#### CURRICULUM VITAE Bret M. Webb, Ph.D., P.E., D.CE Professor bwebb@southalabama.edu

University of South Alabama Civil, Coastal, and Environmental Engineering 150 Jaguar Drive, SH 3142 Mobile, Alabama 36688-0002 USA Fax (251) 461-1400



### **Education**

Ph. (251) 460-7507

• 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
- 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
- South Coast Engineers LLC, Fairhope, Alabama, Senior Coastal Engineer, 8/07 Present
- Dept. Civil Engineering, University of South Alabama, Instructor, 8/07 8/08
- 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: living shorelines, coastal infrastructure, coastal resilience, coastal hazards

## **Licenses & Certifications**

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

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

- 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**

• Kelsey Carpenter (current); Elizabeth Winter (current); Kate Haynes (graduated May 2018, thesis); Marshall Hayden (graduated December 2018, project); Patrick Hautau (graduated December 2018,

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thesis); Justin Lowlavar (graduated December 2017); Garland Pennison (current); 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**

• Evan Mazur (current); Ian Cox (current); Morgan Lassitter (current); 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. 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.
- 2. 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.
- 3. Little Lagoon Extended Monitoring and Research: Phase III; Webb (PI), Beebe (Co-PI); \$278,853; 6/17 5/20; Alabama Dept. Transportation
- 4. 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)
- 5. 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
- 6. Lake Forest Mapping Study; Webb (PI); \$5266.46; 4/16 8/16; City of Daphne, Alabama
- 7. 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
- 8. NIST Community Resilience Center of Excellence; Webb (PI) and Douglass (Co-PI); \$257,335; 3/15 2/20; National Institute of Standards and Technology
- 9. Design and Fabrication of Flume for Coastal Engineering; Webb (PI); \$44,356; 5/14 2/15; National Highway Institute / Kilgore Consulting and Management
- 10. 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
- 11. Testing Service Agreement Performance of a Floating Breakwater System; Webb (PI); \$39,022; 12/13 3/14; Martin Ecosystems
- 12. 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
- 13. 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
- 14. 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
- 15. 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

16. 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

- 17. 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
- 18. 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
- 19. 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
- 20. 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
- 21. 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. Masoomi, H., van de Lindt, J.W., Do, T.Q., <u>Webb, B.M.</u> 2019. Combined wind-wave-surge hurricane-induced damage prediction for buildings. *Journal of Structural Engineering* 145(1).
- 2. Morris, R.L., Bilkovic, D.M., Boswell, M.K., <u>Webb, B.M.</u>, 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.
- 3. 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.
- 4. Cleary, J.C., <u>Webb, B.M.</u>, 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.
- 5. Lee, J., Webb, B.M., Dzwonkowski, B., Valle Levinson, A., Lee, J. 2018. Characteristics of exchange flow in a multiple inlet diurnal estuary: Mobile Bay, Alabama. *Journal of Marine Systems* (accepted).
- 6. 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.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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.

11. Webb, B. M. 2012. A personal watercraft-based system for coastal ocean mapping. *Journal of Ocean Technology* 7(2), 47-68.

- 12. Douglass, S. L., <u>Webb, B. M.</u>, 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.
- 13. 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)

- 14. Webb, B. M., Hardaway, C. S., DeBerry, D. 2020. *Living Shorelines: Fundamental Principles of Ecology and Engineering*, J. Ross Publishing, ISBN 978-1-60427-124-9 (early 2020 pub date).
- 15. 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.
- 16. 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.
- 17. 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.
- 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)

- 19. Misra S., Padgett J. E., Barbosa A. R., <u>Webb, B.</u> 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.
- 20. Pennison, G.P., Cloutier, R.J., <u>Webb, B.M.</u> 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.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. Allen, R., <u>Webb, B. M.</u> 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.
- 26. Webb, B. M., Douglass, S. L., Dixon, C. R., Buhring, 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.
- 27. Russ, S.H., Perepa, V., Leavesly, S., <u>Webb, B. M.</u> 2010. Novel low-cost salinity sensor for embedded environmental monitoring. In: *Proceedings of the IEEE SoutheastCon 2010*.

28. 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.

- 29. 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.
- 30. Puleo, J. A., Holland, T., Slinn, D. N., Smith, E., <u>Webb, B. M.</u> 2002. Numerical modeling of swash zone hydrodynamics. In: *Proceedings of the 28th International Conference on Coastal Engineering*, Cardiff, Wales.

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

- 31. Webb, B.M. 2019. Nature-based alternatives for Tensaw River Bridge. National Adaptation Forum. Madison, WI, April 23-25.
- 32. 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.
- 33. 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.
- 34. Webb, B.M. 2018. Nature-based resilience for coastal highways. Alabama Association of Floodplain Managers Annual Conference. Orange Beach, AL, Oct 22-23.
- 35. 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.
- 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.
- 37. Douglass, S.L., <u>Webb, B.M.</u> 2018. Highways in the coastal environment. American Shore & Beach Preservation Association National Coastal Conference. Galveston, TX Oct 31 Nov 2.
- 38. Groza, B., <u>Webb, B.M.</u> 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.
- 39. Pennison, G.P., Gidaris, I., Padgett, J.E., <u>Webb, B.M.</u> 2018. Predicting coastal roadway damage using modified dispersion functions. 36<sup>th</sup> International Conference on Coastal Engineering, Abstract no. 1315. Baltimore, MD.
- 40. 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.
- 41. 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.
- 42. 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.
- 43. 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.

