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## **Education**

- B.S. (Civil Engineering), University of Florida, Gainesville, Florida 2001
- M.S. (Coastal & Ocean Eng.), University of Florida, Gainesville, Florida 2004
- Ph.D. (Coastal & Ocean Eng.), University of Florida, Gainesville, Florida 2008

## **Professional Experience** (reverse chronological order)

- Dept. Civil, Coastal, & Environmental Engineering, University of South Alabama, Professor, 8/17 - Present
- Dept. Civil Engineering, University of South Alabama, Associate Professor, 8/14 – 8/17
- South Coast Engineers, LLC, Fairhope, AL, Senior Coastal Engineer, 1/15 – Present
- Graduate School, University of South Alabama, Full Member, 8/14 – Present
- Graduate School, University of South Alabama, Associate Member, 8/08 – 8/14
- Dept. Civil Engineering, University of South Alabama, Assistant Professor, 8/08 – 8/14
- Dept. Civil Engineering, University of South Alabama, Instructor, 8/07 – 8/08
- South Coast Engineers, LLC, Fairhope, AL, Consultant, 8/07 – 12/14
- Dept. Civil & Coastal Engineering, University of Florida, Grad. Res. Assistant, 1/01 – 8/07
- Naval Research Lab., SSC, Mississippi, Research Assistant, 5/02 – 8/02
- Coastal Engineering Consultants, Inc., Naples, Florida, Field Technician, 5/99 – 9/99
- SubOceanic Consultants, Inc., Naples, Florida, Field Technician, 5/96 – 9/96

## **Research Interests**

- Coastal Engineering: coastal resilience, nature-based solutions, coastal infrastructure, coastal hazards

## **Licenses & Certifications**

- Professional Engineer, Alabama, No. 34056
- Professional Engineer, Florida, No. 78748
- Board Certified Coastal Engineer (ACOPNE)

## **Honors and Awards** (reverse chronological order)

- ASCE COPRI Orville T. Magoon Sustainable Coasts Award, March 2023
- Federal Highway Administration 2022 Environmental Excellence Award
- ASBPA Robert (Bob) G. Dean Coastal Academic Award, American Shore & Beach Preservation Association, September 2021
- Olivia Rambo McGlothren National Alumni Association Outstanding Scholar Award, University of South Alabama, August 2021
- ASBPA Member of the Year Award, 2018
- “Top Prof” Award, Azalea Chapter of Mortar Board, Univ. South Alabama, 2014, 2011, 2010
- Andy and Carol Denny Excellence in Teaching Award, Univ. South Alabama, August 2013
- College of Engineering Excellence in Research Award, Univ. South Alabama, April 2013
- College of Engineering Excellence in Teaching Award, Univ. South Alabama, April 2013
- Named one of USA’s 50 outstanding faculty in 50-year history, February 2013

- Nominated for Bliss Medal, Society of American Military Engineers (SAME), December 2012
- Outstanding Student Mentor Award, Mobile Post, SAME, December 2012

### **Graduate Students**

- Kate Richards (current); Ian Adkins (current); Ryan Poe (current); Deborah Fernandes (current); Trevor Strong (current); Tabassum Islam (graduated December 2023, thesis); Kyle Rumaker (graduated August 2023, thesis); Sean McQuagge (graduated May 2022, thesis); Kelsey Carpenter (graduated August 2022, thesis); Elizabeth Winter (graduated August 2022, thesis); Kate Haynes (graduated May 2018, thesis); Marshall Hayden (graduated December 2018, project); Patrick Hautau (graduated December 2018, thesis); Justin Lowlavar (graduated December 2017); Garland Pennison (graduated December 2020, dissertation); Jackie Wittmann (current); Bryan Groza (graduated May 2016, thesis); Kari Servold (graduated December 2015, thesis); Chris Marr (graduated August 2013, thesis); Richard Allen (graduated May 2013, thesis); Jenifer Butler (graduated May 2013, coursework); Miyuki Matthews (graduated August 2012, thesis)

### **Undergraduate Research Students**

- Noah McMillan (current); Wade Naritoku (graduated May 2022); Ian Cox (graduated May 2022); Evan Mazur (graduated May 2020); Derek Kelly (graduated May 2019); Brandon Tarver (graduated May 2017); Patrick Hautau (graduated May 2016); Brock Jones (graduated May 2015); Jake Denson (graduated May 2015); Luke Walding (graduated May 2014); Jackie Wittmann (graduated May 2014); Clay McCoy (graduated May 2014, UCUR 2013); Tim Wicker (graduated May 2013); Drew Harrison (graduated May 2013); Falon Nettles (graduated May 2013, UCUR 2012); Bennett Dulaney (graduated May 2012); Crystal Fulcher (graduated May 2012); Sylvia Gonzales (graduated May 2012); Richard Allen (graduated BSCE May 2011); David Dickinson (graduated May 2011); Greg Dike (graduated May 2011); Jeff Jones (graduated May 2011); S. Matthew Jones (graduated May 2011); Seth Peterson (graduated May 2011); George Kantrales (graduated May 2010)

### **Proposals Funded** (reverse chronological order)

1. Augmenting Hurricane Sentinel Towers with Chemical and Biological Sensors; Webb (PI), Morrison (Co-PI); \$549,758; 8/15/23-8/14/26; U.S. Army Engineering Research and Development Center (Dept. of the Army).
2. Surface Transportation, Sea Level Rise, and Coastal Storms: a Sustainable Pathway to Increased Resilience; Webb (PI), subaward from Auburn University; \$194,700; 10/2021-09/2025; National Oceanic and Atmospheric Administration (Effects of Sea Level Rise Program).
3. Coastal Communities' Pavement Resilience to Sea Level Rise using Natural and Nature-Based Features; Webb (PI), subaward from U. New Hampshire; \$445,496; 10/2021-09/2025; National Oceanic and Atmospheric Administration (Effects of Sea Level Rise Program).
4. Comprehensive Living Shoreline Monitoring; Webb (PI), Baker (Co-PI); \$2,113,332 (USA) / \$3.8M (total); 03/16/21-07/31/26; RESTORE Alabama Department of Conservation and Natural Resources.
5. Systems Engineering Approaches for Resilience to Coastal Hazards; Webb (PI), Smallegan (Co-PI); \$825,000; 10/1/20-9/30/24; U.S. Army Engineering Research and Development Center (Dept. of the Army).
6. Little Lagoon Extended Monitoring and Research: Phase IV; Webb (PI), Beebe (Co-PI); \$428,834; 5/20 – 5/26; Alabama Dept. Transportation
7. NIST Community Resilience Center of Excellence; Webb (PI); \$180,429; 2/1/20-1/31/25; National Institute of Standards and Technology.
8. Barrier Island Hydrodynamics and Morphodynamics DURING an Extreme Event; Webb (PI), Smallegan (Co-PI), Puleo (Co-PI); \$499,999; 10/1/19-12/30/23; U.S. Army Engineering Research and Development Center (Dept. of the Army).

9. Bon Secour National Wildlife Refuge Living Shoreline; Webb (PI at USA); \$20,243; 7/19 – 7/22; US Fish and Wildlife Service via Mississippi State University.
10. Development of an innovative turbulence mooring to advance coupled physical-biogeochemical processes; Dzwonkowski (PI), Webb (Co-PI); \$24,998; 5/15/19-5/14/20; U. South Alabama.
11. Fowl River Marsh Health Assessment; Beebe (PI), Dzwonkowski (Co-PI), Webb (Co-PI), Smallegan (Co-PI); \$84,394; 1/18 – 12/18; Mobile Bay National Estuary Program.
12. Little Lagoon Extended Monitoring and Research: Phase III; Webb (PI), Beebe (Co-PI); \$278,853; 6/17 – 5/20; Alabama Dept. Transportation.
13. Evaluating the Capacity of Natural and Nature-Based Features to Reduce Coastal Storm Hazards; Webb (PI), Cebrian (Co-PI), Scyphers (Co-PI); \$64,970; 9/16 – 8/18; U.S. Army Engineering Research and Development Center (Dept. of the Army).
14. Green Infrastructure Techniques for Coastal Highway Resilience; Webb (PI); \$21,264; 8/16 – 7/17; U.S. Department of Transportation via Mississippi Dept. of Transportation
15. Lake Forest Mapping Study; Webb (PI); \$5266.46; 4/16 – 8/16; City of Daphne, Alabama
16. Monitoring the Coastal Processes in the Vicinity of Little Lagoon Pass: Phase 2, Post-Construction; Webb (PI); \$117,684; 9/15 - 5/17; Alabama Dept. Transportation
17. NIST Community Resilience Center of Excellence; Webb (PI) and Douglass (Co-PI); \$257,335; 3/15 - 2/20; National Institute of Standards and Technology
18. Design and Fabrication of Flume for Coastal Engineering; Webb (PI); \$44,356; 5/14 - 2/15; National Highway Institute / Kilgore Consulting and Management
19. Velocity and Bathymetry Mapping in the Vicinity of the US HWY 90/98 Causeway; Webb (PI); \$13,500; 3/14 - 5/14; Alabama Dept. Conservation and Natural Resources / South Coast Engineers
20. Testing Service Agreement - Performance of a Floating Breakwater System; Webb (PI); \$39,022; 12/13 - 3/14; Martin Ecosystems
21. Monitoring the Coastal Processes in the Vicinity of Little Lagoon Pass; Webb (PI) and Douglass (Co-PI); \$197,517; 8/12 - 8/14; Alabama Dept. Transportation
22. Evaluation of Coastal Processes and Structure Design Methodologies for TNC Restoration Activities in Alabama's Coastal Waters; Webb (PI); \$14,756; 2/12 - 9/12; The Nature Conservancy
23. A Decision Support Toolkit for the Functional Design of Structures in Living Shorelines; Webb (PI) and Douglass (Co-PI); \$149,207; 2/12 - 2/14; Mississippi-Alabama Sea Grant Consortium
24. Identifying Transport Pathways and Quantifying Exchange in Alabama's Coastal Waters: from the Shelf to the Delta; Webb (PI), Park (Co-PI) and Dzwonkowski (Co-PI); \$199,223; 12/10 - 6/12; BP Rapid Gulf Research Initiative / Alabama Marine Environmental Science Consortium
25. Modeling of Circulation and Physical Transport for the Alabama Coastal Waters to Assess Transport and Distribution of Oil-Derived Substances; Park (PI), Dzwonkowski (Co-PI) and Webb (Co-PI); \$129,246; 12/10 - 6/12; BP Rapid Gulf Research Initiative / Alabama Marine Environmental Science Consortium
26. Investigation of the Three Dimensional Eulerian Flow Field and Resulting Lagrangian Transport Pathways on the Alabama Shelf; Dzwonkowski (PI), Park (Co-PI) and Webb (Co-PI); \$177,975; 12/10 - 6/12; BP Rapid Gulf Research Initiative / Alabama Marine Environmental Science Consortium
27. Mass Transport along the Ship Channel in Mobile Bay, Alabama; Park (PI), Dzwonkowski (Co-PI) and Webb (Co-PI); \$69,277; 6/10 - 12/10; Northern Gulf Institute
28. Acquisition of a Water Quality Sonde to Measure Near-Surface Hydrocarbon Concentrations and Water Quality Indicators in Mobile Bay; Webb (PI); \$79,163; 9/10 - 8/11; National Science Foundation

