

Senate Committee on Environment and Public Works
Information-Gathering Process entitled, “An Information-Gathering Process on Draft Legislation entitled, America’s Water Infrastructure Act of 2020 and The Drinking Water Infrastructure Act of 2020: Stakeholder Comments”

April 22, 2020

Questions for the Record for Mr. Pratt

Chairman Barrasso:

1. Currently, the beneficial use of dredged material from one federal project is limited to its being disposed of in a beneficial way through its use in another federal project.

Sections 1080 and 1509 of America’s Water Infrastructure Act of 2020 would provide greater flexibility in evaluating beneficial use of the dredged material, and potentially allow for alternative disposal sites that are not the least costly when they have environmental benefits or help prevent storm damage or flood risk.

Why is it important that Congress continue to provide options and increase flexibility regarding beneficial use of dredged material for Corps projects?

Sand and sediment are the building materials of a healthy coastline. Beaches and wetlands are dynamic systems that naturally erode and rebuild, but too often they cannot rebuild because human activity has prevented sediment from ever reaching the coast – dams, levees, hardened cliffs and riverbanks keep sediment out of waterways; and groins, jetties and dredging stem the longshore flow of sediment or send it far offshore.

In short, America’s coastlines are facing a sediment-starvation crisis, in addition to the challenges of rising sea levels and localized subsidence and erosion. Over the long-term, our nation must consider how to restore the natural processes that resulted in sediment reaching coastal waters. In the near-term, we must make sure that sediment dredged for navigation maintenance is used to restore coastlines which helps mitigate the losses incurred by the above stated activities.

The Corps dredges about 214 million cubic yards of sediment per year from navigation channels. Of that, 38% is used beneficially¹; that is not good enough. The Corps should beneficially use **100% of uncontaminated dredged sediment**.

¹ Federal coastal navigation projects were inventoried to examine the extent to which RSM goals have been implemented across USACE at the project level. This study examined USACE navigation projects that beneficially reuse sediments dredged from Operations & Maintenance (O&M) projects nationwide. These data were derived from a comprehensive analysis of nearly 20 years of USACE dredging data at both the national and district level. The data have been quality checked, updated, and revised over the last five years through extensive interviews of USACE staff at the District, Division and HQ levels. *USACE RSM, 2019. USACE Navigation Sediment Placement: An RSM Program Database (1998-present), U.S. Army Corps of Engineers Regional Sediment Management Program, <https://qim2.aptim.com/rsm>, accessed July 2, 2019.*

To achieve that goal of 100% - or as nearly as possible – beneficial use of dredged material, the Corps will need advanced planning through regional sediment management, flexibility in where material can be placed, and increased funding to ensure beneficial placement is not coming at the expense of other critical navigation projects.

Ranking Member Carper:

2. In your statement, you mention that many USACE districts are employing regional sediment management strategies, but these practices not consistently implemented throughout all USACE districts.
 - a. What do you think USACE needs to do in order to be able to consistently implement regional sediment management activities and attain the goal of putting 100% of uncontaminated dredged sediment to beneficial use?
 - b. Are there legislative actions Congress can take to assist these efforts?

One good example of RSM in practice is at the mouth of Columbia River in Oregon, where the USACE Portland District is working with partners to develop a network of nearshore placement sites for dredged sediment. The goal is to keep material in the littoral zone so that it feeds the beaches of Oregon and Washington through natural coastal processes. Placing 500,000 cubic yards of sediment in a nearshore site, with no more than five centimeters of accumulation on the seabed per disposal, has yielded \$200,000 in cost savings to date, helped naturally maintain an eroding coastline, and yielded no crab mortalities (the primary environmental concern with nearshore placement in this region).

In another example of RSM, near St. Augustine, FL, the Jacksonville District has combined multiple federal projects so that timing of dredging and placement is aligned. They have also instituted inlet bypassing, so less sand accumulates in the St. Augustine Inlet and instead is distributed to a down drift shoaling area that distributes sand to eroding beaches. This resulted in a \$2 million cost savings from reduced dredging and associated environmental mitigation efforts and by combining permits.

