H.R. 1395, H.R. 5487, H.R. 6814, AND H.R. 7020

LEGISLATIVE HEARING

BEFORE THE

SUBCOMMITTEE ON WATER, WILDLIFE AND FISHERIES

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTEENTH CONGRESS

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Thursday, March 21, 2024
U.S. House of Representatives
Subcommittee on Water, Wildlife and Fisheries
Committee on Natural Resources
Washington, DC

The Subcommittee met, pursuant to notice, at 10:01 a.m. in Room 1324, Longworth House Office Building, Hon. Cliff Bentz [Chairman of the Subcommittee] presiding.

Present: Representatives Bentz, Graves, Westerman; Huffman, Peltola, Hoyle, Dingell, and Porter.

Also present: Representatives Donalds, Fitzpatrick, McClain; and Evans.

Mr. BENTZ. The Subcommittee on Water, Wildlife and fisheries will come to order.

Good morning everyone. I want to welcome Members, witnesses, and our guests in the audience to today's hearing.

Without objection, the Chair is authorized to declare a recess of the Subcommittee at any time.

Under Committee Rule 4(f), any oral opening statements at hearings are limited to the Chairman and the Ranking Member. I therefore ask unanimous consent that all other Members' opening statements be made part of the hearing record if they are submitted in accordance with Committee Rule 3(o).

Without objection, so ordered.

I also ask unanimous consent that the Congressman from Pennsylvania, Mr. Fitzpatrick; the Congresswoman from Michigan, Ms. McClain; and the Congressman from Florida, Mr. Donalds, be allowed to participate in today's hearing.

Without objection, so ordered.

We are here today to consider four legislative measures: H.R. 1395, the Delaware River Basin Conservation Reauthorization Act of 2023, sponsored by Representative Fitzpatrick of Pennsylvania; H.R. 5487, the Help Our Kelp Act, sponsored by Ranking Member Huffman of California; H.R. 6814, the Marine Fisheries Habitat Protection Act, sponsored by Representative Graves of Louisiana; and H.R. 7020, the Great Lakes Mapping Act, sponsored by Representative McClain of Michigan.

I now recognize myself for a 5-minute opening statement.

STATEMENT OF THE HON. CLIFF BENTZ, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. BENTZ. Good morning again. Let me begin by thanking our witnesses for joining us and, of course, thanks to the Members for the thought and effort they have put into creation of the legislation we will be considering in this Committee today.

This morning's hearing gives us the opportunity to advance legislation which applies to some of the myriad of issues that face marine systems. Marine systems are oceans, rivers, lakes, and other bodies of water that serve many essential purposes. They provide habitat for fish and animal species, a means of transporting freight in clean and environmentally friendly ways, opportunities for all types of recreation, millions upon millions of megawatts of electric power, water for irrigated agriculture, and, of course, fish for human consumption.

The legislation we are considering today, if enacted, would improve the environmental condition of our oceans, enhance our access to and understanding of geographic features of the lake beds of the Great Lakes, build upon a successful partnership of states within the Delaware River Basin who joined together to clean up water running into the rivers and streams in that basin.

Two of the four bills we will discuss today concern research and data development.

H.R. 7020, the Great Lakes Mapping Act, directs NOAA to complete high-resolution mapping of the five Great Lakes by 2030.

This mapping will dramatically improve our understanding of what rests on the floors of these lakes, improve our understanding of the safest shipping channels, provide a baseline for studying water levels and currents and the location of underwater habitats, among many other benefits. Given that these lakes provide an estimated $6 trillion for our nation's economy, not to mention $7 billion in annual commercial recreational fishing revenue, this data-gathering effort is obviously important.

Another bill focused on research is H.R. 5487, the Help our Kelp Act, introduced by Ranking Member Huffman. This bill would direct NOAA to stand up a new competitive grant program for states and local governments, tribes, the fishing industry, and higher educational institutions to create projects that bolster the health of underwater kelp and improve monitoring efforts. Given studies that suggest 96 percent of kelp forests in the Northern California region and off Oregon have been destroyed, this is an important bill.

A third piece of legislation we are considering this morning is H.R. 1395, the Delaware River Basin Conservation Reauthorization Act of 2023. This legislation authorizes the Delaware River Basin Restoration Program, a non-regulatory program that helps advance restoration efforts across the five Delaware River Basin states through partnership and collaboration. This reauthorization adds the state of Maryland to the list of Basin states and alters the Federal cost share for projects in rural and disadvantaged communities.

The Delaware River Basin contributes some $21 billion in ecosystem services annually through flood and stormwater management and soil conservation, among other benefits. Since 2018, this program has funded projects that have restored 1,000 acres of wetland and 76 miles of streams. Reauthorization allows for the continuation of these effective partnerships.

Finally, H.R. 6814, the Marine Fisheries Habitat Protection Act, capitalizes on the benefit that offshore energy infrastructure provides to marine habitats, particularly in the Gulf of Mexico. Since the year 2000, 60 percent of oil rigs in the Gulf of Mexico have been removed, as required by law, causing disruption to habitats and harm to the fishing sector. Mitigating this disruption is critical, given recent data from the American Sports Fishing Association which found that anglers in Louisiana contributed some $2.5 billion in economic output and supported nearly 18,000 jobs.

This legislation requires NOAA to conduct further assessment of the relationship between offshore energy infrastructure and marine habitats, and directs NOAA to provide the Secretary of the Interior a map of the idle structures in the Gulf that support marine life.

Additionally, this legislation gives owners and operators of this infrastructure the ability to reef such structures that are set to be decommissioned in places within 5 years once the structure's safety is determined. This will encourage greater participation in a program that has benefited the marine environment in the Gulf, recognizing that energy production and marine life can work together, and minimizing the impact on the Gulf of Mexico's fisheries.

I once again want to thank the Members and their witnesses that have joined us this morning. I am looking forward to hearing more about how these pieces of legislation will advance the objectives of this Committee using the most up-to-date science, encouraging partnerships between the Federal Government with states, and recognizing the multiple uses of the United States' abundant natural resources.

With that, I recognize Ranking Member Huffman for 5 minutes.

STATEMENT OF THE HON. JARED HUFFMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. HUFFMAN. Thank you, Mr. Chairman. Good morning, everyone. We have four bills before us today. Three of them I support. One I have some concerns about, as we will discuss.

The first is H.R. 1395, the Delaware River Basin Conservation Reauthorization Act. This continues conservation and restoration work in the Delaware River watershed. This was authorized in 2016. The bill does include critical changes to matching requirements to address ongoing funding access problems for small, rural, and disadvantaged communities. It is a good bill.

H.R. 7020, the Great Lakes Mapping Act, directs NOAA to conduct high-resolution mapping of the Great Lakes. We need that in order to fill knowledge gaps and manage our greatest freshwater resources.

And then H.R. 5487, I am a little biased on this, it is my bill, the Help our Kelp Act, but it is very critical to help kelp ecosystem health and restoration on the West Coast. I will dive into the details of that a little bit later.

My concern in this hearing is H.R. 6814. Now, I am not categorically opposed to rigs to reefs. I know there can be some benefits in certain conditions, and I am sure that when Mr. Graves gets here we are going to see some impressive pictures of him posing a red snapper that was caught maybe near a decommissioned reef or even a working reef. By the way, he has been known to pose pictures of fish that his children catch as if they were his own catches. But we will have to address that on a case-by-case basis, as we should address the challenge of what to do with decommissioned rigs when they have outlived their life cycle.

I think there could be opportunities to reuse and recycle some of this offshore oil and gas infrastructure, potentially even for other energy resources such as offshore wind. We should be talking about that as an option if we are talking about something other than full decommissioning. All of these things, though, have to be carefully considered on a site-by-site basis. We can't have an absolute, one-size-fits-all rule, which just happens to be a windfall to big oil.

When these companies enter leases and rights-of-way for oil drilling or pipelines, they commit to full decommissioning. They commit at the start, and the commitment is to leave the ocean in pre-leasing conditions when they are finished. And this legislation would flip the script by stalling any decommissioning until layers of studies and certifications are complete. A very low level of scrutiny, which means anything that has any marine life on it, if you can find a barnacle, it is going to be pretty much impossible to decommission that infrastructure.

So, the bill is like one of those choose-your-own-adventure books, where no matter which choice you make it takes you back to something other than full decommissioning as a windfall to big oil. And it makes this the rule in every case instead of an option. So, this seriously conflicts with state rigs-to-reef programs, and that includes my home state of California.

Our story is important here. As a recent GAO report demonstrated, we have a lot of idle oil and gas infrastructure in the Pacific. It is past due for decommissioning. And the longer it sits there, the more contamination risks are presented, the more other safety hazards grow. And we have these state rigs-to-reef laws. We also have a new record of decision from BSEE that came out in December. It identifies full decommissioning as the preferred option.

So, we are moving in these thoughtful directions, and this bill would conflict with that and set us back considerably. It needs some more work. California and other states shouldn't be forced into projects that they and BSEE have deemed counter to the best course of action for cleaning up expired infrastructure.

And the bill also shifts liability in a very problematic way to the Federal Government or to the states. Even as a GAO report identifies that $40 to $70 billion in potential decommissioning costs are out there for the Department of the Interior, in the face of this we are talking about letting big oil and gas companies off the hook financially. That is a mistake.

Let me be clear. Big oil wants rigs to reef as the rule in every case, not because they have some newfound love of marine life or biodiversity. They want to save money. And we should just be very careful as we approach this policy. I will not support another handout to the industry, an industry that continues to exacerbate climate change and harm our ocean ecosystems.

With that, Mr. Chairman, I yield back.

Mr. BENTZ. I will now introduce our first panel. As is typical with legislative hearings, the bills' sponsors are recognized for 5 minutes each to discuss their bills.

With us today is Congressman Garret Graves, who is recognized for 5 minutes.

STATEMENT OF THE HON. GARRET GRAVES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. GRAVES. Thank you, Mr. Chairman. I am going to find some of the pictures from a trip with Mr. Huffman and make clear that the minnows that he catches fishing are substantially smaller than the whales that I caught in our trip.

I seriously do appreciate my friend from California coming down to Louisiana to take a tour on some of our unique coastal areas, and everything from the fresh and brackish marsh out to the coast and the offshore. And I appreciate him coming down to see that, to understand how different Louisiana is than California. I have been waiting, what, 7 years now for the reciprocal invite. I know it is coming, Jared, and I look forward to that.

Mr. HUFFMAN. As soon as you clean up your act.

Mr. GRAVES. I am on the cusp of it. I am on the cusp.

[Laughter.]

Mr. GRAVES. So, seriously, there are big differences between the Gulf Coast and the West Coast. The habitat for our fisheries in the Gulf of Mexico is the energy infrastructure. And at one point in time, it was something like 75 percent of all of the offshore energy infrastructure in the world was in the Gulf of Mexico. I don't think that percentage is as high anymore, but it is a huge, huge percentage of the overall reef structure in the Gulf of Mexico. Yes, we have flower garden banks as a sanctuary, but the fish that congregate around the reef structure in the Gulf of Mexico is the energy infrastructure, which includes the pipelines, as we found through the great red snapper count.

What has happened over the last several years is we have had platforms removed, all of this reef structure removed at a rate that has never, ever been seen before. So, you are removing the reef habitat for the fisheries, and nothing is being put back. It is having a profound impact on the fisheries.

And in addition to having Mr. Huffman down there, we also had one of his former California delegation members, Mr. Lowenthal. And that is where you fish. You fish at the rigs. That is where the habitat is, that is where the fish are, that is where the reef infrastructure is. And by pulling it out, I can't say it enough, you are having a substantial impact on the habitat in the Gulf of Mexico.

Now, Mr. Huffman just said something about concerns about liability and all those things. I want to be clear, I agree with you. There is nothing we want to do that we want to increase the threat to the health and the ecological productivity of the Gulf of Mexico.

What our bill does is our bill simply tries to create a clear process, provide regulatory certainty on how we can take this energy infrastructure that may be moving toward decommissioning, the P&A work and ultimately decommissioning, and allow for it to be reefed in place. And that can mean all sorts of different things. It could literally be right there, cut down to a safe level to where you are not an obstruction to navigation. It means you could drag it to a special artificial reef zone, as we have done in the past. But ensuring that we are not removing this habitat is what is most important.

We have worked with a number of different folks on this over the years, including the Coastal Conservation Association and the American Sport Fish Association. I have a few letters, Mr. Chairman, one from the American Sportfishing Association; Bonefish & Tarpon Trust; Center for Sportfishing Policy; the CCA, Congressional Sportsmen's Foundation; International Game Fish Association; the National Professional Anglers Association; and TRCP, the Theodore Roosevelt Conservation Partnership. I ask unanimous consent that these be included in the record.

I also have a March 6 letter from the Destin Charter Boat Association; the Florida Guides Association, the Charter Fishermans Association; the Alabama Charter Fishing Association; and the Panama City Boatmens Association. These are all organizations that are supporting this bill, and many of these are groups that we have worked with before we introduced it.

Mr. BENTZ. Without objection.

[The information follows:]

December 14, 2023

Hon. Garret Graves
Hon. Marc Veasey
U.S. House of Representatives
Rayburn House Office Building
Washington, DC 20515

Dear Congressman Graves and Congressman Veasey:

On behalf of the nation's recreational fishing community, we thank you for your leadership to protect diverse marine ecosystems and important angling access through the Marine Fisheries Habitat Protection Act.

The saltwater recreational fishing community is comprised of 10 million angler conservationists and thousands of businesses who strongly support healthy marine resources. As part of both its conservation mission and providing access to sustainable fisheries, the recreational fishing community has long advocated for, and contributed to, efforts to enhance fisheries populations through habitat protection, restoration, and creation.

Since the late 1940's, the development of offshore oil and gas infrastructure has been enhancing marine habitats in coastal waters of the United States. Energy infrastructure on the Outer Continental Shelf (OCS) has boosted fish, coral, and other marine animal productivity by providing an otherwise absent hard substrate on which organisms can colonize and begin developing local reef ecosystems. Over time, these structures have been the catalyst for teeming communities of fish and marine life that serve as incredibly important destinations for recreational anglers, divers, and commercial fishermen alike.

The importance of the OCS platforms and supporting infrastructure on enhancing marine ecosystems is well documented. A study by Sammarco et al. in 2004 found 11 species of coral commonly inhabit oil and gas platforms in the northern Gulf of Mexico,[1] two of which are currently listed on the International Union for Conservation of Nature's (IUCN) critically endangered list. Likewise, an article published in the Proceedings of the National Academy of Sciences concluded oil and gas platforms off the coast of California have the highest secondary fish production per unit area of seafloor of any marine habitat that has been studied.[2] Similarly, a 2020 study report commissioned by the Bureau of Ocean Energy Management estimated that as much as 48% of the total biomass of greater amberjack in the Gulf of Mexico, a currently depleted fishery, is associated with OCS oil and gas infrastructure.[3]

Unfortunately, less than 25% of these original structures remain nationally, and due to recent bankruptcies in the oil and gas industry or expired mineral leases, many more of these important habitats for recreationally and commercially important fish and marine animals will be unnecessarily lost in the next few years. The Marine Fisheries Habitat Protection Act seeks to stem that loss and convert many of these platforms to state Rigs-to-Reefs programs, ensuring their contribution to fisheries productivity endures for future generations.

Specifically, the bill requires an evaluation of the remaining structures for the presence of important reef organisms, and once found, allows for more time for the

[1] "Expansion of coral communities within the Northern Gulf of Mexico via offshore oil and gas platforms." 2004 https://www.researchgate.net/publication/234046738_Expansion_of_coral_communities_within_the_Northern_Gulf_of_Mexico_via_offshore_oil_and_gas_platforms

[2] "Oil platforms off California are among the most productive marine fish habitats globally." 2014 https://www.pnas.org/doi/suppl/10.1073/pnas.1411477111

[3] "Explosive Removal of Structures: Fisheries Impact Assessment." 2020. https://espis.boem.gov/final%20reports/BOEM_2020-038.pdf

structures to be converted to a Rigs-to-Reefs program, provided the associated wells are safely plugged just as they would be if they were decommissioned on land. Furthermore, it encourages oil and gas companies to consider the Rigs-to-Reefs program as a decommissioning option by designating the area in the immediate vicinity of the platforms as reef planning areas with the goal of conserving important localized marine ecosystems. Essentially, the bill uses a science basis to facilitate the voluntary conversion of oil and gas platforms to permanent reef fish habitat.

Thank you again for your leadership in preserving important marine fisheries habitat and angler access to healthy fisheries for future generations. We look forward to working with you in support of the Marine Fisheries Habitat Protection Act as it moves through the legislative process.

Sincerely,

American Sportfishing Association	Congressional Sportsmen's Foundation
Bonefish & Tarpon Trust	The International Game Fish Association
Center for Sportfishing Policy	National Professional Anglers Association
Coastal Conservation Association	Theodore Roosevelt Conservation Partnership

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March 6, 2024

Hon. Garret Graves
U.S. House of Representatives
2077 Rayburn House Office Building
Washington, DC 20515

Dear Representative Graves:

The Charter Fishermans Association is a gulf-wide federally permitted For-hire industry advocacy group with members in all five Gulf States. The Destin Charter Boat Association represents the federally permitted For-hire fishing fleet out of Destin, Florida. The Florida Guides Association represents state and federally permitted fishing business from across the entire State of Florida. The Alabama Charter Fishing Association represents the federally permitted For-hire fishing fleet from the State of Alabama. The Panama City Boatmens Association represents the federally permitted For-hire fishing fleet out of Panama City, Florida.

We are writing today in the support of the "Marine Fisheries Habitat Protection Act". In the Gulf, we have more recreational stakeholders than any other regional management area in the nation. And with the continued population of Americans that are moving to the Gulf coasts interest in marine and deep-sea fisheries continues to grow.

The Gulf has a vast amount of area suitable to support habitat for the Reef and Pelagic fish complexes. Multiple states in the Gulf have artificial reef programs which continue to try to enhance habitat and angling opportunities for its citizens. This Act is a welcome change from programs such as "Idle Iron" which were counter intuitive to these efforts. Decommissioning and removing these structures in a non-ecological mindset have hampered efforts to create more habitat for our nation's resources in the Gulf.

Your proposed Act would help ensure that federal agencies would have to apply that ecological mindset when addressing regulatory issues and balance them with

the needs of the nation's fisheries in the Gulf of Mexico. This will align agencies actions with all regional management areas that desire to grow and maintain healthy fish stocks and create more biomass which is imperative for not just the recreational enjoyment of fishing in the Gulf but also the commercial fisheries which the nation relies upon for sustainably caught wild seafood.

With, all of the signed associations whole heartedly support your efforts in protecting the unforeseen benefits of the oil and gas industries infrastructures, and pledge to continue to work with you and your colleagues to get legislation like the "Marine Fisheries Habitat Protection Act" passed for the betterment of our nation's resources while providing more angling opportunities.

Sincerely,

Capt. Jim Green, President
Charter Fishermans Association

Mrs. Kelia Paul, President
Panama City Boatmens Association

Capt. Dylan Hubbard, President
Florida Guides Association

Capt. Jason Klosterman, Vice Pres.
Destin Charter Boat Association

Capt. Dale Woodruff, President
Alabama Charter Fishing Association

Mr. GRAVES. So, let me just say in closing I look forward to working with you all. I want to be clear we are not going to have pride in authorship, and if there are some perfections we need to do, we would love to hear some of the thoughts on how we could do that. But I think this is an absolutely critical thing.

And it may seem foreign to folks on the East Coast, the West Coast, and other areas, but I want to be crystal clear on this. This is our habitat. This is our reef structure. And it is absolutely critical that we ensure that we have some type of plan to maintain this important habitat for the fisheries.

I yield back.

Mr. BENTZ. Thank you, Congressman Graves. I now recognize Ranking Member Huffman for 5 minutes to discuss H.R. 5487.

Mr. HUFFMAN. Thank you, Mr. Chairman. One of the bills we are discussing today is my Help our Kelp Act. I am proud to lead this with my colleagues on the Subcommittee, Mr. Case and Mr. Mullin.

Kelp is critical for healthy coastal communities, marine ecosystems, and addressing climate change threats like ocean acidification and coastal erosion on the West Coast. But kelp forests are getting wiped out, and we need to do something about it quickly. These coastal habitats are not unlike the forests that we are all familiar with on land. Think about an underwater rainforest. They provide food and habitat for hundreds of marine species, including ones that are valuable to local fishers and local economies.

The bull kelp and the giant kelp that make up these forests do a lot of things. They are not only essential building blocks for the many fisheries and invertebrates that live and forage in that habitat, they play a vital role in coastal protection, tourism, carbon sequestration, and other values. So, you can imagine the serious impacts that extensive kelp loss would have on our ocean and those who depend on it, and that is exactly what is happening in the north coast of California, my district.

We have more than 95 percent of our kelp forests that have been lost due to this perfect storm of bad conditions. The climate crisis is bringing higher ocean temperatures, limiting kelp growth. Then we have increasing purple sea urchin populations. The favorite food of the purple sea urchin happens to be kelp, and they are exploding because their primary predator, the starfish, is not around because of a starfish wasting disease. So, all of these conditions have combined, and our kelp is just getting wiped out.

We are feeling the effects from the ocean to the shore. Habitat loss means fewer fish, less food for birds, larger fish, marine mammals, and, of course, commercial and recreational fishers. The red abalone fishery was severely impacted by lack of food, and it was forced to close, harming a lot of local businesses and communities.

And the good news is that local communities and our state partners are already hard at work with kelp restoration and urchin removal projects. They need our support for those efforts. We need to direct necessary Federal resources to these important recovery initiatives, and this bill addresses that need by establishing a NOAA grant program to fund conservation, restoration, and management projects focused on kelp forest restoration.

In order to fully restore and productively manage these kelp forests, we also need to support diverse and traditional approaches, which is why this bill includes a cost share waiver set aside for tribal applicants.

The ecological disaster that we are dealing with is too big to ignore. We need to get the Help our Kelp Act passed and signed into law soon. I am very grateful to my colleagues on this Committee and others who have co-sponsored the bill.

Thank you, Mr. Chairman, for including it in the agenda today, and I hope to see it pass the Congress so that we can commit to restoring these ecosystems.

In the remaining seconds I have, I just want to introduce our witness, Deb Self.

I am delighted to have you here, Deb, in Washington.

She is the Executive Director of the Greater Farallones Association. The Greater Farallones Association conserves the wildlife and habitat in marine-protected areas along the Northern California coast, and among the vital programs the Association administers they work with NOAA's Greater Farallones National Marine Sanctuary to help kelp forest habitat along the Northern California coastline through active restoration, monitoring, research, and community engagement.

There are no better voices on this topic than those doing the work on the ground, so it is my honor to introduce Deb Self to the Committee today.

Thank you, Mr. Chairman, I yield back.

Mr. BENTZ. I thank Ranking Member Huffman for his testimony. I now recognize Congressman Brian Fitzpatrick for 5 minutes to discuss H.R. 1395.

STATEMENT OF THE HON. BRIAN K. FITZPATRICK, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. FITZPATRICK. Thank you, Chairman Bentz and Ranking Member Huffman, for holding this bipartisan hearing. I am grateful to have this opportunity to speak before the Subcommittee about my bill, the Delaware River Basin Conservation Reauthorization Act.

First, it is my pleasure to introduce one of today's witnesses, Kelly Knutson, a biologist by training. Kelly now serves as the Director for the Coalition for the Delaware River Watershed. The CDRW joins together stakeholders throughout the region to ensure conservation efforts are as impactful as possible for our basin communities. Today, Kelly will share with you and with this Committee how our partners working on the ground in the watershed have made the restoration program an incredible success, and have helped preserve the Delaware River for generations to come.

Mr. Chairman, for my constituents in Bucks and Montgomery Counties in Pennsylvania, and for our entire region, the Delaware River is more than a natural resource. It is an essential component of our daily lives, our health, our economies, and our heritage.

Since the Basin Restoration Program was established by Congress in 2016, it has been a model for how the Federal Government can effectively bring together states, localities, and non-profit organizations looking to carry out conservation efforts. The program is, by definition, collaborative. Communities throughout the watershed voluntarily identify areas of need and coordinate with preservation groups to propose projects to the U.S. Fish and Wildlife Service.

At the foundation of the program is also a cost-sharing mechanism, which guarantees that the Federal Government and the stakeholders carrying out these crucial conservation efforts are, in fact, true partners. Mr. Chairman, in just 6 years, the program has provided $55 million in grants to leverage an additional $79 million in non-Federal matching funds to support nearly 200 conservation initiatives across the Basin region. Projects in my congressional district alone have allowed our community to improve water quality, reduce flood risk, and expand recreational access to the river, just to name a few.

This bipartisan bill that I propose will strengthen the program by correcting the definition of eligibility to include Maryland, as well as by increasing the Federal cost share for projects and smaller, more rural communities throughout the watershed region. By reauthorizing the Basin Restoration Program through Fiscal Year 2030, Congress can ensure that this collaborative, non-regulatory relationship between the Federal Government and communities throughout the Delaware River Watershed continues to create success stories after more success stories.

And as co-Chair of the Delaware River Watershed Caucus, I want to close by thanking the Members on both sides of the aisle who co-sponsored this effort, as well as the CDRW, and all of our state and local partners for their support.

Mr. Chairman, Mr. Ranking Member, I look forward to continuing to work with both of you and the members of this

Committee to ensure this common-sense approach to conservation and environmental stewardship can continue to benefit generations to come.

Thank you, and I yield back.

Mr. BENTZ. I thank Congressman Fitzpatrick for his testimony. I now recognize Congresswoman Lisa McClain for 5 minutes to discuss H.R. 7020.

STATEMENT OF THE HON. LISA C. MCCLAIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mrs. MCCLAIN. Thank you, Mr. Chairman, and thank you all for being here. Thank you for the opportunity to really address this Subcommittee.

The Great Lakes states and surrounding region generates over $6 trillion to the nation's GDP, supports over 51 million jobs, and is a critical shipping lifeline for the entire country, with more than 200 million tons of cargo shipped through the Great Lakes annually.

Despite the immense benefits the Great Lakes and the surrounding region provide for the United States, they have never really fully been explored. Thousands of shipwrecks lay hidden in the depths that the ancient civilization has left, their cultural footprint hundreds of feet below the surface.

Our Great Lakes power a $7 billion fishery economy, yet their habitats are barely understood. Recreational boats and commercial vessels traverse the vast waters of the lakes, but unknown dangers lurk beneath the surface.