29. Improving Wave Height Prediction During Barrier Island Overtopping; Webb (PI), Rogers (Co-PI) and Kennedy (Co-PI); \$9,599; 8/10 - Present (continuous support); Mississippi-Alabama Sea Grant Consortium
30. Exploratory Research on Wave Induced Scour at Coastal Bridges; Webb (PI) and Douglass (Co-PI); \$316,288; 9/08 - 9/10; Federal Highway Administration

### **Refereed Journal Publications** (reverse chronological order)

1. Viriden, M.F., Temple, N.A., Webb, B.M., Sparks, E.L. 2023. Improvement of a Low-cost DIY Wave Gauge. *The Journal of Extension*, 61(1), Article 17.
2. Beebe, D.A., Scott, M.B., Webb, B.M., Jackson Jr., W.T. 2022 Atmospheric groundwater forcing of a subterranean estuary. *Geophysical Research Letters*, 49, e2021GL096154. 10 pp.
3. Dawson, K., Webb, B.M. 2022. Field measurements of boat wake attenuation in salt marshes of coastal Alabama. *Shore & Beach* 90(3): 68-79.
4. Darestani, Y.M., Webb, B.M., Padgett, J.E., Pennison, G.P., Fereshtehnejad, E. 2021. Fragility analysis of coastal roadways and performance assessment of coastal transportation systems subjected to flood hazards. *J. Performance Constructed Facilities* 35(6).
5. Elko, N., Briggs, T.R., Benedet, L., Robertson, W., Thomson, G., Webb, B., and Garvey, K. 2021. A Century of Beach Nourishment. *J. Ocean and Coastal Management* 199, 1-11.
6. Morris, R.L., La Peyre, M.K., Webb, B.M., Marshall, D.A., Bilkovic, D.M., Cebrian, J., McClenachan, G., Kibler, K.M., Walters, L.J., Bushek, D., Sparks, E.L., Temple, N.A., Moody, J., Angstadt, K., Goff, J., Boswell, M., Sacks, P., and Swearer, S.E. 2021. Large-scale variation in wave attenuation of oyster reef living shorelines and the influence of inundation duration. *Ecological Applications*, 31(6).
7. Temple, N.A., Sparks, E.L., Webb, B.M., Cebrian, J., Viriden, M.F., Lucore, A.E., Moss, H.B. 2021. Responses of two fringing salt marsh plant species along a wave climate gradient. *Marine Ecology Progress Series* 675, 53-66.
8. Coogan, J., Dzwonkowski, B., Park, K., and Webb, B. 2020. Observations of restratification after a wind mixing event in a shallow highly stratified estuary. *Estuaries & Coasts* 43, 272-285.
9. Misra, S., Padgett, J., Barbosa, A., Webb, B. 2020. An Expert Opinion Survey on Post Hazard Restoration of Roadways and Bridges: Data and Key Insights. *Earthquake Spectra* 36(2), 983-1004.
10. Scyphers, S., Beck, M., Haner, J., Keeler, A., Landry, C., Webb, B. M., Grabowski, J. 2020. Designing effective incentives for living shorelines as a habitat conservation strategy along residential coasts. *Conservation Letters* 13(5), e12744. 10 pp.
11. Temple, N., Webb, B., Sparks, E., Linhoss, A. 2020. Low-Cost Pressure Gauges for Measuring Water Waves. *Journal of Coastal Research* 36(3), 661-667.
12. Webb, B.M., Douglass, S.L., Cleary, J. 2020. Contribution of relative sea-level rise to bridge failure during Hurricane Ivan. *Journal of Forensic Engineering* 0(0), 1-12.
13. Coogan, J., Webb, B., Smallegan, S., and Puleo, J. 2019. Geomorphic changes measured on Dauphin Island, AL, during Hurricane Nate. *Shore & Beach* 87(4). 8 pp.
14. Lee, J., Webb, B.M., Dzwonkowski, B., Valle Levinson, A., Lee, J. 2019. Characteristics of exchange flow in a multiple inlet diurnal estuary: Mobile Bay, Alabama. *Journal of Marine Systems* 191, 38-50.
15. Masoomi, H., van de Lindt, J.W., Do, T.Q., Webb, B.M. 2019. Combined wind-wave-surge hurricane-induced damage prediction for buildings. *Journal of Structural Engineering* 145(1).
16. Morris, R.L., Bilkovic, D.M., Boswell, M.K., Webb, B.M., et al. 2019. The application of oyster reefs in shoreline protection: Are we over-engineering for an ecosystem engineer? *Journal of Applied Ecology* 56, 1703-1711.
17. Scyphers, S., Beck, M., Furman, K., Haner, J., Josephs, L., Lynskey, R., Keeler, A., Landry, C., Powers, S., Webb, B., and Grabowski, J. 2019. A Waterfront View of Coastal Hazards: Contextualizing Relationships among Geographic Exposure, Shoreline Type, and Hazard Concerns among Coastal Residents. *Sustainability* 11(23), 6687.

18. Webb, B.M., Cleary, J.C. 2019. Drag-induced displacement of a simply supported bridge span during Hurricane Katrina. *Journal of Performance of Constructed Facilities* 33(4), 13 pp.
19. Cleary, J.C., Webb, B.M., Douglass, S.L., Buhring, T., Steward, E.J. 2018. Assessment of engineering adaptations to extreme events and climate change for a simply supported interstate bridge over a shallow estuary: case study. *Journal of Bridge Engineering* 23(12), 12 pp.
20. Gidaris, I., Padgett, J. E., Barbosa, A. R., Chen, S., Cox, D., Webb, B., Cerato, A. 2017. Multiple-hazard fragility and restoration models of highway bridges for regional risk and resilience assessment in the U.S.: a state-of-the-art review. *Journal of Structural Engineering* 143(3), 17 pp.
21. Webb, B. M., Marr, C. D. 2016. Spatial variability of hydrodynamic timescales in a broad and shallow estuary: Mobile Bay, Alabama. *Journal of Coastal Research* 32(6), 1374-1388 doi: 10.2112/JCOASTRES-D-15-00181.1.
22. Webb, B. M., Matthews, M. T. 2014. Wave-induced scour at cylindrical piles: estimating equilibrium scour depth in a transition zone. *Transportation Research Record: Journal of the Transportation Research Board* 1(2436), 148-155.
23. Dzwonkowski, B., Park, K., Lee, J., Webb, B. M., Valle-Levinson, A. 2014. Spatial variability of flow over a river-influenced inner shelf in coastal Alabama during spring. *Continental Shelf Research* 74, 25-34.
24. Lee, J., Webb, B. M., Dzwonkowski, B., Park, K., Valle-Levinson, A. 2013. Bathymetric influences on tidal currents at the entrance to a highly stratified, shallow estuary. *Continental Shelf Research* 58, 1-11.
25. Webb, B. M. 2012. A personal watercraft-based system for coastal ocean mapping. *Journal of Ocean Technology* 7(2), 47-68.
26. Douglass, S. L., Webb, B. M., Dixon, C. R., Buhring, T. 2011. Beach profile and island cross-section manipulations in response to the oil spill. *Journal of the American Shore and Beach Preservation Association* 79(4), 3-10.
27. Webb, B. M., King, J. N., Tutak, B., Valle-Levinson, A. 2007. Flow structure at a trifurcation near a North Florida inlet. *Continental Shelf Research* 27(10-11), 1528-1547.

#### **Book Chapters & Manuals** (reverse chronological order)

28. Webb, B. M., Hardaway, C. S., DeBerry, D. 2023. *Living Shorelines: Fundamental Principles of Ecology and Engineering*, J. Ross Publishing, ISBN 978-1-60427-124-9 (est. late 2023).
29. Krolak, J., Webb, B.M., Douglass, S.L., Kriebel, D., Walker, R., Girard, L., Dasenbrock, D., Habic, E., Kafalenos, R., Sharar-Salgado, D. 2021. "Congressional Report on Coastal Shoreline Erosion: American Samoa, Guam, Hawai'i, Northern Mariana Islands, Puerto Rick, and US Virgin Islands." Report No. FHWA-HIF-21-XXX. USDOT Federal Highway Administration, Washington, DC. 329 pp.
30. Douglass, S.L., and Webb, B.M. 2020. "Highways in the Coastal Environment, 3<sup>rd</sup> Ed." Hydraulic Engineering Circular 25. United States Department of Transportation, FHWA-HIF-19-059, Washington, DC. 434 pp.
31. Kilgore, R., Thomas Jr., W.O., Douglass, S., Webb, B., Hayhoe, K., Stoner, A., Jacobs, J.M., Thompson, D.B., Herrmann, G.R., Douglas, E., and Anderson, C. 2019. "Applying Climate Change Information to Hydrologic and Coastal Design of Transportation Infrastructure: Design Practices." National Cooperative Highway Research Program 15-61, Transportation Research Board, The National Academies of Sciences, Engineering, and Medicine. 154 pp.
32. Kilgore, R., Thomas Jr., W.O., Douglass, S., Webb, B., Hayhoe, K., Stoner, A., Jacobs, J.M., Thompson, D.B., Herrmann, G.R., Douglas, E., and Anderson, C. 2019. "Applying Climate Change Information to Hydrologic and Coastal Design of Transportation Infrastructure: Final Report." National Cooperative Highway Research Program 15-61, Transportation Research Board, The National Academies of Sciences, Engineering, and Medicine. 384 pp.
33. Webb, B. M., Dix, B., Douglass, S. L., Asam, S., Cherry, C., Buhring, B. 2019. "Nature-Based Solutions for Coastal Highway Resilience: An Implementation Guide." United States Department of Transportation, FHWA-HEP-19-042, Washington, DC. 229 pp.