Projects like these succeed through cross-budget-line planning and multi-year project forecasting. This type of planning is happening in some districts but not all. AWIA Section 1019 requires all USACE districts that do navigational dredging to develop “a 5-year sediment management plan” that includes a “a sediment budget...; a description of the scheduled dredging..., the suitability of the sediment... for a full range of beneficial uses; and the economic and environmental benefits and impacts, and feasibility, of using the material for such beneficial uses.” This is an incredibly positive step in improving planning to attain the goal of putting 100% of uncontaminated dredged sediment to beneficial use.

Policy changes such as those identified in Section 1080 and 1095, that require USACE districts more fully assess the potential value of dredged sediment may also encourage more RSM practices across USACE.

3. As you know, the 7001-process authorized in 2014 is the mechanism by which Congress takes up, reviews and then through WRDA, authorizes new projects or project modifications.
 - a. As a stakeholder that represents non-federal partners in USACE projects, do you think there is a clear understanding among stakeholders and the Corps regarding the purpose of 7001?
 - b. Are there additional policy or process concerns you have on inconsistent implementation across USACE districts?

No. Most coastal communities do not have a clear understanding of the 7001 process for getting projects authorized. Many coastal communities and local stakeholders rely on traditional higher-level government agencies (e.g., state coastal program, county beach programs, etc.) to be their conduit to USACE. This works for standard project development, but 7001 was intended to circumvent the standard process which allows USACE to stymie project's they do not support. USACE has not done an adequate job of explaining the 7001 process to communities, and too often communities do not know how to get their projects included for Congressional consideration.

We strongly support guidance and mandates to USACE in every District to actively inform the communities they serve that this opportunity exists and provide help in applying for 7001 submittals. Members can also initiate outreach and workshops as Senator Carper did in Delaware in March 2019. His staff sponsored a Corps 101 meeting for local communities to become more knowledgeable of Philadelphia District operations and opportunities for assistance that the communities did not know were available to them, including Section 7001 related issues.

4. Do you believe the use of traditional non-structural flood risk reduction measures, such as better use of floodplains and the flood-proofing or relocation of structures, could be more cost-effective than the typical structural projects, such as dams, and why or why not?

I do believe that the use of non-structural flood reduction measures are often more cost-effective, especially when one takes into account the full range of benefits, physically and temporally, of non-structural measures compared to more typical structural means. This is precisely why the Council on Environmental Quality identified non-structural measures in the Principles and Requirements for Federal Investments in Water Resources (March 2013) now being implemented by the USACE. On page 11 of that report CEQ says, "Full consideration and reporting on nonstructural alternative actions or plans should be an integral part in the evaluation of Federal investments in water resources."²

5. Should natural and nature-based features and the relocation of existing levees (i.e. setback levees, which allow for more room for rivers to run) be considered as non-

² https://obamawhitehouse.archives.gov/sites/default/files/final_principles_and_requirements_march_2013.pdf

structural features according to the Corps? What are the advantages and disadvantages of such a change?

Both natural infrastructure and nonstructural solutions can provide vital flood and storm damage reduction benefits while protecting and restoring water quality, recreational opportunities, and thriving populations of fish and wildlife. Despite these important similarities, the Corps treats natural infrastructure and nonstructural measures differently when assessing the non-Federal cost share, with significant implications for communities.

