Brian Zachry, Ph.D.

Chief, Technology and Science Branch National Hurricane Center

Brian Zachry, Ph.D., is the Chief of the Technology and Science Branch (TSB) at NOAA's National Hurricane Center in Miami. TSB is responsible for application development, transfer of research to operations to improve tropical cyclone and tropical marine forecasts, and support of NHC's computer infrastructure and data flow.

Dr. Zachry is a Florida native, earning his Bachelor of Science degree in Atmospheric Science / Meteorology from Florida Institute of Technology in Melbourne, FL. After graduation, he was selected as a prestigious National Foundation Integrative Science Graduate Education and Research Traineeship Fellow and earned his Doctoral degree in Wind Science and Engineering / Meteorology from Texas Tech University. His research focused on wind-wave interaction in the nearshore environment during hurricanes to better forecast storm surge flooding and evaluate wind load standards along the hurricane prone coastline. His work has provided valuable contributions to the research community. Dr. Zachry has an extensive multidisciplinary background that includes tropical cyclones, wind loading, field instrumentation, damage assessment, ocean waves, and storm surge.

Dr. Zachry joined AIR Worldwide in 2009 as an atmospheric scientist, where he developed a SLOSH-based storm surge model to assess risk. He continued work in this field when he joined Berkshire Hathaway Specialty Insurance in 2017 as a Principal Scientist. He was responsible for leading a team and providing expert guidance to inform business decisions on matters related to storm surge risk.

Dr. Zachry began his career with NOAA in 2013. He served in the NHC Storm Surge Unit, where he was responsible for performing real-time storm surge forecasts, providing scientific



and technical support to advance the SLOSH model and P-Surge, and participating with outreach, education, and training. In addition, Dr. Zachry led the technical advancement of the next-generation SLOSH basins, which are used by FEMA to develop the Nation's Hurricane Evacuation Zones. He also served as Project Manager for the Coastal Inundation Forecasting Demonstration Project for the Caribbean (CIFDP-C), which includes Haiti and the Dominican Republic

In 2019, Dr. Zachry assumed the position of NHC's Science and Operations Officer. Some of his responsibilities include overseeing the transfer of new technologies from the research community to the operational environment, consulting with scientists in the NWS, NOAA, other agencies, academia, and the private sector to identify opportunities to enhance and improve forecast procedures and techniques, to serve as a forecaster at the various NHC branches, and to develop and facilitate training and professional development activities for NHC staff. He was selected as the branch chief of TSB in April 2021.

Dr. Zachry has authored numerous scientific publications related to hurricanes and storm surge and serves as a reviewer for NSF proposals and many scientific journals. He also serves on scientific panels and is a member of the American Meteorological Society.