44. 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.

- 45. Webb, B. M. 2017. Mapping and analysis of sedimentation in a suburban lake. Alabama Water Resources Conference & Symposium. Orange Beach, AL, Sep. 6-8.
- 46. 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.
- 47. 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.
- 48. 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.
- 49. Webb, B. M. 2016. Using green infrastructure to improve coastal transportation resilience. ASCE Mississippi Section Meeting, Biloxi, MS, Oct. 17-19.
- 50. 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.
- 51. 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.
- 52. Servold, K., <u>Webb, B. M.</u>, 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.
- 53. 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.
- 54. Douglass, S. L., <u>Webb, B. M.</u>, Servold, K. 2014. A primer on coastal engineering for "living shorelines." Mississippi-Alabama Bays and Bayous Symposium. Mobile, AL, Dec. 2-4.
- 55. 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.
- 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.
- 57. Douglass, S. L., <u>Webb, B. M.</u>, 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.
- 58. 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.
- 59. 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.

60. Allen, R. J., <u>Webb, B. M.</u> 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.

- 61. 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.
- 62. Douglass, S. L., <u>Webb, B. M.</u>, 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.
- 63. Dzwonkowski, B., Park, K., Lee, J., <u>Webb, B.</u>, 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.
- 64. 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.
- 65. 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.
- 66. 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.
- 67. 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.
- 68. Servold, K., Douglass, S. L., <u>Webb, B. M.</u> 2013. Developing engineering guidance for the functional design of structures in living shorelines. ASBPA Annual Conference. South Padre Island, TX, Oct 22-25.
- 69. 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.
- 70. 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)
- 71. 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.
- 72. 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.
- 73. 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.
- 74. Allen, R. J., <u>Webb, B. M.</u> 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.
- 75. Allen, R. J., <u>Webb, B. M.</u> 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.
- 76. 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.
- 77. 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.
- 78. 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.
- 79. 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.
- 80. 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.
- 81. 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)
- 82. 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.
- 83. 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)
- 84. 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.
- 85. 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.
- 86. 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.
- 87. 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.
- 88. 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.
- 89. Allen, R., <u>Webb, B. M.</u> 2011. Determination of wave transmission coefficients for oyster shell bag breakwaters. American Shore and Beach Preservation Association, New Orleans, LA (ASBPA Student Education Award).
- 90. 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.
- 91. 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.
- 92. Ross, J. L., <u>Webb, B. M.</u>, 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.
- 93. Webb, B. M. 2011. Linking objectives and outcomes assessment in electronic learning. South Alabama Conference on Teaching and Learning, Mobile, AL.
- 94. 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.
- 95. Webb, B. M. 2010. Wave induced scour at coastal infrastructure. National Hydraulic Engineering Conference, Park City, UT.
- 96. 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.
- 97. 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.
- 98. Webb, B. M., Slinn, D.N. 2008. Modeling small-scale sediment transport and morphology. AGU-ASLO Joint Ocean Sci. Meet. Suppl., Abstract OS028.
- 99. 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.
- 100. 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.
- 101. 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.
- 102. 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: 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., <u>Webb, B. M.</u> 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

<u>Curriculum Vitae</u> Webb, Bret M.

- 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

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

- Member, US Coastal Research Program National Academic Committee, Feb 2019 Present
- Co-Chair, ASCE COPRI Coastal Zone Management Committee, January 2019 Present
- President, American Shore & Beach Preservation Association Central Gulf Coast Chapter, March 2018 – Present
- Panelist, NIBS-NFIP-FEMA Scientific Resolution Panel, San Mateo County Appeal, January 2018 April 2018
- 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 Present
- 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 No. 135082 *Highways in the Coastal Environment*, Newington, CT, Dec. 2013
- Instructor, NHI Course No. 135082 *Highways in the Coastal Environment*, Arlington, VA, August 2013
- Instructor, NHI Course No. 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 No. 135082 *Highways in the Coastal Environment*, Baton Rouge, LA, March 2009
- Co-Chair and Convener, Nearshore Processes, American Geophysical Union Fall Meeting, 2008
- Member, Science Advisory Committee, Mobile Bay National Estuary Program, 2008 Present
- Instructor, NHI Course No. 135082 *Highways in the Coastal Environment*, Gainesville, FL, February 2008

• Reviewer for Journal of Fluid Mechanics; 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, 2008 - Present

# **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

### <u>University Service</u> (reverse chronological order)

- Chair, 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 Present
- Member, USAOnline Advisory Committee, 2012 Present
- 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 Present
- 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 Present
- 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)
- American Society of Civil Engineers (member)
- ASCE Coasts, Oceans, Ports, and Rivers Institute
- Association of Coastal Engineers (member)
- Chi Epsilon Civil Engineering National Honor Society (member)
- Tau Beta Pi Engineering Honor Society (member)
- Coastal Education & Research Foundation (member)
- Coastal & Estuarine Research Federation (member)
- Society of American Military Engineers (young member)