The non-federal cost share for nonstructural flood projects is 35% of total project costs, including the costs of all lands, easements, rights of way, and disposal sites (“LERRDs”).³ This decade-old cost share requirement eliminates the risk of unfairly burdening non-federal sponsors for alternatives that typically require less construction but more land. The Corps defines nonstructural measures as relocation, flood proofing, elevations of structures, flood warning systems, and zoning laws.⁴

The non-federal cost share for natural infrastructure projects, however, can be as high as 50% of total project costs. This is because the Corps typically accounts for natural infrastructure as a structural project, which requires the non-federal sponsor to pay 35% of project costs plus the costs of all LERRDs, up to a combined maximum of 50% of project costs.⁵

To address this Corps-created disparity, Congress should clarify that natural infrastructure projects are subject to the same cost share requirements as nonstructural projects. This would be consistent with 33 U.S.C. § 701n(a)(4), which defines the term “nonstructural alternatives” for the purpose of the PL 84-99 program to include “efforts to restore or protect natural resources, including streams, rivers, floodplains, wetlands, or coasts, if those efforts will reduce flood risk.”

6. OMB determines a project’s benefit-to-cost ratio (BCR) when prioritizing and selecting projects to be included in the annual President’s Budget request and the annual work plan. Focus on the BCR has resulted in unbalanced project prioritization toward very large initiatives that have significant national impacts, instead of projects with more regional and local benefits. Mr. Pratt, looking at this process as a stakeholder, what are your thoughts on the BCR and the reforms contained in the draft AWIA 2020 bill?

As a beaches and waterways management professional for 40+ years in Delaware I was acutely aware of the value in guiding investment decisions for the state by including the full suite of benefits that were generated or protected by the investment and the benefits or assets that were at risk if the investment were not made. Sadly, the level of information that I was used to having at

³ 33 U.S.C. § 2213(b).

⁴ “Nonstructural measures reduce flood damages without significantly altering the nature or extent of flooding. Damage reduction from nonstructural measures is accomplished by changing the use made of the floodplains, or by accommodating existing uses to the flood hazard. Examples are flood proofing, relocation of structures, flood warning and preparedness systems (including associated emergency measures), and regulation of floodplain uses.” USACE, Planning Guidance Notebook, ER 1105-2-100 (22 April 2000) at 3-10.

⁵ 33 U.S.C. § 2213(a).

the state level is not mirrored in the federal process of determining where and how much should be invested in different infrastructure projects. We do not see language that addresses this issue to any great degree in the AWIA of 2020. The closest we see is Section 1080, a.2 which says, in reference to the placement of dredged material, “the economic and environmental benefits and impacts, and feasibility, of using the material for those beneficial uses.” We had hoped that this issue would have been more directly addressed in the bill.

We were very pleased to see that recently, the Assistant Secretary of the Army (ASA) for Civil Works, RD James, issued a memo directing the USACE to calculate a broader range of benefits in determining feasibility of all USACE projects. For all projects, he specifically directs USACE “to identify, analyze and maximize all benefits” for “Regional Economic Development (RED) and Other Social Effects (OSE)” whereas previously only the National Economic Development (NED) impacts were fully calculated.

This has yet to be implemented, but we are cautiously optimistic this will provide decision-makers a more complete picture of federal projects benefits. One change we would like to see is ensuring Environmental Quality (EQ) is also maximized for all projects. We hope the EPW committee will provide rigorous oversight to ensure this directive gets implemented and stays in force.

7. Section 1017 of the draft WRDA bill establishes a cost-share waiver for small, rural or disadvantaged communities that partner with the Corps for projects carried out under its Continuing Authorities Program (CAP). These types of projects are smaller in nature, for purposes such as flood protection, emergency streambank stabilization and aquatic ecosystem restoration. Do you believe that CAP authorities for these types of projects are useful in small, rural or disadvantaged communities? Further, do you believe this Administration will actually implement this provision at its discretion, or should Congress be more directive in its intention to level the playing field for smaller, rural or disadvantaged communities?

ASBPA was thrilled to see an increase in overall authorization for the Continuing Authorities Programs (CAPs). Even with an increase in authorization, they are low-budget, and the individual projects they fund are small compared to the federally authorized projects with their own budget line-item. Nevertheless, coastal communities rely on these projects – particularly CAP 204 (RSM), CAP 103 (Shore Protection), and CAP 206 (Aquatic Ecosystem Restoration) – to support their flood risk management and ecological restoration efforts, making them incredibly valuable at the community level.

