

U.S. House of Representatives
Committee on Natural Resources
Washington, DC 20515

March 17, 2021

Captain Alek Modjeski
Habitat Restoration Program Director
American Littoral Society
18 Hartshorne Drive
Highlands, NJ 07732

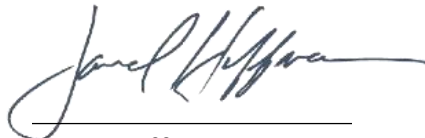
Dear Captain Modjeski,

I am writing to thank you for appearing before the Subcommittee on Water, Oceans, and Wildlife at our virtual oversight hearing entitled, "*Building Back Better: Water, Oceans, and Wildlife*," on Thursday, March 11, 2021 at 2:00 PM EST. I appreciate the effort you took to prepare and present your testimony.

While many questions were asked during the hearing, the Subcommittee has an additional question attached for your reply. Please provide your written responses to Ms. Casey MacLean, Subcommittee Policy Aide, no later than **Thursday, October 25**. Committee Rule 3(o) requires that responses be submitted within 10 business days of the hearing.

We appreciate your time and insight, and we remain grateful for your contribution to the Subcommittee's work. Should you have any questions, please contact the Subcommittee Policy Aide, Ms. Casey MacLean, at (202) 875-0126.

Sincerely,



Jared Huffman

Chair

Subcommittee on Water, Oceans, and Wildlife

Attachment: Questions for the Record from Representative Cohen, Representative Matsui, Representative González-Colón, and Representative Graves

COMMITTEE ON NATURAL RESOURCES
SUBCOMMITTEE ON WATER, OCEANS, AND WILDLIFE
REMOTE OVERSIGHT HEARING
MARCH 11, 2021
2:00 P.M. EST

Oversight Hearing on "*Building Back Better: Building Resilience for the Economy, Climate, and Ecosystems.*"

Questions from Representative Cohen

- 1) How does your organization educate and involve youth in restoration projects, and can you describe any ways in which that has directly impacted community investment or cultivated continued interest within future generations?

Our active partnership approaches to education and youth involvement have led to in-kind investments by municipal governments and local school authorities. Youth that have participated in our programs have been hired through city parks programs, and other stewardship-oriented programs. The demonstrated resiliency value of several of the projects led to the expansion and increased investment in resiliency and coastal habitat restoration by municipal government partners. It provided a body of evidence for more active partnerships and investment across governmental levels which ultimately supported more community engagement. We have long standing partnerships with faith-based institutions, community boards and local schools who year after year participate in the work, and regularly show their support for its value. While it is often difficult to track future outcomes of students who have participated in the programs, we know of several who have pursued careers in conservation, environmental protection, and the sciences because they have come back to us to share their successes; many of these young people come from underserved and BIPOC communities who have historically been turned away from the STEM career paths.

- 2) Your restoration work has not only improved habitat resiliency and threatened species repopulation; those have had second-order effects on local economies through tourism and job creation. Can you speak to the necessary protections and boundaries that need to be drawn to sustain species while reaping the benefits of community engagement and tourism?

Tourism and recreation built around wildlife species needs to be managed with due respect to the life history needs of the animals. In Cape May, bird watching associated with the return of migratory shorebirds, including federally threatened species, is a multi-million dollar portion of the local economy. However, the successful stopover of these migrants on their way to the Arctic depends on minimizing disturbance during their foraging on the beaches that our restoration work rebuilt after Hurricane Sandy. We actively addressed this possible conflict by keeping people, trucks, and dogs off the beaches during the time the birds were present, but also by creating free and accessible watching platforms staffed by "beach stewards" who provided education and natural history interpretation free of charge. This program created a shared sense of stewardship, provided access to see the wildlife and hence supported the associated economy and respected the boundaries needed to protect the welfare of the birds. At its essence, it managed access to the resource, was built on dialogue and active

engagement with the public and affected communities and created a sense of shared responsibility for the wildlife while still benefiting from them economically.

Questions from Rep. Matsui

Captain Modjeski, you mentioned in your testimony that in southern New Jersey, average flood damage from storms decreased due to habitat restoration.

- 1) What factors helped reduce the damages, and can this type of habitat restoration be scaled to other ecosystems or parts of the country, perhaps to reduce inland flooding?

The reduction in flood damage was related primarily to the health and integrity of the tidal marsh systems studied, and the distance between the water and the structure. The bottom line was a healthy and expansive tidal marsh out in front of the structures provided increased protection. Given the loss of the historic tidal marsh base nationally, it would appear to be evident that there is lots of opportunity to restore these features for those values. Indeed, that strategy is pursued actively throughout the nation, though perhaps not at a scale sufficient to match the problems. Similarly, the restoration of beach habitats, including intertidal flats, beach berms and coastal dune systems provide similar nature-based approaches to minimizing flood hazard risk, with similar results. In many ways, it comes down to putting more distance between our built communities and the hazard and filling that distance with “natural speed bumps.” These features consequently provide both the benefits associated with their habitat qualities as well as their hazard mitigation functions.

