



Science & Technology Committee 2019

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- 1. ASBPA Science Director:** 2019 was the second year that the organization had a Science Director, responsible for expanding our science advocacy and coordination with federal agencies and the academic community. In addition to duties categorized as Administration, Outreach, Conferences, Strategic, and Development, the Science Director obtained two external contracts to allow continued engagement and leadership of the U.S. Coastal Research Program (USCRP) and a strategic evaluation of coastal practitioners' greatest management challenges and needs.
- 2. The Nation's Top 5 Coastal Management Challenges:** At the 2019 Coastal Conference, ASBPA S&T expanded upon the initial 2018 effort with funding from the USGS toward a strategic evaluation of coastal management challenges (mentioned in #1). The effort will address objectives of the ASBPA, the USGS, and the USCRP. The goal of this effort is to socialize these challenges to inform applied coastal research investments and to publish white papers and easy-to-understand products describing each by 2022.

Next steps include: 1) An initial 8-minute survey (<http://asbpa.org/us-coastal-research/survey/>) is open for four months (until after the ASBPA Coastal Summit) to identify and connect with coastal managers to prioritize challenges, 2) a more detailed survey will open in June 2020 to evaluate the effectiveness of ASBPA, USGS, and USCRP products and tools, and 3) the list of the top five (current) challenges will be published with an initial white paper describing the top coastal management challenge along with easy-to-understand products (fact sheet video, podcast, etc.) available online.

3. Information and Guidance on Specific Coastal Management Challenges:

- a. ASBPA's National Beach Nourishment Database:** This online tool provides a



broadly-sourced national overview of the history of beach nourishment in the U.S. 511 projects have placed >1.6 billion cubic yards of sand on US beaches since the 1920's. The geodatabase, developed in partnership with the USACE Regional Sediment Management (RSM) Program, CPE, and

APTIM, includes federal projects, beneficial placement of navigation sediment, and state/local/private beach nourishment projects. It maps the volume of sand, cost, and length of shoreline restored.

In 2019, we developed advanced capabilities for the tool to allow ASBPA users to edit nourishment data online. S&T leveraged a network of networks that highlights ASBPA's excellent national reach into specific practitioner communities. Committee members were assigned regions corresponding to their area of experience. Each of these "regional managers" was asked to reach out to up to five other coastal managers within their region, and so on. This strategy has developed a national network of coastal professionals who are called upon once each year to update the database with recent nourishment data.

Next step includes: A 2020 update (kicks off in April) to verify existing data, identify missing and new projects, and promote use of database.

- b. **White Papers for Public Outreach:** ASBPA has published at least one White Paper per year for the past 5 years. The intended audience for these papers is non-technical coastal professionals and stakeholders. 2019 papers include "Beach Nourishment Activities on Coastal Biogeochemical Processes and Conditions" (Aug 2019) and "Existing Conservation Measures and Recommended BMPs for Regional Sediment Management in Coastal Inlets" (forthcoming).

Next steps include: 2020 White Paper on ASBPA National Beach Nourishment Database.

- 4. **U.S. Coastal Research Program (USCRP):** ASBPA's Science Director serves as a co-Executive Director of the USCRP, a collaboration of federal agencies, academics, and stakeholders that aims to build a community of practice, identify research priorities and fundamental knowledge gaps for addressing societally-relevant coastal challenges, foster collaborative opportunities, enhance funding for academics and students), and promote science translation to users. USCRP Leadership is pictured to the right (Mary Cialone, USACE ERDC & USCRP Managing Director; Nicole Elko, ASBPA & USCRP Co-Executive Director; Hilary Stockdon, USGS & USCRP Co-Executive Director; Britt Raubenheimer (and Huger), WHOI, Academic Team Chair; LeighAnn Brandt, BOEM, Federal Team; Julie Rosati, USACE ERDC & USCRP Co-Executive Director. To date, USCRP has hosted 5 workshops and awarded \$6.3M for 37 academic studies.



2019 Accomplishments: 1) 344 members joined; 2) 2019 DUNEX (During Nearshore Event eXperiment) pilot, large-scale multi-agency field experiment in the Outer Banks of N.C.; 3) Organizational structure implemented; and 4) \$5M in academic funding awarded in 2019.