Nationally, tens of millions of dollars are being allocated for ocean-related initiatives. But, unfortunately, the Great Lakes remains a low priority and, as a result, are underfunded, undervalued. In fact, only 13 percent of the Great Lakes are mapped to modern standards.

I believe it is time to take exploration and discovery of the underwater environment of the Great Lakes into our own hands. That is why I joined with Representative Debbie Dingell and 17 of our colleagues to introduce the Great Lakes Mapping Act.

This critical legislation directs the National Oceanic and Atmospheric Administration to engage with states, regional coastal observing systems, universities, industries, and other stakeholders to map the lake beds of the Great Lakes by 2030. This data, which will be made publicly available, will enable exploration, yield valuable discoveries, enrich lake knowledge, and inform efforts to protect our Great Lakes, one of America's greatest natural resources, really, for generations to come.

Lastly, I would like to thank the Great Lakes Observing System and its partners for their work in developing the Lake Bed 2030 campaign. Without your work in describing the need and setting the vision for the Great Lakes mapping, we would not be here today.

I thank the members of this Committee for their consideration of this legislation and ask for your support. Thank you, Mr. Chairman.

Mr. BENTZ. Thank you. I thank the Members for their testimony. I will now introduce our second panel.

Mr. Clay Porch, Director of the Southeast Fisheries Science Center with NOAA in Miami, Florida; Mr. Kelly Knutson, Director of the Coalition of the Delaware River Watershed in Burlington, New Jersey; Dr. Jennifer Boehme, CEO of the Great Lakes Observing System in Ann Arbor, Michigan; Ms. Deb Self, Executive Director of Restoration and Partnerships with the Greater Farallones Association in San Francisco, California; and Mr. Chris Horton, Senior Director for Fisheries Policy with the Congressional Sportsmen's Foundation in Washington, DC.

Let me remind the witnesses that under Committee Rules, they must limit their oral statements to 5 minutes, but their entire statement will appear in the hearing record.

To begin your testimony, please press the button on the microphone.

We use timing lights. When you begin, the light will turn green. When you have 1 minute remaining, the light will turn yellow. And at the end of 5 minutes, the light will turn red, and I will ask you to complete your statement.

I will also allow all witnesses to testify before Member questioning.

I now recognize Mr. Porch for 5 minutes.

STATEMENT OF CLAY PORCH, DIRECTOR, SOUTHEAST FISHERIES SCIENCE CENTER, NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, MIAMI, FLORIDA

Mr. PORCH. Chair Bentz, Ranking Member Huffman, and members of the Subcommittee, thank you for the opportunity to testify today. My name is Clay Porch. I am the Director of NOAA's Southeast Fisheries Science Center. Today, I am here to represent NOAA's views on three of the bills under consideration, and I look forward to any questions and the discussion that follows.

I will first address H.R. 6814, the Marine Fisheries Habitat Protection Act. NOAA currently serves in a consultative role, and provides comments to states and other Federal agencies on the creation, siting, and permitting of artificial reefs. NOAA also advises on standards for the transfer, cleaning, and preparation of certain reef materials. We appreciate Congress' interest in these issues, and we have several comments regarding implementation and timing.

Primarily, NOAA has concerns about the scope of the charge, including what specifically the Act would require in terms of assessments, and how it defines reef-associated species. NOAA would face challenges in fully complying and implementing the legislation as presently drafted, given existing staff, vessels, equipment, and funds.

We acknowledge Congress' interest in supporting the repurposing of existing structures to provide marine habitat and enhance marine life and would be happy to work with Congress more on this issue.

Next, I would like to address H.R. 7020, the Great Lakes Mapping Act. The National Ocean Mapping, Exploration, and Characterization Council released a progress report earlier this month on unmapped U.S. waters. The report stated that 87 percent

of U.S. waters in the Great Lakes remain unmapped to modern standards, the highest percentage unmapped of all U.S. regions.

NOAA strongly supports the need to map U.S. waters to modern standards, particularly in the Great Lakes. In 2022, NOAA's ship, *Thomas Jefferson*, conducted hydrographic surveys in the Great Lakes, the first survey there since 1990. This year, we have four mapping projects planned for Lakes Superior, Erie, and Ontario. NOAA aims to send one of its hydrographic survey ships to the lakes every 3 to 5 years to continue making progress on mapping the Great Lakes.

NOAA is very grateful for the funding provided to the Great Lakes Restoration Initiative, GLRI, for this mapping work. We have invested in improved technologies to improve resolution and classification of shorelines, biology, and socioeconomic features, and appreciate Congress' interest in and support of this work.

Finally, I will speak to H.R. 5487, the Help Our Kelp Act. In recent years, Washington and California have seen dramatic declines in their kelp populations. These declines have caused impacts to threatened and endangered salmonids, abalone, and commercial and recreational fisheries. The Help our Kelp Act authorizes NOAA to carry out a grant program to conserve, restore, and manage kelp forest ecosystems.

Currently, NOAA works with a diverse set of partners, including government agencies, environmental organizations, academic institutions, and community partners on kelp restoration. NOAA and these partners are also working to identify state management priorities, engaging and educating stakeholders, providing technical assistance, and working to streamline permitting on subtitle restoration efforts. Restoring and conserving kelp forest is a priority for NOAA, and additional resources through a grant program would allow us to scale up this important work.

NOAA is proud to serve as a steward of America's ocean, coastal, and Great Lakes resources. We appreciate the Subcommittee's attention to these topics, and appreciate the opportunities to enhance our work with partners, conserve our coastal and marine ecosystems, and build community resilience. Thank you.

[The prepared statement of Mr. Porch follows:]

PREPARED STATEMENT OF CLAY PORCH, DIRECTOR,
SOUTHEAST FISHERIES SCIENCE CENTER, NATIONAL MARINE FISHERIES SERVICE,
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
U.S. DEPARTMENT OF COMMERCE

ON H.R. 1395, H.R. 5487, H.R. 6814, AND H.R. 7020

Introduction

Chairman Bentz, Ranking Member Huffman, and Members of the Subcommittee, thank you for the opportunity to testify today regarding these two ocean related bills. My name is Clay Porch and I am the Director for the National Oceanic and Atmospheric Administration's National Marine Fisheries Service's (NOAA Fisheries) Southeast Fisheries Science Center.

NOAA acknowledges and appreciates the ongoing work with this Subcommittee to enhance successful ocean and coastal resilience, conservation, and restoration, and I look forward to discussing the bills under consideration with you today.

H.R. 6814—Marine Fisheries Habitat Protection Act

H.R. 6814, Marine Fisheries Habitat Protection Act, would establish a process, managed by Federal and State agencies, by which operators choose to donate

decommissioned oil and gas platforms to coastal States to serve as artificial reefs under the National Artificial Reef Plan (Rigs- to Reefs). NOAA serves in a consultative role for activities such as providing comments to states and other federal agencies on the creation, siting, and permitting of artificial reefs as well as standards for the transfer, cleaning, and preparation of certain reef materials.

NOAA Fisheries approaches the existing Rigs-to-Reef program through the lens of multiple mandates regarding fisheries, habitat, endangered species, and marine mammals. The major permitting and consultative actions that NOAA Fisheries is responsible for in relation to the Rigs-to-Reefs program, include: Endangered Species Act Section 7 Consultation—50 CFR 402; Magnuson Stevens Fishery Conservation and Management Act Essential Fish Habitat—50 CFR 600.805; and, Marine Mammal Protection Act—50 CFR 216.

We appreciate Congress's interest in these issues and we have several comments regarding implementation and timing.

As drafted, H.R. 6814 directs NOAA to conduct an assessment of each "idle structure," defined as an offshore oil and gas platform or pipeline which the Secretary of the Interior has determined no longer useful for operations, and determine if there is an "established reef ecosystem" on, under, or in the immediate vicinity of the idle structure. The proposed definition of "established reef ecosystem" is broad and as such may be of limited value in practice and may present challenges in terms of identifying true "established reef ecosystems." The word "established" implies some level of permanence or longevity. As drafted, current language would designate an area as an established reef ecosystem when an identified reef species is present, regardless of period of residency, even if it is transient. As such, any place in the Gulf where an identified reef species meeting criteria in the bill are present—such as the general water column, even if only passing through, and regardless of their association with decommissioned oil and gas infrastructure—becomes an established reef ecosystem.

These man-made structures are recognized as temporary additions to the environment by the Department of the Interior (DOI) under the Outer Continental Shelf Lands Act, as well as the Gulf of Mexico Fishery Management Council with respect to the biologic communities associated with them. DOI's Bureau of Safety and Environmental Enforcement regulations, primarily codified at 30 C.F.R. Part 250, subpart Q apply to the removal, reuse, or reefing of idle structures. NOAA has observed that the decision to donate/make the jacket structure available to State programs currently appears to be a business decision of the private entity. NOAA is supportive of the existing programs in place, managed by the states in conjunction with the Gulf States Marine Fisheries Commission, which currently allow for structures to be added to existing artificial reefing areas, reefed in place, or removed altogether. Leaving idle structures or reefing them in place must take into consideration competing uses of the seafloor including commercial fishing interests as well as considerations for navigational safety and the potential risks posed to the natural environment from structures being toppled or relocated during hurricane storm events. There is also concern regarding the affinity of invasive species, such as orange cup coral and lionfish, to these artificial structures.

NOAA would face challenges in fully complying with the Marine Fisheries Habitat Protection Act, as presently drafted, given existing resources, staff, vessels, underwater autonomous vehicles, and funds to contract with the private sector to support implementation. NOAA currently does not have the resources to implement this program and the FY 2025 President's Budget does not include funding for these activities. We acknowledge Congress's interest in supporting the repurposing of idle structures to provide marine habitat and enhance marine life, and would be happy to work with Congress more on this issue.

H.R. 7020—Great Lakes Mapping Act

H.R. 7020 addresses high-resolution mapping of Great Lakes water depths and lakebeds. NOAA appreciates the interest in our mapping efforts and continues to work to map our Nation's waters to the necessary modern standards with today's advanced technologies.

NOAA would appreciate the opportunity to have additional discussion with the Committee on this legislation and offer some minor modifications to more holistically support the necessary high-resolution mapping work NOAA and partners are doing and need to do in this region.

The National Ocean Mapping, Exploration, and Characterization Council (NOMEC) released a progress report on unmapped U.S. waters earlier this month. This report states that 87 percent of U.S. waters in the Great Lakes remain unmapped to modern standards.

NOAA strongly supports the need to map U.S. waters to modern standards, particularly in the Great Lakes. In 2022, NOAA Ship *Thomas Jefferson* conducted hydrographic surveys in the Great Lakes. Although NOAA has a significant presence in the Great Lakes, this is the first time a NOAA hydrographic ship has deployed there since the early 1990s. The survey efforts of NOAA Ship *Thomas Jefferson* covered 450 square nautical miles of lake bottom in Lake Erie and 274 square nautical miles in Lake Ontario with high resolution mapping data. These surveys identified 42 confirmed and new shipwrecks, and discovered 22 other lakebed features. In addition to NOAA ships, we have a contract mechanism to collect bathymetric data that will update the suite of NOAA navigation products and services, like the one done in 2023 in southwestern Lake Michigan. In 2024, NOAA's Navigation Response Teams and contractors have four projects planned for Lakes Superior, Erie and Ontario. NOAA aims to send one of its hydrographic survey ships to the lakes every 3–5 years to continue making progress on mapping the Great Lakes.

Since 2019, NOAA has also received funding totaling over $11,000,000 through the Great Lakes Restoration Initiative (GLRI) to support updated and improved mapping in understanding coastal and nearshore benthic habitats. This work has involved the collection of new multibeam sonar data and airborne bathymetric lidar to aid in the classification and high-resolution mapping of the Great Lakes bottom environments. To date over 1,000 square kilometers (~386 square miles) of high-resolution data has been collected to help inform in-water habitat monitoring and restoration efforts. Additionally, GLRI has provided $5,150,000 to NOAA over the last 5 years to update the Great Lakes Environmental Sensitivity Index (ESI) datasets which map and classify shorelines, biology, and socioeconomic features. These funds paid for updates to the ESIs for the following geographies: Straits of Mackinac, St. Clair Detroit River System, and Lakes Ontario, Michigan, Superior, and Huron, while the U.S. Coast Guard paid for updates to Lake Erie, and the St. Marys and Lawrence Rivers. This work is in accordance with the Great Lakes Environmental Sensitivity Index Act of 2020, which directs that NOAA shall endeavor to update the ESI datasets at least once every seven years.

NOAA supports interagency coordination through NOMEC to achieve the highest return on investment for mapping and charting, and operates under the adage "map once, use many times". To enable this, NOAA follows international standards for hydrographic surveys and rigorous quality assurance procedures to ensure mapping data can support the full range of applications, including updating NOAA's official nautical charts to ensure safety of navigation. NOAA is also well-positioned to ensure free and open access to mapping data via its National Centers for Environmental Information and the seamless, authoritative National Bathymetric Source. NOAA currently does not have the resources to implement the program called for in H.R. 7020, and the FY 2025 President's Budget does not include funding for these activities.

H.R. 5487—Help our Kelp Act

Kelp forests harbor a greater variety and higher diversity of plants and animals than almost any other ocean community. Additionally, kelp forests provide a variety of ecosystem services to humans and serve as habitat for a number of ecologically, culturally and commercially important fishery species such as kelp bass and black rockfish. Bull kelp in South Puget Sound (Washington) has declined by more than 80 percent in the last 145 years, according to recent analyses. Since 2014, northern California has lost over 95 percent of its kelp beds, causing significant impacts to the vital ecosystem that provides habitat to threatened and endangered salmonids, abalone, and commercial and recreational fisheries.

H.R. 5487 authorizes NOAA to carry out a grant program to conserve, restore, and manage kelp forest ecosystems. NOAA currently does not have the resources to implement this program and the FY 2025 President's Budget does not include funding for these activities. NOAA collaborates with a diverse set of partners, including government agencies, environmental organizations, academic institutions, and community partners to restore, manage, conserve, and better understand these iconic, ecologically significant, and economically valuable habitats. NOAA and our partners are researching kelp ecosystem dynamics and socio-economic input to help identify state management priorities, restoring kelp and abalone through outplanting and reduction of urchin grazing pressure, engaging and educating stakeholders, providing technical assistance, and working to streamline permitting on subtidal restoration efforts.

Conclusion

NOAA is proud to serve as steward of America's ocean, coastal, and Great Lakes resources, and we appreciate the Subcommittee's support for our mission. We look forward to working with you to enhance our work with partners, conserving our coastal and marine ecosystems, and building community resilience.

QUESTIONS SUBMITTED FOR THE RECORD TO MR. CLAY PORCH, SOUTHEAST FISHERIES SCIENCE CENTER, NOAA

Mr. Porch did not submit responses to the Committee by the appropriate deadline for inclusion in the printed record.

Questions Submitted by Representative McClain

Question 1. Mr. Porch, high resolution mapping of the Great Lakes is a big job that will cost a lot. How will NOAA perform this work in an efficient and affordable manner? Will NOAA use the private sector expertise in high-resolution mapping and the processing of bathymetric data to the maximum extent possible?

Mr. BENTZ. Thank you, Mr. Porch. I now recognize Mr. Knutson for 5 minutes.

STATEMENT OF KELLY KNUTSON, DIRECTOR, COALITION FOR THE DELAWARE RIVER WATERSHED, PRINCETON, NEW JERSEY

Mr. KNUTSON. I appreciate the Subcommittee for their leadership in hearing this bill. I also just want to express my gratitude to Congressman Fitzpatrick for championing this effort in Congress and inviting me down to Washington, DC.

As noted, my name is Kelly Knutson. I am the Director of the Coalition for the Delaware Watershed, testifying in support of H.R. 1395, the Reauthorization of the Delaware Basin Conservation Act.

Just as a little bit of background, the Coalition is a network of over 185 different local non-profit groups working to preserve and protect this watershed that provides drinking water to over 14.2 million people. Our network represents land conservancies, fishing and sporting interests, watershed protection groups, among other national advocacy entities.

This piece of legislation is bipartisan in Congress, and we are really happy that it is also widely received amongst our non-profit partners. In fact, many of our non-profit partners that engage with the Coalition have received money through the Federal Government and completed on-the-ground projects through this existing program.

So, on our end, Congress really affirmed the importance of the Delaware Watershed when it passed the bipartisan piece of legislation known as the Delaware Basin Conservation Act in 2016. This initiated the U.S. Fish and Wildlife Service to create and facilitate the Delaware Basin Restoration Program, which is non-regulatory, leverages private investment, local knowledge, and regional partnerships to implement on-the-ground projects.

For us, we are really pleased that the Service has implemented six rounds of funding. The seventh is on its way. I think the RFP actually closes this week, so another grant soon to come, and that

is through the Delaware Watershed Conservation Fund. Congress required that to be the core part of this program in that legislation.

So, projects can really run the gamut, and improve public access, recreational opportunities, can protect vulnerable fish and wildlife habitats, as well as restore riparian ecosystems, stream, wetland ecosystems, and much, much more.

Since 2018, the Delaware Watershed Conservation Fund, as Congressman Fitzpatrick previously noted, has actually awarded $55.1 million to 195 projects. There has been $79.2 million in non-Federal match for a total conservation impact of $134.3 million. In Fiscal Year 2023 alone, the National Fish and Wildlife Foundation, who administer these grants, actually saw 64 proposals totaling a $26.7 million in demand for projects. They are only appropriated $11.5 million to distribute.

So, there is really no shortage of demand. However, a lot of this demand comes from larger, well-endowed national and regional organizations, compared to those smaller entities, especially those located in less populated and rural areas. This legislation actually is really strategic in trying to address that problem head on.

Historically, there has been a one-to-one non-Federal match in order to participate and receive monies from this program. This legislation has language that would make it more available to a wider prospective of grantees by allowing a 90 percent Federal investment for a 10 percent match for small, rural, and disadvantaged communities as defined by the Department of the Interior. Of course, the Secretary may waive all match requirements at their own discretion, as well.

On our end, we think that this will allow funding to flow to communities that just historically haven't had a chance to access these Federal funds. Again, it provides some much-needed match relief to really expand the program's reach to economically challenged and less populated communities throughout the watershed, as well. This shift is done in a way that is cost effective, locally driven, and really can tap into that tremendous unmet demand that I spoke about earlier, and again, an efficient, effective way to maximize the dollars coming into the watershed, and making sure that communities that historically haven't accessed these funds can benefit and leverage them, too.

So, reauthorization of this critical and well-established program would just continue to affirm the national and economic significance of the Delaware Watershed. In order to fully realize the benefits of this Act, we must continue to support the Delaware Basin Restoration Program and reauthorize the Act. If passed, this legislation would continue the program through Fiscal Year 2030.

Again, I really appreciate the leadership of this Subcommittee in hearing this bill and, again, look forward to working with you all to help make it happen.

I am happy to take questions, and I will yield my time back. Thank you.

[The prepared statement of Mr. Knutson follows:]

PREPARED STATEMENT OF KELLY KNUTSON, DIRECTOR, COALITION FOR THE DELAWARE RIVER WATERSHED

ON H.R. 1395

On behalf of the Coalition for the Delaware River Watershed, I write in support of H.R. 1395—the Delaware River Basin Conservation Reauthorization Act—which will continue the non-regulatory program that provides resources for advancing protection and restoration of the ecologically and economically significant Delaware River Watershed.

The Coalition for the Delaware River Watershed unites organizations working throughout the multistate region to enhance their capacity to effectively advocate and work toward protecting and restoring the Delaware River. Our coalition represents over 185 local watershed associations, land conservancies, outdoor recreation and sporting interests, national organizations, and other stakeholder groups working throughout the 13,539 square miles of the watershed. The bill also has broad and deep support among the communities we represent. These include national organizations like, Trout Unlimited and Ducks Unlimited, along with local groups, like Friends of the Upper Delaware in upstate New York, who have completed on-the-ground projects that were funded from the existing program.

Congress clearly affirmed the importance of protecting the natural resources of the Delaware River Watershed when it passed the Delaware River Basin Conservation Act in December 2016 with bipartisan support and leadership. The legislation directed the U.S. Fish and Wildlife Service to create and facilitate the Delaware River Basin Restoration Program, a non-regulatory effort that leverages private investment, regional partnerships, and local knowledge to protect and restore the resources of the watershed. The Service has since successfully executed six annual rounds of funding and is finalizing the seventh, through the Delaware Watershed Conservation Fund, a grant program which Congress required to be the core of the program. Projects include those that improve public access and recreational opportunities, support restoring and protecting vulnerable fish and wildlife habitat, and protect riparian, stream, and wetland habitat.

Since 2018, the Delaware Watershed Conservation Fund has awarded $55.1 million to 195 projects, which generated $79.2 million in match, for a total conservation impact of $134.3 million. These projects will collectively restore over 29 miles of riparian habitat and 76 miles of stream habitat, conserve and enhance 1,339 acres of wetland habitat, restore 293 acres of floodplain, improve 29,321 acres of forest habitat and open 6,052 acres for public access. In FY23 alone, the National Fish and Wildlife Foundation, which administers the grants, received a total of 64 proposals requesting $26.7 million dollars. This amount reinforces a continued need to improve the health and resources of the watershed for generations to come. There's no shortage of demand, however, this often comes from larger, national, and regional organizations as opposed to smaller organizations, especially in less populated rural areas.

While historically a minimum of a one-to-one non-federal match is required for the grant program, the program is structured to increase the competitiveness of grants that exceed that threshold to leverage the maximum amount of non-federal dollars. To make the program accessible to a wider array of prospective grantees, reauthorization would allow a 90% federal investment with 10% match for small, rural, or disadvantaged communities and the Secretary may waive all match requirements at their own discretion. This would allow projects to move forward with funding that was previously out of reach for local communities that need help the most but lack the financial resources to provide matching dollars.

The Coalition believes that match relief will help to expand the program's reach to economically challenged and less populated rural areas as well as some urban areas. This shift is done in a locally driven and cost-effective way, and taps into the tremendous unmet demand to do work throughout the watershed. This type of approach is an efficient and effective way to ensure that limited resources are targeted to where they can provide maximum benefit and expand to areas where historically it hasn't had an impact locally.

The Delaware River Basin is the five-state region that drains into the Delaware River and Delaware Bay. Along with its historic importance for our nation, the river basin is a powerhouse for the economy and home to more than 8 million people. Significantly, the watershed serves as the source of clean drinking water for 14.2 million people, or roughly five percent of the U.S. population, in the densely populated Mid-Atlantic region.

The Delaware River is a historical icon that is home to nationally significant ecological and recreational assets, including one of the country's most visited units of

the National Park System, the Delaware Water Gap. It also hosts more than 400 miles of National Wild and Scenic Rivers, six National Wildlife Refuges, and Delaware Bay is one of the largest systems in the National Estuary Program.

Reauthorization of this critical and well-established federal program would continue to affirm the nationally and historically significant Delaware River as a resource worth protecting. In order to fully realize the benefits of the Act and help ensure a healthy watershed for generations to come, we must provide continued support to the Delaware River Basin Restoration Program and reauthorize the Program. If passed, the program and restoration successes would continue through 2030.

We greatly appreciate your leadership and thank you for considering the reauthorization of the Delaware River Basin Conservation Act. Please contact me at kelly.knutson@delriverwatershed.org if you have any questions. The Coalition looks forward to working with you on this important legislation.

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The following documents were submitted as supplements to Mr. Knutson's testimony.

FACT SHEET

NFWF

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PARTNERS

- U.S. Fish and Wildlife Service
- William Penn Foundation
- AstraZeneca

ABOUT NFWF

Chartered by Congress in 1984, the National Fish and Wildlife Foundation (NFWF) protects and restores the nation's fish, wildlife, plants and habitats. Working with federal, corporate and individual partners, NFWF has funded more than 6,000 organizations and generated a total conservation impact of $8.1 billion. NFWF is an equal opportunity provider.

Learn more at **www.nfwf.org**

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Delaware River

BACKGROUND

The Delaware Watershed Conservation Fund addresses near-term and long-range issues identified by the Delaware River Basin Restoration Partnership and Program Framework, for measurable gains for fish and wildlife conservation, clean water, access to outdoor recreation, and other values and natural and economic benefits for people living in the basin. Major funding for the Delaware Watershed Conservation Fund is provided by the U.S. Fish and Wildlife Service, with additional funding provided by the William Penn Foundation and AstraZeneca.

The fund was launched in 2018 as a first step toward bringing together various stakeholders invested in restoration and conservation efforts throughout the Delaware River Watershed to address different strategic program areas and cross-program activities, build networks, and improve efficiency and focus on a basin-wide scale.

The Delaware Watershed Conservation Fund's 2023 grant slate is the second year to include funds from the Bipartisan Infrastructure Law, enacted in November 2021, which made possible an historic $26 million investment in the watershed through the Delaware Watershed Conservation Fund (DWCF). The funding from the law, distributed over five years, will support innovative green-infrastructure projects that contribute to the health and economic vitality of communities in the watershed.

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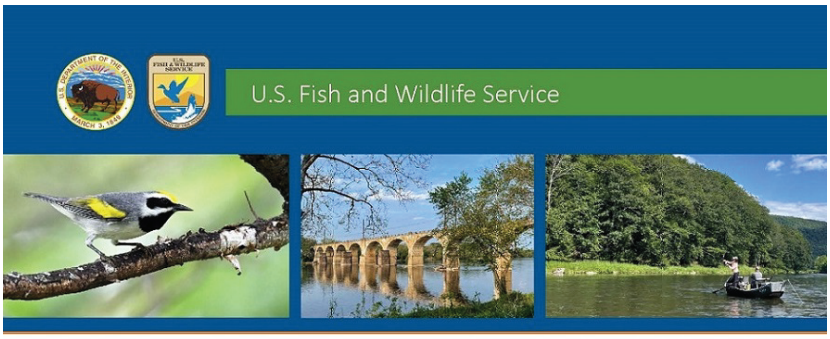
The full document is available for viewing at:
https://docs.house.gov/meetings/II/II13/20240321/116893/HHRG-118-II13-Wstate-KnutsonK-20240321-SD001.pdf



DELAWARE RIVER BASIN RESTORATION PROGRAM

Report to Congress

FISCAL YEAR 2023

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The full document is available for viewing at:
https://docs.house.gov/meetings/II/II13/20240321/116893/HHRG-118-II13-Wstate-KnutsonK-20240321-SD002.pdf

DOI U.S. Fish and Wildlife Service

Delaware River Basin Restoration Program

PROGRAM OVERVIEW

Authorized by Congress in 2016 with strong bipartisan support, the U.S. Fish and Wildlife Service's Delaware River Basin Restoration Program (DRBRP) responded to a need for federal, state, regional and local partners to work together to keep the Delaware River and its watershed healthy for future generations of people and wildlife.