34. Webb, B. M. 2017. "A Primer on Modeling in the Coastal Environment." United States Department of Transportation, FHWA-HIF-18-002, Washington, DC. 72 pp.
35. Douglass, S. L., Webb, B. M., Kilgore, R. 2014. "Highways in the Coastal Environment: Assessing Extreme Events." Hydraulic Engineering Circular 25 Vol. 2. United States Department of Transportation, Washington, DC. 149 pp.
36. Russ, S. H., Webb, B. M., Holifield, J., Walker, J. 2011. PILS: Low-Cost Water-Level Monitoring, In: *Environmental Monitoring*, E. O. Ekundayo, (Ed.), pp. 137-156, InTech, ISBN 978-953-307-661-4, Vienna, Austria.

#### **Conference Published Proceedings** (reverse chronological order)

37. Hoch, C., Weaver, R.J., Webb, B.M., Resio, D., Ward, N., Lodge, C., Kachouie, N.N., Hopkin, O., Bouhassira, R. 2022. Predicting Near-Bed Sediment Transport Through Particle Image Velocimetry. In: *Proceedings of the 37<sup>th</sup> International Conference on Coastal Engineering*, ASCE, Reston, VA.
38. Pennison, G.P., Webb, B.M. 2020. Transdisciplinary systems thinking: sustainability of coastal systems. In: *Proceedings of the 2020 Industrial and Systems Engineering Conference*, L. Cromarty, R. Shirwaiker, P. Wang (Eds.), New Orleans, LA.
39. Pennison, G.P., Webb, B.M. 2020. Coastal road system failures: cause and effect. In: *Proceedings of the 2020 Industrial and Systems Engineering Conference*, L. Cromarty, R. Shirwaiker, P. Wang (Eds.), New Orleans, LA.
40. Misra S., Padgett J. E., Barbosa A. R., Webb, B. 2018. Post-earthquake restoration modeling of roadways and bridges: A survey based approach. In: *Proceedings of the 11<sup>th</sup> National Conference in Earthquake Engineering*, Earthquake Engineering Research Institute, Los Angeles, CA.
41. Pennison, G.P., Cloutier, R.J., Webb, B.M. 2018. Local coastal roads—next generation. In: *Proceedings of the 2018 Industrial and Systems Engineering Conference*, K. Barker, D. Berry, C. Rainwater (Eds.), Orlando, FL.
42. Servold, K., Webb, B. M., Douglass, S. L. 2015. Effects of low-crested living shoreline breakwaters on wave setup. In: *Proceedings of the Conference on Coastal Structures and Solutions to Coastal Disasters*, ASCE, Reston, VA. Boston, MA.
43. Webb, B. M., Allen, R. 2015. Wave transmission through artificial reef breakwaters. In: *Proceedings of the Conference on Coastal Structures and Solutions to Coastal Disasters*, ASCE, Reston, VA. Boston, MA.
44. Webb, B. M., Kennedy, A., Rogers, S., Gravois, U., Omar, H. 2012. A wave, water level, and structural monitoring plan for Dauphin Island, Alabama. In: *Proceedings of the ATC-SEI Advances in Hurricane Engineering Conference*, ASCE, Reston, VA.
45. Webb, B. M., Whelton, A. J. 2012. Near-synoptic measurements of surface water characteristics in a reservoir using a personal watercraft-based mapping system. In: *Proceedings of the Hydraulic Measurement and Experimental Methods Conference*, ASCE, Reston, VA.
46. Allen, R., Webb, B. M. 2011. Determination of wave transmission coefficients for oyster shell bag breakwaters. In: *Proceedings of the Conference on Coastal Engineering Practice*, 684-697. ASCE, Reston, VA.
47. Webb, B. M., Douglass, S. L., Dixon, C. R., Buhning, B. 2011. Application of coastal engineering principles in response to the Deepwater Horizon disaster: lessons learned in coastal Alabama. In: *Proceedings of the Conference on Coastal Engineering Practice*, 359-372. ASCE, Reston, VA.
48. Russ, S.H., Perepa, V., Leavesly, S., Webb, B. M. 2010. Novel low-cost salinity sensor for embedded environmental monitoring. In: *Proceedings of the IEEE SoutheastCon 2010*.
49. Webb, B. M., Slinn, D. N. 2008. Phase-resolving sediment transport and morphology model, In: *Proceedings of the 31st International Conference on Coastal Engineering*, Hamburg, Germany.

50. Webb, B. M., Slinn, D. N. 2006. Modeling bed morphology under waves and currents, In: *Proceedings of the 30th International Conference on Coastal Engineering*, Vol. 4, 3254-3261. San Diego, CA.
51. Puleo, J. A., Holland, T., Slinn, D. N., Smith, E., Webb, B. M. 2002. Numerical modeling of swash zone hydrodynamics. In: *Proceedings of the 28th International Conference on Coastal Engineering*, Cardiff, Wales.

### **Conference Presentations** (reverse chronological order)

52. Douglass, S.L., Webb, B.M., Sharar-Salgado, D. 2023. Incorporating Sea Level Rise in Coastal Infrastructure Design. ASCE INSPIRE. Washington, DC. Nov 15-18, 2023.
53. Fernandes, D., Webb, B., Guannel, G. 2023. Exploring the Impact of Different Seagrass Species on Wave Energies and Sediment Budget in Tropical Environments. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Providence, RI. Oct 11-13, 2023.
54. Islam, T., Webb, B. 2023. Evaluating the Impacts of Oyster Reef Breakwaters on Hydrodynamics, Morphodynamics, and Sediment Transport Using XBeach. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Providence, RI. Oct 11-13, 2023.
55. McKay, K., Bledsoe, B., Aliu, J, Webb, B. 2023. Accelerating Use of Hybrid Infrastructure Systems in Water Resources. ASCE INSPIRE. Washington, DC. Nov 15-18, 2023.
56. Poe, R.C., Webb, B.M. 2023. Comparison of 1-D Numerical Models on Dauphin Island. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Providence, RI. Oct 11-13, 2023.
57. Temple, N.A., Webb, B.M., Rodriguez, A., Baker, R., Hunter, A. 2023. Wave Transmission through Varying Reef Designs: Early Observations from the Alabama Comprehensive Montiroing Program. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Providence, RI. Oct 11-13, 2023.
58. Webb, B.M. 2023. Resilient Nature-Based Solutions for Highways in the Coastal Environment. International Conference on Transportation System Resilience to Extreme Weather and Climate Change Challenges, National Academies of Science, Engineering, and Medicine, Transportation Research Board. Washington, DC. Nov 13-15, 2023.
59. Douglass, S., Krolak, J., Webb, B.M. 2022. Highways in the Coastal Environment: New USA Guidance. 37<sup>th</sup> International Conference on Coastal Engineering (ICCE), Sydney, Australia, 12/4/2022-12/9/2022.
60. Douglass, S., Webb, B.M. 2022. Updated Coastal Resilience Guidance in HEC-25 3<sup>rd</sup> Ed. National Hydraulic Engineering Conference. Atlanta, GA 8/15/2022-8/19/2022.
61. Douglass, S., Webb, B.M., Buhring, T. 2022. Practical, Quantitative Sea Level Rise Guidance for Coastal Engineers. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Long Beach, CA 9/14/2022-9/16/2022.
62. Dwyre, L., Eberhardt, A., Jacobs, J.M., Sias, J.S., Webb, B.M. 2022. Natural and Nature-Based Features Protecting Roads from Sea Level Rise in Coastal New Hampshire. American Geophysical Union Fall Meeting. Chicago, IL 12/11/2022-12/15/2022.
63. Fernandes, D., Webb, B.M., Guannel, G., Cruz-Rivera, E. 2022. Assessing the Impact of Tropical Seagrasses as NNBf in Tropical Coastal Environments. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Long Beach, CA 9/14/2022-9/16/2022.
64. Fernandes, D., Webb, B.M., Guannel, G., Cruz-Rivera, E. 2022. Assessing the Impact of Tropical Seagrasses as NNBf in Tropical Coastal Environments. 8<sup>th</sup> Young Coastal Scientists and Engineers Conference – Americas Pensacola Beach, FL 11/4/2022-11/6/2022.
65. Hoch, C., Weaver, R.J., Ward, N., Resio, D., Webb, B.M., Lodge, C. 2022. Predicting Near-Bed Sediment Transport Through Particle Image Velocimetry. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Long Beach, CA 9/14/2022-9/16/2022.

66. Hoch, C., Weaver, R.J., Ward, N., Resio, D., Webb, B.M., Lodge, C. 2022. Predicting Near-Bed Sediment Transport Through Particle Image Velocimetry. 37<sup>th</sup> International Conference on Coastal Engineering (ICCE). Sydney, Australia, 12/4/2022-12/9/2022.
67. Islam, T., Klee, C., Palermo, A.J.A., Rushton, B., Webb, B.M. 2022. Grand Isle Mitigation and Rebuilding Strategies: A Hybrid Design Approach to Reduce Shoreline Erosion and Enhance Biodiversity. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Long Beach, CA 9/14/2022-9/16/2022.
68. Islam, T., Klee, C., Palermo, A.J.A., Rushton, B., Webb, B.M. 2022. Grand Isle Mitigation and Rebuilding Strategies: A Hybrid Design Approach to Reduce Shoreline Erosion and Enhance Biodiversity. 8<sup>th</sup> Young Coastal Scientists and Engineers Conference – Americas Pensacola Beach, FL 11/4/2022-11/6/2022.
69. Mazur, E., Amante, O., Puleo, J.A., Shi, F., Smallegan, S., Webb, B.M. 2022. Urban coastal flooding pathways during storm events, AGU Ocean Sciences Meeting, Honolulu, HI.
70. Poe, R., Webb, B.M. 2022. Predicting Effects of Overland Wave Propagation During Extreme Storm Events. 8<sup>th</sup> Young Coastal Scientists and Engineers Conference – Americas Pensacola Beach, FL 11/4/2022-11/6/2022.
71. Rumaker, K., Webb, B.M., Landry, B. 2022. The Modification of Low-Cost Liquid Level Sensors to Measure Wave Characteristics. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Long Beach, CA 9/14/2022-9/16/2022.
72. Rumaker, K., Webb, B.M., Landry, B. 2022. The Modification of Low-Cost Liquid Level Sensors to Measure Wave Characteristics. 8<sup>th</sup> Young Coastal Scientists and Engineers Conference – Americas Pensacola Beach, FL 11/4/2022-11/6/2022.
73. Strong, T., Webb, B.M. 2022. Analyzing Barrier Island Community Resilience to Coastal Hazards Augmented by Sea Level Rise. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Long Beach, CA 9/14/2022-9/16/2022.
74. Strong, T., Webb, B.M. 2022. Analyzing Barrier Island Community Resilience to Coastal Hazards Augmented by Sea Level Rise. 8<sup>th</sup> Young Coastal Scientists and Engineers Conference – Americas Pensacola Beach, FL 11/4/2022-11/6/2022.
75. Webb, B.M. 2022. Nature-Based Solutions Enhance Coastal Highway Resilience. National Hydraulic Engineering Conference. Atlanta, GA 8/15/2022-8/19/2022.
76. Webb, B.M. 2022. Using Climate Data in Hydrologic Analysis: Sea Level Rise for Design. National Hydraulic Engineering Conference. Atlanta, GA 8/15/2022-8/19/2022.
77. Webb, B.M. 2022. Vulnerability of Coastal Transportation Infrastructure to Extreme Events: Preparing for the Future. ASCE Lifelines Conference. Virtual 1/31/2022-2/4/2022.
78. Webb, B.M., Brown, B. 2022. Determining the Reliability of a Low-Cost DIY Pressure Gauge for Measuring Water Levels and Waves. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. Long Beach, CA 9/14/2022-9/16/2022.
79. Amante, O., Mazur, E., Puleo, J.A., Webb, B.M., Smallegan, S. 2021. Measurement and modeling of intra-event processes. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. New Orleans, LA 9/28/2021-10/1/2021.
80. Amante, O., Mazur, E., Puleo, J.A., Smallegan, S., Webb, B.M. 2021. Measurement and Modeling of Intra-Event Processes, 7th Young Coastal Scientists and Engineers Conference Americas, Myrtle Beach, South Carolina.
81. Amante, O., Mazur, E., Puleo, J.A., Smallegan, S., Webb, B.M. 2021. Measurement and modeling of intra-event processes on a steep beach, Coastal Dynamics '21, Delft, The Netherlands.
82. Carpenter, K., Webb, B.M. 2021. Using XBeach to Simulate Future Impacts of a Living Shoreline Project in Little Lagoon, Alabama. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. New Orleans, LA 9/28/2021-10/1/2021.
83. Mazur, E., Amante, O., Puleo, J.A., Shi, F., Smallegan, S., Webb, B.M. 2021. Urban coastal flooding pathways during storm events, 7th Young Coastal Scientists and Engineers Conference Americas, Myrtle Beach, South Carolina.



84. Mazur, E., Amante, O., Puleo, J.A., Shi, F., Smallegan, S., Webb, B.M. 2021. Urban coastal flooding pathways during storm events, Coastal Dynamics '21, Delft, The Netherlands.
85. McQuagge, S., Webb, B.M. 2021. Observing the Change in Wave Energy Over Dauphin Island, AL During Hurricane Nate. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. New Orleans, LA 9/28/2021-10/1/2021.
86. Webb, B.M., Douglass, S.L., Buhring, B. 2021. A Homeowner's Bay Shoreline Stabilization Project Proves Resilient During Hurricane Sally. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. New Orleans, LA 9/28/2021-10/1/2021.
87. Webb, B.M. 2021. ASBPA Gulf Coast Chapter Update. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. New Orleans, LA 9/28/2021-10/1/2021.
88. Winter, E., Webb, B.M. 2021. Modeling Future Hydrodynamics and Morphodynamics of a Living Shoreline Project at Little Lagoon, Alabama using XBeach. ASBPA National Coastal Conference, American Shore & Beach Preservation Association. New Orleans, LA 9/28/2021-10/1/2021.
89. Carpenter, K., Webb, B.M. 2020. Using XBeach to Simulate Future Impacts of a Living Shoreline Project in Little Lagoon, Alabama. ASBPA National Coastal Conference, American Shore & Beach Preservation Association, Virtual/Zoom Webinar. Oct. 13-15.
90. McQuagge, S., Webb, B.M. 2020. Observing the Change in Wave Energy over Dauphin Island, AL During Hurricane Nate. ASBPA National Coastal Conference, American Shore & Beach Preservation Association, Virtual/Zoom Webinar. Oct. 13-15.
91. Pennison, G.P., Webb, B.M. 2020. Coastal Road System Failures: Cause and Effect. Institute of Industrial & Systems Engineers Annual Conference and Expo. Virtual Conference. Nov. 1-3.
92. Pennison, G.P., Webb, B.M. 2020. Transdisciplinary Systems Thinking: Sustainability of Coastal Systems. Institute of Industrial & Systems Engineers Annual Conference and Expo. Virtual Conference. Nov. 1-3.
93. Webb, B.M. 2020. Nature-Based Solutions for Coastal Highway Resilience: an Implementation Guide. The National Coastal & Estuarine Virtual Summit, Restore America's Estuaries. Sep. 29-Oct. 1.
94. Webb, B.M., Hodges, T. 2020. Nature-Based Solutions for Coastal Highway Resilience. Gulf of Mexico Alliance Mid-Year Meeting. Mobile, AL. Jan. 17.
95. Webb, B.M., Douglass, S.L., Hodges, T. 2020. Nature-Based Solutions for Coastal Highway Resilience. ASCE Alabama Section Winter Meeting, Mobile, AL. Mar. 10.
96. Webb, B.M., Weber, C. 2020. Developing Engineering Guidelines for Living Shorelines: What are We Waiting for? ASBPA National Coastal Conference, American Shore & Beach Preservation Association, Virtual/Zoom Webinar. Oct. 13-15.
97. Winter, E., Webb, B.M. 2020. Modeling Future Hydrodynamics and Morphodynamics of a Living Shoreline Project at Little Lagoon, Alabama Using XBeach. ASBPA National Coastal Conference, American Shore & Beach Preservation Association, Virtual/Zoom Webinar. Oct. 13-15.
98. Webb, B.M., Coogan, J., Smallegan, S., Puleo, J., McQuagge, S. 2020. Observations of Storm Tides, Waves, and Erosion on a Low-lying Barrier Island During Hurricane Nate. American Geophysical Union, Ocean Sciences Meeting 2020, Poster CP34C-1257.
99. Brockbank, D., Elko, N., Rosati, J.D., Stockdon, H., Webb, B.M. 2019. The US Coastal Research Program: Addressing Research Challenges through Federal, Stakeholder, and Academic Partnerships. 25th Biennial Conference of the Coastal and Estuarine Research Federation, Coastal and Estuarine Research Federation, Mobile, AL. Nov. 2-5.
100. Hodges, T., Webb, B.M. 2019. Nature-Based Solutions for Coastal Highway Resilience: An Implementation Guide. International Conference on Ecology & Transportation. Sacramento, CA. Sep. 22-26.
101. Pennison, G., Webb, B.M. 2019. Using Coastal Road Failures to Improve Resiliency. International Conference on Transportation System Resilience to Natural Hazards and Extreme

- Weather, National Academies of Science, Engineering, and Medicine. Washington, DC. Nov. 13-15.
102. Webb, B.M. 2019. Nature-based alternatives for Tensaw River Bridge. National Adaptation Forum. Madison, WI, April 23-25.
  103. Webb, B.M., Beebe, D., Carmichael, R., Cebrian, J., Coogan, J., Cook, M., Dzwonkowski, B., Goff, J., Hieb, E., Horne, H., Kudulis, J., Lehrter, J., Smallegan, S., Thibaut, T. 2019. An interdisciplinary collaboration leads to an assessment of marsh health in Fowl River, Alabama. 33<sup>rd</sup> Annual Alabama Water Resources Conference & Symposium. Orange Beach, AL, Sep. 5-7.
  104. Webb, B.M., Hodges, T. 2019. Implementing Nature-Based Solutions for Coastal Highway Resilience. ASBPA National Coastal Conference, American Shore & Beach Preservation Association, Myrtle Beach, SC. Oct. 22-25.
  105. Webb, B.M., Hodges, T. 2019. Nature-Based Solutions for Coastal Highway Resilience. International Conference on Transportation System Resilience to Natural Hazards and Extreme Weather, National Academies of Science, Engineering, and Medicine, Washington, DC. Nov. 13-15.
  106. Webb, B.M. 2018. Nature-based resilience for coastal highways. Alabama Association of Floodplain Managers Annual Conference. Orange Beach, AL, Oct 22-23.
  107. Beebe, D., Carmichael, R.H., Cebrian, J., Cook, M., Dzwonkowski, B., Kudulis, J., Lehrter, J., Smallegan, S., Thibaut, T., Vittor, B., Webb, B.M. 2018. Fowl River Marsh Study: If You Try Sometimes You Just Might Find You Get What You Need. 32<sup>nd</sup> Annual Alabama Water Resources Conference & Symposium. Orange Beach, AL, Sep. 5-7.
  108. Douglass, S.L., Krolak, J., Beucler, B., Webb, B.M. 2018. Advancing coastal engineering in US highways. 36<sup>th</sup> International Conference on Coastal Engineering, Abstract no. 1254. Baltimore, MD.
  109. Douglass, S.L., Webb, B.M. 2018. Highways in the coastal environment. American Shore & Beach Preservation Association National Coastal Conference. Galveston, TX Oct 31 – Nov 2.
  110. Groza, B., Webb, B.M. 2018. Submarine groundwater discharge as a likely driver of coastal inlet sediment dynamics at a Central Gulf lagoon. American Shore & Beach Preservation Association National Coastal Conference. Galveston, TX Oct 31 – Nov 2.
  111. Pennison, G.P., Gidaris, I., Padgett, J.E., Webb, B.M. 2018. Predicting coastal roadway damage using modified dispersion functions. 36<sup>th</sup> International Conference on Coastal Engineering, Abstract no. 1315. Baltimore, MD.
  112. Pennison, G.P., Webb, B.M., Padgett, J.E., Gidaris, I. 2018. Coastal roads: using failure to improve resiliency. American Shore & Beach Preservation Association National Coastal Conference. Galveston, TX Oct 31 – Nov 2.
  113. Webb, B.M., Douglass, S.L, Hodges, T. 2018. Implementing nature-based solutions for coastal highway resilience. American Shore & Beach Preservation Association National Coastal Conference. Galveston, TX Oct 31 – Nov 2.
  114. Webb, B.M., Scyphers, S., Cebrian, J., Gittman, R., Sharma, S., Rosati, J. 2018. Evaluating the capacity of natural and nature-based features to reduce coastal storm hazards. 36<sup>th</sup> International Conference on Coastal Engineering, Abstract no. 1429. Baltimore, MD.
  115. Haynes, K., Webb, B. M. 2017. Field measurements of boat wake attenuation in coastal salt marshes. American Shore & Beach Preservation Association National Coastal Conference. Fort Lauderdale, FL Oct. 24-27.
  116. Webb, B. M., Scyphers, S., Cebrian, J., Gittman, R., Sharma, S., Rosati, J. 2017. Evaluating the capacity of natural and nature-based features to reduce coastal storm hazards. American Shore & Beach Preservation Association National Coastal Conference. Fort Lauderdale, FL Oct. 24-27.
  117. Webb, B. M. 2017. Mapping and analysis of sedimentation in a suburban lake. Alabama Water Resources Conference & Symposium. Orange Beach, AL, Sep. 6-8.