ASBPA was also pleased to see cost-share waivers for smaller, rural and disadvantaged communities. CAP projects are smaller and do not require the same benefit cost ratio that typically advantages larger more densely populated shorelines, so we believe CAP could disproportionately benefit less populated and disadvantaged communities. Having a waiver for local cost-share make these project even more attainable for communities that might struggle to provide \$1-5 million for any expense not considered an essential service.

We are concerned that OMB will choose not to provide this waiver with any frequency. OMB has been reticent to agree to nearly any coastal project funding, even when a full local cost-share is being provided, so we have no confidence they will approve USACE CAP funding for coastal projects without any local cost-share. We therefore request Congress to be more direct in requiring the administration to approve local cost-share waivers to smaller, rural and disadvantaged communities.

Senator Cardin:

8. Ocean City, Maryland will soon need its next round of beach renourishment, estimated to cost \$11.3 million. Maintaining the shoreline in Ocean City is, of course, critical to the local economy. Now, with the coronavirus pandemic, we are facing the real possibility of a lost season with travel and tourism at a standstill. What sorts of steps should we be taking either through WRDA or separate, infrastructure-focused relief legislation in the near-term to help us mitigate and recover from this economic hardship?

WRDA is critical legislation for coastal communities. We commend the EPW committee and Congress for returning WRDA to a regular 2-year cycle, which provides stability and continuity for USACE and coastal communities. But responding to the crisis that beach and coastal communities are currently facing due to the coronavirus pandemic will take separate legislation.

As Congress considers stimulus bills in response to the coronavirus pandemic, we ask you to prioritize funding for coastal infrastructure whose purpose is to help tourism *and* increase the resilience of communities to future economic challenges from the inevitable challenges posed by sea level rise and coastal storms.⁶ We also ask you to help state and local communities' beach and coastal budgets that are being decimated by lost tax and tourism revenue, and shifted to cover essential services.

In short, we're asking the federal government to:

- a) put people to work restoring and rebuilding beaches and coastlines: the natural infrastructure that drives U.S. tourism AND keeps communities safe from storms and sea level rise.
- b) Provide coastal states and communities with enough funding to provide health and safety services (e.g. lifeguards, beach patrols, sanitation services) on beaches and other public coastal areas.

9. Maryland has communities that have been waiting for years—sometimes decades—to have their channels dredged, and the shoaling that has occurred has impacted both recreational boating as well as maritime commerce. Maryland's number of federally-authorized channels far exceeds the number that actually get dredged each year. While funding is one obstacle, I understand that another obstacle is that a preliminary study to identify a suitable sediment placement site has not been completed for each and every channel that communities would like to see dredged.

⁶ ASBPA "Letter to Congressional Leadership", April 3, 2020. http://asbpa.org/wpv2/wp-content/uploads/2020/04/ASBPA_CoronavirusStimulusletter_Final.pdf

- a. Do you think the provisions in this legislation related to beneficial use, natural infrastructure, and regional sediment management plans, taken together, have the potential to help us get more of these smaller dredging projects done?
- b. What more can we do to accelerate the process of identifying suitable sites for the placement of dredged material?

ASBPA is confident that the more USACE operates using principles of RSM and explores how to beneficially use dredge material, more beneficial use sediment placement sites will become available. Furthermore, beaches and coastal wetlands will increasingly need sediment placed on them to keep pace with sea level rise so coordinating dredging efforts to meet these needs may also allow for increased dredging. In other words, expanded RSM and beneficial use of dredge material may provide opportunities for dredging in channels that may not have previously had suitable sediment placement disposal sites. AWIA sections 1019, 1080, and 1095 encourage USACE districts to use RSM principles and beneficially use their dredge material, so one result could be more getting more small dredging projects done.

