

Testimony on Delaware Beach and Dune System – A National Model for Coastal Resilience

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American Shore & Beach Preservation**

Senate Committee on Environment & Public Works The Water Resources Development Act of 2024: Non-Federal Stakeholder Views

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Chairman Carper, Ranking Member Capito and members of the Committee, my name is Tony Pratt and it is a privilege to appear before you today in my capacity as both the Executive Director of the Delaware Bay Beach Association (BBA) and as the Executive Director of the American Shore and Beach Preservation Association (ASBPA). Having been involved in coastal issues for over four decades, I can say firsthand that the work of this Committee is critical to maintaining healthy and resilient coastlines. In turn, our coastal communities play a strong role in our Nation's economic well-being. Thank you for your commitment to lifting up all of America through the biennial consideration of the Water Resources Development Act.

Coastal and Waterways Background

My career in beach related science and management began with my first job after college graduation where I helped study erosion of the Nature Conservancy's Virginia Coast Reserve for the University of Massachusetts. This experience sparked a passion for coastal issues and led to 38-years of public service at Delaware's Department of Natural Resources and Environmental Control. In retirement, I am now a self-employed coastal consultant specializing in beach and waterway issues. During the span of my career I have had the privilege of working on critical coastal resilience issues in a number of ways including as vice president and president of the ASBPA, as an adjunct professor for 20 years in the Marine Policy Program at the University of Delaware's graduate College of Earth, Ocean and Environment, as a member of the FEMA Climate Change Study Team Review Panel, as a member of the National Research Council Committee on Beach Nourishment and Protection, and as a member of the Heinz Center panel on Risk, Vulnerability, and the True Costs of Coastal Hazards. Today, I serve on the Advisory Board of Coastal Resilience Center at UNC, Chapel Hill and work with frontline coastal challenges for a number of municipalities and clients. I am honored to be with this distinguished panel today to share my experiences working on critical coastal protection issues in my adopted home state of Delaware

as well as the importance of the WRDA process in achieving meaningful results for Delaware's precious coastal resources.

Importance of Biennial Passage of WRDA

Having dedicated my career to coastal issues, I can recall all too well the long stretches of time in the early and mid-2000s when we did not have regular passage of WRDAs. Between 2000 and 2014 there were just two WRDA bills. Contrast that stark record with the last nine years where this Committee has shepherded through five WRDA bills. This is the type of regular order that our Nation's dynamic and evolving water resources challenges need and deserve and I commend you for your leadership in charting and maintaining a path where non-federal sponsors, like the State of Delaware, can count on Congress to ensure timely authorization of new feasibility studies, Chiefs Reports, authorities, and reports that drive the US Army Corps of Engineers (USACE) and its civil works mission forward.

The Nation is threatened annually with a multitude of natural hazards. I feel safe in saying that there was not a single week over the past 12 months that one natural disaster or another was not a top story in the news. This past week we witnessed extraordinary flooding in New York and Vermont, flooding categorized as occurring once in a thousand years. Simultaneously the southwest was suffering under extreme heat that has lasted for weeks. Tornadoes, drought, extreme winter snowpack, spring river flooding in the middle of the country, landslides, forest fires, spring snowpack melt flooding in the west, hurricanes, tropical storms, and nor'easters have all occurred this year. And of course, earthquakes are always a threat along the pacific coast. Our homeland security is severely threatened by these forces. These natural hazards do more damage and invoke more loss and suffering on our communities and population yearly than almost any other threat. Today's hearing, focusing on water management concerns and the beginning of consideration of the 2024 WRDA could not come at a more important moment.

Background on Critical Coastal Protection in Delaware

I am before you today to speak about coastal risk and effective mitigation measures that have benefits far wider than are typically accounted for. Using Delaware, as an example, I would like to share some of the progress that has been made in the "First State" on several critical coastal efforts which have been made possible thanks to previous WRDA authorizations and our number one coastal champion, Chairman Carper. Chairman Carper has been our State Treasurer, lone Delaware Representative to Congress, Governor, Senator and currently the Chairman of this distinguished Committee. He has seen first-hand, and over many decades, the impact that coastal storms and sea level rise have had along the Delaware coast. He was our Governor as we went through feasibility and eventual design of our large ocean beach projects and that everlasting dedication to coastal resiliency was evident in the 2022 WRDA bill which provided extensive protection of the Delaware Bay coast. The beach and dune enhancement work that the last WRDA provided for in Delaware will serve to protect over 30,000 acres of tidal wetlands that are important nursery grounds for the commercial fishery in Delaware. NOAA reports commercial fish landings in Delaware in the year 2020 exceeded \$10 million. The authority brought about by

WRDAs to enhance the nature-based features of protective beaches and dunes is a clear vision of the importance of investing in pre-disaster mitigation.

I represent the Bay Beach Association which advocates for the Delaware Bay shore. Several years ago, we witnessed the opening of several breaches in the dunes within Prime Hook National Wildlife Refuge. The shoreline within the Refuge is uninhabited but the beach and dunes that had been in place provided a protective barrier between open Delaware Bay waters and the quiescent wetlands system landward of the beach. U.S. Fish and Wildlife had owned and managed these wetland resources for decades for their values as migratory wildlife habitat. The breaches in the dunes allowed daily flow of Delaware Bay water into this protected tidal area which amplified the tidal range significantly. Estuary vegetation died off, and the marsh system changed dramatically. But additional unexpected consequences resulted as well. Vast acreage of forest lands along the upland fringe of the Refuge's wetlands holdings were inundated with salt water. Similarly neighboring farm fields, which grow a variety of crops for both market as well as for feed for the very important chicken industry in Delaware, were covered in salt water when coastal storms elevated the tide of Delaware Bay. I personally saw Delaware Bay finfish of appreciable size swimming in rows of corn stalks in one field during a nor'easter. The tide dropped after the storm, but the salt stayed in the soil, rendering those fields useless for crop production. While tourists visiting Delaware's beach boardwalks often bring home souvenirs with the "stay salty" slogan, staying salty is not an option for Delaware's productive farmland.

We are beginning to address the health of these wetlands and the dune breaches through WRDA authority which directs USACE to use their expertise to design and build protective features that incorporate nature-based solutions. Practitioners like me, who have spent careers working at mitigating the dynamic forces at work along our nation's coasts, deeply appreciate the vision and actions of this Committee in finding efficient and successful ways to protect communities and natural resources. This authority, to look beyond traditional civil works project approaches, is a gift to the Nation on all water related hazards.

As I mentioned earlier in my testimony, I have been involved in coastal issues for over four decades. I have seen a lot of change over the course of my career, and I also have the benefit of many lessons learned from things that did and did not work so well. If you will indulge me, I would like to offer up two recommendations for enhancing the Nation's defense against coastal storms and sea level rise.

- Through previous WRDA bills, Congress has provided a sophisticated toolbox of authorities to help USACE meet our most pressing coastal challenges. However, there is a lag in implementation guidance and authorized studies often never receive funding. Please do all you can to remedy challenges with implementation so all of your good work can actually benefit those of us who work with the USACE Districts on front line problems.
- Help break the cycle of paying for the cost of the hazard after the fact and avoid the damages by investing before the event. This could be helped by conducting comprehensive risk assessments of natural disasters that factor in the aftereffects of

disaster recovery. Natural disasters, whether they be floods, storms, fires, tornadoes, earthquakes, extreme heat, or drought are life altering events. The post event cost of human suffering is very real, but it is absent from the federal government's view on recovery and rebuilding costs.

I want to close my testimony by thanking this Committee for its steadfast commitment to our Nation's coastlines, all other flooding and water resource problems and related threats to homeland security, through biennial passage of WRDA. The examples I have shared today may be for just one state, however you could find similar examples across the country. Thank you for taking on these challenges head on. The BBA, ASBPA and I stand ready to assist you with the development of WRDA 2024.