The legislation outlines three primary components needed to address the strategic program areas:

1. A partnership (Delaware Watershed Conservation Collaborative)
2. A grant and technical assistance program (Delaware Watershed Conservation Fund)
3. A watershed-wide strategy (Conservation Blueprint)

Delaware River Basin Restoration Program

STRATEGIC PROGRAM AREAS

- Sustain and enhance fish and wildlife habitat through restoration and conservation activities
- Improve and maintain water quality to support fish and wildlife, as well as habitats of fish and wildlife, and drinking water for people
- Sustain and enhance water management for volume and flood damage to benefit fish, wildlife and people
- Improve recreational opportunities for public access in the watershed consistent with the ecological needs of fish and wildlife habitat

CONSERVATION IN ACTION

The DRBRP, through the Delaware Watershed Conservation Fund (DWCF), supports a diversity of conservation and restoration projects that contribute to the health, wellness and economic vitality of the communities in the Delaware River watershed. Combined with matching funds from partner organizations, the grants, which are co-administered by the National Fish and Wildlife Foundation, result in significant, measurable benefits for people and wildlife in the watershed.

Fostering Stewardship

The DRBRP is investing in the next generation of conservationists by transforming unused green spaces on school campuses into eco-classrooms with wildlife and pollinator habitats — providing opportunities to teach environmental stewardship and advance conservation efforts.

Supporting Agricultural Communities

With 21% of watershed's lands dedicated to agriculture[1], the DWCF is investing in projects that reduce agricultural runoff at the source, increase habitat for pollinators and wildlife and support agricultural landowners.

Expanding Recreational Opportunities

The Delaware River Watershed's recreation economy is valued at $1.2 billion[2]. The DRBRP is supporting that economy by investing in public access projects that expand and enhance educational and recreational opportunities such as boating, fishing and wildlife viewing.

Restoring and Conserving Habitats

The DRBRP advances conservation actions across the watershed. Efforts in the upper watershed include brook trout research and forest management. In the lower parts of the watershed, some projects address coastal resilience/restoration, urban conservation and pollinator habitats.

[1] Technical Report for the Delaware Estuary and Basin, 2022; [2] Kauffman, 2016. doi.org/10.1111/j.1936-704X.2016.03222.x

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The full document is available for viewing at:

https://docs.house.gov/meetings/II/II13/20240321/116893/HHRG-118-II13-Wstate-KnutsonK-20240321-SD003.pdf

QUESTIONS SUBMITTED FOR THE RECORD TO KELLY KNUTSON, DIRECTOR, COALITION FOR THE DELAWARE RIVER WATERSHED

Questions Submitted by Representative Fitzpatrick

Question 1. Mr. Knutson, one of the themes our Committee has talked about repeatedly in recent months is the multiple uses of our natural resources for sectors of our economy and for recreational activity.

1a) Can you share your perspective on how the Delaware River Basin serves these multiple uses?

Answer. The Delaware River Basin and its many natural resources support the economy and recreation in many different and valuable ways. The Delaware River Basin Restoration Program is an essential program that ensures the continued conservation of the basin and its many resources for the benefit of the local, regional and national economy, endless recreational opportunities throughout the basin, and the continued supply of clean drinking water for millions of people.

A 2016 study by the University of Delaware's Water Resources Center which is one of the most comprehensive studies of the basin to date, calculated that the Delaware River basin contributes over $21 billion in annual economic activity from fish and wildlife ($1.5 billion, which includes commercial and recreational fishing and hunting), public parks ($1.8 billion), water quality ($2.5 billion), navigation ($2.6 billion), agriculture ($3.4 billion), water supply ($3.8 billion), and forest benefits ($5.1 billion, which includes environmental and health benefits). The Delaware basin supports 600,000 direct/indirect jobs with $10 billion in wages in the coastal, farm, ecotourism, water/wastewater, ports (Ports of Philadelphia, Wilmington, Camden, and Salem), and recreation industries. In addition, as I noted in my testimony, the Delaware River watershed serves as the source of clean drinking water for over 14 million Americans—roughly 5% of the U.S. population. The Delaware River Basin Conservation Act, which was enacted by Congress in 2016, has only helped bolster the contributions the broader Delaware River watershed contributes to the economy and residents as more recreational opportunities have been made available, improved water quality and more jobs as a growing number of people access the natural treasures throughout the watershed.

In addition, the USDA's Natural Resources Conservation Service (NRCS) has been engaging with the U.S. Fish and Wildlife Service (FWS) to further support conservation practices that align well with the habitat needs of fish and wildlife. By working with agricultural producers and forest landowners, NRCS and FWS are enhancing working lands, which is key to this watershed that is 21% in agricultural lands. Benefits are numerous: increased habitat for pollinators, improved water quality for economically and culturally important fish species, and enhanced forest management for forest a variety of forest bird species.

Question 2. Mr. Knutson, in your testimony you noted that since 2018 the Delaware Watershed Conservation Fund—a core part of the Delaware River Watershed's conservation programs—has awarded $55.1 million with a generated match of $79.2 million.

2a) Can you talk about how these programs have helped to leverage taxpayer dollars in a way that effectively gets resources to the places they're needed most?

Answer. The Delaware Watershed Conservation Fund (DWCF) has and continues to select high quality projects in areas of the greatest need, but that also leverage much more funding than the non-Federal match required by the enacting legislation. In fact, the Program's funding strategy prioritizes projects that have the potential to generate significant matching funds from other sources, and encourages collaboration among various stakeholders. Additionally, the Program emphasizes projects that provide multiple benefits, such as improving water quality, enhancing wildlife habitat, and supporting recreational activities. In the first six years of funding, funded projects have provided an additional $24.1 million over and above what was required—that provides an additional 44% of on-the-ground project work that would not have been done if only the minimum "one for one" dollar match was provided. The Fish and Wildlife Service's partnership with the National Fish and Wildlife Foundation (NFWF) as the implementing partner for the DWCF is critical to bringing non-federal match to the table since one of NFWF's primary purposes, to raise private funds to match with federal funds, was one of Congress's reason for creating the Foundation forty years ago.

Over the first six rounds of grants, the implementing partners have developed and funded a diversity of projects both geographically, and by type. Concern continues

to grow among underserved and rural communities that the current matching fund requirements of the Program will hinder or even fully prevent these communities from qualifying—even in cases where these communities have developed expertise to implement the projects effectively. Concern is also growing that as the needs of the Delaware River Basin grow, there will not be enough implementation partners able to manage quality projects due to the current match requirements that limit the number of organizations and communities that can qualify for the funding.

Question 3. One of the changes that the Delaware River Basin Conservation Reauthorization Act of 2023 makes to the Delaware River Basin Restoration Program is adding the state of Maryland.

3a) Can you talk about how adding Maryland to this program will expand and improve restoration efforts across the Delaware River Basin?

3b) As knowledge of the reach of the Delaware River has increased, how important is it to ensure that Maryland is involved seeking solutions to challenges to restoration and conservation efforts?

Answer. The addition of Maryland to the DRBCA is simply a technical correction to the existing law. The second Finding under the original law states: "The Basin contains over 12,500 square miles of land in the States of Delaware, New Jersey, New York, and Pennsylvania, including nearly 800 square miles of bay and more than 2,000 tributary rivers and streams;" This geographic description of the "basin" or watershed, is technically incorrect because a small portion of Maryland includes part of the watershed and therefore Maryland should be included in the authorizing statute.

The Christina River originates in southeast Pennsylvania and flows 35 miles through the northeast corner of Maryland into Delaware and then joins the mainstem of the Delaware River in Wilmington, DE. Although "Maryland" was not mentioned in the original Act, the U.S. Fish & Wildlife Service would consider any proposed project in the Maryland portion of the basin to be eligible for consideration of funding, although no such proposals have been submitted to date. The inclusion of Maryland in the bill simply fixes a geographic omission. It does not negatively impact the Program in any way and but should expand cross-jurisdictional conservation practices to address the needs of the watershed more comprehensively.

The large majority of the Christina River watershed is upstream from Maryland in Pennsylvania (71% of the watershed), and 28% is downstream in Delaware. With only 1% of the Christina River watershed in Maryland there is little that can be done in the Maryland portion of the watershed to have significant impacts on the rest of the river system, but every restoration action can still have a positive impact.

Mr. BENTZ. Thank you. I now recognize Congresswoman McClain to introduce Dr. Boehme.

Mrs. MCCLAIN. Thank you, Mr. Chairman. It is my honor to introduce to you Dr. Jennifer Boehme.

Dr. Boehme is the Chief Executive Officer of the Great Lakes Observing System, a bi-national non-profit which aims to provide data services to support science, policy, management, and industry on the Great Lakes.

Dr. Boehme has served with the GLOS as CEO since 2023, and previously was a member and Chairwoman of its Board. Dr. Boehme's career has long revolved around our Great Lakes. Throughout her time serving at International Joint Commission, focused on Great Lakes water quality and on various boards and commissions. As a research scientist in the University of Maine and the Smithsonian, Dr. Boehme has cultivated a broad range of knowledge and expertise on the Great Lakes that is very much appreciated and very much needed.

Under her leadership, GLOS is pursuing its Lake Bed 2030 campaign to map the lake beds of the Great Lakes by 2030. I am so glad to be working alongside her and her organization in pursuit

of this goal, through the Great Lakes Mapping Act being discussed here today.

Thank you very much, Dr. Boehme, for being here and for your testimony today, and for your commitment, most of all, to the Great Lakes. Thank you.

I yield back.

Mr. BENTZ. Dr. Boehme, you are recognized for 5 minutes.

STATEMENT OF JENNIFER BOEHME, CHIEF EXECUTIVE OFFICER, GREAT LAKES OBSERVING SYSTEM, ANN ARBOR, MICHIGAN

Dr. BOEHME. Thank you, Chairman Bentz, Ranking Member Huffman, and members of the Committee. Thank you for inviting me to speak in support of H.R. 7020, the Great Lakes Mapping Act, and giving me the opportunity to highlight how this bill is critical to the people, economy, and ecosystems in our region.

I am Jennifer Boehme, the Chief Executive Officer of the Great Lakes Observing System, or GLOS, a Michigan-based non-profit organization that provides high-quality lake information in support of science, policy, management, and industry in the Great Lakes region.

GLOS is one of 11 regional associations, or RAs, that are part of the Integrated Ocean Observing System, or IOOS, a network of non-Federal organizations that collect data and transform it into useful tools tailored to local needs through public-private partnership. IOOS is funded through the National Oceanic and Atmospheric Administration, and RAs like GLOS leverage those dollars to do even more for our communities.

GLOS provides critical data such as weather information; water characteristics; wind, wave, and water patterns; and biological and chemical parameters that inform key business, policy, and public health decisions in the Great Lakes. Underpinning all of these observations is the lake floor itself, an area woefully lacking in up-to-date high-density data collected to modern standards.

It may sound cliche, but it is true: We know more about the surface of Mars than we do about our own planet. With only 13 percent of the U.S. Great Lakes' waters mapped to modern standards, we know surprisingly little about the world's largest freshwater ecosystem that serves tens of millions of people and supports a massive economy. Meanwhile, we have nearly complete coverage of the surface of Mars at a higher density than exists for the Great Lakes. That is downright embarrassing.

The Great Lakes Mapping Act seeks to increase data density by a thousand-fold in many parts of the lakes, dramatically improving our ability to manage and protect this vital resource.

The total economy for the U.S. Great Lakes region generates approximately $3.1 trillion in gross domestic product, while employing 25.8 million people and supporting $1.3 trillion in wages. This is due in large part to our blue economy and the five major ports in the region: Chicago, Cleveland, Detroit, Duluth, and Milwaukee.

The Great Lakes also supports a vibrant $7 billion commercial fishery, as well as shipping, recreational boating, heavy industry,

telecommunications, tourism, and all the related businesses that support those industries.

Researchers around the lakes are working hard to understand the full impact of environment and public health threats such as pollution of our drinking water and increasing invasive species that affect our fisheries. In order to do that, they need the full picture, water depths, lake bed configurations, shoreline delineations, so that they can assess the true size and scale of impacts, and then recommend scientifically sound resilience and adaptation strategies to local decision makers.

The Great Lakes Mapping Act seeks to reverse course and chart a new direction for fully mapping the underwater environment of the Great Lakes. This is a game-changer for the understanding of and ability to support and manage the people and industries that rely on them.

The bill has two primary goals. The first is to use new and improved technologies to comprehensively survey the Great Lakes to modern standards and in high density. This activity includes the collection, processing, and bathymetric construction of a high-resolution digital elevation model of the lake beds. The second primary goal of this bill is to ensure widespread, equitable access to the data so everyone can benefit.

GLOS, as the IOOS regional association, will work with NOAA and its partners to build and release integrated, high-resolution maps and digital elevation models. Based on the work undertaken by GLOS and assessments done by three separate survey companies, the estimated total cost for this effort is $200 million, the amount authorized in this bill.

Mapping the Great Lakes can ultimately help the economic transformation of the region, from the Rust Belt to the Blue Belt. This type of mapping data and information is considered a foundational data set, meaning it is essential data to have in order to understand geospatial context, make decisions, realize opportunities, and plan investments.

The direct economic benefits from better supporting a commercial fishery, commercial shipping and transportation, growing tourism and recreation, protecting infrastructure and coastline, growing and retaining a workforce that stays in the region while growing the blue economy are significant. If passed, the Great Lakes Mapping Act would bring our region up to par with other U.S. coastal areas. The return on investment for mapping the Great Lakes benefits America, the American people, American business, and perhaps most importantly, the future of our Great Lakes.

Thank you again for the opportunity to testify, and I look forward to your questions. I yield back my time.

[The prepared statement of Dr. Boehme follows:]

PREPARED STATEMENT OF JENNIFER BOEHME, CHIEF EXECUTIVE OFFICER, GREAT LAKES OBSERVING SYSTEM

ON H.R. 7020

Chairman Bentz, Ranking Member Huffman and Members of the Committee, thank you for inviting me to testify in support of H.R. 7020, the Great Lakes Mapping Act, and giving me the opportunity to highlight how this bill is critical to the people, economy, and ecosystems in our region.

I am Jennifer Boehme, Chief Executive Officer of the Great Lakes Observing System (GLOS), a Michigan based non-profit organization that provides high-quality lake information in support of science, policy, management, and industry in the Great Lakes region.

GLOS is one of 11 Regional Associations that are part of the Integrated Ocean Observing System (IOOS), a network of non-federal organizations that collect data and transform it into useful tools tailored to local needs through public-private partnership. IOOS is funded through the National Oceanic and Atmospheric Administration (NOAA), and RAs like GLOS leverage those dollars to do even more for our communities.

GLOS provides data such as weather information, water characteristics, wind/wave/water patterns, and biological and chemical parameters that inform key business, policy, and public health decisions in the Great Lakes. Underpinning all of these observations is the lakefloor itself, an area woefully lacking in up-to-date high-density data collected to modern standards with new technologies.

It may sound cliché, but it's true: we know more about the surface of Mars than we do of our own planet. With only 13%[1] of U.S. Great Lakes waters mapped to modern standards, we know surprisingly little about the world's largest freshwater ecosystem that serves tens of millions of people and supports a massive economy. Meanwhile, we have nearly complete coverage of the surface of Mars at a higher density than exists for the Great Lakes. That's downright embarrassing.

The Great Lakes Mapping Act seeks to increase data density by a thousandfold in many parts of the Lakes, dramatically improving our ability to manage and protect this vital resource.

Importance of the Great Lakes

Mapping data above and below the waterline in the Great Lakes is an essential missing component for the people and industries that call this region home.

Unlike Mars, the Great Lakes region is home to over 40 million people in two countries, eight states and one province. It is the world's largest freshwater lake system with a coastline of 4,350 miles.[2] Five lakes, Superior, Michigan, Huron, Erie, and Ontario make up the Great Lakes with depths, ranging from 30 feet in the shallowest of places in Lake Erie to nearly 1332 feet in Lake Superior. The total area of all the Great Lakes, including Canadian waters, is 94,250 square miles—approximately the size of the state of Oregon. Supporting major international cities, such as Chicago, Toronto, Detroit, Cleveland and Milwaukee, the Great Lakes supplies drinking water to approximately 30 million people, 10% of the U.S. population.

Economically, the importance of the Great Lakes cannot be understated. The total economy for the U.S. Great Lakes region generates approximately $3.1 trillion in gross domestic product (GDP) while employing 25.8 million people and supporting $1.3 trillion in wages. This is due in large part to the five major ports in the region: Chicago, Cleveland, Detroit, Duluth, and Milwaukee.[3] When combined with Canada, this represents over a $6 trillion GDP, the 3rd largest in the world, if the Great Lakes region were its own country.

Our blue economy underpins everything. The Great Lakes support a vibrant $7 billion commercial fishery, shipping, recreational boating, heavy industry, telecommunications, freshwater management, tourism, and all the related businesses that support these industries.

Mitigating Environmental Impacts

Researchers around the lakes are working hard to understand the full impact of environmental and public health threats such as pollution of our drinking water and increasing invasive species affecting our fisheries. In order to do that, they need the full picture, water depths, lakebed configurations, shoreline delineations so that they assess the impacts and recommend resilience and adaptation strategies to local decision-makers.

The Great Lakes are a dynamic environment challenged by legacy impairments with new stressors and threats that emerge every year. There are more than 180

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[1] Integrated Ocean and Coastal Mapping, 'U.S. Bathymetry Coverage and Gap Analysis', Integrated Ocean and Coastal Mapping, 2024, https://iocm.noaa.gov/seabed-2030-bathymetry.html (accessed 14 March 2024).

[2] F. Klug, 'Great Lakes have the most miles of coastline in the contiguous US', *MLive*, 2 April 2013, https://www.mlive.com/news/2013/04/who_has_more_miles_of_coastlin.html (accessed 14 March 2024).

[3] NOAA Office of Coastal Management, 'NOAA Regional and State Report on the U.S. Marine Economy', NOAA Office of Coastal Management, 2023, https://coast.noaa.gov/data/digitalcoast/pdf/econ-report-regional-state.pdf (accessed 14 March 2024).

non-native species[4] that have been introduced into the Great Lakes through the ballast water of seagoing ships, sometimes from other countries. Sea lamprey, alewife, dreissenid mussels, round gobies, and the spiny water flea are all examples of invasive species that have affected or are affecting Great Lakes fisheries.[5] An estimated 750 trillion mussels are carpeting the lake floor. These mussels muscle out native species and disrupt the food chain by siphoning out nutrient-rich plankton that fish also need to survive.[6] The collective invasive species are responsible for the loss of 18 fish species in at least one Great Lake.[7]

Runoff, water level fluctuations, ice cover, or lack thereof, wind and storm events, as well as other human and nature induced impacts further affects the Great Lakes. This winter, Lake Superior is experiencing a historic low with ice cover less than 2 percent in February.[8] The variability and diminishing of ice cover for the past several decades has heavily influenced the nearshore waters and altered historic sediment distribution patterns. Industry, homeowners, businesses and those who enjoy recreation on the Great Lakes have established themselves along the shores where coastlines can change. Fluctuating lake levels and coastal erosion can cause hundreds of thousands of dollars of damage in a single year and upwards to several million dollars in a single storm event. Improved mapping data would aid researchers in assessing the extent of these challenges and devising effective strategies to mitigate them.

The State of Our Maps

Before NOAA's Lake Survey Center closed its doors in 1976, the Great Lakes were surveyed at low density with what is now obsolete technology. Since then, there has not been a concerted effort to map the Great Lakes until NOAA brought its hydrographic survey vessel *Thomas Jefferson* to the region in 2022. The Great Lakes Mapping Act aims to make that level of effort routine. With over eight states and a Canadian province surrounding the lakes, there is no state level jurisdictional agency responsible for this type of work, nor does the computing infrastructure exist at the state level to handle this volume and type of specialized data.

Legacy and current efforts for national mapping have deprioritized the Great Lakes in favor of U.S. ocean coastal waters. With much of the depth data for the Great Lakes over 50 years old, in a dynamic environment, our understanding of the lakebeds and their relationships with habitat, subaqueous processes, invasive species, and coastline erosion is limited, introducing significant risk into science, policy, management, and day-to-day business operations.

The Great Lakes Mapping Act

The Great Lakes Mapping Act seeks to reverse course and chart a new direction for fully mapping the underwater environment of the Great Lakes, all within a relatively short time frame. There are two primary goals of the bill.

The first is to use new and improved technologies to comprehensively survey the Great Lakes to modern standards and in high-density. This activity includes the collection of and processing of bathymetric construction of a high-resolution digital elevation model of the lakebeds.

The second primary goal of this bill is related to data sharing for widespread, equitable access to the data, which will be so useful for so many purposes. Data sharing will depend heavily on high quality metadata and data archive for accessibility. GLOS, as the IOOS Regional Association for the Great Lakes, will work with NOAA and partners to build and release integrated high resolution maps and digital elevation models as data is acquired.

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[4] Shedd Aquarium, 'Great Lakes Invasive Species: 180 and Counting', Shedd Aquarium, 20 February 2020, https://www.sheddaquarium.org/stories/great-lakes-invasive-species-180-and-counting (accessed 14 March 2024).

[5] Great Lakes Fishery Commission, 'Invasive Species', Great Lakes Fishery Commission, 2024, http://www.glfc.org/invasive-species.php (accessed 14 March 2024).

[6] K. Lavey, 'How do you get rid of 750 trillion mussels in the Great Lakes', Detroit Free Press, 22 February 2017, https://www.freep.com/story/news/local/michigan/2017/02/22/zebra-quagga-mussels-great-lakes/98242180/ (accessed 14 March 2024).

[7] Great Lakes Fishery Commission, 'Invasive Species', *Great Lakes Fishery Commission*, 2024, http://www.glfc.org/invasive-species.php (accessed 14 March 2024).

[8] P. Huttner, 'Where's the ice? Historic low Superior and Great Lakes ice cover', *MPR News*, 22 February 2024, https://www.mprnews.org/story/2024/02/22/wheres-the-ice-historic-low-superior-and-great-lakes-ice-cover (accessed 14 March 2024).

Based upon the work undertaken by GLOS[9] and assessments done by three separate survey companies, the estimated total cost for this effort is $200 million.

Impact and Benefit of the Great Lakes Mapping Act

Foundational Dataset

This type of mapping data and information is considered a foundational dataset, meaning it is essential data to have in order to understand the geospatial context, make decisions, realize opportunities, and plan investments. Across the United States, and even in the states surrounding the Great Lakes, we have mapped our land elevations to much higher accuracy and density than the Great Lakes themselves. We need to understand the bathymetric composition of our Great Lakes themselves, and combine this information with the surrounding topography for a complete picture. For a resource that supplies drinking water to tens of millions of people, supports a massive economy including a fishery and shipping, is a complex ecosystem threatened by a changing climate, coastal processes and invasive species, it is in the national interest to fully map our Great Lakes waters in short order.

Economic

The economic benefits of investing in this initiative are comprehensive. NOAA's Blue Economy Strategic Plan for 2021–2025 aims to advance America's Blue Economy and enhance the global ocean economy. This includes the Great Lakes. A commercial fishery is better informed, better managed and would likely yield higher revenues with a better understood lakebed. Shipping routes would have more up to date information, for safer navigation and greater access with more accurate data, reducing risk and saving time and money in commercial operations. Tourism and recreational activities are increased, driving revenues, directly impacting local economies, creating jobs and providing new opportunities for companies to establish themselves in the region. Technology innovation is a natural consequence of investing in this initiative. The Great Lakes are a perfect test bed for new technology development. Similar conditions exist in the Great Lakes as the high Arctic, an area that is primed for new exploration with warming polar regions and increased shipping traffic. Preparing a workforce to support this burgeoning industry goes hand-in-hand with educating, attracting and retaining talent in the region, further enhancing the economic benefits. Mapping the Great Lakes can ultimately help the economic transformation of the region from the 'rust belt' to the 'blue belt'.

Environmental

From an environmental perspective, the Great Lakes are changing. This year, the city of Duluth had an ice-free winter on Lake Superior. Temperatures are warming, water levels are fluctuating, the shoreline is changing, algae blooms are increasing, the ecology is changing, and large rain events are becoming more predominant. All of these have impacts on the lakebeds of which we have very little baseline knowledge of. Coastal resilience is an important theme for NOAA and stormwater runoff is a major threat. One of the primary activities to improving management of stormwater runoff is fully understanding the underwater environment impacted by this human activity. Human migration is anticipated to dramatically increase, bringing hundreds of thousands of people to the region, all requiring drinking water. New infrastructure will be required to support this growth and a well understood lakebed will aid in this decision making. More research is required to better understand all of these environmental indicators of change in the Great Lakes and having a foundational dataset is critical to the human knowledge required for the protection and preservation of the Great Lakes. Without it, the economic impact would be profound. More efficient decision making, impacting a wide range of beneficiaries and constituents, would be made as a result of having access to better data.

Investing in mapping the Great Lakes will undoubtedly see an almost immediate return on investment economically, environmentally and in areas that represent opportunity.

The Great Lakes Mapping Act can be executed successfully and efficiently by leveraging the power of organizations that span jurisdictions, have federated partner networks and non-commercial interests in facilitating the two primary goals of the bill. In support of the goal of 'High-resolution Lakebed Mapping', a qualified organization would utilize existing reports on prioritization, gap analysis and strategic areas of importance to set priorities, coordinate mapping efforts and facilitate communication and management. Working with other stakeholders, a high-resolution map would be created while in process and at the completion of the effort,

[9] https://glos.org/wp-content/uploads/2021/12/Costs-and-Approaches-for-Mapping-the-Great-Lakes.pdf

lead the development of a methodology and implementation of a process for data processing and work with partners on an efficient use of existing and new cyberinfrastructure resources for data management, cataloging, archival and metadata management. Supporting the second goal, 'Data Sharing', a regionally certified authority under NOAA would provide public access points for data and metadata discovery, download, map visualization and sharing both during and after the mapping effort. This includes ensuring that all relevant and approved data is archived within Federal government data holdings and made publicly available. The development of high visibility products, such as maps, models and related information would be coordinated and communicated to a wide range of stakeholders for effective and future decision making that benefits the economy, environment and American people.