To accelerate the process of identifying suitable sites for the placement of dredged material, you may want to consider a slight addition to Section 1019 of AWIA. Something such as:

“(a)(2)(D)(iii) potential sites within a 10(?) mile radius of every authorized dredging project that could benefit from one-time or recurring sediment placement”

10. Last year the Army Corps Baltimore District began work in collaboration with Maryland to conduct a Baltimore Coastal Storm Risk Management Study. The study is now on hold due to lack of funding, and I am urging the Administration to provide the funds to complete it, because I think it is important that we begin thinking about how urban communities in coastal regions will adapt to climate change. How can the Army Corps better help cities plan and build their resiliency to these impacts, and are we making progress in this legislation?

Let me start by saying that I believe this study as well as the other comprehensive risk management studies, such as the New York & New Jersey Harbors and Tributaries Study, which were de-funded by the Administration and dismissed in a tweet by the president⁷, should be funded and completed. Coastal cities need to rapidly adapt to climate change and improve their resilience, and USACE is the right agency to help them figure out the engineering for how to do that. Not funding the studies that determine how cities should efficiently prepare for climate impacts, is not only penny-wise and pound-foolish, it's dangerous to millions of Americans who live in coastal cities.

While we believe the USACE can and should play a lead role in helping coastal communities build their resiliency, we are concerned about the on-going stove-piping of missions within the Corps as well as between agencies which have overlapping and/or similar missions. Looking at an urban area in particular with natural hazard risks to population and infrastructure

⁷ <https://twitter.com/realDonaldTrump/status/1218674016942219265?>

(environment and public works) we see involvement in mitigating risk and responding to devastation from flooding and coastal storms from USACE, NOAA, HUD, FEMA, USDOT and a variety of private sector entities. If all these stakeholders shared in the development of risk reduction together the broader partnership might possibly help in bringing urban risk reduction to the planning finish line.

We are also concerned that USACE's efforts to help communities prepare for coastal climate impacts are based in their mission to reduce flood risk, when the bigger issue to prepare for is inundation. Flooding, by definition, means waters rise but then recede; with sea level rise, waters will rise but then stay high. Coastal communities need to prepare for short term flooding *and* for long term inundation. Congress needs to direct USACE to address the long-term but inevitable sea level rise that will inundate many coastal areas of the country in the coming decades. This will take a major policy overhaul and "inundation adaptation" may need to be added as a primary mission of USACE, which will need to be balanced against current mission areas, like flood risk reduction, navigation and ecosystem resilience. We hope EPW will consider this in future legislation.

11. I am pleased that this legislation expands the pilot program for the beneficial use of dredged material specifically for the technique of thin layer placement, which has been successfully used in Maryland's Blackwater National Wildlife Refuge. Can you provide some additional background on the various benefits of this technique and why identifying more opportunities for the use of thin layer placement of sediment is a good idea?

"Thin Layer Placement (TLP) broadly encompasses the purposeful placement of sediment or dredged material in a manner that produces a specific layer thickness or ground surface elevation necessary to achieving the overall project objectives. In TLP projects, the layer thickness typically ranges from a few centimeters to some fraction of a meter, depending upon the variation in ground surface or water levels at the site, and the functional objectives the placement is intended to achieve."⁸ Functionally, TLP is most often used to stabilize and/or restore eroding or deteriorating wetlands or as an adaptation to allow coastal wetlands to grow at the rate of relative sea level rise.

As sea level rise accelerates in the coming decade, more coastal wetlands will need an adaptation plan that includes some amount of TLP to avoid becoming open water. This will be necessary not just to maintain the ecological value of the wetland, but to provide storm protection to nearby communities. Coastal wetlands absorb storm surge and attenuate wave damage, and heavily populated coastal areas from Baltimore to New York to New Orleans benefit from the protection provided by coastal wetlands. Without thin layer placement these communities will be more vulnerable and/or need to invest much heavily in structural protection such as sea walls.