- 2) What is the most immediate action that Congress can take to address habitat restoration?

There exists a set of federal programs across the full range of agencies which have been demonstrated to be innovative, efficient, and effective. They are complemented by a NGO, academic and community-based set of organizations with practical, real world experience in making such projects work. While there are still new practices developing, the most immediate action Congress can take is to fund these programs more robustly. The list of proposed projects that result from every Request for Proposals is the surest indicator of the demand and need for such support.

Questions from Representative González-Colón

- 1) Last year, we heard from the Director of the Puerto Rico Coastal Zone Management Program and Coral Reef Conservation and Management Program. He mentioned that federal funding opportunities are rarely pursued by U.S. island jurisdictions. While there are several reasons, lack of capacity to develop specific components of federal grants is a one of them. I want to make sure Puerto Rico and other coastal jurisdictions across the Nation are able to compete. Do you have any recommendations to improvements to these programs that ensure our island and coastal communities are not disadvantaged by the cumbersome federal grant making process?

We often work in partnership with local communities to help navigate sometimes challenging program requirements that could provide sorely needed and well-deserved funding. In some

instances, we address technical issues or needs and sometimes grant management needs. Our own approach is often ad hoc, in that the federal programs don't always support or promote such partnership opportunities proactively (though they may allow them formally). The key to partnerships and successful outcomes is providing space for the needed skills to be brought to bear on the problem. A review of how federal programs could promote and encourage these kinds of partnerships to ensure the requisite capacity and skill sets are available to potential non-federal applicants may, literally, pay dividends.

- 2) You have been involved with the federal permitting process. In your experience, are there opportunities where we can streamline or improve this process?

In the last several years, the American Littoral Society has negotiated and received regional approval permits from the US Army Corps of Engineers, Philadelphia District and the State of New Jersey which provide a 10-year regulatory framework for our habitat restoration work on the Delaware Bay. These "blanket permits" conduct fundamental regulatory compliance reviews comprehensively and regionally, looking at the prospective series of projects and activities as interrelated across the regional geography and time. They set compliance conditions early on, and work to minimize repetitive submissions and demonstrations on our part, and provide the regulators with a broader perspective on environmental effects and compliance issues, facilitating their responsibilities and making their reviews more effective.

- 3) One of the biggest climate-related issues we face in Puerto Rico is coastal erosion. Prior to the impact of Hurricanes Irma and Maria in 2017, it was estimated that around 60% of our beaches suffered from this problem. The storms only exacerbated the erosion problem, with recent studies from the University of Puerto Rico finding that most beaches on the Island suffered a loss of elevation and width.
- a. Can you discuss some of the strategies the American Littoral Society implemented in New Jersey in the aftermath of Hurricane Sandy to enhance and restore shorelines and beach habitat? How can your organization's experience and work serve as a model for Puerto Rico and other coastal communities throughout the United States?
 - b. How can coastal restoration efforts contribute to revitalizing coastal economies?

In reference to (a): In the aftermath of Hurricane Sandy, the Society immediately reached out to private, local, county, state, and Federal partners to better assess and prioritize areas needing immediate restoration, areas that had not only affected human-built communities, but also areas that supported critical habitat instrumental in the survivability of trust species and federally-listed species. Once identified, we quickly assembled multi-disciplinary teams that could implement the restoration but also monitor its effects so we could revisit the restorations and adaptively manage each moving forward. For instance, Hurricane Sandy hit in October, and after our state-wide assessment and discussions early on with our partners, it was determined that we needed to have urgent focus in Delaware Bay, since that region had lost the majority of suitable habitat needed for spawning horseshoe crabs and foraging shorebirds, to include the federally-listed red knot. These species come

to Delaware Bay in May and June and without sandy beaches for the horseshoe crabs to lay their eggs that the shorebirds feed upon on their way to Arctic breeding grounds, two species populations faced large adverse impacts to their future survivability. We immediately evaluated pre-Sandy beach footprints, requested emergency approvals to restore, calculated sand volume needs to restore beaches to their pre-Sandy footprint, estimated costs, assessed available resources, met with several funders, and relied on our existing partnerships and local knowledge to quickly restore beaches. We also established a monitoring plan to assess the success of the restorations, knowing we could only do the minimum then, but more would need to be accomplished in the future. Post-restoration data would be used to revisit, adaptively manage, and proactively complete the restoration work the following year. We also worked with communities on not only re-building dunes, maritime forests, and re-opening fish passage across the state, but we also showed the value of these strategies in protecting the human-built and natural environments from future storms through outreach and volunteerism. Our restoration approach after Sandy, would definitely, benefit others in effectively restoring their shorelines and beaches.