Investment and Conclusion

The Great Lakes Mapping Act is an investment in the future of the Great Lakes. The direct economic benefits from better supporting the commercial fishery, commercial shipping, growing tourism and recreation, protecting infrastructure and coastline, growing and retaining a workforce that stays in the region while growing the blue economy are significant. From an environmental perspective, the Great Lakes have a lot to gain with this foundational dataset. Understanding the risks from invasive species on the lakebed, unveiling discoveries of the deep—both human, such as shipwrecks, and geologic, such as mineral or gaseous deposits all impact the economic picture of the Great Lakes. Using this data to understand the effects of a changing climate, stormwater runoff, coastal processes, benthic habitats and decreasing ice coverage impacts enable the research community to make informed decisions that affect economic sustainability of a wide range of industries. Human migration is poised to significantly grow the population of the Great Lakes, putting strain on a fragile freshwater ecosystem that supplies drinking water to many Americans. This data helps prepare for that eventuality. Current Great Lakes bathymetry is decades old, low density and captured with obsolete technology. The Great Lakes Mapping Act will see comprehensive high-density data collected to modern standards and made publicly available through intuitive discovery tools. This brings the region up to par with other U.S. coastal areas for having the kind of coverage and depth data required for effective and efficient decision making that impacts millions of lives and businesses in one of the largest economies in the world. This effort is able to take advantage of established organizations via NOAA, IOOS and GLOS that already work with large partner networks that include state, federal, local and commercial interests. Furthermore, supporting technologies and computing infrastructure already partially exists to facilitate the collection, cataloging, storing, processing, modeling, sharing and visualization of this comprehensive data and high-resolution map of the Great Lakes.

The return on investment for mapping the Great Lakes benefits America, the American people, American business and perhaps most importantly, the future of the Great Lakes.

Support for the Great Lakes Mapping Act

"As Director of the Great Lakes Acoustic Telemetry Observation System (GLATOS), a binational research effort with a mission of understanding the movements of Great Lakes fish, the need for high-resolution bathymetric mapping of the lake beds is imperative. GLATOS researchers are able to understand fish movement patterns at unprecedented scales with acoustic telemetry technology; however, without precise information about what habitat these fish are using (i.e., via high resolution lake bed mapping) a large information gap exists. A concerted high-resolution mapping effort across the Great Lakes Basin would allow researchers and managers to better understand native fish critical habitat use (i.e., for spawning, nursery and foraging) to ensure these economically and ecologically important species persist in the face of climate change."

Christopher S. Vandergoot
Director, Great Lakes Acoustic Telemetry Observation System
Associate Professor, Michigan State University

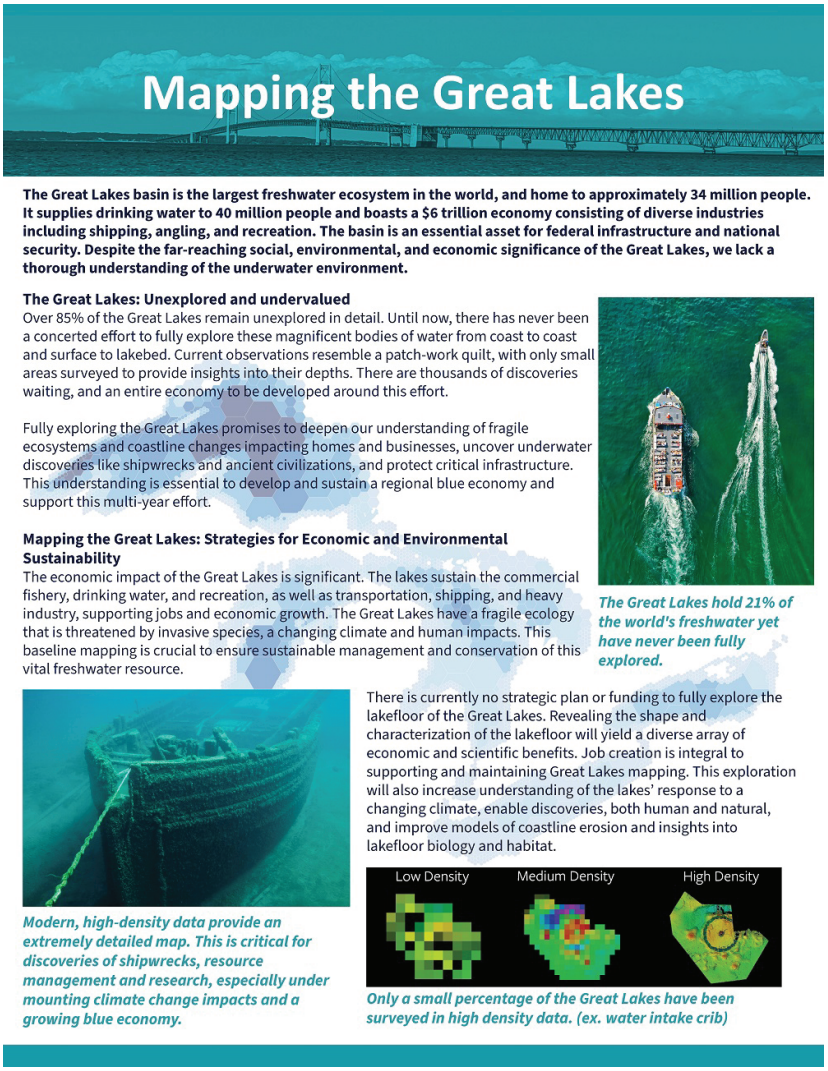
"High-resolution bathymetry data for the lakebed would be tremendously beneficial to sustainable management of the Great Lakes fishery, said Dr. Marc Gaden, executive secretary of the Great Lakes Fishery Commission, a Canada-US treaty organization. We need these data for the whole of the Great Lakes. Bathymetry data would allow us to link fish movement and behavior to specific habitat; would allow us to identify, protect, and improve areas most important to fish spawning and fish recruitment; and would help us better predict fishery production in areas

where good habitat data are otherwise unavailable. Moreover, from a whole lake perspective, high-resolution bathymetry would allow us to develop better models and tools to better understand occupancy and ecosystem function, and allow fishery managers to work more effectively with their water quality counterparts. The Great Lakes Fishery Commission and its partners look forward to the day when these tools are available in the Great Lakes basin."

Marc Gaden, PhD
Executive Secretary
Great Lakes Fishery Commission
2200 Commonwealth Blvd. Ste 100
Ann Arbor, MI 48105

Further information regarding mapping in the Great Lakes can be found in Attachments 1 and 2.

Attachment 1



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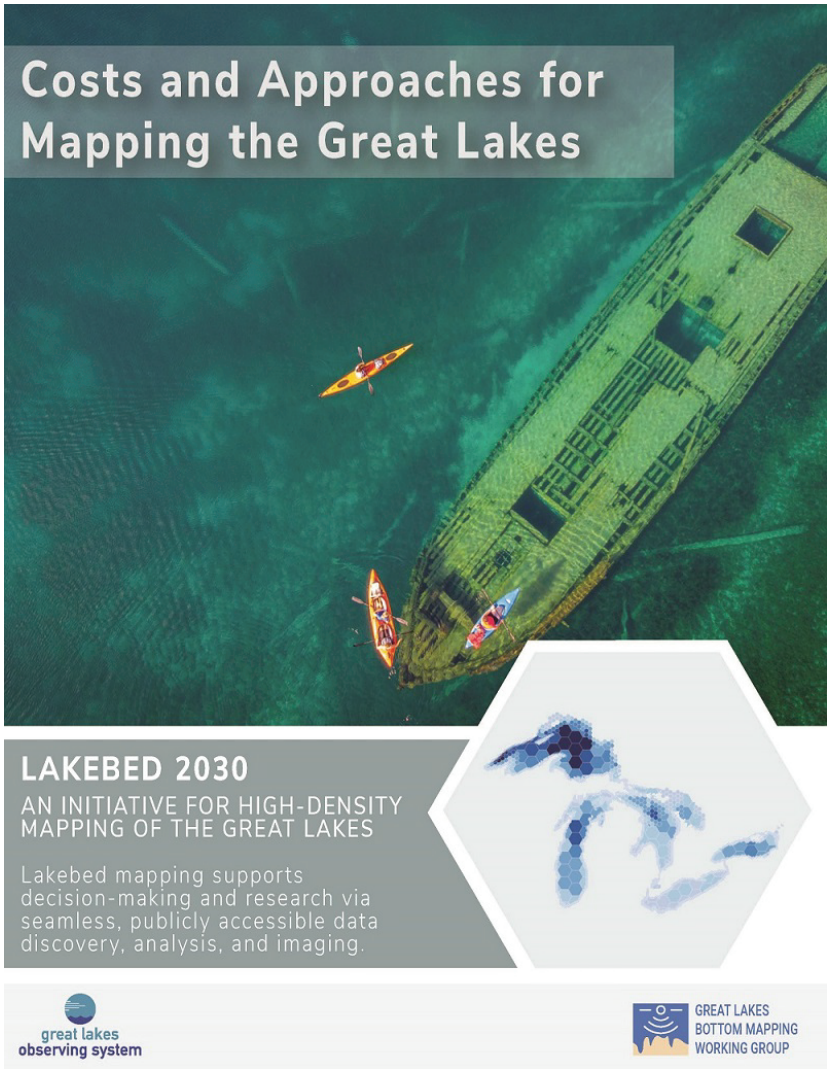
The full document is available for viewing at:

https://docs.house.gov/meetings/II/II13/20240321/116893/HHRG-118-II13-Wstate-BoehmeJ-20240321-SD001.pdf

Attachment 2



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The full document is available for viewing at:

https://docs.house.gov/meetings/II/II13/20240321/116893/HHRG-118-II13-Wstate-BoehmeJ-20240321-SD002.pdf

QUESTIONS SUBMITTED FOR THE RECORD TO JENNIFER BOEHME, CHIEF EXECUTIVE OFFICER, GREAT LAKES OBSERVING SYSTEM

Questions Submitted by Representative McClain

Question 1. Dr. Boehme, GLOS' November 2021 report, Costs and Approaches for Mapping the Great Lakes, talks about the roles of different mapping technologies, including airborne LiDAR, vessel-based multibeam echosounder, and autonomous surface and underwater vessels.

1a) Can you talk about the need to use multiple technologies to effectively and timely map the Great Lakes and how industry can aid NOAA in these efforts?

Answer. **The Use of Multiple Technologies for Mapping the Great Lakes and Industry Role:**

Leveraging multiple technologies and approaches for mapping the Great Lakes provides the highest likelihood of complete and rapid coverage while maximizing industry contribution by leaning on multiple specialities; driving further economic benefit in the region.

There are two broad categories of approaches to achieve high density mapping in the Great Lakes, '*crewed*' and '*uncrewed*'. Crewed techniques involve aerial (helicopter and fixed wing aircraft) and surface vessels (usually small to large vessels). Uncrewed techniques typically include autonomous and semi-autonomous surface and subsurface vehicles. There are also only two methods for capturing lake floor depths, reflected light and reflected sound. Aerial methods (including aircraft and even satellite imagery) rely on reflected light (LidAR and multispectral imagery) and is usually limited to very shallow and very clear water. Reflected sound, SONAR (Sound Navigation and Ranging) is the principle method for collecting high density data via either crewed or uncrewed methods. There is a broad range of systems employed by both industry and government that are tailored for shallow or deep water collection.

The 'field season' in the Great Lakes is limited to good weather and sea state conditions. A vessel experiencing poor weather conditions on the surface will not usually collect good quality data from the lake bottom. Therefore, both crewed and uncrewed platforms need to take advantage of a relatively short weather window (May to September) for survey operations.

The most practical reason for diversifying the approaches, methods and technologies for Great Lakes lakefloor data acquisition is to maximize the resources available for the work. The US Government is limited in the hardware, personnel, and technology that it can apply. A federated group within industry is best positioned to support this effort. Few companies boast the capability to employ a wide range of mapping technologies, resulting in the reliance on a number of companies who specialize in one of the primary approaches.

Leveraging multiple approaches to Great Lakes mapping is also an efficiency gain. Costs vary based on distance from shore and water depth—requiring different platforms. Crewed vessel based operations are best suited for longer durations in the field, further from shore and deeper water. These platforms can cost anywhere from $6,000–$60,000 per day. As of late, uncrewed vessels have typically had shorter durations, being better suited for shallower water, closer to shore and have a cheaper price point, often around $200–600 per hour ($5,000–$15,000 per day) yielding a 15% to 75% benefit in cost savings. Uncrewed range, depth and duration is changing though, reflecting the continuing evolution and innovation in this competitive sector. Given the limited nature of crewed vessels, in terms of both skilled personnel and the vessels themselves, by utilizing a traditional survey approach in conjunction with uncrewed systems, we create a *force-multiplier*, covering more area for less money and less time. There is also an environmental benefit to leveraging uncrewed vessels; these vessels are usually smaller, requiring less power and are often battery or even solar powered, reducing carbon emissions.

Employing a multi-faceted approach to mapping, leveraging industry, utilizing different approaches, and taking advantage of a wide range of technologies, has a cumulative effect on the ability to map the Great Lakes within a short time frame. Organizations like the Great Lakes Observing System can serve as a conduit for partner coordination, mission planning, data throughput and product development. NOAA stands to gain from industry and non-industry participation by leveraging the force multiplier effect, domain expertise, innovative approaches, as well as environmental and operational efficiency.

Question asked during the hearing by Representative Bentz

Question 1. On the value of mapping, could you provide a very narrowly constructed list of the benefits.

Answer. **The Value of Mapping the Great Lakes:**

The value proposition for mapping the Great Lakes is extensive and touches many aspects of the broader economy in the region.

It has *intrinsic value*—a better understanding of the world's largest freshwater ecosystem is aligned with the U.S. National Strategy For Mapping, Exploring, And Characterizing The United States Exclusive Economic Zone (NOMEC); and *investment value*—by creating an environment for increased flow of businesses, educated resources and tourism to the region, as well as *economic value*—by creating jobs, benefiting the commercial fishery, savings through prevention of marine accidents, and increased shipping & trade in the region.

Humans have long had an instinctive nature to explore and discover their surroundings. This interest in exploration also extends to the Great Lakes. Never having been fully explored in high density before, our insatiable desire to map these waters goes beyond basic human traits. While national interests may not demonstrate immediate or direct economic benefits in the short term, they help protect and document a national boundary that straddles Canada, which is home to tens of millions of people and supports a region-wide $6 trillion economy. There are over 6,000 wrecks in the Great Lakes, most of them undiscovered, unexplored and undocumented. Discovery, preservation and documentation of these wrecks is important for the historical record, but also for the families of the missing seeking closure for their loved ones.

Mapping the Great Lakes is not only about documenting and exploring the depths. It is also about investing in the region. Boasting a massive economic output and a burgeoning economy centered solely around maritime and marine related activities, this effort has the opportunity to help transform the region from the *rust belt* to the *blue belt*. Mapping the Great Lakes will require an army of knowledge workers, thus spurring increased educational offerings in the region, who will reduce the *brain drain* of the Great Lakes and rather enable the *brain gain* of the Great Lakes. These educated professionals will settle in the area, have families, contribute to the economy and support local businesses and communities.

While the fundamental technologies exist at present for surveying the depths of the lakes, innovation in this exploration sector is blossoming. LiDAR and SONAR systems, uncrewed & autonomous platforms, artificial intelligence, data processing, vessel positioning, data transmission are all just some of the technologies that are ripe for continued development. Investing in mapping the Great Lakes will yield growth in the region's blue economy with a wide range of beneficiaries.

It is not just the act of mapping the Great Lakes that will yield investment value. It is also the *data itself*. One of NOAA's Integrated Ocean and Coastal Mapping core principles is, "map once, use many times." This refers to the recurring value that is derived from data collected via a single investment. In the Great Lakes, this translates into *investment potential* ranging from applications of the data, increased tourism from scuba diving[1] and cruise ships[2], future infrastructure development, resource extraction, coastal resilience and all of the subsequent spinoff industries. This data also increases the situational awareness for vessel operators (both recreational and commercial) both by creating efficiencies and by reducing risk, saving Americans' lives and insurance companies' financial exposure.

Finally, the direct economic value to mapping the Great Lakes is already well documented. NOAA and partners have done many studies showing the direct impact of the value of nautical charts (derived from depth mapping), the importance of hydrography (the science of depth mapping), and the value of the maritime transportation system and its relationship to economic benefit. NOAA's report on 'Value to the Nation'[3] from 2018 cites that there is a 15x direct benefit and 30x indirect benefit from coastal mapping in the U.S. As the GLOS written testimony documented, the existing $7B commercial fisheries in the Great Lakes stands to gain economically from this effort. Better understanding of the benthic habitat and spawning grounds for lake fish, from which the fishery is dependent upon, will lead

[1] https://www.michiganseagrant.org/wp-content/uploads/2018/08/11-715-Lake-Huron-Scuba-Diving.pdf

[2] https://www.nationalgeographic.com/travel/article/cruises-on-the-great-lakes-are-giving-new-life-to-the-rust-belt

[3] https://www.noaa.gov/sites/default/files/legacy/document/2019/Nov/NOAA-by-the-Numbers-Accessible-Version-Corrected-17-JUL-18%20%281%29.pdf

to more efficient operations, higher yields and increased profits. A 2024 report [4] from NOAA's Office for Coastal Management details the economic profile in the region by state (eight of them) and by ocean sector category including three new categories; power generation, state & local government, and research and education. All told, this new report boasts over 15,000 businesses with hundreds of thousands of employees earning over $11 billion in wages supporting a $22.6 billion gross domestic product (GDP) annually. Tourism and recreation are two of the largest categories, producing over half of the GDP. Both are poised to grow in the coming years, collecting comprehensive and high density data, shared publicly, will further fuel this economic growth.

Answer. **Narrowly Constructed List of the Benefits:**

To be succinct in the benefits of Great Lakes Mapping, they are:

- Economic impact
  - o Job creation
  - o Investment
  - o Innovation
  - o Education & workforce development
- Business relevance
  - o Commercial shipping/transportation
  - o Ports and harbors
  - o Fishery/aquaculture
  - o Tourism
    - □ Boating, coastal activities
    - □ Scuba diving
    - □ Cruise/passenger vessels
  - o Technology innovation/startups
  - o Company migration
- Science/Research
  - o Climate adaptation
  - o Coastal resilience/erosion
  - o Renewable resource site identification
  - o Benthic habitat
  - o Invasive species
  - o Pollution effects
  - o Modeling (elevation, coastal processes, ice, temperature, wave, current, storm surge, volume)
- National/Regional benefits
  - o Ship/aircraft wreck discovery & documentation
  - o Ancient civilization/cultural significance & documentation
  - o National security considerations
  - o Supports national strategic initiatives
  - o Underwater hazards

Additional Support for the Great Lakes Mapping Act

"High resolution lakebottom mapping has been essential to our conservation efforts within the sanctuary and is leading to the discovery of new, nationally-significant cultural sites. The maps also provide up-to-date nautical charts for commercial and recreational vessels. Equally important, this type of mapping enables the creation of high resolution lakebed habitat maps, which do not currently exist for the sanctuary or much of the Great Lakes. Such maps are an essential tool

[4] https://coast.noaa.gov/data/digitalcoast/pdf/marine-economy-great-lakes-profile.pdf

for our academic, local, state, and federal partners as they look for solutions to the devastating impacts of invasive species on fisheries, beaches, and the general health and well-being of Lake Michigan."

Russ Green
Superintendent, Wisconsin Shipwreck Coast National Marine Sanctuary
One University Ave.
UW Green Bay, Sheboygan Campus
Sheboygan, WI 53081

"A critical knowledge gap exists in our understanding of the Great Lakes, and that limits our ability to effectively manage this important resource. Comprehensive, high-resolution mapping would be a transformative investment, supporting the development of a sustainable blue economy and providing the information needed to ensure safe drinking water, resilient coastlines, sustainable fisheries, and accessible recreation."

Céline B. Gerson
Group Director, Americas and President USA
Fugro

"The Nature Conservancy is a global organization with the mission of conserving the lands and waters on which all life depends. TNC has a long history in the Great Lakes region with a focus on fisheries, aquatic invasive species, coastal resiliency, climate, and sustainable agriculture. The high-resolution bathymetry data that would result from the Mapping the Great Lakes Act is not only relevant to all of these management issues, but would help us and our myriad of partner better protect and restore this globally important resource."

Scott Sowa
Juli Plant Grainger Great Lakes Program Director
Wisconsin chapter of The Nature Conservancy

Mr. BENTZ. Thank you, Dr. Boehme.

I now recognize Ms. Self for 5 minutes.

STATEMENT OF DEB SELF, EXECUTIVE DIRECTOR OF RESTORATION AND PARTNERSHIPS, GREATER FARALLONES ASSOCIATION, SAN FRANCISCO, CALIFORNIA

Ms. SELF. Chairman Bentz, Ranking Member Huffman, and members of the Subcommittee, thank you for the honor to testify today in strong support of the Help our Kelp Act.

My name is Deb Self. I am the Executive Director of Greater Farallones Association, a non-profit organization dedicated to working in close public-private partnership with NOAA in studying and restoring ecosystems of the Greater Farallones and Cordell Bank National Marine Sanctuaries, and the Northern Management Area of the Monterey Bay National Marine Sanctuary. This encompasses approximately 5,000 square miles of federally protected ocean along the coast of Northern California, representing one of the most biologically productive ocean ecosystems in the world.

On behalf of GFA and our many collaborators working on kelp restoration in California, Washington, Oregon, Alaska, and Maine, it is my pleasure to voice strong support for H.R. 5487, sponsored by Ranking Member Huffman.

In Northern California as elsewhere, kelp forests have historically formed the backbone of our marine ecosystems, with massive benefits to numerous species of fish and invertebrates, marine mammals, and people. Commercial and recreational fisheries, recreational diving businesses, tribes, communities, and the health of state economies have all depended on healthy kelp forests in the

past. Kelp's ecosystem value for California fisheries alone has been estimated to be worth hundreds of millions of dollars. One study puts it at $1.1 billion for one type of seaweed alone.

Unfortunately, kelp forests have been decimated by climate stressors and disease vectors that have wiped out most kelp forests along the West Coast, leaving widespread so-called barrens of purple urchin that, having eaten all the kelp, can lie dormant for decades, waiting for the next kelp to come along.

The greatest loss of kelp forests on the West Coast has occurred in Northern California, with some of the most devastating losses in Greater Farallones National Marine Sanctuaries, primarily along Sonoma and Mendocino coasts, where more than 90 percent of historic kelp cover was lost between 2014 and 2016.

Now, along the Northern California coast, there are only remnants of kelp forests, but these remaining beds offer hope because they may serve as vital sources of kelp spores and also offer critical lessons in resilience, which makes a kelp forest be able to withstand these kinds of stressors. GFA is avidly studying this through underwater scientific diving and aerial mapping.

Though the collapse has brought peril to fisheries and communities alike, there is a window of time right now to reduce purple urchin density and to grow and plant baby kelp, and then defend that kelp against urchins. This will save our fisheries, our economies, and our cultures.

The Help our Kelp Act would provide 5 years of urgently-needed funding to bring to scale highly effective, science-based restoration projects within a framework of collaboration and with a crucial set-aside for tribes. GFA believes that this is just the right approach. Successful partnerships are integral to GFA's restoration efforts, and we partner extensively with under-employed commercial fishermen who actually know how to quickly and efficiently remove purple urchin to defend the kelp, and we also partner extensively with academic institutions, marine labs, NOAA, and state governments.

The establishment of this grant program through H.R. 5487 will increase the speed, the scale, and the impact of these efforts, and it is critical to both the immediate success in re-establishing kelp, and also to ensuring its resilience over time.

Thank you again for the opportunity to testify today in strong support of H.R. 5487, which will help our kelp and will help our communities and our economies. I am more than happy to take any questions. I yield back.

[The prepared statement of Ms. Self follows:]

PREPARED STATEMENT OF DEB SELF, EXECUTIVE DIRECTOR, GREATER FARALLONES ASSOCIATION

ON H.R. 5487

Chairman Bentz, Ranking Member Huffman, and Members of the Subcommittee, thank you for the honor of testifying before you today on behalf of Greater Farallones Association. My name is Deb Self, and I am the Executive Director of GFA, a nonprofit organization dedicated to working in close public-private partnership with NOAA's Greater Farallones and Cordell Bank National Marine Sanctuary, and the Northern Management Area of the Monterey Bay National Marine Sanctuary.

Our kelp ecosystems are in dire need of rapid restoration to maintain the fisheries and communities that are dependent on kelp. It is my pleasure to voice strong support for H.R. 5487, the Help Our Kelp Act, which would create additional restoration funds for kelp, including an emphasis on ensuring Tribes receive resources for restoration and co-management.

This is important to Greater Farallones Association, because our mission is to ensure a thriving ocean ecosystem through science, restoration, and education. From deep-sea research to community-based coastal monitoring, Greater Farallones Association provides critical longitudinal data to support good decisions about protection of species. In working to inspire and train the next generation of ocean scientists and stewards, we educate around 14,000 California primary and secondary students per year, and provide paid fellowships to college students. Increasingly, we are called on to restore balance and function to sanctuary ecosystems—none more important than kelp forests.

Together, the national marine sanctuaries we partner with encompass approximately 5,000 square miles of federally protected ocean along the coast of California—representing one of the most biologically productive upwelling zones in North America. In this unusual geologic setting, cold water rises from the depths of the ocean, bringing nutrients and plankton to the surface, supporting 36 marine mammal species, more than a quarter million seabirds, and more than 500 species of fish, crabs, shrimp, deep-sea corals, sponges, squid and octopuses. It provides a necessary feeding ground for a globally significant population of white sharks.[1]

This abundance is the foundation of Pacific commercial and recreational fisheries, supporting countless communities and federal and state tribes, and also providing vital cultural and recreational value not only to California's inland communities but to all of the American public.

The Value of Healthy Kelp

Along the coasts of Northern California and Oregon bull kelp is a foundation species, creating ecological resilience by forming favorable habitat for hundreds of species. Kelp forests provide habitat for numerous state and federally managed fish species, including the federally listed black abalone, lingcod, cabezon and rockfishes.