118. Webb, B. M., Hyman, R. 2017. Potential of living shorelines projects to protect transportation infrastructure. International Conference on Ecology & Transportation. Salt Lake City, UT, May 14-18.
119. Webb, B. M. 2016. Potential of living shorelines projects to protect transportation infrastructure. Restore America's Estuaries Conference 8<sup>th</sup> National Summit on Coastal and Estuarine Restoration, Panel Session 7 – Green Infrastructure for Coastal Resilience. New Orleans, LA, Dec. 12-15.
120. Webb, B. M., Groza, B. 2016. Dynamics of a small tidal inlet and the search for channel stability. American Shore & Beach Preservation Association National Coastal Conference, Long Branch, NJ, Oct. 26-28.
121. Webb, B. M. 2016. Using green infrastructure to improve coastal transportation resilience. ASCE Mississippi Section Meeting, Biloxi, MS, Oct. 17-19.
122. Webb, B. M. 2016. The importance of ecology and engineering in coastal restoration: lessons learned in Alabama. National Conference on Ecosystem Restoration, Coral Springs, FL, April 18-22.
123. Webb, B. M., Douglass, S. L. 2015. Incorporating coastal engineering principles in the design, implementation, and monitoring of living shorelines. American Shore and Beach Preservation Association National Conference, New Orleans, LA, Oct. 14-16.
124. Servold, K., Webb, B. M., Douglass, S. L. 2015. Effects of low-crested living shoreline breakwaters on wave setup. Joint Coastal Conference on Coastal Structures and Solutions to Coastal Disasters, Boston, MA, Sep. 9-11.
125. Webb, B. M., Allen, R. 2015. Wave transmission through artificial reef breakwaters. Joint Conference on Conference on Coastal Structures and Solutions to Coastal Disasters, Boston, MA, Sep. 9-11.
126. Douglass, S. L., Webb, B. M., Servold, K. 2014. A primer on coastal engineering for "living shorelines." Mississippi-Alabama Bays and Bayous Symposium. Mobile, AL, Dec. 2-4.
127. Groza, B., Webb, B. M. 2014. Hydrodynamic and sediment transport modeling of Little Lagoon in Gulf Shores, Alabama, to assist with sediment bypassing and maintenance of water quality, Poster. Mississippi-Alabama Bays and Bayous Symposium. Mobile, AL, Dec. 2-4.
128. Webb, B. M., Douglass, S. L., Herder, T. 2014. Community-based restoration: a living shoreline for Mon Louis Island, Alabama. Mississippi-Alabama Bays and Bayous Symposium. Mobile, AL, Dec. 2-4.
129. Douglass, S. L., Webb, B. M., Servold, K. 2014. A primer on coastal engineering for "living shorelines." Restore America's Estuaries 7<sup>th</sup> National Summit on Coastal and Estuarine Restoration. Washington, D.C., Nov 1-6.
130. Webb, B. M., Douglass, S. L., Herder, T. 2014. Community-based restoration: a living shoreline for Mon Louis Island, Alabama. Restore America's Estuaries 7<sup>th</sup> National Summit on Coastal and Estuarine Restoration. Washington, D.C., Nov 1-6.
131. Webb, B. M., Matthews, M. T. 2014. Wave-induced scour at cylindrical piles: estimating equilibrium scour depth in a transition zone. Meeting of the Transportation Research Board. Washington, D.C., Jan 14-16.
132. Allen, R. J., Webb, B. M. 2013. Physical modeling of wave transmission for submerged and emergent breakwaters used in living shorelines. University of South Alabama Spring Research Forum. Mobile, AL, March 21.
133. Allen, R. J., Marr, C., Dulaney, B., Erdman, C., Lucas, I., Thomley, K., Webb, B. M., Whelton, A. 2013. Spatial Variability of Water Quality Near the MAWSS Pump Station Intake: J.B. Converse Reservoir. American Water Works Association Annual Conference & Exposition (ACE13), PST02 - Fresh Ideas Poster Session. Denver, CO, June 9-13.
134. Douglass, S. L., Webb, B. M., Kilgore, R. 2013. Development of a manual for transportation

- professionals on climate change and extreme coastal events. AGU Chapman Conference on Communicating Climate Science, Abstract ID 1667366. Granby, CO, June 8-13.
135. Dzwonkowski, B., Park, K., Lee, J., Webb, B., Valle-Levinson, A. 2013. Spring seasonal velocity structure on a river-influenced inner shelf: where is the coastal current? Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting. New Orleans, LA, Feb 17-22.
  136. Gough, M., Reniers, A., Haus, B., Beron-Vera, F.J., Chen, S., Coelho, E., Griffa, A., Haza, A., Hogan, P., Huntley, H.S., Iskandarani, M., Jacobs, G., Kirwan, Jr., A.D., Laxague, N., Levinson, A., Lipphardt, Jr., B.L., Mariano, A., Novelli, G., Olascoaga, M.J., Özgökmen, T., Poje, A., Ryan, E.H., Smith, C., Sulman, M., Webb, B., Wei, M. 2013. Inertial currents in the Northern Gulf of Mexico during the GLAD experiment. Gulf of Mexico Oil Spill & Ecosystem Science Conference. New Orleans, LA, Jan 21-23.
  137. Marr, C. D., Webb, B. M. 2013. Hydrodynamic modeling of turnover times in Mobile Bay, Alabama and their sensitivity to tides, fluvial discharge, and meteorological forcing. *Coastal and Estuarine Research Federation*, November 3 - 7, San Diego, CA.
  138. Marr, C. D., Webb, B. M. 2013. Spatial variability of residence time in Mobile Bay, Alabama. University of South Alabama Spring Research Forum. March 21, 2013. Mobile, AL.
  139. Nettles, F., Webb, B. M. 2013. Spatial variability of water quality in Big Creek Lake, Alabama. 27<sup>th</sup> National Conference on Undergraduate Research. April 11 – 13, 2013. La Crosse, WI.
  140. Servold, K., Douglass, S. L., Webb, B. M. 2013. Developing engineering guidance for the functional design of structures in living shorelines. ASBPA Annual Conference. South Padre Island, TX, Oct 22-25.
  141. Servold, K., Webb, B. M., Douglass, S. L., Powers, S., Allen, R. J., Wicker, T., Harrison, D. 2013. A decision support toolkit for the functional design of structures in living shorelines. University of South Alabama Spring Research Forum, Poster 20. March 21, 2013. Mobile, AL.
  142. Webb, B. M., Douglass, S. L. 2013. Monitoring coastal processes in the vicinity of Little Lagoon Pass. 56<sup>th</sup> Annual Transportation Conference. February 12 – 13, 2013. Montgomery, AL. (invited)
  143. Webb, B. M., Douglass, S. L., Servold, K. 2013. Living shorelines: how much coastal engineering do you need? *Coastal and Estuarine Research Federation*, November 3 - 7, San Diego, CA.
  144. Webb, B. M., Marr, C. 2013. Hydrodynamic timescales of Mobile Bay, AL and their Spatial Variability. Annual Conference of the Alabama Section of the American Water Resources Association. September 4 - 6, 2013. Orange Beach, AL.
  145. Allen, R. J., Marr, C., Webb, B. M., Whelton, A., Dulaney, B., Erdman, C., Lucas, I., Thomley, K. 2012. Spatial Variability of Water Quality Near the MAWSS Pump Station Intake: J.B. Converse Reservoir. Alabama-Mississippi Section of the American Water Works Association Annual Conference. Mobile, Alabama. October 15 – 16.
  146. Allen, R. J., Webb, B. M. 2012. Engineered reefs: a comprehensive evaluation of wave transmission through physical modeling. Mississippi-Alabama Bays and Bayous Symposium, Poster No. 21. Biloxi, MS, Nov 14-15.
  147. Allen, R. J., Webb, B. M. 2012. Wave Attenuation Devices: a Comprehensive Evaluation of Wave Transmission through Physical Modeling. University of South Alabama Spring Research Forum, Poster 20. March 26 – 30, 2012. Mobile, AL.
  148. Buhring, T., Webb, B. M., Douglass, S. L., Powers, S., Scyphers, S., Allen, R. J. 2012. A database on living shorelines with breakwaters: did we miss your project? Restore America's Estuaries Conference, Poster No. PP-1. Tampa, FL, Oct 21-23.
  149. Marr, C. D., Webb, B. M. 2012. Spatial Variability of Residence Time in Mobile Bay, Alabama. University of South Alabama Spring Research Forum, Poster 19. March 26 – 30, 2012. Mobile, AL.

150. Matthews, M. T., Webb, B. M. 2012. Characterizing Wave-Induced Scour Processes in a Transition Zone: a Continuum Model for Equilibrium Scour Depth at Cylindrical Piles. University of South Alabama Spring Research Forum, Poster 18. March 26 – 30, 2012. Mobile, AL.
151. Weaver, R. J., Webb, B. M. 2012. Surface water quality survey of northern Indian River Lagoon from Sebastian Inlet to Mosquito Lagoon. *Eos. Trans. AGU XX (XX)*, Fall Meet. Suppl., Abstract OS21B-1750.
152. Webb, B. M., Douglass, S. L. 2012. The effects of climate change on storm surge and waves in coastal Alabama and their impact on transportation infrastructure. National Hydraulic Engineering Conference. Nashville, TN, Aug 29-31.
153. Webb, B. M., Douglass, S. L. 2012. Monitoring the coastal processes in the vicinity of Little Lagoon Pass. Alabama Department of Transportation Research Advisory Committee, July 2, 2012. Montgomery, AL. (invited)
154. Webb, B. M., Douglass, S. L., Allen, R. J., Buhring, T. 2012. Maximizing the ecological and engineering benefits of living shorelines through the effective design of breakwaters. Mississippi-Alabama Bays and Bayous Symposium. Biloxi, MS, Nov 14-15.
155. Webb, B. M., Douglass, S. L., Dixon, C. R., Buhring, B. 2012. Application of coastal engineering principles in response to the Deepwater Horizon disaster: lessons learned in coastal Alabama. 55<sup>th</sup> Annual Transportation Conference. February 23 – 24, 2012. Montgomery, AL. (invited)
156. Webb, B. M., Douglass, S. L., Powers, S., Scyphers, S., Allen, R. J., Buhring, T. 2012. Decision support tools for the design of structures in living shorelines. Restore America's Estuaries Conference, Poster No. STP-14. Tampa, FL, Oct 21-23.
157. Webb, B. M., Rogers, S., Kennedy, A., Gravois, U., Omar, H. 2012. Measurements of storm surge and waves on Dauphin Island during Hurricane Isaac. Mississippi-Alabama Bays and Bayous Symposium. Biloxi, MS, Nov 14-15.
158. Webb, B. M., Russ, S. H., Martin, D. B. 2012. Development of an Enhanced Ocean Drifter. University of South Alabama Spring Research Forum, Poster 17. March 26 – 30, 2012. Mobile, AL.
159. Webb, B. M., Weaver, R. J. 2012. A tale of two inlets: tidal currents at two adjacent inlets in the Indian River Lagoon estuary, Florida. *Eos. Trans. AGU XX (XX)*, Fall Meet. Suppl., Abstract OS21B-1751.
160. Webb, B. M., Whelton, A. J. 2012. Engaging scientists and engineers through immersive learning. South Alabama Conference on Teaching and Learning, May 14 – 15, 2012. Mobile, AL.
161. Allen, R., Webb, B. M. 2011. Determination of wave transmission coefficients for oyster shell bag breakwaters. American Shore and Beach Preservation Association, New Orleans, LA (ASBPA Student Education Award).
162. Webb, B. M. 2011. Synoptic surveys of near-surface hydrography in a Gulf of Mexico estuary. *Coastal and Estuarine Research Federation*, November 6 – 10, Daytona Beach, FL.
163. Lee, J., Webb, B. M. 2011. Tidal current characteristics with the diurnal tidal system in a shallow estuary. *Coastal and Estuarine Research Federation*, November 6 – 10, Daytona Beach, FL.
164. Ross, J. L., Webb, B. M., Dzwonkowski, B., Park, K., Valle-Levinson, A. 2011. Lagrangian observations over a region influenced by the Mobile Bay outflow plume. *Coastal and Estuarine Research Federation*, November 6 – 10, Daytona Beach, FL.
165. Webb, B. M. 2011. Linking objectives and outcomes assessment in electronic learning. South Alabama Conference on Teaching and Learning, Mobile, AL.
166. Webb, B. M., Russ, S., Holifield, J., Walker, J. 2011. Improving predictions of wind-generated water levels and salinity distributions in Mobile Bay. University of South Alabama Spring Research Forum, Mobile, AL.
167. Webb, B. M. 2010. Wave induced scour at coastal infrastructure. National Hydraulic Engineering Conference, Park City, UT.

168. Webb, B. M., Rogers, S., Kennedy, A. 2010. Improving wave height prediction during barrier island overtopping. Mississippi-Alabama Bays and Bayous Symposium, Poster No. 56. Mobile, AL.
169. Webb, B. M. 2010. Improving parameterizations of stress and transport in the rippled bed regime under combined wave-current flows. *Eos. Trans. AGU 91 (26)*, Ocean Sci. Meet. Suppl., Abstract GO35A-09.
170. Webb, B. M., Slinn, D.N. 2008. Modeling small-scale sediment transport and morphology. AGU-ASLO Joint Ocean Sci. Meet. Suppl., Abstract OS028.
171. Webb, B. M., Slinn, D. N. 2006. Modeling bed morphology under waves and currents. *Eos. Trans. AGU 87 (36)*, Ocean Sci. Meet. Suppl., Abstract OS35E-26.
172. Webb, B. M., Slinn, D. N. 2004. Vertical distribution of radiation stress for non-linear shoaling waves. *Eos. Trans. AGU 85 (47)*, Fall Meet. Suppl., Abstract OS14B-05.
173. Webb, B. M., Slinn, D. N. 2003. Three-dimensional modeling of the swash zone. *Eos. Trans. AGU 84 (52)*, Ocean Sci. Meet. Suppl., Abstract OS12E-09.
174. Puleo, J. A., Slinn, D. N., Holland, K. T., Webb, B. M. 2002. A volume of fluid model for surf and swash zones. *Eos. Trans. AGU 83 (47)*, Fall Meet. Suppl., Abstract OS71A-0250.

#### **Other Presentations and Publications** (reverse chronological order)

- Invited Presentation: Natural and Nature-Based Features for Coastal Resilience. Water, Wetlands, and Watersheds Seminar. University of Florida Howard T. Odum Center for Wetlands, March 2, 2022.
- Webinar: Proactive Strategies to Address Coastal Highway Vulnerability. National Academies of Science, Engineering, and Medicine Transportation Research Board. Webinar: Progress Toward More Resilient Pavements. November 9, 2021.
- Invited Presentation: Innovation and Designing for the Future: Sea Level Rise and Storms. Restore America's Estuaries Living Shorelines Tech Transfer Workshop. Cape May, NJ, October 19-20, 2021.
- Congressional Briefing: Protecting Coastal Roads – Using Nature Based Solutions to Protect Transportation Infrastructure from Sea Level Rise and Flooding, September 9, 2021.
- Invited Presentation: Nature-Based Solutions for Coastal Highway Resilience. Gulf of Mexico Alliance Habitat Resources Team 2020 Mid-Year Meeting, Mobile, AL January 17, 2020.
- Briefing: Nature-Based Solutions for Coastal Highway Resilience. US Global Climate Research Program, Federal Adaptation & Resilience Group, November 15, 2019.
- Webinar: Nature-Based Solutions for Coastal Highway Resilience. USDOT Federal Highway Administration, October 23, 2019 (250+ attendees).
- Invited Presentation: Coastal Infrastructure Resilience: Preparing for Sea-Level Rise. ASCE Mobile Branch Meeting, Mobile, AL, June 12, 2019.
- Invited Presentation: Nature-Based Solutions for Shoreline Stabilization. ASCE Mississippi Gulf Coast Branch Meeting, Biloxi, MS, May 15, 2019.
- Invited Presentation: Lake Forest Mapping & Analysis. Mobile Bay National Estuary Program Project Implementation Committee Meeting, Mobile, AL, August 18, 2016.
- Invited Workshop (1 hr): NOAA Climate Adaptation Workshop. NOAA Disaster Resilience Center, Mobile, AL, January 27, 2016.
- Invited Presentation and Panelist: Green Coast Council Sustainability Summit – Resilience and Sustainability. University of South Alabama, Mobile, AL, January 29, 2016.
- Invited Workshop: Designing Effective Instruction. University of South Alabama New Faculty Orientation, August 15, 2015.

- Invited Workshop: Designing Effective Instruction. University of South Alabama New Faculty Orientation, August 15, 2014.
- Invited Seminar: Status of Living Shoreline Research: Where are we now? Mississippi-Alabama Sea Grant, Living Shorelines Workshop, May 29, 2014.
- Invited Seminar: Case Studies of Living Shorelines in Alabama. Southern Environmental Law Center Alabama Living Shoreline Collaborative, Engineering and Ecology Workshop, August 21, 2013.
- Invited Workshop: Designing Effective Instruction. University of South Alabama New Faculty Orientation, August 15, 2013.
- Invited Seminar: Laboratory Measurements and Observations of Wave Attenuation by Living Shoreline Reefs. Lake Pontchartrain Basin Foundation and Environmental Defense Fund Oyster Reef Workshop, August 7, 2013.
- Webb, B. M., Douglass, S. L. 2013. Customization may be Key to Success of Living Shorelines. *Sea Briefs* Vol. 13, No. 1.
- Invited Seminar: Drifter Trajectories on the Inner Shelf of the Northern Gulf of Mexico: the Challenges of Lagrangian Data Analysis. Naval Research Laboratory - Stennis Space Center SEAP/NREIP Seminar Series, June 19, 2013.
- Invited Seminar: Designing Effective Instruction. University of South Alabama Innovation in Learning Center (ILC) Seminar Series, April 24 and 25, 2013.
- Webb, B. M. 2012. *Evaluation of Coastal Processes and Structure Design Methodologies for The Nature Conservancy's Restoration Activities in Alabama's Coastal Waters*. Technical Report for The Nature Conservancy, Alabama Coastal Chapter.
- Webb, B. M. 2012. *Jag Ski Creates Versatile Platform for Bay Study*. Application Note, SonTek / Xylem.
- Invited Seminar: Designing Effective Instruction. University of South Alabama Innovation in Learning Center (ILC) Seminar Series, September 10 and 11, 2012.
- Werblow, S., Webb, B. M. 2012. Jet Ski Provides Platform for Collecting Water Quality Data in Bay Studies. *Sea Technology*. August 2012.
- Invited Seminar: Designing Effective Instruction. University of South Alabama Innovation in Learning Center (ILC) Seminar Series, May 24, 2012.
- Invited Seminar: Living Shorelines: an Exercise in Engineered Restoration. American Society of Civil Engineers Mobile (AL) Branch Meeting, April 11, 2012.
- Invited Seminar: Designing Effective Instruction. University of South Alabama Innovation in Learning Center (ILC) Seminar Series, March 7 and 8, 2011.
- Invited Seminar: Designing Effective Instruction. University of South Alabama Innovation in Learning Center (ILC) Seminar Series, September 12 and 13, 2011.
- Invited Seminar: Synoptic Surveys of Near-Surface Water Characteristics in a Gulf of Mexico Estuary. Naval Research Laboratory - Stennis Space Center National Defense Education Program, July 13, 2011.
- Invited Seminar: The South Alabama Jag Ski: an Opportunity for Rapid Water Quality Surveys and Enhanced Descriptions of Mobile Bay's Dynamics. Gulf Coast Exploreum Science Brown Bag Lunch Seminar, May 4, 2011.
- Webb, B. M. 2011. The University of South Alabama Jag Ski: a Personal Watercraft Hydrographic Data Collection System. *The National Association of Environmental Professionals National E-News*, May - June: 10-16.
- Webb, B. M., Douglass, S. L., Dixon, C. R., Buhring, B. 2011. Coast Guards. *Civil Engineering* 81(12): 76-83. ASCE, Reston, VA.

- Webb, B. M., Douglass, S. L., Schultz, P., Hogan, C., Choate, A. 2011. Impacts of climate change on storm surge and waves in coastal Alabama. ADCIRC Workshop, Stennis Space Center, MS.
- Webb, B. M. 2011. *Wind, Wave, Water Level, and Sediment Transport Analysis for Mon Louis Island, Alabama*. Technical Report for Mobile Bay National Estuary Program.
- Invited Speaker: The Coastal Processes of Mon Louis Island. Mobile Bay National Estuary Program, Mon Louis Island Community Based Restoration Meeting, February 17, 2011.
- Webb, B. M. 2010. *Shoreline Stabilization Strategies for Steele Creek Lodge – Satsuma, Alabama*. Technical Report for Mobile Bay National Estuary Program.
- Invited Seminar: Innovative Teaching in the STEM Curriculum, Part II of II. University of South Alabama Program for the Enhancement of Teaching and Learning (PETAL) Seminar Series, October 7, 2010.
- Invited Seminar: Innovative Teaching in the STEM Curriculum, Part I of II. University of South Alabama Program for the Enhancement of Teaching and Learning (PETAL) Seminar Series, September 30, 2010.
- Invited Seminar: Student Assessment Techniques. University of South Alabama Program for the Enhancement of Teaching and Learning (PETAL) PowerPETAL Workshop, August 20, 2010.
- Invited Seminar: Innovative Teaching in the STEM Curriculum. University of South Alabama Program for the Enhancement of Teaching and Learning (PETAL) Seminar Series, February 10, 2010.
- Invited Seminar: Hydrodynamics of a North Florida Inlet: St. Augustine, FL. Dauphin Island Sea Lab Seminar Series, September 3, 2009.
- Invited Seminar: Effective Teaching in the STEM Curriculum. University of South Alabama Program for the Enhancement of Teaching and Learning (PETAL) Brown Bag Lunch Series, October 3, 2008.
- Invited Seminar: Phase-Resolving Models of Sediment Transport and Morphology. Naval Research Laboratory - Stennis Space Center, MS, August 15, 2008.
- Invited Seminar: Civil Engineering in the Coastal Environment. University of South Alabama Odyssey Program, November 2, 2007.

### **Courses Taught** (chronological order)

- Fall 2007
  - i. CE 366 Hydraulic Engineering; 10 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 10 students
- Spring 2008
  - i. CE 490/590 Coastal Sediment Processes; 8 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 8 students
- Fall 2008
  - i. CE 360 Water Resources Engineering I; 11 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 11 students
- Spring 2009
  - i. CE 360 Water Resources Engineering I; 16 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 12 students
  - iii. CE 502 Civil Engineering Design in the Coastal Environment; 6 students
- Fall 2009
  - i. CE 501 Introduction to the Coastal Design Environment; 10 students
- Spring 2010
  - i. CE 360 Water Resources Engineering I; 33 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 17 students



- iii. CE 466 Coastal & Harbor Engineering; 3 students
- iv. CE 566 Coastal & Harbor Engineering; 3 students
- Fall 2010
  - i. CE 501 Introduction to the Coastal Design Environment; 7 students
  - ii. CE 494 Wave Basin Testing of Bagged Oyster Shell; 1 student
  - iii. CE 494 Coastal Engineering Analysis of Katrina Cut; 1 student
  - iv. EG 101 Freshman Seminar (7 weeks of instruction); 27 students
- Spring 2011
  - i. CE 360 Water Resources Engineering I; 35 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 33 students
  - iii. EG 231 Engineering Economics and Ethics; 35 students
  - iv. CE 599 MSCE Thesis Hours; 1 student
- Summer 2011
  - i. CE 592 Descriptions of Mobile Bay's Hydrodynamics; 1 student
- Fall 2011
  - i. CE 501 Introduction to the Coastal Design Environment; 7 students
  - ii. CE 590 Field Analysis and Sampling Techniques in CE; 2 students
  - iii. CE 490 Field Analysis and Sampling Techniques in CE; 4 students
  - iv. CE 599 MSCE Thesis Hours; 1 student
- Spring 2012
  - i. CE 360 Water Resources Engineering I; 39 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 40 students
  - iii. CE 560 Coastal Hydrodynamics; 3 students
  - iv. CE 599 MSCE Thesis Hours; 2 students
- Summer 2012
  - i. CE 590 Coastal Zone Management; 2 students
  - ii. CE 599 MSCE Thesis Hours; 3 students
- Fall 2012
  - i. CE 501 Introduction to the Coastal Design Environment; 14 students
  - ii. CE 563 Coastal Hydrodynamic Modeling; 4 students
  - iii. CE 599 MSCE Thesis Hours; 2 students
- Spring 2013
  - i. CE 360 Water Resources Engineering I; 35 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 33 students
  - iii. CE 494 Hydrodynamic Modeling of Little Lagoon; 1 student
  - iv. CE 599 MSCE Thesis Hours; 2 students
- Summer 2013
  - i. CE 599 MSCE Thesis Hours; 1 student
- Fall 2013
  - i. CE 501 Introduction to the Coastal Design Environment; 39 students
  - ii. CE 566 Coastal & Harbor Engineering; 2 students
  - iii. CE 466 Coastal & Harbor Engineering; 5 students
  - iv. CE 599 MSCE Thesis Hours; 1 student
- Spring 2014
  - i. CE 360 Water Resources Engineering I; 26 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 28 students
  - iii. CE 490 Coastal & Environmental Engineering Design; 5 students
  - iv. CE 590 Coastal & Environmental Engineering Design; 2 students
  - v. CE 599 MSCE Thesis Hours; 1 student

- Fall 2014
  - i. EG 360 Fluid Mechanics; 54 students
  - ii. CE 494 Engineering Alternatives for Flood Risk; 1 student
  - iii. CE 501 Introduction to the Coastal Design Environment; 10 students
  - iv. CE 599 MSCE Thesis Hours; 1 student
- Spring 2015
  - i. CE 360 Water Resources Engineering I; 37 students
  - ii. CE 367 Hydraulic Engineering Laboratory; 43 students
  - iii. CE 432 Senior Design II; 14 students
  - iv. CE 563/490 Numerical Modeling of Coastal Hydrodynamics; 6 students
  - v. CE 599 MSCE Thesis Hours; 1 student
- Summer 2015
  - i. CE 599 MSCE Thesis Hours; 2 students
- Fall 2015
  - i. EG 360 Fluid Mechanics; 48 students
  - ii. CE 501 Introduction to the Coastal Design Environment; 9 students
  - iii. CE 592 Beach Nourishment Optimization for Cat Island, MS; 1 student
  - iv. CE 599 MSCE Thesis Hours; 1 student
- Spring 2016
  - i. CE 367 Hydraulic Engineering Laboratory; 18 students
  - ii. CE 494 Coastal Engineering Laboratory Experiments; 1 student
  - iii. CE 502 Civil Engineering Design in the Coastal Environment; 9 students
  - iv. CE 560 Coastal Hydrodynamics; 4 students
  - v. CE 592 Hydraulic Modeling for Stream Restoration; 1 student
  - vi. CE 599 MSCE Thesis Hours; 1 student
- Summer 2016
  - i. CE 599 MSCE Thesis Hours; 1 student
- Fall 2016
  - i. CE 460 Water Resources Engineering II; 44 students
  - ii. CE 501 Introduction to the Coastal Design Environment; 11 students
  - iii. CE 590 Coastal Structures; 3 students
  - iv. CE 490 Coastal Structures; 1 student
  - v. CE 599 MSCE Thesis Hours; 1 student
- Spring 2017
  - i. CE 367 Hydraulic Engineering Laboratory; 15 students
  - ii. CE 502 Civil Engineering Design in the Coastal Environment; 11 students
  - iii. CE 592 Coastal Hydrodynamic Modeling; 2 students
  - iv. CE 599 MSCE Thesis Hours; 1 student
- Summer 2017
  - i. CE 599 MSCE Thesis Hours; 1 student
- Fall 2017
  - i. CE 460 Water Resources Engineering II; 40 students
  - ii. CE 501 Introduction to the Coastal Design Environment; 6 students
  - iii. CE 590 Coastal Green Infrastructure; 4 students
  - iv. CE 599 MSCE Thesis Hours; 1 student
- Spring 2018
  - i. CE 367 Hydraulic Engineering Laboratory; 19 students
  - ii. CE 502 Civil Engineering Design in the Coastal Environment; 5 students
  - iii. CE 594 CE Project Hours; 1 student