In reference to (b): As stated in my testimony, coastal habitat restoration projects and programs not only revitalize the natural ecology of an area, but they also restore and rebuild local and regional economies directly through implementation of the restoration or indirectly through patronage of local businesses. Delaware Bay beaches support an array of shorebirds and its waters contain numerous species that add to its ecological health. The bay also supports recreational and commercial fisheries. The human-built communities rely heavily on eco-tourism and on those who visit during shorebird migration. The ecological community relies on the horseshoe crab egg laid on the beaches to survive and to further sustain the species sought (directly or indirectly) by recreational and commercial fisherman. Its interconnected. If you keep a healthy eco-system, you maintain a healthy economy.

Questions from Representative Graves

- 1) Mr. Modjeski, coastal restoration and hurricane protection are issues of critical importance to my state, the State of Louisiana. Louisiana is home to one of the most ecologically diverse coastlines in the nation but unfortunately, we have lost over 2,000 square miles of our coast to erosion and subsidence, so we are constantly working to combat those impacts by capturing sediments, establishing oyster reefs, and restoring our marshes.

In fiscal year 2019 alone, the State of Louisiana received close to \$156M in revenue from oil and gas development in the Gulf of Mexico and every single penny was invested in coastal restoration and hurricane protection efforts.

What do you think would happen to our coastline if the Congress or the Administration were to jeopardize those revenue streams?

I am not really sure how it would impact other coastlines or New Jersey's, but in a recent email exchange with our friends at the Coalition to Restore Coastal Louisiana (CRCL), we were informed that their funding streams for coastal restoration would decline sharply once funding from the Deep Water Horizon oil spill ends in 2032. It was identified that after 2032, revenues from oil and gas development through the Gulf of Mexico Energy Security Act (GOMESA) would be one of the remaining sources of funding for Louisiana's coastal restoration and protection. If that funding no

longer existed, there would be a sharp decrease in funding available in future years and the ecological health of the coastline would suffer.

- 2) Mr. Modjeski, the Biden Administration recently attempted to justify jeopardizing thousands of conventional energy jobs by making false promises that those jobs could be replaced with so called "green energy" jobs but in reality, it is very unlikely United States is going to be able to compete with countries like China who benefit from cheap labor and very little environmental regulation.

In your testimony, you speak to how effective coastal restoration dollars are in not only improving the resiliency of coastal ecosystems but also in creating jobs, you cite a 2017 Restore America's Estuaries study that estimated for every million dollars invested in coastal restoration, 30 jobs are created.

My question is, how many coastal restoration jobs do you think would be lost if offshore oil and gas activities were to be prohibited in the Gulf of Mexico?

Any idea how the state would replace those revenue streams?

The coastal economy provides a diverse source of tax revenues and jobs, of which oil and gas is a significant contributor though has been declining in recent years. Maintaining the coastline is essential to maintaining and growing the oyster and fishing industry in the state. Healthy coastlines are also tourist magnets. There is substantial opportunity to grow offshore wind the state. Louisiana Governor John Bel Edwards announced an ambitious plan for the Gulf for wind power. According to research funded by BOEM and conducted by National Renewable Energy Laboratory three of the top four states with the highest offshore wind resource capacity are within (Louisiana, Texas, and Florida. It would be important that that the state be able to develop schemes to generate tax revenue from wind power and wind related jobs, such as the GE offshoot LM Wind Power test center. According to the US Department of Energy wind power is less expensive than nature-gas fired plants, oil, or coal, so these costs savings will mean lower energy prices in the region helping families and industry. Additionally, there is the expectation that surplus wind can be used to create hydrogen which will foster a whole new set of industries while leveraging the state's skills in energy management. Finally, it is important to point out that according to NOAA record hurricanes and flooding are a product of climate change. If we want to address the long-term threats to Louisiana's coast and coastal communities we need to address climate change, and also invest in resilience.

Because of the increasing number of hurricanes and floods (NOAA) and the rising costs of these weather events (FEMA), Louisiana must invest in resilience by restoring and protecting its coastlines. The question really is: does the state want to invest proactively to protect its citizens or reactively once a disaster has occurred? I think we all witnessed Katrina and Sandy, where I am from, and never want to see that happen again. According to the study, The Natural Hazard Mitigation Saves: 2017 Interim Report, every \$1 invested in mitigation saves \$6 in recovery, while avoiding human suffering and improving habitat. It seems only financially prudent that the local, state, and

federal government continue to invest in resilience.

It is understandably disconcerting to think of transiting many oil and gas jobs to green energy jobs. However, according to the U.S. Bureau of Labor Statistics wind turbine service technician, with a median salary of about \$53,000 per year is the faster growing job. Solar installer is the third fastest growing occupation on the list, with a median salary of nearly \$45,000. The growth in renewable energy jobs can be explained by the fact that it is a newer, expanding industry and requires more workers per unit of energy than fossil fuels. While it would be great if all this equipment were made in the US, these jobs are domestic energy jobs. This transition will not be easy. This is outside my expertise, but economic transition funding targeted to small companies and workers could make this easier.