While USACE has implemented dozens of different TLP projects⁹ and is currently developing technical guidance for TLP, this is still a relatively new and underused technique, with emerging engineering and environmental protocols. The more USACE can undertake TLP projects in

⁸ <https://tlp.el.erdc.dren.mil/what-is-tlp/>

⁹ <https://tlp.el.erdc.dren.mil/case-studies-by-project-type/>

coordination with local project sponsors and stakeholders, the better understood the process will become.

Senator Markey:

12. As coastal communities in Massachusetts and across the nation face more frequent and severe damage from shoreline erosion and seasonal storms, the Army Corps' Storm and Hurricane Restoration and Impact Minimization Program is more essential than ever. Under this program, the Corps has the continuing authority to conduct small shore and beach restoration and protection projects without specific legislation from Congress. However, the Corps' funding for this program is currently capped at \$37.5 million for all projects across the country, as well as \$10 million for each individual project. In order to ensure that the Corps' ability to protect coastal communities keeps pace with the increasing risks of climate change, I authored language for the draft bill under consideration that would raise the aggregate and per-project funding caps for this program. I am proud that the legislation includes a provision that will increase the aggregate funding cap from \$37.5 million to \$46 million per year. However, there is no increase for the per-project funding limit.

- a. Given the increasing risks and severity of damage facing coastal communities, as well as general economic inflation, should Congress raise both the aggregate and per-project funding limits for projects under the Storm and Hurricane Restoration and Impact Minimization Program?

ASBPA is pleased to see an increase in authorization in aggregate for Continuing Authorities Programs (including Section 103, Hurricane and Storm Damage Reduction Projects), and we thank you for your commitment to increasing this fund. Although projects funded through this program are intended to be much smaller in scale than individually authorized Coastal Storm Risk Damage Reduction projects, many coastal communities rely on CAP Sec 103 for part of their flood risk management program. CAP 103 projects also often use natural infrastructure, such as beach and dune systems, making them valuable to the local community beyond just their flood risk reduction.

ASBPA supports an increase in per-project funding limits for CAP projects to account for increasing project costs. CAP per-project funding limits have not increased in years, while project costs have increased significantly. A project that costs \$10 million (the current per-project total cost for a CAP 103 project) is going to be much less impactful today than it would have been a decade ago. So while we support the intent of CAP to be used for projects that are smaller in scope than the individually authorized projects, we would welcome an increase in per-project limit to keep pace with the inflation of total project costs.

13. In addition to increasing the funding for individual shoreline protection projects, I believe we must develop more comprehensive plans for addressing the risks of climate change to coastal communities. That's why I requested language in the draft bill under consideration that will authorize a feasibility study for a comprehensive coastal management project in the entire Newbury and Newburyport region of Massachusetts. The goal of this study is to develop a larger, regional approach to managing sediment, controlling erosion, encouraging maritime development, and protecting human life and property from the seasonal storms that have degraded the coastline in this vital part of the Commonwealth.

- a. Do you believe that Congress should promote similar, comprehensive and regional projects to protect coastal communities across the country? If so, please describe the specific steps that you believe Congress should take in the current bill or future water infrastructure legislation.

Yes. Planning and coordinating coastal projects within a region is the very essence of regional sediment management, for which we strongly advocate and have been pleased to see expanded in AWIA. Congress should continue to look for ways to encourage USACE to study and develop projects at a regional scale.

At a macro-regional scale, USACE has completed the North Atlantic Coast Comprehensive Study (NACCS) (although certain more localized studies that were developed from the NACCS have yet to be completed) and is working on a South Atlantic Coastal Study. Congress has authorized a Great Lakes Coastal Resiliency Study at the request of the eight Great Lakes states in partnership with their local USACE districts, but OMB has not approved this Section 729 Watershed study as a new start. Congress should also direct USACE to work with states to develop a concept for a regional resilience study for the Pacific Coast including (or as a separate additional study) Hawaii and the Pacific Island territories.

At smaller regional scale – such as the project study you reference in Massachusetts – Congress should direct USACE to study coastal project that bring together multiple jurisdictions and multiple project types. This will lead to projects that are more cost efficient and can address multiple challenges facing a region. This type of effort had been happening with the New York & New Jersey Harbors and Tributaries Study (and elsewhere) until recently, when the Administration abruptly and foolishly pulled the funding for the study.

Additionally, Congress should encourage USACE to expand their multi-project dredge contracting effort that has been underway since the passage of WRDA 2018, in which Sec. 1111, “Dredge Pilot Program,” specifically authorized multi-project contracts. That program has focused on navigational dredging needs but could be expanded into coastal projects.

14. The draft text of *America's Water Infrastructure Act of 2020* contains many provisions that will help coastal communities address the risks of climate change. However, future

water infrastructure legislation is still needed to fundamentally reshape the role of the Army Corps of Engineers in combatting and mitigating our environmental crisis.

- a. What additional, broader steps do you believe Congress should take to help coastal communities adapt to and overcome the effects of climate change?

As you suggest, USACE will need to undertake a new and much larger mission related to the long-term impact of sea level rise inundation in addition to their flood risk reduction mandate in order to best prepare coastal communities for the risks and inevitabilities of climate change. (See our response to Question 10, above.) But a wide variety of agencies with an even wider variety of missions and mandates are needed to fully address our nation's vulnerability to coastal hazards that are worsening due to climate change and increasing development in high flood-risk coastal areas..

This message has been put forward in the current and previous two Administrations. In 2004, the final report of the U.S. Commission on Ocean Policy, *An Ocean Blueprint For The 21st Century*¹⁰, provided a great basis for coordinating ocean and coastal policy and activities among federal agencies. During the Obama Administration, Nancy Sutley, Chair of the White House Council on Environmental Quality said, "The challenges our oceans, coasts, and Great Lakes are facing are complex, and to meet these challenges we must have the participation of a wide spectrum of views from within the federal government."¹¹ And more recently President Trump signed the Executive Order Regarding the Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States on June 19, 2018 which states that it shall be the policy of the United States to coordinate the activities of executive departments and agencies regarding ocean-related matters to ensure effective management of ocean, coastal, and Great Lakes waters and to provide economic, security, and environmental benefits for present and future generations of Americans.¹²

Coordination and partnership across federal agencies to help coastal communities adapt to climate change and increasing sea level rise rates, will take leadership and commitment from the Administration, but Congress will play an essential role in providing agencies funding, authorities, guidance and oversight. We encourage Congress to develop long-term funding streams – such as leasing fees from offshore energy production (renewable and fossil fuel) - that can provide a reliable source of coastal resilience funding. Congress should ensure that all federal agencies have the authority to plan for long-term climate impacts. And ultimately Congress will need to pass comprehensive infrastructure legislation that requires coastal planning and preparedness for any new or upgraded infrastructure in the coastal zone and invests in coastal resilience.

Senator Whitehouse:

¹⁰ https://govinfo.library.unt.edu/oceancommission/documents/full_color_rpt/000_ocean_full_report.pdf

¹¹ https://obamawhitehouse.archives.gov/administration/eop/ceq/whats_new/Interagency-Ocean-Policy-Task-Force

¹² <https://www.whitehouse.gov/presidential-actions/executive-order-regarding-ocean-policy-advance-economic-security-environmental-interests-united-states/>

15. How can the U.S. Army Corps of Engineers better address climate impacts in their work, including increasing flood risk and inundation by sea level rise?

As mentioned in the answers to questions 10 and 14, above, we believe USACE will a) need to expand their mission area to include coastal inundation in addition to flood risk reduction; and b) embrace the team/partnering approach of working collaboratively across all federal agencies with a coastal mission.

In addition, USACE should include the value of all benefits that stem from water resources projects when determining which projects to prioritize for funding. This concept was included in the Principles and Requirements for Federal Investments in Water Resources (March 2013) “Heretofore, Federal investments in water resources have been mostly based on economic performance assessments which largely focus on maximizing net economic development gains and typically involve an unduly narrow benefit-cost comparison of the monetized effects. Non-monetized and unquantified effects are often included in the overall analysis process, but are not necessarily weighted as heavily or considered key drivers in the final decision making process. As a result, decision making processes are, at this point in time, unnecessarily biased towards those economic effects that are generally more easily quantified and monetized. A narrow focus on monetized or monetizable effects is no longer reflective of our national needs, and from this point forward, both quantified and unquantified information will form the basis for evaluating and comparing potential Federal investments in water resources to the Federal Objective. This more integrated approach will allow decision makers to view a full range of effects of alternative actions and lead to more socially beneficial investments.”¹³

Including a broader range of benefits is likely to demonstrate greater value for natural infrastructure projects, such as beaches, dunes, and coastal wetlands, that combine flood risk reduction with ecological benefits, recreation benefits and, in some cases, the ability to naturally adapt to rising sea levels. These projects tend to be more resilient to coastal climate impacts and will help communities better prepare for flood risk and inundation. It is time to put this guidance into practice.

16. In the face of sea level rise, increasing storm intensity, and other coastal threats, does current funding for coastal infrastructure and coastal resiliency meet the long-term needs of our country’s coastal communities? Under the U.S. Army Corps of Engineers’ Flood and Coastal Storm Damage Reduction category in their FY 2021 budget, coastal work receives only 2% of total funding, compared to inland’s 98%. Do you agree that there is a disparity in Flood and Coastal Storm Damage Reduction funding as it relates to coastal versus inland funding?

The disparity between inland and coastal funding in the USACE’s proposed Flood and Coastal Storm Damage Reduction budget is stark, short-sighted and unwarranted.

¹³ https://obamawhitehouse.archives.gov/sites/default/files/final_principles_and_requirements_march_2013.pdf

While Coastal Storm Damage Reduction projects often get funded through disaster supplemental appropriations, primarily funding risk reduction *after* a disaster is a terrible way to budget. We applaud Congress for regularly increasing USACE Shore Protection funding in the annual Energy & Water Appropriations to require USACE to spend on coastal flood risk reduction projects.

And yes, with sea level rise, increasing storm intensity and lack of sediment reaching our coasts, our coastlines are facing challenges today and in the coming years that threaten the very existence of many coastal communities. Coastal resilience and coastal infrastructure are vastly underfunded. Our country must make a major investment in planning, infrastructure and resilience that provides long-term funding for communities looking to reduce their risk, manage their interconnected coastal system and waterways in changing climate conditions, and have the ability to relocate or realign their infrastructure to accommodate future coastal conditions.

17. The National Academy of Sciences, Government Accountability Office, and others have confirmed that there are many benefits to using innovative materials in our infrastructure. Specifically, the long-term benefits of these materials include lower maintenance costs (due to resistance from deicing salts and other corrosive agents, and high salinity environments in coastal areas), enhanced durability, and longer life of the structures. As we continue to replace our aging water infrastructure should we consider the use of innovative materials?

Yes. We wholeheartedly agree that use of innovative materials in water infrastructure replacements and upgrades should be considered as appropriate.

18. The Army Corps has regularly missed deadlines or allowed timelines to slip for congressionally mandated reports, studies, and other Corps responsibilities. How could the Committee increase accountability for Corps and OMB leadership?

We have also been disappointed and frustrated by USACE's flagrant disregard for meeting deadlines established by Congress for reports, studies and, perhaps even more frustrating, the long delays in generating implementation guidance on WRDAs. We believe that this must be resolved by requesting both USACE and OMB leadership to appear before the Committee to address why these delays, in defiance of Congress, have become standard operating procedures and how they intend to be responsible to Congressional mandates and deadlines in the future.