- iv. CE 599 MSCE Thesis Hours; 2 students
- v. CE 699 D.Sc. Dissertation Hours; 1 student
- Summer 2018
  - i. CE 592 Directed Study; 1 student
  - ii. CE 599 MSCE Thesis Hours; 1 student
- Fall 2018
  - i. CE 460 Water Resources Engineering II; 38 students
  - ii. CE 501 Introduction to the Coastal Design Environment; 5 students
  - iii. CE 490/590 Littoral Processes; 2 students
  - iv. CE 499 Undergraduate Honors Thesis Hours; 1 student
  - v. CE 594 CE Project Hours; 1 student
  - vi. CE 699 D.Sc. Dissertation Hours; 1 student
- Spring 2019
  - i. CE 432 Civil Engineering Design II; 20 students
  - ii. CE 499 Civil Engineering Honors Senior Project; 1 student
  - iii. CE 502 Civil Engineering Design in the Coastal Environment; 5 students
  - iv. CE 699 D.Sc. Dissertation Hours; 1 student
- Summer 2019
  - i. n/a
- Fall 2019
  - i. CE 460 Water Resources Engineering II; 61 students
  - ii. CE 503 Introduction to Coastal Engineering; 10 students
  - iii. CE 699 D.Sc. Dissertation Hours; 1 student
- Spring 2020
  - i. CE 367 Hydraulics Engineering Laboratory; 12 students
  - ii. CE 432 Civil Engineering Design II; 6 students
  - iii. CE 699 D.Sc. Dissertation Hours; 1 student
- Fall 2020
  - i. CE 460 Water Resources Engineering II; 43 students
  - ii. CE 490/503 Introduction to Coastal Engineering; 14 students
  - iii. CE 590 Coastal Engineering Experiments; 5 students
  - iv. CE 699 D.Sc. Dissertation Hours; 1 student
- Spring 2021
  - i. CE 367 Hydraulics Engineering Laboratory; 19 students
  - ii. CE 490/560 Coastal Hydrodynamics; 11 students
- Fall 2021
  - i. CE 460 Water Resources Engineering II; 32 students
  - ii. CE 490/503 Introduction to Coastal Engineering; 15 students
- Spring 2022
  - i. CE 367 Hydraulics Engineering Laboratory; 20 students
  - ii. CE 432 Civil Engineering Design 2: 8 students
  - iii. CE 590 NNBF for Coastal Resilience; 8 students
- Fall 2022
  - i. CE 460 Water Resources Engineering II; 36 students
  - ii. CE 490/503 Introduction to Coastal Engineering; 15 students
- Spring 2023
  - i. CE 367 Hydraulics Engineering Laboratory; 22 students
  - ii. CE 432 Civil Engineering Design 2: 9 students
  - iii. CE 490/590 Hurricane Ian; 8 students

- Fall 2023
  - i. CE 460 Water Resources Engineering II; 43 students
  - ii. CE 490/503 Introduction to Coastal Engineering; 17 students

**Professional Service** (reverse chronological order)

- Panelist and Chair, NIBS-NFIP-FEMA Scientific Resolution Panel, Palm Beach County Appeal, September 2023 – January 2024
- Instructor, NHI Course 142085 *Addressing Climate Resilience in Highway Project Development and Preliminary Design*, Austin, TX, September 2023
- Instructor, NHI Course 142085 *Addressing Climate Resilience in Highway Project Development and Preliminary Design*, Richmond, VA, June 2023
- Instructor, NHI Course 135082 *Highways in the Coastal Environment*, Wilmington, NC, Jan 2023
- Instructor, NHI Course 135082 *Highways in the Coastal Environment*, Columbia, SC, July 2022
- Instructor, NHI Course 135082 *Highways in the Coastal Environment*, Boston, MA, Oct 2021
- Member, Alabama Coastal Foundation Advisory Council, January 2022 – Present
- Chair, ASCE COPRI Coastal Council, March 2021 – Present
- Guest Editor, Shore & Beach Journal dedicated issue on Observations and Lessons Learned from Recent Storm Events, September 2020 – January 2021
- Member, Science Advisory Committee, Stone Living Laboratory, August 2020 – Present
- Member, Academy of Coast, Ocean, Port, and Navigation Engineers Communications & Marketing Committee, August 2020 – Present
- Member, US Coastal Research Program National Academic Committee, Feb 2019 – Present
- Co-Chair, ASCE COPRI Coastal Zone Management Committee, January 2019 – February 2021
- President, American Shore & Beach Preservation Association Central Gulf Coast Chapter, March 2018 – Present
- Panelist and Chair, NIBS-NFIP-FEMA Scientific Resolution Panel, San Mateo County Appeal, January 2018 – April 2018
- Editorial Board Member, Shore & Beach Journal, American Shore & Beach Preservation Association, January 2017 – Present
- Panelist, NIBS-NFIP-FEMA Scientific Resolution Panel, New York City Appeal, March 2016 – October 2016
- Contributions to ASBPA Science & Technology Committee, Nationwide Permit B Response, June 2016 – August 2016
- Panelist, National Science Foundation, Major Research Instrumentation Program, March 2015
- Marine Environment Committee, TRB/NRC/NAE, 4/14 – 2/18
- Coastal Zone Management Committee, ASCE COPRI, 4/14 - Present
- Living Shorelines Subcommittee, ASCE COPRI, 1/13 - Present
- Member, Mobile Bay Interagency Working Group, 2011 – Present
- Instructor, NHI Course 135082 *Highways in the Coastal Environment*, Newington, CT, Dec. 2013
- Instructor, NHI Course 135082 *Highways in the Coastal Environment*, Arlington, VA, August 2013
- Instructor, NHI Course 135082 *Highways in the Coastal Environment*, Tampa, FL, March 2013
- Panelist, NOAA/MASGC Hydrologic Restoration Funding Program, 2012
- Panelist, Louisiana Board of Regents Funding Program, 2012
- Panelist, NOAA/MASGC Hydrologic Restoration Funding Program, 2011

- Co-Chair, Alabama Marine Environmental Science Consortium BP Gulf Research Initiative, Theme 2: Physical Transport, September 2010 – 2012
- Instructor, NHI Course 135082 *Highways in the Coastal Environment*, Baton Rouge, LA, Mar 2009
- Co-Chair and Convener, Nearshore Processes, American Geophysical Union Fall Meeting, 2008
- Member, Science Advisory Committee, Mobile Bay National Estuary Program, 2008 – 2023
- Instructor, NHI Course 135082 *Highways in the Coastal Environment*, Gainesville, FL, Feb 2008
- Reviewer for *Journal of Fluid Mechanics*; *Journal of Fluids & Structures*; *Journal of Ocean Technology*; *Journal of Waterway, Port, Coastal, and Ocean Engineering*; *Journal of Coastal Research*; *Estuaries & Coasts*; *Journal of Marine Systems*; *Journal of Bridge Engineering*; *Journal of Geophysical Research – Oceans*; *Journal of Ocean Engineering*; *Shore & Beach*; *Journal of Climatic Change*; *Journal of Marine Science & Engineering*; *Journal of Bridge Engineering*; 2008 – Present. 30+ completed journal reviews since 1/2015

### **Community Service** (reverse chronological order)

- Chairman, City of Daphne (AL) Environmental Advisory Committee, January 2012 – December 2015
- Executive Vice President, Smart Home Alabama 501(c)(3), 2010 – 2012
- Member, Board of Directors, Smart Home Alabama 501(c)(3), 2009 – 2012
- Technical Advisor, Mobile Area Education Foundation, 2008 – 2015

### **University Service** (reverse chronological order)

- Chair, Research & Creative Activities Committee of the Faculty Senate, September 2023 – Present
- Member, University General Education Committee, September 2023 – Present
- Chair, CCEE Faculty Search Committee, May 2023 – September 2023
- Member, Exploratory R1 Research Committee, May 2022 – Present
- Member, Research & Creative Activities Committee of the Faculty Senate, September 2021 – Present
- Member, Marine & Environmental Sciences Faculty Search Committee, 2021 – 2022
- Member, CCEE Department Chair Search, March 2021 – December 2021
- Member, College of Engineering Ad Hoc Research Committee, September 2019 – January 2022
- Chair, Civil Engineering Faculty Search Committee, September 2019 – February 2020
- Member, First Year Experience Committee (FS Rep), September 2019 – September 2020
- Chair, Systems Engineering Faculty Search Committee, September 2019 – April 2020
- Engineering Caucus Leader, Faculty Senate, September 2019 – Present
- Member, College of Engineering Dean Search Committee, January 2019 – May 2019
- Civil Engineering Promotion and Tenure Committee, August 2017 – Present
- Member, College Promotion and Tenure Committee, August 2017 – Present
- Chair, Civil Engineering Faculty Search Committee, August 2016 – December 2016
- Chair, Civil Engineering Faculty Search Committee, December 2014 – April 2015
- Chair, College of Engineering Faculty Search Committee, March 2015 – August 2015
- Chair, College of Engineering Faculty Search Committee, January 2014 – August 2014
- Chair, College of Engineering Faculty Search Committee, June 2013 – August 2013
- Faculty Mentor, Clay McCoy, USA UCUR program, 2013
- Member, USA Graduate Council, 2013 – 2019

- Fellowship Mentor, Dr. Steven Scyphers, NSF SEES, Northeastern University, 2012 – 2016
- Faculty Mentor, Falon Nettles, USA UCUR program, 2012
- Member, D.Sc. Advisory Committee, 2012 – 2020
- Member, USAOnline Advisory Committee, 2012 – 2016
- Member, Faculty Search Committee, Civil Engineering, 2011 – 2012
- Panelist, PowerPETAL II, Program for the Enhancement of Teaching and Learning, University of South Alabama, “Engaging Students,” January 2011
- Facilitation for MathCounts, College of Engineering, Spring 2011
- Member, Society of American Military Engineers Mobile Post Student Chapter Committee, University of South Alabama, January 2011 – 2019
- Member, Advisory Board, Program for the Enhancement of Teaching and Learning, University of South Alabama, December 2010 – 2012
- Member, Faculty Search Committee, Civil Engineering, 2010 – 2011
- Faculty Advisor, USA Sailing Club, August 2010 – August 2019
- Faculty Advisor, USA Student Chapter of SAME, August 2010 – 2019
- Member, Doctoral Program (ACHE) Committee Member, College of Engineering, 2010
- Member, Undergraduate Affairs Committee, College of Engineering, 2010 – 2012
- Member, Computing Committee, College of Engineering, 2009 – 2013
- Member, Faculty Search Committee, Civil Engineering, 2009 – 2010
- Instructor, Alabama Stormwater Management Continuity Education Seminar, “Stormwater Management using Wet and Dry Detention Facilities,” October 2009
- Panelist, STEM Education, Program for the Enhancement of Teaching and Learning, University of South Alabama, September 2009
- Associate Member, USA Graduate Faculty, 2008 – 2014
- Member, Academic Standards Committee, College of Engineering, 2008 – 2010
- Member, Library Committee, University of South Alabama, 2008 – 2014

### **Professional Organizations**

- American Geophysical Union (member)
- American Shore and Beach Preservation Association (member, officer)
- American Society of Civil Engineers (member, officer)
- ASCE – Coasts, Oceans, Ports, and Rivers Institute (member, officer)
- Association of Coastal Engineers (member)
- Chi Epsilon Civil Engineering National Honor Society (member)
- Tau Beta Pi Engineering Honor Society (member)