Healthy kelp forest habitats provide intrinsic biodiversity value through the tourism they support; opportunities for recreation in and around them including SCUBA diving, freediving, swimming, kayaking, and wildlife viewing; kelp harvesting, commercial and recreational fishing; and cultural significance to Tribes and other communities. The Oregon Kelp Alliance (ORKA), estimates the value of ecosystem services of marine kelp forests in Oregon at $23–52 million (a preliminary estimate derived from the pre-publication 2024 Oregon Kelp Forest Status Report authored by the Oregon Kelp Alliance). Kelp's ecosystem value for California fisheries, meanwhile, has been estimated to be worth upwards of hundreds of millions of dollars.[2]

However, this vital resource is teetering. Climate change has brought unusually warm ocean waters to the West Coast over the past decade, and the warmer waters have lowered reproduction rates of kelp and allowed diseases to remove important predators of purple urchin, which graze on kelp. The combination of successive marine heat waves and the introduction of Sea Star Wasting Syndrome to Northern California waters resulted in a widespread die-off of numerous species of sea stars, including the iconic sunflower sea star (*Pycnopodia helianthoides*). A population explosion of purple urchin ensued, and the kelp stood no chance against urchin with voracious appetites and no predators. As a result, kelp forests and their associated species have all but disappeared, including the less competitive red urchin, whose commercial fisheries in California have also collapsed; without kelp restoration, increasingly dire effects on nearshore groundfish fisheries are expected.

The greatest proportionate loss of kelp forests on the West Coast has occurred in Northern California, with some of the most devastating loss in Greater Farallones National Marine Sanctuary, where more than 90% of historic kelp cover was lost between 2014–2016. Now, along the Northern California coast, there are only remnant kelp beds—so valuable now, because they may serve as vital sources of kelp spores and also provide information about resilience.

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[1] NOAA Greater Farallones and Cordell Bank National Marine Sanctuaries

[2] Eger, A.M., Marzinelli, E.M., Beas-Luna, R. et al. The value of ecosystem services in global marine kelp forests. Nat Commun 14, 1894 (2023). https://doi.org/10.1038/s41467-023-37385-0

Economic Impact from the Kelp Forest Collapse

The extensive and prolonged loss of kelp forests along the Sonoma and Mendocino County coastlines has resulted in devastating economic impacts for adjacent communities. The recreational red abalone fishery was closed in 2017, causing an estimated $44 million non-market loss annually (Reid et al 2019). Due to the loss of revenue from red abalone divers, the sole dive shop on the Sonoma-Mendocino coast closed indefinitely. The commercial red sea urchin fishery, with an estimated $3 million value, subsequently collapsed, leaving commercial fishermen out of work. Loss of kelp forest habitat leads to the loss of additional ecosystem services, including valuable recreational opportunities such as SCUBA diving and kayaking, and supporting cultural resources such as fishing, hunting and traditional subsistence knowledge.

The kelp forests of the California, Oregon, and Alaska coast also have deeply held cultural value for numerous Tribes with customary uses and historic management of these coastal ecosystems. For example, several of Oregon's coastal Tribes use abalone shell extensively in traditional regalia and crafts. Members of the Coquille Indian Tribe have expressed to the Oregon Kelp Alliance that they are concerned about how abalone will persist in the face of the loss of so much of their habitat.

Tipping the Balance From Urchin-Dominated Back to Kelp-Dominated

There *is* a window of time—right now—to reduce purple urchin density, culture and plant baby kelp, and defend emergent kelp beds from urchin encroachment.

Bull kelp, which grows mostly north of Monterey Bay and all the way up the West Coast, is an annual species that grows up to an astonishing 10 inches per day. This fast annual growth makes bull kelp forests among the most resilient and productive ecosystems in the world that thousands of marine species depend on for nursery grounds, food, and shelter. Kelp forest loss on the North Coast has persisted for a decade, but with the focused removal of urchin grazing pressure and replenishment of bull kelp spore availability within strategic locations, the large-scale recovery potential of kelp forests is incredibly high due to the natural resilience and dynamics of kelp.

The benefits of restoring this habitat will also extend to coastal businesses and other jobs related to recreational abalone divers and nearshore recreational and commercial fisheries—and will provide renewed opportunities for recreation for the benefit of local residents, businesses, and tourists.

Kelp restoration on the West Coast is a federal, state, and Tribal priority. Working with multiple partners, Greater Farallones Association's goal is to transition urchin barrens formed in 2014–2016 to kelp forests by removing red and purple urchins to less than two urchins per square meter; culture and plant baby kelp, support the introduction of sunflower sea stars (an major urchin predator) and defend the growth of kelp from encroachment until it is reestablished.

In 2019, Greater Farallones Association published the Sonoma-Mendocino Bull Kelp Restoration Plan,[3] outlining strategies in kelp restoration, monitoring, research, and community engagement. In developing those strategies, GFA has met with representatives from the Kashia Band of Pomo Indians, Sherwood Valley Band of Pomo, Noyo Tribal Community, North Coast Resource Partnership Tribal Representatives, Round Valley Tribes, Coyote Valley Band of Pomo, Manchester/Point Arena Tribe, Potter Valley Tribe, and InterTribal Sinkyone Council. Since publication of the Restoration Plan, GFA and NOAA have actively worked to identify areas of kelp resilience and persistence in the Greater Farallones National Marine Sanctuary. Using drones and historical imagery from crewed fixed-wing surveys, we identified persistent kelp beds that historically have shown high resilience to stressors.

We continue to collaborate with the Kashia Band of Pomo Indians to establish a kelp forest canopy mapping site at Kashia Coastal Reserve and this year we look forward to further information sharing as the Tribe begins work to start their own restoration project. I'll say again that GFA is very supportive of the set aside in H.R. 5487 to fund Tribal restoration efforts.

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[3] Hohman, R., Hutto, S., Catton, C. and F. Koe. 2019. Sonoma-Mendocino Bull Kelp Restoration Plan. Plan for the Greater Farallones National Marine Sanctuary and the California Department of Fish and Wildlife. San Francisco, CA. 166 pp.

We Have Begun Restoring Kelp in Greater Farallones National Marine Sanctuary

With the support of a previous appropriation of funds for kelp restoration, Greater Farallones Association has begun restoration work within the marine sanctuary. We have done so by standing up a trained team of scientific divers to conduct biological assessments and to monitor the success of our restoration strategies. Secondly, GFA entered the commercial fishing industry with a California commercial fish buyers license that allows us to leverage the efforts of commercial fishermen who are really struggling to make ends meet. In our first short season of 2023, commercial urchin divers used rakes to collect more than 24,000 pounds of urchin by hand, making substantial headway in several key restoration areas. These boat-based urchin removals occur primarily out of Bodega Bay and secondarily out of Point Arena. For each restoration site, commercial urchin divers are removing urchins to densities of 1–2 urchins per sq meter at transects we established to demarcate the restoration sites, which are in depths 10 to 60 feet. The commercial fishermen return to the sites to collect urchins every 2–3 weeks after the initial pass for at least 12 months after initial urchin removal. The fishermen bring proficiency with hand rakes and baskets, offering a fast-paced, high-quantity removal effort; their long-time experience diving in these coves brings safety and important observations about the substrate and urchin barriers (like sand bars) as hone our approach to securing long-term sustainability of cleared areas.

Commercial urchin dive boat (left) and a commercial urchin diver, harvesting urchins (right). Photo: Stephen Page.

Left, an urchin barren in Greater Farallones National Marine Sanctuary. Right, long-time commercial urchin diver Erik Owen, celebrating a haul of purple urchin with a GFA Staff member and NOAA Scientific Diver. (Photos: CDFW, GFA)

Kelp Enhancement (Outplanting)

In a complementary strategy, Greater Farallones Association is also planting baby kelp and giving it a shot at quickly growing and reaching its reproductive stage within a given season—all with the hopes of seeding a connected "necklace" of resilient kelp beds along the coast. We have partnered with Moss Landing Marine Lab (MLML) and Sonoma State University to develop practical and cost-effective techniques for enhancing recruitment of bull kelp in kelp restoration areas following urchin removals.

First, we culture bull kelp recruits at MLML and Bodega Marine Lab (BML) for planting in the restoration zones. Then, we transport them to the North Coast where our collaborative team of scientific divers runs mesh bags with concentrated spores and twine inoculated with juvenile kelp along the restoration plots. By pairing kelp enhancement with urchin removal efforts, we aim to grow kelp and seed the next generation of kelp plants in the restoration area.

Kelp culturing set-up managed by SSU at the UC Davis Bodega Marine lab (left). Kelp are grown on gravel under conditions and temperatures similar to that of the field (center). Photos: Brent Hughes, SSU. At right, growing kelp with restoration staff.

Finally, because the recovery of the understory algal community and settlement of bull kelp will be heavily influenced by ocean conditions (primarily temperature), we are working with several academic partners to deploy moorings at each site equipped with sensors to continuously collect environmental data during the growth season for bull kelp.

Conclusion

To plan, conduct, monitor, and maintain kelp restoration projects is critical to not just ecosystem health, but our states' economic health. From commercial fishing to recreational dive shops, from community well-being to Tribal autonomy, restoring kelp can reverse devastating economic and cultural trends.

H.R. 5487 will help our kelp and help our communities. Greater Farallones Association strongly supports the Help Our Kelp Act and its emphasis on science-based restoration and Tribal engagement. We look forward with hope to extending nascent restoration programs to ensure there is adequate time to bring back the kelp.

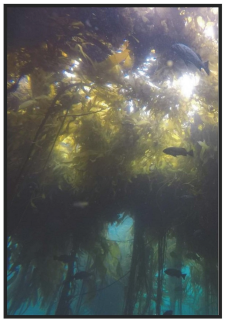

Photo credit: NOAA

Mr. BENTZ. Thank you, Ms. Self.

I now recognize Mr. Horton for 5 minutes.

STATEMENT OF CHRIS HORTON, SENIOR DIRECTOR, FISHERIES POLICY, CONGRESSIONAL SPORTSMEN'S FOUNDATION, BISMARCK, ARKANSAS

Mr. HORTON. Thank you, Chairman Bentz, Ranking Member Huffman, and members of the Subcommittee. My name is Chris Horton, and I am the Senior Director of Fisheries Policy for the Congressional Sportsmen's Foundation. I am also a fisheries biologist. I want to thank you for holding a hearing on H.R. 6814, the Marine Fisheries Habitat Protection Act. This bipartisan, science-based legislation will help to ensure that important fishing and diving destinations and highly-productive marine habitats are protected today and for future generations.

I currently serve on the Sport Fishing and Boating Partnership Council, which reports to the Secretaries of Commerce and Interior, as well as on the board of the National Fish Habitat Partnership. Though perhaps most important relative to today's hearing, I am an avid angler. And the waters of the Gulf of Mexico around Fort Morgan, Alabama are my home waters when it comes to saltwater fishing. And many of my best, most consistent fishing locations are around oil and gas platforms and their associated infrastructure.

Energy infrastructure on the Outer Continental shelf, or OCS, has boosted fish, coral, and other marine animal productivity for more than three-quarters of a century by providing hard substrate over an otherwise sterile, soft, mud and sand bottom. Over time, these structures have been the catalyst for teeming communities of fish and marine life.

There has been a long-standing debate as to whether artificial structures like oil and gas platforms are simply aggregators or fish producers. While some level of aggregation no doubt occurs, recent research has demonstrated they can contribute to increasing the biomass of marine reef fish communities. For instance, the study published in 2014, the Marine Ecology Progress Series, used stable isotope ratios to essentially support the notion that platforms and other hard structures promote the establishment of filter feeders, which in turn feed on phytoplankton floating by in the water column, and allows for the assimilation of planktonic organic matter into the food chain that otherwise would have been lost in the absence of the hard structure.

However, OCS platforms aren't just important to fish; they are important to corals, as well. Another study surveyed 13 OCS platforms for corals in the northern Gulf of Mexico and found eight reef-building coral species, two of the most common of which were the ten-ray star coral and the symmetrical brain coral. Both species are on the IUCN Red List, and are considered critically endangered from a global perspective. The authors conclude that OCS platforms have facilitated the expansion of coral populations in the Gulf of Mexico, and possess an intrinsic environmental value.

Fortunately, there is an opportunity to convert these highly-productive structures into permanent artificial reefs through the Rigs-to-Reef Program. Through current Federal law, states that have an approved Rigs-to-Reef Program can accept the liability and

ownership of OCS infrastructures as artificial reefs. Strict conditions must be met, including all associated wells have been permanently isolated, capped, and abandoned, just as they would if they were taken completely to shore for decommissioning. All components are clean and free of contaminants, and the platform doesn't pose a navigational hazard when reefed.

Unfortunately, of the more than 6,000 to 7,000 platforms once constructed in the Gulf of Mexico, today we are down to 1,101, and 266 of those have formal decommissioning applications submitted, and many more are at or nearing the end of their life in the next several years. This legislation would facilitate the conversion of the most important and prolific marine habitats on standing OCS platforms to permanent artificial reefs under the Rigs-to-Reef Program.

Specifically, the bill requires a science-based evaluation of the remaining structures for the presence of established reef fish communities and, once found, allows for more time for the structures to be converted to a state's Rigs-to-Reef Program, and allows for designating the area in the immediate vicinity of the platforms as reef planning areas. However, the bill does not remove any platform decommissioning responsibilities by the owners, including isolating and permanently capping the associated wells.

Regardless of where you are from, your recreational interests, people come from all over the country and the world to experience the rich, diverse habitat and biodiversity OCS platforms have to offer.

In addition, reef platforms could also play an important role in climate resiliency for some species, including corals. However, it is difficult to explain the importance of biodiversity and climate resiliency to offshore anglers and divers from Texas to Alabama when the U.S. Government required the removal of their favorite offshore destination that had the most diverse habitat they had ever seen.

In summary, the science-based Marine Fisheries Habitat Protection Act is simply a win for anglers, commercial fishermen, nearby coastal communities, divers, and the marine environment.

Thank you for your time. I am happy to answer any questions.

[The prepared statement of Mr. Horton follows:]

PREPARED STATEMENT OF CHRIS HORTON, SENIOR DIRECTOR, FISHERIES POLICY, CONGRESSIONAL SPORTSMEN'S FOUNDATION

ON H.R. 6814

Thank you, Chairman Bentz, Ranking Member Huffman, and members of the Subcommittee. My name is Chris Horton, and I'm the Senior Director of Fisheries Policy for the Congressional Sportsmen's Foundation (CSF). First, I would like to thank the Chairman, Ranking Member, and Members of the Subcommittee for holding a hearing on H.R. 6814, the Marine Fisheries Habitat Protection Act, a bill strongly supported by CSF. This bipartisan, science-based, very timely legislation will help to ensure extremely important fishing and diving destinations and highly productive marine habitats off our coasts are protected today and for future generations.

Established in 1989, CSF is a non-partisan organization that works with the bipartisan Congressional Sportsmen's Caucus (CSC), the largest, most active caucus on Capitol Hill, and with state legislators and governors across the country. The current House CSC Co-Chairs are Representatives Bruce Westerman (AR) and Jimmy Panetta (CA), and Vice Chairs are Representatives Garret Graves (LA) and Jared Golden (ME). I have had the privilege to work with Members of Congress, state legislators, governor's offices, state and federal natural resource agencies, and

recreational fishing organizations for the last 11 years serving as the fisheries policy lead for CSF.

I began my career as a fisheries research biologist for a state natural resource agency. Prior to joining CSF in 2010, I held the position of conservation director for B.A.S.S., the largest angling organization in the world. I currently serve as an appointed member to the Sport Fishing and Boating Partnership Council, which reports to the Secretaries of Commerce and Interior, as well as on the board of the National Fish Habitat Partnership. Though perhaps most importantly relative to this hearing today, I'm an avid angler. In fact, one of my earliest memories as a child was fishing with my grandmother sometime around the age of five. I have had the good fortune of fishing across the nation, from salmon and halibut in Alaska to mahi and sailfish off the coast of Florida. However, the Gulf of Mexico, and particularly inshore and offshore waters near Fort Morgan, Alabama, are my home waters when it comes to saltwater fishing. Many of my best, most consistent fishing locations are associated with oil and gas platforms and associated infrastructure.

Energy infrastructure on the Outer Continental Shelf (OCS) has boosted fish, coral, and other marine animal productivity for more than three quarters of a century by providing the necessary hard substrate, in an otherwise soft mud/sand substrate, on which organisms can colonize and begin assimilating nutrients from the surrounding water column and developing local reef ecosystems. In addition to providing incredibly important destinations for recreational anglers, divers, and commercial fishermen, over time, these structures have been the catalyst for teeming communities of fish and marine life. In fact, the contributions of OCS energy infrastructure, as well as artificial reefs in general, to enhancing marine ecosystems is well documented, and I offer several examples below.

Fisheries Abundance and Production

A March 2020 report funded by the Bureau of Ocean Energy Management found that as much as 48% of the estimated greater amberjack stock in the Gulf of Mexico is likely associated with OCS platforms and infrastructure.[1] In addition, the report stated that "Platform removals are likely having, and will likely have, significant adverse impacts on local fisheries, especially those offshore Louisiana and Mississippi." Likewise, studies suggest that the production of young red snapper in the Gulf of Mexico has likely increased as a result of habitat enhancement by artificial structures, including OCS platforms.[2,3]

A 2014 study published in the *Proceedings of the National Academy of Sciences* found that, ". . . oil and gas platforms off the coast of California have the highest secondary fish production per unit area of seafloor of any marine habitat that has been studied, about an order of magnitude higher than fish communities from other marine ecosystems."[4] Furthermore, a 2015 modeling study published in Integrated Environmental Assessment and Management concluded the potential contribution of reefing a platform by partial removal to fish production in this region of California is significant.[5]

Production vs. Aggregation

Until relatively recently, there has been a long-standing debate as to whether artificial structures like oil and gas platforms simply attracted and aggregated fish from surrounding areas or whether they contributed to secondary production and new biomass locally. While some level of aggregation no doubt occurs, recent research is adding to a growing body of evidence that artificial habitats provide important ecological functions, including secondary production.

For instance, using stable isotope ratios of carbon (13C) and nitrogen (15N) of the pelagic and benthic organic matter surrounding artificial reefs as a unique "fingerprint" (so to speak), Cresson et al. (2014) demonstrated that artificial reefs effectively support biomass production, as invertebrate species directly depended on locally produced organic matter, primarily from the water column. Isotopic ratios of surrounding fish confirmed the importance of the artificial reefs as a food supplier.[6]

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[1] https://espis.boem.gov/final%20reports/BOEM_2020-038.pdf

[2] https://sedarweb.org/documents/s31rd18-a-life-history-review-for-red-snapper-in-the-gulf-of-mexico-with-an-evaluation-of-the-importance-of-offshore-petroleum-platforms-and-other-artificial-reefs/

[3] https://sedarweb.org/documents/sedar-52-rd-02-investigation-of-the-relative-habitat-value-of-oil-gas-platforms-and-natural-banks-in-enhancing-stock-building-of-reef-fish-in-the-western-gulf-of-mexico/

[4] https://www.pnas.org/doi/pdf/10.1073/pnas.1411477111

[5] https://setac.onlinelibrary.wiley.com/doi/10.1002/ieam.1689

[6] https://www.researchgate.net/publication/265067101_Artificial_reefs_do_increase_secondary_biomass_production_Mechanisms_evidenced_by_stable_isotopes

Essentially, this study supports the notion that OCS platforms and other artificial hard structure allow for sessile filter feeders (barnacles, clams, mussels, oysters, etc.) to attach and colonize. These organisms begin building biomass locally by collecting and feeding on phytoplankton from the surrounding water column that would have otherwise drifted out to sea over soft mud/sand bottoms. The growth and increasing abundance of the filter feeders provides forage for other invertebrate predators and fish, thus allowing for the assimilation of planktonic organic matter, again otherwise lost in the absence of hard structure, to the top of the local trophic food chain.

In addition to the assimilation of pelagic organic matter to the trophic chain locally, the addition of artificial habitat where natural reef habitat is absent can increase fish production by enhancing larval and juvenile fish survival. Heath et al. (2020) looked at production versus attraction at three widely separated estuaries with limited rocky-reef habitat along the coast of southeast Australia. Their findings "provide evidence that the fish seen on artificial reefs were not attracted from the nearby rocky-reefs and were likely 'produced' by the addition of artificial reefs in these estuaries. Artificial reefs can increase the carrying capacity in these estuaries by providing refuge that would otherwise be unavailable." [7]

Benefits of OCS Platforms for Corals

While the abundance of fish around OCS platforms is an inherent draw for anglers and divers alike, it is the diving community that is privileged to see the true splendor of these artificial reefs. Many species of stony corals are commonly found in abundance on OCS platforms in the Gulf of Mexico, and these artificial reefs could serve as important donor colonies for coral restoration efforts and provide a great example of real and effective climate resiliency opportunities.

Sammarco et al. (2004) surveyed 13 OCS platforms for corals in the northern Gulf of Mexico. They found eight hermatypic scleractinians (reef-building stony corals), two of the most common of which were the ten-ray star coral (*Madracis decactis*) and the symmetrical brain coral (*Diploria strigosa*, now *Pseudodiploria strigosa*).[8] Both species are on the International Union for the Conservation of Nature (IUCN) red list and are considered critically endangered globally.[9,10] Subsequently, the authors conclude, "Platforms have facilitated the expansion of coral populations in the GOM. Such platforms possess an intrinsic environmental value through the presence of coral populations, and this may influence future decisions regarding their removal." [11]

In a final report to BOEM on this study, as well as studies on coral recruitment and genetic affinity in 2013, Dr. Sammarco states, "These communities should be considered fragile because of their slow development rate. Mass coral mortality on these platforms would require decades for recovery." [12] Yet, given current policies regarding OCS infrastructure at the end of its production life, we are on a trajectory to lose around 75% or more of these coral populations on OCS platforms in the near future. Furthermore, without the hard substrate throughout the water column that OCS platforms provide, there will be no chance for recovery.

Rigs to Reefs Program

Fortunately, there is an opportunity to convert these highly productive, climate resilient structures into permanent artificial structures through the Rigs to Reefs program. In 1984, Congress passed the National Fishing Enhancement Act (NFEA), which was followed shortly thereafter by the National Artificial Reef Plan (NARP) in 1985. The NARP allows for states that have an approved Rigs to Reef plan to accept liability and ownership of OCS infrastructures. In total, there are five federal agencies that have a role in the eventual permitting of platforms to a Rigs to Reefs program (BOEM, BSEE, EPA, US Coast Guard, US Army Corps of Engineers). However, three primary conditions that must be met are 1) a permit from the U.S. Army Corps of Engineers on the final reefing location and at a US Coast Guard-approved surface clearance depth; 2) all components to be reefed must be cleaned and clear of contaminants; and 3) the platform owner has permanently capped and

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[7] https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.13666

[8] https://www.researchgate.net/publication/234046738_Expansion_of_coral_communities_within_the_Northern_Gulf_of_Mexico_via_offshore_oil_and_gas_platforms

[9] https://www.iucnredlist.org/species/133663/166001780

[10] https://www.iucnredlist.org/species/133155/165745174

[11] https://www.researchgate.net/publication/234046738_Expansion_of_coral_communities_within_the_Northern_Gulf_of_Mexico_via_offshore_oil_and_gas_platforms

[12] https://espis.boem.gov/final%20reports/5335.pdf

abandoned all associated wells, just as they would if decommissioning the structure to shore.

An additional "win-win" to the Rigs to Reefs program is that the OCS platform owner shares a portion of their decommissioning cost savings of reefing a structure with the state accepting liability, typically at 50% of the difference in the cost to reef the structure versus towing to shore for decommissioning. To date, there have been over 550 OCS platforms reefed as part of a state's Rigs to Reefs program. While the majority of those were off the coast of Louisiana and Texas, all five Gulf of Mexico states have benefited from the Rigs to Reefs Program, both through the permanent addition of habitat and financially.

Current Challenges for the Rigs to Reefs Program

Since the first OCS platform was constructed in the Gulf of Mexico in the 1940s, there have been somewhere between 6,000–7,000 platforms installed over time. Today, 1,101 remain with 266 of those having formal decommissioning applications submitted. Out of the 266, only 76 are slated for the Rigs to Reefs program. With many more OCS platforms at or nearing the end of their life, it will be difficult to ensure the majority of those with established reef fish communities become permanent habitat under the Rigs to Reefs program. Given the lengthy process (24–48 months, Alabama DCNR personal communication) to secure permits and the transfer of liability to the states, stakeholders who highly value these artificial habitats fear that the vast majority will be lost forever.

The cost to replace these habitats, once removed, would be excessive. For instance, the Alabama Department of Conservation and Natural Resources (AL DCNR) has the most extensive artificial reef system in the world. A fifteen-foot-tall concrete pyramid commonly used for artificial reefs costs around $500 per cubic meter for the agency to construct, haul, and deploy. A real example of a basic 4-leg platform off the coast of Louisiana in around 130 feet of water depth would require 397 pyramids to replace the same surface area of habitat at a cost of $3.9 million dollars. The deeper the water and the more legs on the platform jacket, the cost is exponentially higher. However, just assuming a $3.9 million price tag for the shallow, four-leg example and applying to the remaining 1,101 platforms in the Gulf of Mexico, the value of the lost habitat in constructing an equivalent replacement alone equals $4.3 billion, in addition to the tremendous lost economic value for angler access and fisheries production in the meantime.

The Solution

The Marine Fisheries Habitat Protection Act would facilitate the conversion of the most important and prolific marine habitats on standing OCS platforms to permanent artificial reefs under the Rigs to Reefs program, ensuring their contribution to fisheries productivity endures for future generations. Specifically, the bill requires a science-based evaluation of the remaining structures for the presence of established reef fish communities, and once found, allows for more time for the structures to be converted to a state's Rigs to Reefs program. Furthermore, it encourages oil and gas companies to consider the Rigs to Reefs program as a decommissioning option by designating the area in the immediate vicinity of the platforms as reef planning areas with the goal of conserving important localized marine ecosystems.

This bill does not remove any platform decommissioning responsibilities by the owners. The bill also does not relieve oil and gas companies of their liability for any associated wells, which must be permanently plugged, capped, and abandoned whether the platform structure is donated to the Rigs to Reefs program or towed to shore and scrapped on land. Rather, this bill should assist in facilitating the timelier conversion of many end-of-life platforms where the disposition of which may be uncertain.

OCS platforms are incredibly important tourism destinations that provide significant economic benefits to nearby coastal communities. For anyone who has ever fished offshore from Texas to Alabama, chances are, you fished around an oil and gas platform. Whether you are an angler or recreational diver from Louisiana, Maine, Alaska, or anywhere in between, these artificial habitats in federal waters belong to us all, and people come from all over the country and the world to experience the rich, diverse habitat and biodiversity OCS platforms have to offer.

As stated by Dr. Sammarco in his study of corals associated with OCS platforms, the structures have "intrinsic environmental value". Their potential to provide refuge at deeper depths for the same species of corals suffering bleaching and disease in shallower depths in the Florida Keys, Caribbean, and other parts of the world could play a crucial role in climate resiliency for those species. However, it's difficult to explain the importance of biodiversity and climate resiliency to offshore anglers and divers from Texas to Alabama when the U.S. Government required the removal

of their favorite offshore destination that had the most diverse habitat they have ever seen.

In closing, H.R. 6814, the Marine Fisheries Habitat Protection Act, is simply a "win" for anglers, commercial fishermen, recreational divers, fisheries productivity, biodiversity, climate resiliency, and nearby coastal communities. The bill uses a science-based approach to identify habitats associated with OCS energy infrastructure that support important assemblages of fish and coral and encourages the conversion of that infrastructure to permanent artificial reefs under state ownership, all while maintaining the environmental safety requirements for infrastructure decommissioning.

For these reasons, we urge your support of H.R. 6814.

Mr. BENTZ. Thank you. I thank the witnesses for their testimony. I will now recognize Members for 5 minutes each for questions.

Mr. Graves, you are recognized for 5 minutes.

Mr. GRAVES. Thank you, Mr. Chairman. I want to thank you all for your testimony.

Mr. Horton, I know that Alabama has spent a substantial amount of money on creating artificial reefs. Why do they do that?

Mr. HORTON. Because Alabama is known for some of the best reef fishing. No offense to Louisiana, you all are good, too, because of the oil and gas platforms. They don't have as many oil and gas platforms as Louisiana, but they have created a lot of artificial reef habitat, and it has paid off tremendously.

Mr. GRAVES. And you noted in your testimony the extraction of all these platforms or otherwise artificial reefs. As I recall, I think 60 percent of the platforms have been removed since 2000, a huge, huge percentage. Doesn't it seem so much strange or ironic that states like Alabama, as well as efforts in Louisiana, money is being spent to create artificial reefs whenever at the same time we are effectively removing them?

Mr. HORTON. Yes, that is something that, as recreational anglers, it is hard to understand why we would take out habitat that has been there for 40 years and established these communities. It would cost a considerable amount to replenish those habitats with newly-constructed artificial reefs.

For instance, Alabama, the typical 15-foot-tall pyramid that they install roughly costs $500 per cubic meter for that one pyramid to take it out and install it. And if you take just a four-legged platform, there is a real-life example in my testimony of a four-legged platform off the coast of Louisiana in 131 feet of water. To replace that same surface area, it would require 397 of those pyramids at a cost of $3.9 million.

Mr. GRAVES. Wow. Well, thank you. That is amazing.

Dr. Porch, thanks for being here. In your testimony, you cite the overly broad definition of "established reef ecosystems." Could you just talk a little bit about how you think that could be tightened up, or what you think could be done to help to improve or just clarify the intent there?

Mr. PORCH. Sir, thank you for the question. Yes, as written, it really could mean almost anything, including you just see a fish that typically is associated with reefs and passing through. So, almost any structure might at one time——

Mr. GRAVES. So, transient fish versus homeowners. Is that right?

Mr. PORCH. Right. That is one thing we would want to be careful about there.

Also, what is the threshold where we would say it is established reef ecosystem? So, what percentage of what species would we need to see, what percentage of coverage that we would call it an ecosystem. We would be happy to work with you on the language there.

Mr. GRAVES. OK, I certainly would appreciate that, if we could continue the dialogue.

Mr. Horton, if I can come back to you, again, I know that you spent a lot of time fishing in the Gulf of Mexico in one of the top five fishing states, I believe, in the Gulf of Mexico. You are familiar with the great red snapper count, and you are familiar with the fact that I believe it is two-thirds of the abundance under the great red snapper count that was this massive effort carried out by academia, they were actually identified as being in what is known as otherwise uncharacterized bottom.

Could you talk about, as a marine biologist, your thoughts there on the role of pipelines, and if we are properly sort of assessing, under the NOAA system, if we are properly assessing the Gulf of Mexico, or what the great red snapper count sort of brought to light?

Mr. HORTON. Thank you, Congressman, for the question. And yes, the great red snapper count was an unprecedented study that came and kind of gave us a brand new look and perspective on red snapper. And we found that the vast majority of red snapper aren't on hard structures, the population itself, it is an uncharacterized bottom. And some of this uncharacterized bottom is pipelines. And actually, the great red snapper count estimated that there were over 500,000 red snapper on pipelines. And if you take the 7-pound average for red snapper in the Gulf of Mexico, that is 3.5 million pounds of red snapper. That is basically the entire private recreational quota that is found on pipelines.

Mr. GRAVES. Thank you.

Dr. Porch, if I can come back to you, totally changing gears, or maybe the Great Lakes folks just very quickly, March 16, 1957, a F-94 Spitfire Squadron was flying from a base in Indiana to Wurtsmith, which is an Air Force base in Michigan. One of the planes in that squadron was piloted by, let's see, it was Lieutenant Henry Charles Nicolay, and the first officer was Lieutenant Harold Lewis. The plane went down, and they believe it was in Lake Huron.

I know that some of these mapping efforts, they are going to try, this plane has never been found, the people have never been found. Our constituent is actually the son. Would these mapping efforts be able to help to identify perhaps where this plane went down in Lake Huron?

Quickly, please. I am sorry, I am out of time.

Mr. PORCH. Yes, thank you for that question. Certainly, with adequate coverage, with the multi-beam sonars we can pick up things like that.

Mr. GRAVES. Thank you.

I apologize, Mr. Chairman. I yield back.

Mr. BENTZ. The Chair recognizes Councilwoman Hoyle for 5 minutes.

Ms. HOYLE. Thank you very much.

I was very proud to be able to secure a $2.5 million grant for the Oregon Kelp Alliance's Kelp Forest Protection and Restoration Initiative for the Fiscal Year 2024 government funding bill to help remove sea urchins across six sites on the Oregon coast, and planting and seeding bull kelp to help reestablish the kelp on three of the cleared sites.

Representative Huffman's bill, the Help our Kelp Act, would create grant programs through NOAA focused on restoring and re-establishing kelp forests. So, I guess I have some questions for Ms. Self.

One, how quickly do you begin to see kelp regrow, once the issues like sea urchins are addressed?

And I know what kelp restoration does for the biodiversity and ocean ecosystems on the Oregon coast; I represent 250 miles of the Oregon coast. But can you talk about the benefit to the economies of coastal communities when we invest in these kinds of projects?

Ms. SELF. Thanks very much for your question and for your prior efforts to get funding to the Oregon coast for kelp restoration. I did speak with the Oregon Kelp Alliance in preparation for this testimony, and they are very excited to be represented here in support of the Help our Kelp Act, as well.

So, how quickly does kelp take hold? Well, it depends on the kind of kelp. But bull kelp grows at an astonishing rate. I was looking for my notes, because I don't want to get it wrong, but because it is an annual species, it will actually grow kind of from the holdfast at the rock all the way to the surface, which can be 30 meters in a given season.

So, just keeping the urchin out of that area or across a sand barrier where the urchin can't get to the kelp, and then giving outplanted kelp something to attach to, and then letting it grow all season, it will become reproductive and produce spores in a given season. So, it is this kind of critical window right out of the bat where you want to clear the urchins, keep them back, do a successful outplanting, and then hopefully produce spores that will have a place to take hold the next season. So, it can be a pretty rapid response.

What was your other question? Fisheries values?

Ms. HOYLE. But specifically what I would like you to address is the benefit to coastal economies because both commercial and sport fishing are really, really important parts of our economy. And I just want you to talk about that kind of benefit.

Ms. SELF. Absolutely. In both Northern California and Oregon, both commercial fisheries and recreational fisheries, recreational dive shops are really a backbone to the economies.

I know that in Oregon, and a preliminary estimate, the Oregon Kelp Alliance has established that somewhere upwards of $50 million a year is related to kelp alone, so enormous benefits to jobs and businesses.

Ms. HOYLE. Thank you so much.

I yield my time.

Mr. BENTZ. Thank you. The Chair recognizes Congresswoman Dingell for 5 minutes.

Mrs. DINGELL. Thank you, Mr. Chairman. I appreciate that H.R. 7020, the Great Lakes Mapping Act is included as part of today's hearing.

This is a piece of legislation that I am leading alongside my friend and colleague from Michigan, Lisa McClain, and her partnership on this has really, really been an important bipartisan effort.

The Great Lakes Basin is the largest freshwater ecosystem in the world, and it is home to more than 20 percent of the world's freshwater supply. It is a vital part of our nation's economic, environmental, and cultural identity. Not only are the Great Lakes unparalleled in their beauty, they are also home to 3,500 unique plant and animal species.

Economically, the Great Lakes provide trade, transportation, and one-of-a-kind recreational activities for Michiganders and visitors across the nation. Their coastlines boast some of the sandiest beaches and, honestly, without the risk of stepping on washed up jellyfish or swimming with sharks.

However, despite how much we enjoy the Great Lakes, we know very little about the lakebed. In fact, 85 percent of the Great Lakes remain unexplored, and there has been little effort to provide accurate information. This gap in the data hinders informed decision-making regarding many issues facing the Great Lakes.

The Great Lakes Mapping Act directs the Administrator of the National Oceanic and Atmospheric Administration, or NOAA, to conduct high-resolution mapping of the lake beds by 2030 and to collect important data. In addition, the bill requires NOAA to share the data publicly no later than 100 days after the completion of the mapping effort.

Today, we are joined by a witness who just happens to be a constituent, as well, Ms. Jennifer Boehme.

It is great to see you today, and thanks for joining us for this important discussion. Ms. Boehme, the Great Lakes Mapping Act authorizes NOAA to conduct groundbreaking, high-resolution mapping of the lake beds. Currently, the Line 5 Pipeline lays at the lake bed of the Straits of Mackinac in between Lake Michigan and Lake Huron, carrying some 22 million gallons per day of light crude oil and LNG. How will this legislation improve our understanding of these lake beds, where pipelines run along the bottom uncovered and liable to leakage?

Dr. BOEHME. Thank you for your question. The help here is finding a missing puzzle piece.

Currently, the mapping that exists in the Great Lakes is a patchwork quilt, and it is unevenly distributed throughout the lakes themselves. What we are talking about with the Great Lakes Mapping Act, that would allow us to achieve mapping to 1 percent of lake depth. So, that means we would have detailed maps at less than a meter resolution for a shallow lake like Lake Erie, up to 5 meters resolution in Lake Superior. At this type of resolution, we would be able to maintain and expand maps for, for instance, zebra mussel invasion, and also be able to provide detailed mapping for pipeline status so that we can monitor for safety.

Mrs. DINGELL. Thank you. Ms. Boehme, how does this authorization or requirement for high-resolution mapping support combating climate change threats and growing the blue economy in the Great Lakes region?

Dr. BOEHME. Sure. Understanding the lake bed means a better understanding of shoreline impacts of storms, and helping us identify coastal areas that are a risk for erosion, especially those that we haven't currently identified yet.

With increasing climate change, the Great Lakes is expecting greater frequency of storms, as well as less ice cover. The wintertime ice cover that protects the coastlines from storm impacts isn't going to be in place the way that it used to be.

As far as the economy, this effort itself will generate new jobs for knowledge workers for gathering data, and developing the maps themselves, as well as downstream economic impacts through the support of fisheries and recreation in the region.

Mrs. DINGELL. OK. In the last 30 seconds, can you tell us how will the American people benefit from having this high-resolution mapping of the Great Lakes?

Dr. BOEHME. Sure. The Great Lakes is the only regional association at IOOS where we drink our water. So, this type of mapping would support protection of also drinking-water pipelines for major cities in the region. It supports coastal access for commercial fishing and anglers, and recreational use of the Great Lakes coast. So, this bill would support a drinkable, swimmable, fishable Great Lakes.

Mrs. DINGELL. Thank you very much. I look forward to continuing our work.

Thank you, Mr. Chairman, and I yield back.

Mr. BENTZ. Thank you. The Chair recognizes Ranking Member Huffman for 5 minutes.

Mr. HUFFMAN. Thank you, Mr. Chairman.

Ms. Self, thanks for your testimony about the kelp, and I understood you to answer my colleague from Oregon about the bull kelp, you were talking about bull kelp that grows. It is an annual. Is it the same with the giant kelp?

Ms. SELF. No, giant kelp, I think that it has been documented to live as long as 7 years, so it is a little bit of a different biological structure and reproductive cycle.

Mr. HUFFMAN. But in both cases, it sounds like the key is to keep the urchins at bay long enough for this fast-growing kelp to reestablish and reproduce. And the good news, perhaps, is that if you can control those urchins in that way, you are going to get your kelp forests back pretty quickly. Is that fair to say?

Ms. SELF. Well, we hope.

Mr. HUFFMAN. Yes.

Ms. SELF. We hope so and, again, those remnant beds that are left are teaching us lessons about what kinds of oceanographic conditions and topographic conditions and what kind of substrate, whether it is sand or boulder, lead to kind of a natural balance where the urchin don't have as much success. So, we are looking for those resilient places, and to try to defend them and then connect contiguous, high-value spots where there historically has been really healthy kelp.

Mr. HUFFMAN. Right. And you also spoke to the importance of these kelp forests to our local recreational economies and to fishermen. I understand you are actually working with some of those folks as part of the urchin control effort in these restoration projects. Could you talk a little more about that?

Ms. SELF. Thanks for asking. I had to cut that part in my statement. In fact, Greater Farallones Association and I myself am now a commercial fish buyer. We work extensively with mostly out-of-work, red urchin fishermen, and we purchase urchin from them. So, they used to gather red urchin, which are now decimated by the purple urchin, and they go out on their own commercial fishing vessels with their own rakes and under their own commercial licenses with the California Department of Fish and Wildlife, and they gather these urchin really efficiently, and they bring them to Dandy Fish Co. in Bodega Bay, where we purchase them.

Currently, we send them for composting, so we have just gotten started on this effort, and this bill would really help us bring that to scale.

Mr. HUFFMAN. Yes, I think that is fantastic.

I am not going to ask you about this, because I know that your organization doesn't yet have a position, but I know that there is another great way to control urchins involving a keystone predator that happens to be quite charismatic that we would like to reintroduce to the North Coast, to California. I am all for it, and it makes an awful lot of sense. But that is probably another conversation. I am talking about the sea otter.

Mr. Porch, I want to ask you a little more about Mr. Graves' legislation. Thanks for discussing the need to tighten up some of those definitions so that everything doesn't qualify as an existing ecosystem. But another technical problem I want to discuss with the bill is including oil and gas pipelines.

Can you explain how this infrastructure would also be impacted by this legislation?

Does this have the potential to support reefs and incredibly valued fishing habitat, or is this maybe just an unintended consequence of the way the bill is drafted?

Mr. PORCH. Thank you for the question.

Of course, the existing Rigs-to-Reef Program does not consider pipelines as adequate for artificial reef building. However, in places where they are exposed, particularly below 200 feet, they don't have to be buried, they do carry a lot of reefs-associated species, and sometimes quite large numbers of fish. So, there is no question that they can support reef fish communities in those areas.

Whether you would want to move them or leave them in place is a different question.

Mr. HUFFMAN. Yes, let's talk about that. I understand that NOAA is already not conducting surveys supporting states' Rigs-to-Reef Programs. BSEE estimates that the process of those surveys takes 1 to 2 years. And this bill would raise the bar, giving you a deadline of 90 days to do all this. You don't have the resources for it, the bill doesn't provide those resources.

So, what happens when everything grinds to a halt is you can't proceed with decommissioning under this legislation, which is a problem, and specifically would be a problem for things like buried

pipelines or even exposed pipelines. Could you talk a little more about that, about the risks as this infrastructure just sits there and ages?

Mr. PORCH. Certainly, thank you for the question. Yes, if the infrastructure was allowed to sit there and it wasn't properly cared for, we have already discussed, yes, you have the possibility of introducing hazardous materials into the water column. Of course, if they decay and pieces fall off, you can create navigational hazards. If the debris is not located properly, it could provide interference for fisheries like our shrimp fishery, where they are dragging nets on the bottom.

So, there certainly are those concerns if the rigs are left there too long, navigational hazards, et cetera.

Mr. HUFFMAN. All right, I appreciate it. Again, I am not absolutely opposed to a bill like this. I think it needs to be much more narrowly tailored, though, to address some of these concerns we have flagged.

I appreciate the testimony and yield back.

Mr. BENTZ. The Chair recognizes Congresswoman Peltola for 5 minutes.

Mrs. PELTOLA. Thank you, Mr. Chairman.

I enjoyed all of your testimony very much. I was listening on C-SPAN, so thank you.

I was particularly interested in Mr. Horton's comments about red snapper in the Gulf of Mexico and in Alaska. We have seen some real depletions in our stocks, specifically three salmon stocks and halibut and crab. And I was wondering if you had any advice or ideas for Congress to consider in rebuilding stocks around the United States.

Mr. HORTON. Congresswoman, thank you for the question.

One of the species or groups of species that I am not that familiar with are the salmonid species, specifically, in the Pacific Northwest. I don't think artificial habitat would benefit those. But we have just seen the benefits of artificial habitat in the Gulf of Mexico and other coastlines, and the potential for even things like wind energy. When you put metal in the water, things are going to grow on it. And the reef-fish-associated type species or bottom species are going to benefit from that, long term.

But I wish I could help on the salmon issue in the Pacific Northwest, because that is obviously a major concern there, for sure.

Mrs. PELTOLA. Thank you.

Mr. BENTZ. Thank you. The Chair recognizes himself for 5 minutes.

Director Porch, I met with NOAA some time ago, maybe 2 years ago, and expressed my concern about the lack of focus upon ocean conditions. And I note you are the Director for the Southeast Fisheries Science Center, so that is in Florida. But I am going to be talking about Oregon, Washington, and the West Coast.

I was concerned when I asked about the number of studies, particularly involving such things as, oh, I know, kelp, by NOAA. Are you aware of something more than mere observation going on in NOAA when it comes to the value of kelp and salmon, for example? Is there a study ongoing by NOAA now on that issue?

Mr. PORCH. I am not certain on the specifics of that, but I would be happy to get back with you on that.

Mr. BENTZ. I would very much appreciate that. And, in fact, while you are at it, I would like to see a list of the studies that NOAA, NMFS are supporting right now when it comes to the condition of our oceans. Because what I see is a focus on rivers, with almost a blind eye toward the ocean, which seems extremely odd. So, if you will get me a list of the types of studies that are ongoing, particularly on the West Coast, I don't need the rest of the world, but the West Coast is terrifically important to me.

And while we are talking about kelp, I am going to go to Ms. Self.

You must be working with Oregon State University on their efforts in that space. Are you aware of any focus upon the importance of kelp to salmon?

Ms. SELF. Thank you for the question. Greater Farallones Association is not working with Oregon State, but I know that the Oregon Kelp Alliance is, and I believe that they are working with that agency carefully on a study that will be coming out soon valuing the fisheries that are dependent on kelp in Oregon. We are working more closely with the California Department of Fish and Wildlife.

And, in fact, to your prior question, all of our projects are actually joint projects with NOAA's Office of National Marine Sanctuaries. So, all of our work on kelp, much of it funded through NOAA, some funded from other sources, is done on behalf and in partnership with NOAA. I just wanted to speak to that engagement on the West Coast ecosystems.

Mr. BENTZ. Right, thank you for that. I am interested, of course, in the question. Ignore Oregon State for a moment. If you can tell me, has there been a focus on the value of kelp to salmon in any of your work, or are you aware of any that NOAA is actually doing?

Ms. SELF. I am not certain. I do know that kelp provides a really important shelter and place for herring spawn, and I am not at all familiar with the life cycle of salmon and how it relates to kelp. But I would be really happy to look into that and provide references.

Mr. BENTZ. I hate to say I wasn't paying total attention to all of your important testimony, but I did look up the papers while I was sitting up here earlier, and there are indeed a couple of papers indicating the importance of kelp to salmon. That has been studied by at least some people. I am just wondering why our most important agency when it comes to these kinds of issues, NOAA, is not doing it, because they should be. And I am looking forward to seeing what they are doing so I am not blaming them for no good reason.

I want to shift to Dr. Boehme for a moment and go to the mapping. And there is much discussion about the value of mapping, but we never seem to quite get to what that value actually is. And I know that the Ranking Member suggested that finding the Edmund Fitzgerald would be a valuable thing, but there must be more to it than that. So, what is it?

And lake currents, depths of water, where does the value come from?

Dr. BOEHME. Part of the value here is understanding how the depths of the lake bed are shifting, so that we have better models for wave action to predict shore impacts during severe storms. And this would enable us to better protect coastal communities. It would allow public and private-sector infrastructure to be better protected from the flood risks that come from these high-impact storms in the region. The Great Lakes is experiencing these more and more often.

So, this is the type of information that we are, as we said, 13 percent mapping, we are quite a bit far behind. So, this foundational data set would help us better protect our coastal communities from flood risk.

Mr. BENTZ. Right. And I am out of time, but it is extremely interesting to me. So, if you could provide a very, very narrowly constructed list of the benefits, I would very much appreciate that.

Dr. BOEHME. We would be happy to follow up.

Mr. BENTZ. Thank you.

Ms. Porter, do you want to be recognized?

[No response.]

Mr. BENTZ. OK, well, then I think that exhausts our Congressfolk.

I want to thank you for your testimony and the Members for their questions.

The members of the Committee may have some additional questions for the witnesses, and we will ask you to respond to these in writing. Under Committee Rule 3, members of the Committee must submit questions to the Subcommittee Clerk by 5 p.m. Eastern Time on Tuesday, March 26. The hearing record will be held open for 10 business days for these responses.

Without objection, the Subcommittee stands adjourned.

[Whereupon, at 11:21 a.m., the Subcommittee was adjourned.]

[ADDITIONAL MATERIALS SUBMITTED FOR THE RECORD]

Statement for the Record

Bureau of Safety and Environmental Enforcement
U.S. Department of the Interior

on H.R. 6814, Marine Fisheries Habitat Protection Act

Introduction

The Bureau of Safety and Environmental Enforcement (BSEE) appreciates the opportunity to submit this statement for the record on H.R. 6814, the Marine Fisheries Habitat Protection Act. BSEE is responsible under the Outer Continental Shelf Lands Act (OCSLA) for regulating the development of oil, gas, and other energy and mineral resources on the United States outer continental shelf (OCS) in an orderly manner while safeguarding the environment. Current BSEE regulations allow for converting decommissioned platform jacket structures to artificial reefs when such structures become part of a State artificial reef program and the responsible State agency acquires the necessary permit and accepts title and liability for the structure.

Rigs-to-Reefs Background

BSEE is responsible for permitting and overseeing the installation and eventual removal of oil and gas and other energy-related facilities on the OCS. When an OCS lease, right-of-way, or right of use and easement expires and/or the facilities are no longer useful for operations, the responsible parties are obligated to decommission and remove their facilities (30 CFR §§ 250.1703, 1725(a)) and clear the seabed of all obstructions (30 CFR § 250.1740).

In 1984, the National Fishing Enhancement Act was enacted to address increased interest and participation in fishing at offshore oil and gas platforms and widespread support for effective artificial reef development by coastal states. The Act recognizes the social and economic values in developing artificial reefs, establishes national standards for artificial reef development, provides for creation of a National Artificial Reef Plan, and provides for establishment of a reef-permitting system.

Since 1985, BSEE has supported and encouraged the reuse of obsolete oil and gas platform jackets as artificial reef material and may grant a departure from removal requirements under 30 CFR § 250.1725(a) and applicable lease obligations when:

- The structure becomes part of a State reef program that complies with the National Artificial Reef Plan;
- The State agency acquires a permit from the U.S. Army Corps of Engineers and accepts title and liability for the reefed structure once removal/reefing operations are concluded;
- The lessee, owner, or grant holder satisfies any U.S. Coast Guard navigational requirements for the structure; and
- The reefing proposal complies with BSEE engineering and environmental standards.

H.R. 6814

H.R. 6814 would amend the National Fishing Enhancement Act by codifying terms related to the conversion of idle oil and gas infrastructure on the OCS to artificial reefs. The bill directs the Administrator of the National Oceanic and Atmospheric Administration (NOAA) to conduct assessments of such structures to determine if there is an established reef ecosystem, and gives authority to the Administrator to designate a reef planning area in the immediate vicinity of such structures. It also requires the Administrator to submit a report to the Secretary of the Interior (Secretary) within one year of enactment regarding each assessment conducted and determination reached.

H.R. 6814 would also amend OCSLA by codifying terms related to the conversion of idle oil and gas infrastructure on the OCS to artificial reefs. The bill would require the Secretary to suspend removal of idle structures pending the Administrator's report. If the Secretary concurs with the determination of the Administrator, the Secretary cannot require structure removal as it continues through the process for acceptance into an artificial reef program managed by a coastal State or Federal agency. All other decommissioning obligations must be accomplished by the lessee,

owner, or grant holder within two years of filing a notice of intent to become part of an artificial reef program, and reefing in place of the structure must be completed within five years.

Analysis

BSEE appreciates the sponsor's focus on this topic and support of the Rigs-to-Reefs process and science-based decision making, including scientific-based ecosystem assessment. However, BSEE has concerns about some provisions of the legislation that would impact the government's oversight of oil and gas infrastructure and its potential use as artificial reefing material on the OCS.

Rigs-to-Reefs Process and Policy

BSEE is concerned about the legislation's proposed changes to the Rigs-to-Reefs process and policy that could fundamentally change the scope and intent of the program. The bill as written is not entirely clear as to whether the intent is to provide greater authority to NOAA to establish a national Rigs-to-Reefs program on the OCS in the Gulf of Mexico, with NOAA taking on liability for artificial reefs established in NOAA designated reefing areas, in addition to the State programs.

The bill also defines "Idle Structure" to include pipelines and associated equipment and infrastructure. These structures are not currently considered adequate or appropriate reefing materials under BSEE's Rigs-to-Reefs Program Policy (BSEE Directive 550.4 DS-G, November 21, 2019). BSEE also believes the definition conflicts with BSEE's definition of "idle iron," which will create confusion for industry regarding its decommissioning obligations (BSEE NTL No. 2018-G03, Idle Iron Decommission Guidance for Wells and Platforms). Aligning the bill's definitions to BSEE's definitions would ensure consistency across programs and properly identify platform structures that are no longer of use for their original purpose.

Federal/State Coordination

The bill lays out coordination between Federal and State agencies, but BSEE believes there could be more clarity on the role of State programs and their authority and responsibilities regarding the designation and approval of reef planning areas and the selection of structures for reefing purposes.

BSEE supports science-based, informed decision-making for all activities on the OCS. In support of those efforts, especially with regard to Rigs-to-Reefs, BSEE created and maintains the publicly available OCS Facility Infrastructure Dashboard, which already provides the information contemplated by the bill's requirement to create an Offshore Infrastructure Dashboard. BSEE's OCS Facility Infrastructure Dashboard is an important tool that has served all stakeholders in the Rigs-to-Reef process.

Decommissioning Obligations and Enforcement

The bill would restrict the Secretary's ability, through BSEE, to enforce decommissioning requirements on idle structures until the Administrator has completed reports on its assessment of idle facilities and makes its determinations regarding the existence of a reef ecosystem. Because of the large number of idle facilities in the Gulf of Mexico, this restriction could impede BSEE's ability to require decommissioning in a timely manner, causing potential safety and pollution hazards to remain in the water longer than they would otherwise.

Conclusion

BSEE appreciates this opportunity to share its experience working with its Federal and State partners to assess certain offshore oil and gas platforms for potential use as artificial reefs while continuing to ensure energy operations on the OCS are safe and environmentally responsible. BSEE welcomes the opportunity to work with the Subcommittee, NOAA, and the Sponsor to address the areas of the proposed legislation that have been noted to be of concern.

Statement for the Record

U.S. Fish and Wildlife Service

on H.R. 1395

Introduction

The U.S. Fish and Wildlife Service (Service) appreciates the opportunity to submit a statement for the record on H.R. 1395, the Delaware River Basin Conservation Reauthorization Act of 2023. The Service supports H.R. 1395, which would continue a legacy of successful collaborative conservation that benefits communities and ecosystems throughout the Delaware River watershed.

The mission of the Service is working with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. The Service's efforts to achieve this mission span a wide variety of programs, including the Delaware River Basin Restoration Program (DRBRP), which is relevant to the legislation addressed today.

H.R. 1395 would reauthorize the DRBRP through 2030. This legislation would make several changes to the DRBRP's grant program, including defining the Delaware River Basin as a 5-state watershed with the addition of Maryland. Additionally, H.R. 1395 increases the federal cost share for projects that serve small, rural, and underserved communities to 90 percent. The Secretary of the Interior would also be authorized to issue a waiver for the non-federal cost share if the Secretary determines that the grant recipient is unable to pay or would experience significant financial hardship.

Background

The Service has a long history of tackling cross-cutting conservation issues. Using this expertise, the Service's Science Applications Program is bringing together partners to identify shared conservation priorities and deliver scientific information needed to achieve goals across the Delaware River watershed. Following the enactment of the Water Infrastructure Improvements for the Nation Act (P.L. 114-322) in 2016, the Service, in partnership with the National Fish and Wildlife Foundation, established the DRBRP to develop a comprehensive and collaborative approach to restore and protect the Delaware River watershed. This voluntary, non-regulatory program brings partners together across the watershed in pursuit of a shared vision: restoring and protecting the watershed's natural resources for the benefit of wildlife and people. Guided by a partner-developed strategic framework, the DRBRP prioritizes conservation activities in four key areas: restoring fish and wildlife habitat, improving water quality, reducing flooding and runoff, and enhancing safe recreational access for the public.

The DRBRP's grant program, the Delaware Watershed Conservation Fund (Fund), implements these priorities by awarding matching grants to on-the-ground conservation projects. Since 2018, the Fund has awarded nearly $55.1 million to 195 projects, which have leveraged $79.2 million in matching funds. This amounts to a total conservation impact of $134.3 million, a testament to the strength of our partnerships and the efficiency of the Service. The Service is appreciative of Congress's transformational investment in the Fund through the Bipartisan Infrastructure Law, which will provide $26 million to tackle larger projects and meet the demand for the Fund which continues to far exceed available resources through Fiscal Year 2026.

Last year, awards supported efforts to develop 13-miles of recreational access for streams in Camden, New Jersey, enhance stormwater management to wetland species and improve public safety in Delaware, build pollinator gardens with faith communities in Delaware, conserve brown and rainbow trout in New York, and implement post-dam removal creek restoration in Pennsylvania. These projects have resulted in far-reaching benefits for fish, wildlife, and people. In total, the DRBRP has restored 76 miles of streams, improved 6,052 acres of habitat with public access, and advanced the management of 29,321 acres of forest, all while creating an estimated 445 jobs for local economies.

H.R. 1395, Delaware River Basin Conservation Reauthorization Act

Building off the last six years of success, H.R. 1395 would enable continued progress toward shared conservation goals in the Delaware River watershed. The DRBRP demonstrates the power of collaborative, landscape-scale conservation in tackling 21st century conservation challenges like climate change, habitat degradation, and biodiversity loss. We appreciate the bill sponsor, co-sponsors, and Committee's continued support for this valuable program.

The addition of Maryland under H.R. 1395 would align the program with the watershed's geography. While entities from Maryland are currently eligible to apply for grants from the Fund, provided they meet all requirements, codifying Maryland's inclusion would clarify eligibility and drive increased engagement throughout the watershed.

The Service appreciates this bill's focus on ensuring equitable access to funding for small, rural, and underserved communities. The non-federal cost share requirement for the DRBRP's grant program can serve as a barrier to participation for many of the communities that would most benefit from this funding. By reducing the non-federal cost share and authorizing a waiver, the Service can support communities that lacked the resources to participate in the program previously. Increasing equity and access to these resources would ensure that the program truly serves everyone who lives, works, and recreates on the Delaware River.

The Service would welcome the opportunity to work with the sponsor and the Subcommittee on three recommended changes to H.R. 1395. The Service recommends removing the prohibition on the net gain of Federal employees for the administration of the DRBRP under P.L. 114-322. Additionally, the Service suggests an edit to Section 2(d) to authorize the program rather than requiring the program to be sunset upon expiration. Finally, we would welcome the opportunity to work with Congress to ensure a strong DRBRP, while maintaining the Service's flexibility and resources to address other areas of conservation priority for the Nation.

Conclusion

The Service supports H.R. 1395, which would continue a legacy of successful collaborative conservation that benefits communities and ecosystems throughout the Delaware River watershed. We appreciate the Subcommittee's interest in community-based, collaborative conservation and continued support for the Delaware River Basin Restoration Program. The Service remains committed to working with partners, local communities, and private landowners to conserve habitat and species while benefiting the public with healthier and more enjoyable surroundings. We look forward to working with the sponsor and Subcommittee on this legislation.

Submissions for the Record by Rep. Huffman

National Audubon Society
Washington, DC

March 19, 2024

Hon. Cliff Bentz, Chair
Hon. Jared Huffman, Ranking Member
House Natural Resources Committee
Subcommittee on Water, Wildlife and Fisheries
Washington, DC 20515

Re: Audubon Support for H.R. 1395 and H.R. 7020

Dear Chair Bentz and Ranking Member Huffman:

On behalf of the National Audubon Society, thank you for holding a legislative hearing on H.R. 1395, the Delaware River Basin Conservation Reauthorization Act of 2023 and H.R. 7020, the Great Lakes Mapping Act. These bills are critical to advancing bipartisan conversation solutions for the Delaware River watershed and the Great Lakes.

H.R. 1395 will reauthorize the Delaware River Basin Restoration Program (DRBRP) through 2030 and empower small, rural, and disadvantaged communities to protect their local environment through a reduced match requirement of 10%. The bill also offers the Secretary of the Interior the ability to waive all cost-share requirements in cases of significant financial hardship. These changes will ensure that these communities can engage in conservation projects and access federal funds more equitably. The Delaware River Watershed encompasses a complex system of forests, rivers, marshes, and urban landscapes stretching 13,500 square miles and 2,000 rivers across the five basin states of Delaware, Pennsylvania, New York, New Jersey, and Maryland. The watershed provides drinking water to over 14 million people, critical habitat for a diverse ecosystem of birds and other wildlife, and a robust tourism and outdoor recreation economy. The DRBRP, administered by the U.S. Department of Fish and Wildlife, champions federal-local collaboration and critical on-the-ground projects in the Delaware River Watershed that conserve and restore this irreplaceable natural resource.

H.R. 7020 would direct the Administrator of the National Oceanic and Atmospheric Administration to conduct high-resolution mapping of the lakebeds of the Great Lakes. The Great Lakes serve as the drinking water source for more than 42 million people and provide a rich aquatic habitat supporting a $7 billion annual fishing industry and Great Lakes recreation that draws millions of tourists who boost the economies of our communities. Millions of migratory birds depend on coastal habitats along the Great Lakes for shelter, rest, and nourishment for their long journeys and thousands of raptors, waterfowl, and wetland birds rely on the Great Lakes systems for safe nesting grounds. High-resolution mapping of the lakebeds of the Great Lakes will help provide new scientific and technical information to support ongoing restoration of the Great Lakes.

Audubon is grateful that these critical watersheds are receiving federal attention and support. Thank you again for holding a hearing on the Delaware River Watershed Conservation Reauthorization Act of 2023 and the Great Lakes Mapping Act and we urge a favorable report from the committee.

Sincerely,

CAITLIN WALL,
Director, Water Policy

Environmental Defense Center
and
Surfrider Foundation

March 20, 2024

Hon. Cliff Bentz, Chair
Hon. Jared Huffman, Ranking Member
House Natural Resources Committee
Subcommittee on Water, Wildlife and Fisheries
Washington, DC 20515

Re: H.R. 6814, Marine Fisheries Habitat Protection Act—OPPOSE

Dear Chair Bentz and Ranking Member Huffman:

We, as dedicated advocates for the marine environment, are compelled to strongly oppose H.R. 6814, the Marine Fisheries Habitat Protection Act. This legislation, if enacted, would disrupt existing federal law and regulations, impede ongoing decommissioning efforts to remove oil and gas infrastructure from the Pacific Coast, and hinder the implementation of existing California state law, which provides a balanced approach to creating artificial reefs from such infrastructure.

The Environmental Defense Center ("EDC") is a non-profit public interest law firm that works to protect and enhance the local environment through education, advocacy, and legal action. Since its inception, EDC has focused on protecting the coast from the risks and impacts caused by offshore oil and gas production.

Surfrider Foundation's ("Surfrider") mission is the protection of our ocean, waves, and beaches, for all people, through a powerful grassroots network. Surfrider advocates for the safe and responsible decommissioning of offshore oil and gas infrastructure.

H.R. 6814 is Not the Right Solution for Decommissioning Offshore Oil and Gas Facilities

A total of 23 aging oil platforms and related infrastructure remain offshore California, all constructed between 35–57 years ago (from 1967–1989). Declining oil production has made some platforms obsolete, with others soon to follow in the foreseeable future. The process for decommissioning these facilities is already well underway on the Pacific Coast, but the passage of H.R. 6814 would only undermine the progress that has already been made.

The consequences of H.R. 6814 are deeply concerning. It would establish a system that favors leaving oil and gas infrastructure in place, regardless of the suitability of a site for an artificial reef, and it disregards the critical need to return the ocean and seafloor to pre-lease conditions after production has ceased. Remnant oil and gas infrastructure poses significant risks, including obstructions and hazards to navigation, entanglement risks to commercial fisheries and marine wildlife, and the potential leaching of toxic chemicals from abandoned structures.

1. H.R. 6814 Would Interfere with Existing Law, Regulations and Lease Requirements.

Existing federal law and regulations under the Outer Continental Shelf Lands Act already mandate comprehensive decommissioning activities, ensuring the removal of platforms, pipelines, and other facilities associated with oil and gas leases. 30 C.F.R. § 250.1703. Decommissioning activities include permanently plugging wells, removing all platforms and other facilities, decommissioning pipelines, and clearing the seafloor of all obstructions associated with the lease, among others. *Id*.

Notably, however, current federal regulations already allow for partial decommissioning, making H.R. 6814 unnecessary. A Regional Supervisor may approve partial structure removal or toppling in place for conversion to an artificial reef if the operator meets the following conditions:

1. The remaining structure becomes part of a State artificial reef program;
2. The U.S. Army Corps of Engineers grants the responsible state agency a permit and the state assumes title and liability for the structure; and,

3. The remnant structure meets U.S. Coast Guard (USCG) navigational requirements.[1]

Furthermore, H.R. 6814 is inconsistent with approved leases and permits for offshore oil and gas facilities which require safe and environmentally sound decommissioning in compliance with all applicable laws and regulations. For example, Exxon Company's Development and Production Plan for the Santa Ynez Unit dated September 1987 required the following:

- All wells plugged and abandoned;
- Casings cut off at least 16 feet below the mud line and all obstructions removed from the ocean floor;
- All equipment removed from the platform;
- Decks dismantled and jackets and pilings removed to below mudline, all of which be transported to shore for disposal, salvage, or reuse;
- All obstructions removed from ocean floor;
- Nearshore marine terminal dismantled; and,
- All obstructions removed from ocean floor.[2]

While Exxon's production plan allowed pipelines to be purged and abandoned in place, the Minerals Management Service (the Bureau of Safety and Environmental Enforcement's ("BSEE") predecessor federal agency) required nearly full removal of all infrastructure after operations have ceased.

H.R. 6814 would disrupt the regime of federal law, regulations, and lease conditions currently in place for the oil and gas industry in their offshore operations.

2. H.R. 6814 Would Interfere with Existing Federal Agency Efforts on Decommissioning.

BSEE has set a course for decommissioning of oil and gas infrastructure on the Pacific Outer Continental Shelf. In late 2023, BSEE concluded a multi-year effort to study and analyze decommissioning for oil and gas infrastructure by publishing its Record of Decision and Final Programmatic Environmental Impact Statement for Oil and Gas Decommissioning Activities on the Pacific Outer Continental Shelf ("PEIS"). The PEIS is an extensive document that examined at length various options for decommissioning, but ultimately selected as its Preferred Alternative complete removal of platforms, jackets, and other subsea infrastructure. The PEIS is a programmatic analysis, from which future projects may tier as they become ready for decommissioning.

BSEE extensively evaluated the potential environmental and socioeconomic impacts of decommissioning in the PEIS and selected complete removal of oil and gas infrastructure because it would ensure that no infrastructure would remain on the Pacific Outer Continental Shelf seafloor that could later interfere with navigation, commercial fisheries, future oil and gas operations, and other current or future users.

Other alternatives studied in the PEIS included two partial removal options and a no action alternative. While acknowledging that removal of platforms, jackets and pipelines would result in some seafloor and habitat disturbance, on balance, BSEE found that any alternative leaving infrastructure in place would result in long-term risks such as entanglement of commercial fishing nets or ship anchors, and future long-term leaching of hazardous materials present in shell mounds at the base of platforms.

Looking forward, the PEIS "will support future federal review of and action on decommissioning applications, and will provide a programmatic analysis to which future, site-specific [National Environmental Policy Act] analyses may tier."[3] This tiering process will allow future analyses to focus on site-specific issues and effects related to the removal activities.[4]

By mandating yet another study before remnant structures are removed, H.R. 6814 would upset the progress that has already been made towards decommissioning of infrastructure in the Pacific region. In addition, the criteria set forth in Section 207(a)(1)(B) of H.R. 6814 for determining whether an owner or lessee may

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[1] 30 C.F.R. § 250.1730.

[2] Exxon Company Development and Production Plan, Santa Ynez Unit Development, Pacific OCS Area Offshore Santa Barbara County, California (September 1987) at XI 18-19.

[3] PEIS at ES-1-2.

[4] *Id.* at 4-22 and ES-2.

"reef in place" does not require that navigational or entanglement hazards be eliminated, only that navigational markers be placed around remnant infrastructure. Similarly, Section 207(a)(1)(B) requires that "hazardous liquids" and hydrocarbons be removed, but does not address the hazardous and toxic materials known to be present in shell mounds in the Pacific Region which could break apart in a seismic event. The criteria set forth in H.R. 6814 are wholly inadequate for ensuring that remnant infrastructure does not create a danger to marine wildlife and human users of the ocean environment.

Simply put, H.R. 6814 does not address the many environmental and navigational hazards that would be created by leaving remnant infrastructure in the ocean environment. BSEE has already thoroughly studied and reached the conclusion that this infrastructure must be removed, which our organizations strongly support.

3. California Law Already Addresses the Matters Contained in H.R. 6814.

At the request of the oil industry, the State of California enacted a rigs-to-reefs law in 2010 that allows companies to apply for partial removal of their platforms as part of the decommissioning process. Prior to the passage of that law, platforms were required to be fully removed.

This State law—the California Marine Resources Legacy Act—addresses the issues set forth in H.R. 6814. First, it provides a partial removal option for platforms that are decommissioned off the coast of California. Second, the law requires site-specific studies to analyze the impacts and benefits of the various decommissioning options. This analysis must consider the contribution of the structure to protection and productivity of fish and other marine life; any adverse impacts to biological resources, water quality, or the marine environment from partial or full removal; and any benefits to the marine environment that would result from partial or full removal. Third, it addresses liability for structures that are left on the seafloor. It was important for the State not to be left holding liability for structures that are decommissioned in federal waters, so the State added an indemnification provision. Finally, the law provides for a percentage of the oil companies' cost savings to be shared with the State.

Several platforms in federal waters offshore California are ready for decommissioning. With the completion of the PEIS and adoption of the State's rigs-to-reef law, these platforms can and should be decommissioned in a timely manner, in accordance with existing law. This bill would delay that process until completion of an assessment of each idle structure. Such delay is not necessary because these assessments are already required by State law.

In light of these considerations, **we urge you to oppose H.R. 6814.** This bill not only disregards established federal and state laws but also jeopardizes the marine environment and coastal communities. We implore you to prioritize the protection of our marine ecosystems and coastal communities, and support timely decommissioning, by rejecting this detrimental legislation.

Sincerely,

Linda Krop, Chief Counsel
Rachel Kondor, Staff Attorney
Environmental Defense Center

Pete Stauffer,
Ocean Protection Manager
Surfrider Foundation

Ocean Conservancy
Washington, DC

March 20, 2024

Hon. Cliff Bentz, Chair
Hon. Jared Huffman, Ranking Member
House Natural Resources Committee
Subcommittee on Water, Wildlife and Fisheries
Washington, DC 20515

Re: Marine Fisheries Habitat Protection Act, H.R. 6814 (Oppose)

Dear Chair Bentz and Ranking Member Huffman:

We are writing to express Ocean Conservancy's [1] concerns with H.R. 6814, the Marine Fisheries Habitat Protection Act. Under existing law, offshore oil and gas operators are responsible for cleaning up offshore infrastructure that has reached the end of its useful life. This process, called "decommissioning," is critically important. Delays and failures in decommissioning can lead to safety, environmental and financial risks.

In some instances, decommissioning, reefing in place, and dedicating the financial savings to conservation may yield ecosystem and recreational benefits. Evaluation of these benefits requires careful consideration. If evaluated case-by-case on the basis of adequate scientific analysis, and if consistent with a regional analysis and plan, partial decommissioning ("rigs-to-reefs") projects may sometimes be consistent with long-term sustainable management of fishery resources.

However, the proposal in this bill would not provide a sufficiently protective and functional rigs-to-reefs program. H.R. 6814 would be a sweetheart deal for the oil and gas industry, whereby entities who currently hold liability for oil and gas rigs/platforms and are responsible for their decommissioning would be able to unload responsibility for their large, expensive, and toxic garbage onto the public. This bill is a blank check for platforms to reef-in-place so long as they meet bare-minimum requirements.

This bill fails to create a protective and functional pathway for offshore infrastructure to reef in place in at least three areas:

1. Use of cost savings

Under a sufficient rigs-to-reefs program, financial benefits to platform owners and operators associated with reefing should be dedicated to the protection and enhancement of the public's marine resources, including sustainable fisheries. Platform owners and operators should be required to direct financial benefits from reefing toward ocean conservation, monitoring, research, and observation programs established and run by the federal government in coordination with affected states. While this bill would provide a small amount of money to states, it would encourage states to take on costly long-term burdens in exchange for a small near-term financial gain. It would excuse the oil and gas industry from its responsibilities and would not require those funds to be used for the benefit of ocean resources.

2. Liability

Under a sufficient rigs-to-reefs program, platform owners and operators must fully indemnify, in perpetuity, the federal and state governments against any liability from the remaining portion of a platform and its associated wellhead or other facilities. In no instance should the liability for reefed or partially removed platforms be borne by the public. All costs of any necessary preparation, approval, and mitigation must remain the responsibility of the owner or operator. This bill does the opposite. It would subsidize the oil and gas industry and burden the public with all future liability and costly maintenance.

3. Review

Under a sufficient rigs-to-reefs program, reefing decisions must be made on a case-by-case basis consistent with regional analyses and plans, and with the goal of strengthening and maintaining ocean health and biodiversity. Reefing decisions should be based on science with independent review. This bill does not include regional analyses or plans and does not provide for independent review.

[1] Ocean Conservancy is working with you to protect the ocean from today's greatest global challenges. Together, we create evidence-based solutions for a healthy ocean and the wildlife and communities that depend on it.

A recent Government Accountability Office (GAO) report highlighted significant and ongoing weaknesses in the Department of the Interior's oversight and enforcement of offshore oil and gas decommissioning activities.[2] The report also found many offshore oil and gas operators were not in compliance with existing decommissioning deadlines. GAO recommended that Congress consider "implementing an oversight mechanism" to help address agency shortcomings. Instead of strengthening Department of the Interior's enforcement and oversight mechanisms, this bill would reward malfeasant oil and gas operators by allowing them to transfer liabilities onto taxpayers.

This bill is a step in the wrong direction for our offshore resources. Ocean Conservancy acknowledges that a well-designed rigs-to-reefs program could, in some cases, have conservation benefits. But decommissioned rigs should not be classified broadly as federally recognized important habitat. Instead, decisions to leave industrial infrastructure in the ocean should be made on their ecological merits, consistent with science-based regional plans and analyses, and with independent review. Furthermore, financial benefits to platform owners and operators associated with reefing should be dedicated to the protection and enhancement of the public's marine resources. Rather than giving offshore oil and gas operators advantageous terms at taxpayer expense, Congress should strengthen the Department of the Interior's ability to oversee and enforce operators' decommissioning responsibilities.

For all these reasons, Ocean Conservancy opposes H.R. 6814. Sincerely,

Sincerely,

KATHY TSANTIRIS,
Director, Government Relations

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[2] See Offshore Oil and Gas: Interior Needs to Improve Decommissioning Enforcement and Mitigate Related Risks, GAO-24-106229 (Jan 25, 2024).

RECORD OF DECISION

Programmatic Environmental Impact Statement for Oil and Gas Decommissioning Activities On the Pacific Outer Continental Shelf

1. INTRODUCTION

The purpose of this Record of Decision (ROD) is to record the decision selecting the Preferred Alternative described and analyzed in detail in the *Programmatic Environmental Impact Statement for Oil and Gas Decommissioning Activities on the Pacific Outer Continental Shelf* (POCS). The Bureau of Safety and Environmental Enforcement (BSEE) proposes to review and approve or deny decommissioning applications for the removal and disposal of oil and gas (O&G) platforms, associated pipelines, and other obstructions and facilities located offshore Southern California on the POCS as required by regulation and governing lease terms. The BSEE and Bureau of Ocean Energy Management (BOEM) POCS Regions prepared the "Programmatic Environmental Impact Statement for Oil and Gas Decommissioning Activities on the Pacific Outer Continental Shelf" (PEIS) (BOEM 2023-1605, October 2023) to identify and evaluate the potential environmental impacts and socio-economic considerations pertinent to the proposed action and alternatives. The PEIS supports future Federal review of and action on decommissioning applications, and provides a programmatic analysis to which future, site-specific National Environmental Policy Act (NEPA) analyses may tier, as permitted in NEPA's implementing regulations (43 CFR 46.140; 40 CFR 1501.11). Future analyses will focus on site-specific issues and effects related to decommissioning activities.[1]

This ROD does not by itself authorize or impose requirements on decommissioning activities on the POCS. This decision does identify potential mitigation measures, which BSEE may supplement or otherwise adjust with additional requirements on permits or other authorizations as site-specific circumstances warrant after the agencies complete additional environmental review.

The Preferred Alternative would apply to decommissioning activities on active and terminated leases in Federal waters of the POCS. The O&G reservoirs associated with the 43 originally active leases on the POCS have been in production for 26 to 48 years. During that time, the reservoir pressures and O&G production have been in decline. Currently, 23 O&G platforms exist on the POCS off the southern California coast. The first platform was installed in 1967 and the last two in 1989. Eventually, all the platforms will be subject to decommissioning. Prior to approving a decommissioning application, a site-specific NEPA analysis and associated relevant consultations will be required.

2. DECISION

I am selecting the Preferred Alternative, Alternative 1 with sub-alternative 1a (Alternative 1a), of the PEIS because it best meets the purpose and need for the proposed action.

The purpose of the proposed action is to perform BSEE's delegated functions of oversight and enforcement of decommissioning obligations for platforms, pipelines, and other obstructions and facilities on the POCS in a manner that ensures safe and environmentally sound decommissioning activities in compliance with all applicable laws, regulations, and lease or permit terms or conditions.

In October 2023, BSEE and BOEM issued the Final PEIS, which incorporates analyses of the proposed action, two other action alternatives, and a no-action alternative presented in the Draft PEIS issued in October 2022. It also addresses public comments that BSEE and BOEM received on the Draft PEIS during the comment period. The Final PEIS evaluates four Alternatives: 1, 2, 3, and 4, which, together, depict the potential range of impacts resulting from decommissioning activities. In addition, each action alternative has a sub-alternative, which considers explosive severance, rather than mechanical severance, for the underwater portions of platforms and wells (casings).

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[1] As clarified by the Council on Environmental Quality (CEQ), "[p]rogrammatic NEPA reviews assess the environmental impacts of proposed policies, plans, programs, or projects for which subsequent actions will be implemented either based on the [Programmatic Environmental Assessment] or PEIS, or based on subsequent NEPA reviews tiered to the programmatic review (e.g., a site-or project-specific document)." CEQ Memorandum for Heads of Federal Departments and Agencies, *Effective Use of Programmatic NEPA Reviews*, at 7 (Dec. 18, 2014). This PEIS will support future actions based on subsequent site-specific NEPA reviews tiered to this programmatic review.

Alternative 1 with sub-alternative 1a is denoted as the Preferred Alternative in the PEIS. This alternative includes the complete removal of platforms, topside, conductors, the platform jackets to at least 4.6 m (15 ft) below the mud line, and the complete removal of pipelines, power cables, and other subsea infrastructure (i.e., wells, obstructions, and facilities), with site clearance from the POCS. In the long term, the Preferred Alternative would ensure that no O&G infrastructure would remain on the POCS seafloor that could interfere with navigation, commercial fisheries, future O&G operations, and other current or future POCS users.

Sub-alternative 1a provides the most proven reliable severance means for decommissioning activities. Not all decommissioning activities under the Preferred Alternative would require explosive severance; however, the use of explosive methods may need to be implemented if non-explosive severance methods cannot successfully be utilized for piling and conductor removals.

I considered the Annual Air Emissions and Social Cost of Greenhouse Gases (GHG) estimates when making my decision to select the Preferred Alternative. The GHG analysis provided in Appendix F of the Final PEIS, *Estimation of Peak Annual Air Emissions and Total Program GHG Emissions, Social Costs, and Emission Equivalencies*, provides a benchmark for the short-term estimates of GHGs to be used for comparison with the future site-specific NEPA analysis. Alternative 1 was estimated to have the highest temporary levels of associated GHG emissions because, in the short-term, this alternative may require more vessel use and more time for removal activities.

Action Alternatives 2 and 3 include only partial jacket removal, to at least 26m (85 ft) below the waterline, rather than complete removal of platform topsides, jackets, pipelines, and other subsea infrastructure (wells, obstructions, and facilities). Alternative 2 considers in-place decommissioning of the jacket with only the top sides of the platform transported to shore for disposal. Alternative 3 includes a Rigs-to-Reefs (RTR) option for the disposal of the jacket with the top side structures removed for on-shore disposal.

Under Alternative 4, the No Action Alternative, BSEE would take no action on decommissioning applications in the POCS region. Other ongoing regulatory and statutory requirements for managing platforms, pipelines, wells, power cables, and subsea infrastructure following lease termination would continue to apply, notably those for maintaining safety and protecting the environment, such as plugging and abandonment activities, including emptying platform tanks, equipment, and piping of all liquids, and emptying and flushing pipelines in anticipation of decommissioning.

3. ALTERNATIVES ANALYZED IN DETAIL BUT NOT SELECTED

I did not select Alternatives 2, 3, or 4 because the Preferred Alternative (Alternative 1) best meets the purposes of the Outer Continental Shelf Lands Act (OCSLA) and supports development of domestic conventional and nonconventional energy resources in an environmentally and economically responsible way.

Alternatives 2 and 3 include only partial jacket removal, to at least 26m (85 ft) below the waterline, removal of the platform jackets, and pipeline abandonment-in-place. There would be relatively less near-term environmental disturbance under Alternatives 2 or 3 than under Alternative 1, which would include additional seafloor disturbance and habitat loss during complete removal of jackets, pipelines, power cables, and other obstructions and facilities (subsea infrastructure, shell mounds, etc.), and site clearance. However, both Alternatives 2 and 3 would leave major portions of platform jackets and pipelines abandoned in place, or jackets reefed at approved sites in the long term. Under Alternatives 2–4, all or portions of platform jackets, pipelines, and other facilities and infrastructure would remain on the seafloor following any other required decommissioning. Long-term risks from remnant infrastructure include entanglement of commercial fishing nets or ship anchors, and future long-term leaching of potential hazardous materials present in shell mounds remaining around the base of platforms that were released in permitted discharges during past O&G operations. Under Alternatives 2 and 3, long-term risks would be analyzed in greater detail when plans are submitted for specific decommissioning projects. Such plans would identify jacket portions, shell mounds, or pipelines proposed to be abandoned in place. This would allow for the identification of the location of at-risk resources and better quantification of the long-term risks from remnant infrastructure.

Under Alternative 4, ongoing regulatory and statutory requirements for managing platforms following lease termination would continue to apply; however, regulatory and lease or grant requirements for decommissioning of idle infrastructure and infrastructure on expired leases and ROWs would not be satisfied. Additionally,

Alternative 4 would result in permanent impacts from marine trash and debris left on the seafloor. Alternative 4 was not chosen because it does not meet the purpose and need for the Proposed Action, nor does it meet the legal obligations of the lessees or other liable parties and BSEE.

For these reasons, I have not selected Alternatives 2, 3, or 4.

4. ENVIRONMENTALLY PREFERABLE ALTERNATIVE

I have identified Alternative 2 as the environmentally preferable alternative based on the seafloor disturbance that would occur with complete removal; the expressed public desire to maintain hard bottom habitats that have become established from the presence of O&G infrastructure and to decrease localized habitat loss; and the potentially enhanced benefits for recreational and commercial fishing. Pursuant to Departmental NEPA regulations, 43 CFR 46.30, the environmentally preferable alternative is defined as that which "causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources." In addition, 43 CFR 46.30 states that "[t]he environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources." Table ES-2 of the PEIS, *Summary Comparison of Potential Effects among Alternatives*, includes additional description for each Alternative's effects on identified resources.

Alternative 2 consistently exhibits similar potential effects to resources as Alternative 1, but in each case, the effects are expected to be reduced in magnitude, duration, or both. Alternative 2 leaves some infrastructure in place that may pose long term risks to other uses on the OCS, including entanglement and loss of gear to commercial and recreational fishing and contaminant leaching from potential hazardous materials present in shell mounds remaining around the base of platforms. The primary beneficial outcome of Alternative 2 is minimizing seafloor disturbance and habitat loss. The installation of platforms, pipelines, and subsea infrastructure in the marine environment resulted in habitat modification. Although these structures were intended to be temporary, the operational life is long term and can impact the local distribution of species in an area. The O&G infrastructure has created locally important hard bottom habitats for species and biodiversity in which the platforms and portions of pipelines have been colonized by dense communities of sessile and epibenthic invertebrate species. The complete removal of jackets and pipelines would mean a permanent loss of existing hard substrate and the associated invertebrate communities, which would be replaced by invertebrates typical of the water column and soft sediments.

5. CONSULTATIONS AND OTHER ENVIRONMENTAL REQUIREMENTS

On October 12, 2022, BSEE and BOEM published a notice in the Federal Register that announced a 47-day public comment period on the Draft PEIS for Oil and Gas Decommissioning Activities on the Pacific OCS. The comment period was extended and closed January 10, 2023. BSEE and BOEM also hosted two virtual public meetings on November 10 and November 15, 2022, to share information about BOEM's environmental review process and to solicit public input. In total, 34 submissions were received, via online and public comment hearings. Of the 34 submissions received, 33 were identified as unique and one submission was a duplicate. BSEE and BOEM included a Summary of Public Comments received for the Draft PEIS as an appendix to the Final PEIS, *Summary of Public Comments and Bureau Responses*.

BOEM and BSEE engaged in a number of consultation and coordination processes with Tribal, Federal, state, and local government entities regarding POCS decommissioning activities.

Interagency Coordination

In 1997, a group of Federal, state, and local agencies agreed to form an Interagency Decommissioning Working Group (IDWG) to develop an action plan to guide agency decommissioning efforts. The IDWG is composed of representatives from BOEM, BSEE, California State Lands Commission, California Coastal Commission, California Department of Fish and Game, National Marine Fisheries Service (NMFS), Ventura County, Santa Barbara County, U.S. Coast Guard (USCG) and U.S. Army Corps of Engineers (USACE). This group meets quarterly to discuss emerging topics impacting the region as it pertains to decommissioning oil and gas facilities in the offshore environment. Departmental agencies and bureaus are required, under 43 CFR 46.225, to invite eligible government entities to participate

as cooperating agencies during the development of an EIS. The Notice of Intent invited other Federal agencies, as well as state, Tribal, and local governments to consider becoming cooperating agencies in the preparation of the PEIS. BSEE established cooperating agency status with the USACE for the PEIS.

Government-to-Government Tribal Consultations

Consistent with Executive Order (EO) 13175 and DOI directives that implement that EO, BOEM contacted four federally Recognized Indian Tribes, including the Pala Band of Mission Indians, Santa Rosa Band of Cahuilla Indians, the Soboba Band of Luiseno Indians, and the Santa Ynez Band of Chumash Indians. On July 21, 2021, August 17, 2021, and February 19, 2022, BSEE sent formal letters to these four federally Recognized Indian Tribes in California notifying them of the development of the decommissioning PEIS. On October 19, 2021, BSEE sent another formal letter announcing and soliciting consultation regarding the Draft PEIS. The Pala Band of Mission Indians, Santa Rosa Band of Cahuilla Indians, and Soboba Band of Luiseno Indians have deferred to the Santa Ynez Band of Chumash Indians for any consultations and have requested that BSEE keep them informed of any progress. During the writing of the draft PEIS, one response was received from the Santa Ynez Band of Chumash Indians and a virtual consultation took place on February 1, 2022. Nothing else has been received in response to letters; however, discussions with designated Tribal representatives are ongoing to determine if any of the individual Tribes desire continued consultations.

Coastal Zone Management Act (CZMA)

Provisions in the CZMA guide coastal states in developing voluntary coastal management programs (CMPs) to manage and balance competing uses of the coastal zone. Federal agency activities must be "consistent to the maximum extent practicable" with relevant enforceable policies of a state's Federally approved CMP (15 CFR 930 Subpart C and 15 CFR part 923) (e.g., POCS lease sales, renewable energy competitive lease sales, and marine minerals negotiated competitive agreements). If an activity will have direct, indirect, or cumulative effects, the activity is subject to Federal consistency rules. For Federal consistency reviews under the CZMA, the California Coastal Commission (CCC) reviews Federal agency, Federally-permitted, and Federally-funded (to state and local government) activities that affect the coastal zone, regardless of their location.

Pursuant to the CZMA, applicants will submit site-specific decommissioning applications to the CCC after certification by BSEE to ensure that the proposed activities are consistent with the enforceable policies of California's CMP.

Endangered Species Act (ESA)

The ESA mandates that the Bureaus, when carrying out their regulatory responsibilities, must consult with other Federal agencies, including the USFWS and NOAA's NMFS. At the time when decommissioning applications are submitted, BSEE will prepare a Biological Assessment specific to the structure removal and pipeline decommissioning activities described in the application to address consultation requirements with NMFS and USFWS. BOEM retains authority under OCSLA to apply additional mitigation measures on post-lease OCS activities, as necessary, to ensure protection of threatened and endangered species and their critical habitat. Throughout consultation, BOEM will ensure that the best available information related to listed species and designated critical habitat is fully considered. Moreover, no activity under a decommissioning application will be allowed to proceed without the completion of appropriate ESA consultation.

Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat (EFH)

The Magnuson-Stevens Fishery Conservation and Management Act (as amended) requires Federal agencies to consult with NMFS regarding actions that may adversely affect designated EFH. BSEE will consult with NMFS and the Pacific Fishery Management Council when a specific decommissioning application is submitted and its supporting NEPA review identifies potential adverse effects on EFH.

Marine Mammal Protection Act (MMPA)

The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States (50 CFR part 216).

POCS operators must receive authorization to take marine mammals incidental to decommissioning activities pursuant to the MMPA requirements. Appendix D of the PEIS includes potential take estimates of MMPA species for Level A and Level B harassment, as well as estimates of non-auditory injury, including mortality.

BSEE will require POCS operators to comply with any terms included in MMPA take authorizations issued by NMFS and USFWS. In addition, BSEE will require POCS operators to follow the mitigation measures required for decommissioning in the current MMPA guidance and the guidelines outlined in BSEE's NTL 2010-G05, "Decommissioning Guidance for Wells and Platforms," and NTL 2020-P05, "Decommissioning of Pacific Outer Continental Shelf Region (POCSR) Facilities."

National Fishing Enhancement Act of 1984 (NFEA)

The NFEA includes the following: (1) recognition of social and economic values in developing artificial reefs, (2) establishment of national standards for artificial reef development, (3) creation of a National Artificial Reef Plan (NARP) under leadership of the U.S. Department of Commerce, and (4) establishment of a reef-permitting system under the USACE. In the NARP, O&G structures are identified as acceptable materials for artificial-reef development. The NFEA led to the creation of a national RTR policy, plan, and program in the United States.

When applicants propose project-specific reefing activities, they will work directly with state reefing programs to meet the requirements of the NFEA.

National Historic Preservation Act (NHPA)

Under Section 106 of the NHPA, as amended (54 U.S.C. 306108), and its implementing regulations (36 CFR part 800), Federal agencies must consider the effects of Federal undertakings on historic properties.

BSEE initiated NHPA-required Section 106 consultations for this Action with four federally Recognized Tribes: the Pala Band of Mission Indians, Santa Rosa Band of Cahuilla Indians, the Soboba Band of Luiseno Indians, and the Santa Ynez Band of Chumash Indians. BSEE also coordinated with BOEM, the California State Historic Preservation Officer, the California State Lands Commission, Channel Islands National Marine Sanctuary, Channel Islands Maritime Museum, and Channel Islands National Park, and initiated Section 106 coordination with interested parties, including: the Barbareño/Ventureño Band of Mission Indians, Chumash Council of Bakersfield, Coastal Band of the Chumash Nation, Gabrieleño Band of Mission Indians-Kizh Nation, Gabrielino-Tongva Indians of California Tribal Council, Gabrielino-Tongva San Gabriel Band of Mission Indians, Gabrielino-Tongva Nation, Gabrielino-Tongva Tribe, Juaneño Band of Mission Indians Acjachemen Nation-Belardes, Northern Chumash Tribal Council, and the San Luis Obispo County Chumash Council. Section 106 consultations were held in conjunction with government-to-government consultations with the Santa Ynez Band of Chumash Indians on February 1, 2022. Several local entities were also contacted as a courtesy and for cultural resources input, including: the Natural History Museum of Los Angeles County, Newport Harbor Nautical Museum, Santa Barbara Maritime Museum, and the Santa Barbara Museum of Natural History. BSEE met with the Santa Barbara Museum of Natural History on March 10, 2022. BSEE then commissioned a historic context of California oil production, which includes preliminary National Register of Historic Places eligibility evaluations for the platforms proposed for decommissioning. Additional studies will be pursued as appropriate when identified in the site-specific analysis and consultations.

National Marine Sanctuaries Act (NMSA)

Section 304(d) of the NMSA requires that Federal agencies consult with NOAA's Office of National Marine Sanctuaries when a proposed action is indicated likely to destroy, cause the loss of, or injure any National Marine Sanctuaries (NMS) resource. When a specific decommissioning permit application is submitted to BSEE, the potential for affecting NMS will be examined during the application-specific NEPA process, and BSEE will address the need for a specific NMSA Section 304(d) consultation at that time.

Rivers and Harbors Act (RHA)

Section 10 of the RHA is overseen by the USACE and prohibits the unauthorized obstruction or alteration of any navigable water of the United States (i.e., construction or placement of various structures that hinder navigable capacity of any waters), without the approval of Congress. Section 10 of the RHA is applicable to structures, installations, and other devices on the POCS seabed, and is directly applicable to O&G decommissioning and reefing platform components. Section 4 of the OCSLA (43 U.S.C. 1333(e)) extended USACE's authority to prevent obstruction of navigation on the OCS. In California, the Department of Fish and Wildlife, as part of its responsibilities for the RTR program, applies to the USACE for RHA permits.

Applicants are required to apply for a permit from the USACE to meet the requirements of the RHA when project-specific decommissioning activities (including

RTR activities) are proposed. Any USACE decision on a permit application will be based on project-specific sediment testing data and methodology for the proposed decommissioning activities.

6. MITIGATION MEASURES

The PEIS identified impact producing factors (IPFs) potentially affecting biotic, physical, and sociocultural resources, including: noise, air emissions, turbidity and sedimentation, seafloor disturbance, lighting, vessel strikes, habitat loss, sanitary wastes/wastewater discharges, marine trash and debris, visual intrusions, and space-use conflicts. Analysis of the IPFs considered a range of platform sizes, water depths, and locations on the POCS, and considered activities involved in each phase of decommissioning, as well as the location, magnitude, and duration of the activities with potential environmental impacts. All practicable mitigation measures to avoid or minimize environmental harm from the IPFs of the selected alternative will be adopted in future site-specific approvals. The Bureaus make every attempt to identify and minimize the environmental effects from decommissioning and adopt mitigation measures to minimize long-term impacts and maintain or enhance long-term productivity. Table 4.1-3 of the PEIS, *Typical Mitigation Measures for Offshore Decommissioning of O&G Platforms and Related Structures*, summarizes specific typical mitigation measures for offshore decommissioning of O&G platforms and related structures for the IPFs described above. BSEE expects that these measures and others will be included, as warranted and appropriate, as elements of forthcoming decommissioning applications.

Mitigation measures will be further explored and defined in site-specific environmental reviews and through ESA section 7 and EFH consultations between BOEM/BSEE and NMFS and USFWS, and mitigation measures will be implemented for any identified adverse impacts. In addition, BSEE expects site-specific mitigations to be identified in decommissioning applications and will require site-specific mitigations as necessary in any approval of those applications. BOEM and BSEE retain discretion to explore and define additional mitigation measures as conditions of future site-specific environmental reviews and consultations.

BSEE Notice to Lessees No. 2020-P02, issued in August 2020, also requires applicants to provide plans for protecting sensitive biological and archeological resources during removal operations, including mitigation measures to avoid and minimize impacts. Mitigation measures could include physical and engineered barriers, work practices, work timing, monitoring, and administrative measures for limiting impacts. Additionally, typical mitigation measures for offshore decommissioning of O&G platforms and related structures include measures to limit impacts from noise from equipment and vessels, to limit impacts of explosives use on marine life, to control air emissions, to reduce production of turbidity and sedimentation, to avoid and limit seafloor disturbance impacts on potentially affected resources and facilities from support vessel mobilization/demobilization, to limit impacts on biological and visual resources from lighting used in removal activities, to limit impacts of vessel strikes on marine protected species (e.g., sea turtles, marine mammals), to mitigate the impacts of loss of platform-based habitat, to reduce impacts from discharged sanitary and industrial wastewater, trash, and debris from work vessels and platforms, and to reduce space-use conflicts between decommissioning-related vessel activities and commercial navigation.

Mitigation Monitoring and Adaptation

BOEM and BSEE will continually assess compliance with, and the effectiveness of, mitigation measures to allow the Pacific Regional Office to adjust mitigation as needed. A primary focus of this effort is requiring submission of information within a specified timeframe or after a triggering event that is tracked by BOEM and/or BSEE. This information helps inform BOEM and BSEE regarding potential impacts, effectiveness of mitigation, and potential modifications to operations or mitigations in the future through post-lease conditions of approval.

Enforcement

BSEE has the authority to inspect and review operations and enforce OCSLA, its regulations, and any lease, ROW, plan, or permit term, stipulation, or condition of approval for any decommissioning activity. BSEE may require corrective actions, impose penalties, or other remedies on any lessee or operator that fails to comply with applicable law, regulations, the terms of a lease, plan, permit, approval, or order, including stipulations and other mitigation measures, and conditions of approval.

7. CONCLUSION

In carrying out this mandate, I considered many factors in selecting the Preferred Alternative 1 and sub-alternative 1a, including the purpose and policies of OCSLA; the regulatory requirements under 30 CFR part 250; public input; comments from Federal, state, and local agencies, Non-Governmental Organizations, and individuals; and the effects analysis in the PEIS. Pursuant to 40 CFR 1505.2(b), I certify that DOI has considered all the alternatives, information, analyses, and comments submitted by Tribal governments, Federal, State, and local agencies, elected officials, industry, non-governmental organizations, and the public for consideration by the lead and cooperating agencies in developing the PEIS. BSEE fully considered the potential effects of this action and rationally articulated the relevant factors in recommending the Preferred Alternative. Therefore, I have decided that BSEE will review and approve or deny decommissioning applications for the complete removal and disposal of O&G platforms, associated pipelines, and other facilities offshore Southern California on the POCS as required by regulation and governing lease terms.

Bruce Hesson
Pacific OCS Regional Director
Bureau of Safety and Environmental Enforcement

March 19, 2024

Hon. Cliff Bentz, Chair
Hon. Jared Huffman, Ranking Member
House Natural Resources Committee
Subcommittee on Water, Wildlife and Fisheries
Washington, DC 20515

Re: Concerns regarding the Marine Fisheries Habitat Protection Act, H.R. 6814

Dear Chair Bentz and Ranking Member Huffman:

We are writing to express our concerns with Representative Garret Graves's H.R. 6814, the "Marine Fisheries Habitat Protection Act" and the impact this bill would have on our marine ecosystems. If passed, this bill would undermine the Outer Continental Shelf Lands Act to make leaving offshore oil and gas infrastructure in place the default, making it easier for oil and gas companies to transfer liability and costs stemming from corporate negligence to the American taxpayer. This bill severely undermines the safety and protection of our marine ecosystems, maritime navigation, and coastal communities.

This bill's default treatment of applications states that if a determination on a reef-in-place application is not made within 90 days, the application will be approved. This default treatment clause poses significant risks to the marine environment, maritime industry, and local communities. While properly decommissioned offshore oil and gas infrastructure can provide artificial reef habitat in some circumstances, significant uncertainties exist regarding reef-in-place structures' impact on the marine environment. These structures can host or act as a vector of invasive species[1] and influence the redistribution, aggregation, or population numbers of fish species.[2] Scientists have explicitly noted that the success of reef-in-place structures in certain areas does not warrant adoption in others, stating, "Every ecosystem is different and needs to be evaluated as such; creating a reef, simply because there is a platform that needs to be decommissioned, is indeed little more than waste disposal".[3] Unsuitable or hazardous structures should never be approved for a reef-in-place permit, regardless of the application timeline.

A recent Government Accountability Office (GAO) report[4] highlighted the abysmal track record of the oil and gas industry in meeting their decommissioning obligations. The report found that:

- Over 75% of end-of-lease and idle infrastructure in the Gulf was overdue as of June 2023, representing over 2,700 wells and 500 platforms.
- Over 40 percent of wells and 50 percent of platforms on Gulf leases that ended between 2010 and 2022 have not been decommissioned.
- The Bureau of Ocean Energy Management (BOEM) held about $3.5 billion in supplemental bonds to cover between $40 billion and $70 billion in total estimated decommissioning costs as of June 2023, leaving taxpayers exposed to billions of dollars in financial risks if operators fail to meet their obligations.

By not plugging offshore oil and gas wells, dismantling and disposing of platforms, and returning the seafloor to pre-lease conditions, the existing infrastructure—just miles from coastal communities where millions of Americans[5] live and work—becomes increasingly vulnerable to damage and deterioration from storms and corrosion. This can topple platforms, cause oil spills, and make decommissioning more expensive and dangerous. This bill would further exacerbate this damaging cycle. Adding additional steps to removing offshore infrastructure would make it even less likely that companies would pay for the total cost of their operations, including

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[1] Van Elden, Sean, Jessica J. Meeuwig, Richard J. Hobbs, and Jan M. Hemmi. "Offshore oil and gas platforms as novel ecosystems: A global perspective." *Frontiers in Marine Science* 6 (2019): 548. https://doi.org/10.3389/fmars.2019.00548

[2] Ajemian MJ, Wetz JJ, Shipley-Lozano B, Shively JD, Stunz GW (2015) An Analysis of Artificial Reef Fish Community Structure along the Northwestern Gulf of Mexico Shelf: Potential Impacts of "Rigs-to-Reefs" Programs. PLoS ONE 10(5): e0126354. doi:10.1371/journal.pone.0126354

[3] Van Elden, Sean, Jessica J. Meeuwig, Richard J. Hobbs, and Jan M. Hemmi. "Offshore oil and gas platforms as novel ecosystems: A global perspective." *Frontiers in Marine Science* 6 (2019): 548. https://doi.org/10.3389/fmars.2019.00548

[4] OFFSHORE OIL AND GAS Interior Needs to Improve Decommissioning Enforcement and Mitigate Related Risks. January, 2024. https://www.gao.gov/assets/d24106229.pdf

[5] https://ecowatch.noaa.gov/thematic/coastal-population

decommissioning. When oil and gas companies sign a lease, they agree to take responsibility for rigs throughout their life cycle. Industry should be held to these obligations. We need more Congressional oversight on offshore infrastructure, not additional loopholes for oil and gas companies to avoid their decommissioning responsibilities. This bill gives a break to an industry that is causing the climate crisis and harming people, and only extends their damaging impacts further out into the future.

Liability for oil and gas infrastructure should remain with companies and not be transferred to the public. As written, the default treatment clause of this bill allows for the complete transfer of liability to the taxpayer regardless of the feasibility of a site to serve as an artificial reef. If a reef-in-place application is accepted under this clause, taxpayer dollars will be used to maintain navigational markers, monitor the decaying infrastructure for environmental or health hazards, and pay for any damages resulting from the infrastructure, all while there may not be any net benefit to the marine ecosystem. This assumption of liability is particularly concerning as reef-in-place legislation in California requires the owner or operator of the oil platform or production facility to indemnify the state from any liability that may arise, including from active negligence.[6] H.R. 6814 has no such provision. Instead, it makes American taxpayers liable for corporate negligence and stands in sharp contrast to state-led efforts to conserve and protect our marine ecosystems.

Instead of addressing long-standing issues surrounding decommissioning offshore infrastructure, this bill provides a handout to oil and gas companies by allowing them to shirk their responsibilities by passing along costs and liability to American taxpayers, all under the guise of environmental stewardship. The recently published GAO report makes it clear that for too long, the oil and gas industry has been leaving its mess for the American taxpayers to clean up. We urge you not to move forward on this bill, refrain from reporting it out of committee, and vote no should the bill make it to the House floor.

Sincerely,

Alaska Wilderness League

Center for Biological Diversity

Creation Justice Ministries

Earthjustice

Environmental Defense Center

GreenLatinos

Healthy Gulf

Healthy Ocean Coalition

López-Wagner Strategies

National Ocean Protection Coalition

National Parks Conservation Association

Natural Resources Defense Council

Nuclear Information and Resource Service

Ocean Conservation Research

Ocean Defense Initiative

Oceana

Plaquemines Rising Coastal Restoration

Surfrider Foundation

TAO

Taproot Earth

The Ocean Project

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[6] http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab_2501-2550/ab_2503_bill_20100621_amended_sen_v95.html