

Qualifications Summary

- Background in laboratory experimentation with wave flumes and their application to numerical modeling relating to beach profile change
- Additional background in environmental engineering including, fluid mechanics, chemistry, ecology, decision analysis, planning, water resources and treatment
- Strong written and verbal communication skills
- Numerical model experience with STWAVE, SBEACH ACES, CORMIX, CSHORE, GENESIS, SMS DYNLET, EXTRM2 and CHAMP
- Survey data acquisition, processing and interpretation (bathymetric and terrain)
- GIS geospatial analysis applications

MITCHELL A. BUCK, M.C.E., B.S.

Coastal Engineer

Professional Affiliations

Member, Order of the Engineer

Fields of Expertise

Utilization of computational models within coastal management and design projects. Bathymetric and shoreline response due to changes with nearshore wave environment and structures. Application of field and laboratory research to resolve and evaluate coastal processes. Design, acquisition, processing, interpretation of bathymetric and terrain survey data for use within computational modeling. Proficient with GPS, including RTK GPS, total stations and echosounders. Utilization of GIS and other geospatial software packages.

Higher Education

M.C.E., Civil Engineering-University of Delaware (2007)

B.S., Environmental Engineering-Johns Hopkins University (2005)

EIT Certification (2005)

Employment History

2007-Present Coastal Engineer, Woods Hole Group

2005-2007 University of Delaware (Teaching and Research Assistant)

Publications and Presentations

Buck, M., Kobayashi, N.K., Payo, A., and B.D. Johnson. "Berm and dune erosion during a storm." CACR-07-03, Center for Applied Coastal Research, University of Delaware, Newark, Delaware.

Buck, M., Kobayashi, N.K., Payo, A., and B.D. Johnson. "Berm and Dune Erosion." International Conference on Coastal Engineering 2008", Hamburg, Germany.