

Cheryl J. Hapke, Ph.D.

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PROFESSIONAL PROFILE: I am a coastal geologist more than 30 years of experience studying coastal processes and working with decision-makers impacted by the challenges of coastal climate risk and resilience, which include municipalities, private coastal facilities, insurers, government entities, and other stakeholders. I am an expert on processes and resiliency in a variety of geomorphic settings including barrier islands, rocky, and reef-fringed coasts. I understand the future holds significant risks, and I have the technical expertise to communicate foundational science to clients and diverse stakeholder groups. My deep understanding of complex system dynamics, aids in the development of state-of-the-art tools and data-driven approaches to efficiently provide insight into risks and identify solutions to help mitigate them. I have extensive experience overseeing and managing large projects and coordinating across diverse groups of stakeholders and partners. In addition, I have served as a technical advisor on coastal resiliency and hazards to state and federal agencies and international groups, and authored numerous peer-reviewed journal articles.

EDUCATION

2002 **Ph.D., Coastal Geology**, University of California, Santa Cruz, California
1992 **M.S., Geology**, University of Maryland, College Park, Maryland
1985 **B.S., Geology**, University of Pittsburgh, Pittsburgh, Pennsylvania

PROFESSIONAL EXPERIENCE

Research Professor, Coastal Geology 2021 - present
University of South Florida, College of Marine Science
Chair of the Florida Coastal Mapping Program (FCMaP)'s Science and Technical Advisory Council (STAC) and co-PI on the NOAA-funded Center for Ocean Mapping and Innovative Technologies (COMIT). Broad duties include developing and leading new research programs and teams, including formulation of new research ideas. The Florida Coastal Mapping Program (FCMaP) is an ongoing initiative to coordinate and facilitate modern, high-resolution mapping of Florida's coastal waters. As STAC chair, I oversee the effort that includes 5 State (FDEP, FDEM, FDOT, FWRI and FIO) and 4 federal (USGS, USACE, BOEM, NOAA) agencies, and duties include organizing large stakeholder workshops, holding monthly STAC calls, and writing reports and peer-review journal articles. As a COMIT co-PI, I develop and guide research and activities coastal change, including disaster response and recovery, and the influence of antecedent geology on modern coastal processes. In 2023, I served on the committees of one M.S. and one Ph.D. student.

Principal Consultant, Coastal Resilience, Fugro, St Petersburg, FL 2023 - present
Hired by Fugro to lead the development of a Coastal Resilience program within the company. Exploring opportunities with non-traditional clients to conduct coastal vulnerability assessments, flood hazard modeling, and develop unique portfolios of adaptation solutions for each client and land use type. Establish internal team to undertake a real-world demonstration study including geomorphic characterization of study area, flood hazard modeling, risk assessment of assets, and the development of potential adaptation strategies. Active member of the UN-sanctioned Disaster Risk Reduction entity for the U.S., ARISE-US, including participating on the Sustainability and Resilience Working Group. Serving as co-chair of the Tampa Bay Regional Planning Council's Resilient Shorelines and Spaces working group and developing research initiatives the group can undertake to better understand coastal erosion hazard potential in the region.

Senior Consultant, Integral Consulting., St Petersburg, FL 2019-2023
Leader in Integral's Coastal Resilience Practice, which broadly focuses on coastal hazards, and vulnerability assessments, and adaptation solutions for coastal communities and facilities to develop climate change adaptation plans. Projects to date include Beach and Dune Assessments in South Padre Island, TX, coastal inundation

vulnerability assessments for Captiva Island FL, and working with a team of scientists and engineers to review, evaluate, and comment on a new proposed development project in California that required data analyses, site evaluation, and extensive report writing. Leader on the development of a new modelling-based decision support framework to assist coastal communities with sea level rise adaptation planning. I have also worked on adaptation alternatives throughout Southwest Florida.

Research Geologist, GS-15

(6/17-4/2019)

U.S. Geological Survey, Coastal and Marine Geology Program, St Petersburg, FL

Senior research scientist, leading and managing all aspects of two collaborative USGS projects: Coastal Cliff Vulnerability Modelling; and lead coordinator and co-chair of the Florida Coastal Mapping Program. Broad duties include developing and leading new research programs and teams, including formulation of new research ideas. The Florida Coastal Mapping Program (FCMaP) is a burgeoning effort to coordinate and facilitate modern, high-resolution mapping of Florida's coastal waters. I lead the effort that includes 5 State (FDEP, FDEM, FDOT, FWRI and FIO) and 4 federal (USGS, USACE, BOEM, NOAA) agencies, and have organized and led 4 workshops since January of 2018 to communicate the value of the effort to multiple stakeholders and partner statewide. NOAA has already begun to invest in mapping in areas identified as top priorities as a result of the communication and coordination of FCMaP. The end result will provide data that will explicitly move the science of coastal morphodynamics and resiliency forward by providing detailed information on the morphology of the nearshore zone. The Coastal Cliff Vulnerability Modeling project is a cross-center collaboration with USGS colleagues at the Pacific Science Center in Santa Cruz, CA, as well as academic colleagues at Scripps Institute of Oceanography and Coastal Carolina University. The goal of the effort is to develop a model that can accurately forecast both event-based response and long-term vulnerability of coastal cliffs. The model is being developed and tested along the Central CA coast but is applicable to many areas such as the Pacific Northwest, the Arctic and the Great Lakes. My position has also included hiring of staff (contractors), directing tasks, managing budgets, preparing, and publishing research papers and reports, and developing proposals.

Center Director, GS-15

(6/15-6/17)

U.S. Geological Survey, St Petersburg Coastal and Marine Science Center, St Petersburg, FL

- Director of research science center with approximately 120 staff overseeing all science and operations of the center with an annual budget exceeding \$10 million. I directly managed a senior leadership team within center, supervised as many as 24 employees concurrently; actively promoted science of center to external partners and collaborators; represented the USGS Coastal and Marine Geology Program at international venues; briefed directors of other science centers, and participated in strategic science planning and organizational development.

Coastal Science Advisor to FEMA

(1/13-4/13)

Joint Field Office, Queens, NY

In response to the federal disaster declaration after Hurricane Sandy, I was detailed to the FEMA Federal Disaster Recovery Joint Field Office in Queens, NY. I served as the coastal science expert advisor to the leadership of multiple federal, state and local agencies and was the lead of the Natural and Cultural Resources Recovery Support Function, working with a team comprised of experts from NPS, FWS, EPA, and NOAA to develop a response plan for the State of New York.

Research Geologist, GS-12-14

(5/02 -6/15)

U.S. Geological Survey, Coastal and Marine Geology Program, Santa Cruz, CA, Woods Hole, MA, and St Petersburg, FL

- Research scientist with wide range of duties including collaborative research, scientific proposal development, hiring and managing staff, networking and interaction with partners and stakeholders,

budget development and management, and publication of peer-review papers, reports and data. During this time, I was successfully promoted within the USGS research grade evaluation process. My duty stations included the Pacific Science Center in Santa Cruz, CA, the Geosciences Department at the University of Rhode Island (as a visiting USGS scientist), the Woods Hole Science Center in MA, and the St Petersburg Coastal and Marine Science Center in FL. My research has included examining the frequency and occurrence of massive coastal landslides along the central California coast, regional historical shoreline change studies covering 1000s of km of coast, predictive models of sea cliff retreat, intensive barrier island evolution analyses, especially in response to extreme storm events. I was on the leadership team of the National Assessment of Coastal Change Hazards project and oversaw the Long-term Coastal Change task. The results of the effort produced data and reports of significant value to managers and planners in the coastal zone and informed numerous policy decisions for the State of CA and the eastern seaboard of the U.S. from ME to NC. A decade of my career was spent analyzing coastal morphodynamics of Fire Island, NY and as a leading researcher of this barrier island I participated as the coastal science expert on numerous panels and teams that included the US Army Corps of Engineers, the State of NY, the NPS, and local and county stakeholders. I also worked internationally in India, Ghana, and Argentina in a science advisory and knowledge transfer capacity.

Geologist, GS-11

(5/98-5/02)

U.S. Geological Survey, Coastal and Marine Geology Program, Santa Cruz, CA

- Team scientist contributing to research projects examining coastal change from extreme storm events. Developed airborne camera system and digital photogrammetric techniques to create topographic models before and after storms.

Photogrammetric Engineer

(9/94-5/97)

Civil Engineering Department, North Carolina State University

Laboratory manager in a coastal studies lab; developed new digital photogrammetric techniques to derive 3D models of barrier islands to measure historical rates of change and periodically update rates for State management and planning.

Special Assignments and Activities

Field Campaigns

Fire Island, 2007-2015: extensive GPS surveys of beaches and dunes; collection of shallow water bathymetry and subbottom data; multiple surveys of inlet

Big Sur, 1999-2004: geologic field mapping, collection of ground control points for photogrammetric processing

Monterey Bay, 1998-2002; geologic field mapping; collection of ground control points for photogrammetric processing

Special Assignments

FEMA Joint Field Office, NY, coastal science subject matter expert, 2013:

Department of Interior coastal science subject matter expert; 2007-2017: primary representative on DOI team on Fire Island to Montauk Point Reformulation Plan (FIMP)

USGS coastal science expert on Fire Island Breach Contingency Plan team, 2012-2017; National Park Service

California Department of Transportation, Coastal science subject matter expert, 1999-2004: served as scientific liaison to Monterey Bay National Marine Sanctuary in Discussions with Caltrans regarding coastal landslides

Congressional and Other Testimony

Congressional Briefing to Senator Charles Schumer's staff on Fire Island (July 2013)

Congressional Briefing: David Wegner, senior democratic staffer to House Subcommittee on Water Resources and Environment, Obama Administration (July 2013)

Briefing to Congressman Zeldin (R – NY) and Senators Schumer and Gillibrand (D-NY) staffers on Fire Island EIS (Sept 2016)

Grants

- 2020-2025 USF College of Marine Science *Center for Ocean Mapping and Innovative Technologies*, #2500180603, NOAA Cooperative Agreement, \$52,360/yr (co-PI on a larger project)
- 2018 *Big Bend Demonstration Study*: NOAA Hurricane Irma Supplemental Funding, 2 year, \$50,000.
- 2014 *Investigating Coastal Vulnerability and Processes*: Hurricane Sandy Supplemental Funding, 3 year, \$4,100,000.
- 2011 *Investigating Morphologic Change in Response to Environmental Forcings and Anthropogenic Modifications on Fire Island Beaches*: USGS National Park Research, 3 year, \$359,000. Competitive proposal ranked #1 nationally.
- 2010 *Coastal Processes Program Development* at the University of Ghana, Accra, Ghana: Office of Naval Research Coastal Geosciences Program, \$76,000.
- 2009 *Marsh Sedimentation Study, Bluff Volumetric Contribution Analysis*: National Park Service, Boston Harbor Islands National Recreation Area, \$34,000.
- 2009 *Coastal Processes Program Development* at the University of Ghana, Accra, Ghana: Office of Naval Research Coastal Geosciences Program, \$6,254.
- 2009-11 *Impacts of Beach Scraping on the Natural Resources of Fire Island National Seashore, NY, Phases II-III*: USGS Natural Resources Preservation Program, \$299,961.
- 2008 *Development of Historical Topographic Models of the Beach/Dune System in Northeast Coastal and Barrier Network Parks*: National Park Service Inventory and Monitoring Program, \$162,645
- 2007 *Impacts of Beach Scraping on the Natural Resources of Fire Island National Seashore, NY, Supplemental I*: National Park Service Northeast Region, \$35,598.
- 2006 *Long-term, Seasonal, and Storm-related Shoreline Change Trends in the Florida Gulf Islands National Seashore*: National Park Service Natural Resource Preservation Program, \$26,391.
- 2006 *Wetlands and Coastal Environments: Impacts, Protection, and Restoration - elevation change and environmental assessment*: U.S. Geological Survey Hurricane Katrina Supplemental Funding 2006, co-investigators Don Cahoon and Glenn Guntenspergen, \$200,000.
- 2006 *Impacts of Beach Scraping on the Natural Resources of Fire Island National Seashore, NY, Phase 1*: National Park Service Northeast Region, \$38,000.
- 2003-04 *Interim Analysis of Landslide Hazards and Processes Along the Big Sur Coast, California*, California Department of Transportation, Coastal Highway Management Plan, co-investigator Dr. Gary Griggs, \$45,300.
- 2001-03 *Historical Assessment of Landslide Volume Contribution to the Monterey National Marine Sanctuary Along the Big Sur Coast, California*, California Department of Transportation, Coastal Highway Management Plan, co-investigator Dr. Gary Griggs, \$67,800.

ACADEMIC SERVICE

Technical Advisor

Katherine Wilson, 2013 – 2015: M.S. student, Department of Geosciences, University of Florida:

Probabilistic Forecasting of Coastal Morphodynamic Storm Response at Fire Island, New York

Major Academic Advisor

Erika Lentz, 2006 – 2010: Ph.D. student, Department of Geosciences, University of Rhode Island: *A Spatial and Temporal Assessment of Topographic Change on a Barrier Island: Fire Island National Seashore, Fire Island, New York*

Meredith Kratzmann, 2006 – 2008: M.S. student, Department of Geosciences, University of Rhode Island: *Anthropogenic influences on the dune/ beach morphology of a moderately developed barrier island: Fire Island, New York*

Graduate Academic Committee Member

Catherine Dietrick, 2021 – present, Ph.D. Dissertation Committee, USF College of Marine Science.

Catalina Rubiano, 2022 – 2024, M.S. Masters Committee, USF College of Marine Science.

Katy Croff, 2008 - 2012, Ph.D. Dissertation Committee member, Graduate School of Oceanography, University of Rhode Island: *The Relationship Between Seafloor Physiography and Holocene History in the Southern Aegean Sea*

Nicole Kinsman, 2008 – 2012, PhD Dissertation Committee, Earth Sciences Department, University of California, Santa Cruz: *Improved Approaches for Effective Beach Nourishment*

Bryan Oakley, 2007 – 2011, Ph.D. Dissertation Committee member, Department of Geosciences, University of Rhode Island: *Late Quaternary and Modern Depositional Environments: Narragansett Bay Rhode Island and Massachusetts*

Chris DiPerna, 2007-08, M.S. Thesis Committee member, Graduate School of Oceanography, University of Rhode Island: *A Paleocological Assessment of Urbanized Coastal Lagoons: Moriches Bay and Great South Bay, Long Island, New York*

Mark Borrelli, 2005-08, Ph.D. Dissertation Committee member, Department of Geosciences, University of Rhode Island: *Sediment Transport, Inlet Evolution and Shoreline Change Associated With a Coastal Lagoon: Pleasant Bay and Chatham Harbor, Cape Cod, Massachusetts*

Rachel Hehre, 2005-07, M.S. Thesis Committee member, Department of Geosciences, University of Rhode Island: *A Photogrammetric and Spatial Analysis Survey of Shoreline Change - Narragansett Bay, Rhode Island: 1939-2002*

Dave Reid, 2004, M.S. Thesis Committee member, Earth Sciences Department, University of California, Santa Cruz: *Long-term Beach Width Change in Monterey Bay, California*

Undergraduate Senior Theses – Principal Advisor

Kate Dallas, 2002: Undergraduate Senior Thesis, University of California, Santa Cruz: *Assessment of Long-term Beach Change Along the Big Sur Coast, CA*

Christina Dell, 2002: Undergraduate Senior Thesis, University of California, Santa Cruz: *The Analysis of Physical and Chemical Properties Influencing the Morphology of the Santa Cruz coastline*

Branden Johannesen, 2001, Undergraduate Senior Thesis, University of California, Santa Cruz: *The*

Lithologic Variations in the Purisima Formation Uncovered Through Intrinsic Property Analysis: Northern Monterey Bay, CA

PROFESSIONAL MEMBERSHIPS

American Geophysical Union
American Shore and Beach Preservation Association
Urban Land Institute
UN Alliance for Disaster Resilient Societies

AWARDS AND ACHIEVEMENTS

2023, Distinguished Alumni Award, University of Pittsburgh, Department of Geology and Environmental Sciences
2021, Presidential Citation from the Association of Environmental and Engineering Geology
2020-21 Jahns Distinguished Lecturer Award, Geological Society of America and Association of Environmental and Engineering Geology
Invited Expert Reviewer, UN 2nd World Ocean Assessment 2020, Chapter 13: Changes in Erosion and Sedimentation
2007-2017 yearly USGS Superior or Exceptional Performance Awards

LECTURES AND PRESENTATIONS

2023 The Coastal Morphometrics Analysis Toolkit for Resilience Planning, American Shore and Beach Preservation Association National Coastal Summit, October 13, 2023
2023 The Development of Conceptual Nature-based Shorelines, Captiva, Florida, American Shore and Beach Preservation Association National Coastal Summit, October 12, 2023 *(Invited)*
2023 The Florida Coastal Mapping Program: Coordinating High-resolution Mapping of the State's Coastal Seafloor, International Conference on Aquaculture and Fisheries, August 14, 2023. *(Invited)*
2023 The Florida Coastal Mapping Program: Updates and Accomplishments, Florida American Society for Photogrammetry and Remote Sensing, June 8, 2023. *(Invited)*
2023 The Florida Coastal Mapping Program: a Template for GOMaP?, Gulf of Mexico Alliance All-hands, June 1, 2023. *(Invited)*
2023 The Florida Coastal Mapping Program (FCMaP): Updates and Accomplishments, 2023 Interagency Working Group for Ocean and Coastal Mapping Annual Meeting, April 13, 2023. *(Invited)*
2023 The Development of Conceptual Nature-based Shorelines for Captiva, FL, Florida Shore and Beach Preservation Association National Conference on Beach Preservation Technology, February 2, 2023.
2022 Florida Seafloor Mapping Program Framework for Alaska, Alaska Coastal and Ocean Mapping Summit Keynote, November 16, 2022.
2022 Mapping Florida's Seafloor to Improve Coastal Resilience, National Ocean Sciences Spoonbill Ball Keynote, February 11, 2022
2022 Coastal Morphodynamics and Beneficial Use of Dredge Material at South Padre Island, Texas: Past, Present and Future, AGU Ocean Sciences Meeting, February 3, 2022

- 2022 Implementing a Model-based Coastal Adaptation Framework at Captiva, FL, Florida Shore and Beach Preservation Association National Conference on Beach Preservation Technology, February 3, 2022
- 2021 Coastal Resilience: Model-based Coastal Hazard Adaptation Framework, Geological Society of America Annual Meeting, October 12, 2021
- 2021 Digging Deep: Mining Long-term Datasets to Identify Resilient Beach and Dune Morphologies – South Padre Island, Texas, American Shore and Beach Preservation Association National Coastal Conference, September 29, 2021
- 2021 Coastal Resilience: A Tale of 2 Gulf of Mexico Communities, Florida Atlantic University, Department of Geosciences, September 16, 2021
- 2021 Evaluating Resilience of the Beach and Dune System at South Padre Island, Texas, Association of Environmental and Engineering Geologists Annual Meeting, September 22, 2021
- 2021 Model-based Decision Support for Coastal Hazard Evaluation and Adaptation, Florida Shore and Beach Preservation Association National Conference on Beach Preservation Technology, February 4, 2021
- 2020 Prioritizing Mapping of Florida’s Coastal Seafloor: Program Development and Sea-level Rise Adaptation Applications, University of South Florida Geosciences Department Colloquium Series, Tampa FL, February 14, 2020.
- 2019 Progress in Understanding Seacliff Evolution Using Remote Sensing Techniques and Historical Data Sources, American Geophysical Union Fall Meeting (Invited), San Francisco, CA December 2019.
- 2019 A Federal-State Partnership for Mapping Florida’s Coast and Seafloor, 2019 BioBase Aquatic Mapping technology Symposium (Keynote), Orlando, FL, February 2019.
- 2018 Why You Need Coastal Mapping (and Probably Don’t Know It), St Petersburg Innovation District State of the Science Conference (Invited), St Petersburg, FL, October 2018.
- 2017 Decoupling Processes and Scales of Shoreline Morphodynamics: Fire Island, NY, Woods Hole Oceanographic Institute Colloquium Series, Woods Hole, MA, August 2017.
- 2016 National Assessment of Coastal Change Hazards, Puerto Rico Climate Change Summit (Invited), San Juan, Puerto Rico, April 2016.
- 2016 Morphologic Change Studies at Fire Island in a Post-Sandy World, Fire Island Biennial Science Meeting (Invited), Patchogue, NY, April 2016.
- 2015 Coastal Change at Fire Island, NY: Influences of Storms, Geology and People (and Politics), University of Pittsburgh, Department of Planetary Sciences Seminar Series, October 2015.
- 2015 Morphologic Response and Recovery Related to Hurricane Sandy at Fire Island, NY, Coastal Carolina University, Department of Marine Science and Geology Seminar Series, February 2015.
- 2014 Controls on Barrier Island Response and Recovery to Hurricane Sandy and Beyond, Fire Island Biennial Science Meeting (Invited), Patchogue, NY, March 2014.
- 2014 Geologic Constraints on the Morphologic Response to Hurricane Sandy at Fire Island, NY, University of Puerto Rico, Mayaguez, Department of Geology Seminar Series, March 2014.
- 2014 Morphologic Response and Recovery Related to Hurricane Sandy at Fire Island, NY, Texas A & M University, Department of Geography Colloquium Series, October 2014.

- 2013 Geomorphic and Human Influence on Large-scale Coastal Change, Binghampton Geomorphology Symposium (Invited), Newark, NJ, March 2013.
- 2013 Barrier island morphologic response to Hurricane Sandy: Fire Island, NY; American Association of Petroleum Geology Annual Meeting (Invited), Pittsburgh, PA, May 2013.
- 2013 Coastal Response to Hurricane Sandy at Fire Island, NY, Long Island Natural History Symposium (Invited), Stony Brook, NY, December, 2013.
- 2013 Influences on the Morphologic Response to Hurricane Sandy: Fire Island, NY, American Geophysical Union Fall Meeting (Invited), December 2013.
- 2012 Scaling Controls of Barrier Island Evolution and Morphology: Fire Island, New York, University of Florida, Department of Geology Seminar Series, October 2012.
- 2011 Multi-scale Coastal Change Analyses: regional trends, local processes and coastal response; USGS St Petersburg Coastal and Marine Science Center Seminar, April 2011.
- 2011 Multi-Scale Coastal Change Analyses in U.S. National Parks: Regional Trends and Local Processes; National Park Service Coastal Geology Webinar (Invited), June 2011.
- 2011 Long-term Coastal Change and Hurricane Sandy Response and Recovery, Fire Island, NY, City College of New York Undergraduate Diversity in the Sciences Seminar Series, November 2011.
- 2010 Investigating Coastal Processes and Hazards Along the Coastline of Ghana, West Africa, American Geophysical Union Fall Meeting (Invited), December 2010.
- 2007 Unraveling the Impacts of Severe Storms in the Long-term Shoreline Change Record, Gulf Islands National Seashore, University of Rhode Island, Department of Geosciences
- 2006 Historical Shoreline Rates and Trends along the California Coast, University of Rhode Island, Kingston, Department of Geosciences
- 2005 Multi-scale Approaches to Measuring Coastal Change and Mapping Coastal Geomorphology, University of Rhode Island, Kingston, Department of Geosciences.
- 2005 Decadal-Scale Analysis of Coastal Landslides along the Big Sur Coast: Rates and Processes USGS Coastal Seminar, Santa Cruz.
- 2003 Determining Landslide Volume Input to the Coastal Zone along the Big Sur Coastline, California, USGS Coastal Seminar, Menlo Park.
- 2002 Determining Landslide Volume Input to the Coastal Zone along the Big Sur Coastline, California, California State University, Sacramento, Department of Earth Science.
- 2002 Controls and Processes of Coastal Landslide Volume Influx to the Nearshore: Big Sur, California, University of Pittsburgh, Pittsburgh, Department of Earth and Planetary Sciences.
- 2001 The Impact of Climatic and Seismic Events on the Short-term Evolution of Seacliffs: Northern Monterey Bay, California, University of California, Santa Cruz, Earth and Marine Sciences Department.

INVITED COURSE LECTURES

2006: Guest Lecturer, Applied Coastal Ecology, University of Rhode Island
 2000, 2001, 2002: Guest Lecturer, GIS and Remote Sensing Course, University of California Santa Cruz.

PUBLICATIONS

1. Chen, J., Liu, Y., Weisberg, R.H., Murawski, S.A., Gilbert, S., Naar, D.F., Zheng, L., Hommeyer, M., Dietrick, C., Luther, M.E. and Hapke, C., 2023. Hydrodynamic response to bathymetric changes in Tampa Bay, Florida. *Deep Sea Research Part II: Topical Studies in Oceanography*, 212, p.105344.
2. Hapke, C., Flanary, C., Watt, S., Friend, P., and Boburka, K., 2023. Evaluation of Coastal Resiliency and Recommendations for Coastal Management: South Padre Island, TX. *Proceedings of Coastal Sediments 2023*, World Scientific, p. 2228-2239.
3. Elko, N., Briggs, T.R., Marsooli, R., Barrineau, P., Hapke, C., McKenna, K., Simm, J., Beyeler, M., Smith, M. and Troy¹⁰, C., 2022. US community perspectives on coastal flooding. *Shore & Beach*, 90(3), 17p.
4. McBride, R.A., Anderson, J.B., Buynevich, I.V., Byrnes, M.R., Cleary, W., Fenster, M.S., FitzGerald, D.M., Hapke, C.J., Harris, M.S., Hein, C.J., Johnson, C.L., Klein, A.H.F., Liu, B., de Menezes, J.T., Mulhern, J.S., Oliver, T.S.N., Pejrup, M., Riggs, S.R., Roberts, H.H., Rodriguez, A.B., Seminack, C.T., Short, A.D., Stone, G.W., Tamura, T., Wallace, D.J., Wang, P., 2022. Morphodynamics of Modern and Ancient Barrier Systems: An Updated and Expanded Synthesis. In: Shroder, J.J.F. (Ed.), *Treatise on Geomorphology*, vol. 8. Elsevier, Academic Press, pp. 289–417. <https://dx.doi.org/10.1016/B978-0-12-818234-5.00153-X>.
5. Hapke, C.J., R. Baumstark, R. Druyor, X. Fredericks, P. Kramer, K. Jackson, and L. McEachon. 2022. Establishing seafloor mapping priorities for coastal states. *Ocean and Coastal Management* 216:105942.
6. Seymour, A.C., C.J. Hapke, and J. Warrick. 2020. Cliff Feature Delineation Tool and Baseline Builder Tool, Version 1.0 User Guide: U.S. Geological Survey Open File Report 2020–1070. 54 pp.
7. van Ormondt, M., Nelson, T.R., Hapke, C.J. and Roelvink, D., 2020. Morphodynamic Modelling of the Wilderness Breach, Fire Island, New York. Part I: Model Set-up and Validation. *Coastal Engineering*, p.103621.
8. Hapke, C.J., Druyor, R., Baumstark, R.D., Kramer, P.A., Fitos, E., Fredericks, X., and Fetherston-Resch, E.H., 2019, A Federal-State Partnership for Mapping Florida’s Coastal Waters, *Proceedings of Coastal Sediments 2019*, American Society of Civil Engineering, 10p.
9. Hapke, C.J., Kramer, P.A., Fetherston-Resch, E.H., Baumstark, R.D., Druyor, R., Fredericks, X., and Fitos, E., 2019, Florida Coastal Mapping Program—Overview and 2018 workshop report: *U.S. Geological Survey Open-File Report 2019–1017*, 19 p., <https://doi.org/10.3133/ofr20191017>.
10. Bennett, V.C., Mulligan, R.P. and Hapke, C.J., 2018. A numerical model investigation of the impacts of Hurricane Sandy on water level variability in Great South Bay, New York. *Continental Shelf Research*, 161, pp.1-11.
11. Brenner, O.T., Lentz, E.E., Hapke, C.J., Henderson, R.E., Wilson, K.E. and Nelson, T.R., 2018. Characterizing storm response and recovery using the beach change envelope: Fire Island, New York. *Geomorphology*, 300, pp.189-202.

12. Locker, S.D., Miselis, J.L., Buster, N.A., Hapke, C.J., Wadman, H.M., McNinch, J.E., Forde, A.S., and Stalk, C.A., 2017, Nearshore sediment thickness, Fire Island, New York: *U.S. Geological Survey Open-File Report 2017-1024*, 21 p.
13. Hapke, C.J., Plant, N.G., Henderson, R.E., Schwab, W.C. and Nelson, T.R., 2016. Decoupling processes and scales of shoreline morphodynamics. *Marine Geology*, 381, pp.42-53.
14. Wilson, K.E., Adams, P.N., Hapke, C.J., Lentz, E.E. and Brenner, O., 2015. