

PROFESSIONAL PROFILE

AZURE DEE SLEICHER, P.E., WEDG VICE PRESIDENT, COASTAL ENGINEERING



With 20+ years of experience in coastal engineering, Ms. Sleicher brings to RACE and our clients specialized knowledge in waterfront planning, regulatory processes and design. Her extensive experience includes: the analysis, design and permitting of coastal erosion protection structures such as seawalls, bulkheads, jetties, groins and breakwaters, design of beach and dune nourishment, as well as, design of recreational waterfront parks

and marina infrastructure including boat ramps, boardwalks, piers and docking facilities. Over the course of her career, Ms. Sleicher's duties have included surveying and site investigations, preparation of design plans and specifications, cost estimating, construction supervision, and regulatory compliance.

Ms. Sleicher has a strong theoretical background in coastal processes coupled with practical experience in wave dynamics, sediment transport, hydraulics, and scour assessment. She is well versed in coastal engineering software such as Mike21, STWAVE, CGWAVE, CMS-WAVE, CMS-FLOW, CEDAS, and the shore protection methods of the U.S. Army Corps of Engineers (USACE) to determine wave climates and design conditions.

Ms. Sleicher has been responsible for a variety of coastal engineering modeling projects. A small sampling of recent work includes: shoreline protection projects in Staten Island, NY, Long Island, NY and Milford, CT where she was involved in numerical modeling and design of riprap revetments and green/hybrid infrastructure for bluff erosion. In addition, Ms. Sleicher has been involved in numerical modeling and design of beach nourishment projects throughout CT.

Ms. Sleicher has extensive experience with the regulatory requirements of the USACE and multiple state and local authorities including CT, NY, NJ, and MA. Combining expertise in coastal engineering, coastal processes and design of waterfront structures with her background in environmental engineering has allowed Ms. Sleicher to design projects that are not only appropriate for the marine environment that they are located in, but with attention to minimizing impacts to natural resources consistent with the goals of the agencies. This experience stimulated an interest in living shorelines and green infrastructure including design of hybrid oyster breakwaters in NJ.

Ms. Sleicher is also well-versed in determination of coastal flood hazard areas in accordance with FEMA's Guidelines and Specifications. She has successfully managed over 60 FEMA Letter of Map Revision (LOMR) applications and was involved in county-wide coastal flood hazard mapping updates for over 800 miles of shoreline in FEMA Region I.

QUALIFICATIONS

EDUCATION

M.S. Florida Institute of Technology, Melbourne, FL
Coastal Engineering

B.S. Syracuse University, Syracuse, NY
Environmental Engineering

PROFESSIONAL REGISTRATION AND LICENSURE

Professional Engineer: CT, NY, NJ

Envision™ Sustainability Professional

PROFESSIONAL AFFILIATIONS

American Council of Engineering Companies
(ACEC)

American Shore & Beach Preservation Assoc.
(ASBPA)

CT Association of Flood Managers

Waterfront Edge Design Guidelines (WEDG)
Associate

PIANC Corporate Member

CONFERENCE SPEAKING ENGAGEMENTS & PAPERS

"Beaches, Dunes & More: How Sand Can Play a Role in a Resilient Coast", Presented at the 2020 Connecticut Valley Geo-Institute Virtual Mini-Series

"Water: Conservation, Mitigation, Creation & Restoration", Presented at the Connecticut Chapter of the American Society of Landscape Architects 2019 Residential Design Expo.

"The Coastal Engineering Behind the Flood Maps", Presented at the Connecticut Association of Flood Managers Conference, 2018.

"Gandy's Beach Hybrid Breakwater Project – A Catalyst for Living Shoreline Protection and Ecological Uplift", Presented at the American Shore and Beach Preservation Association (ASBPA) Annual Conference, 2015.

"Implementation of Updated Guidelines for Coastal Redelineation in FEMA Region 1", Presented at the Association of State Floodplain Managers (ASFPM) Annual Conference, 2008.

"Modeling the Wave Impacts of Hurricane Floyd in Charleston Harbor, South Carolina", Presented at the American Society of Civil Engineers (ASCE) Solutions to Coastal Disasters Conference, 2005.

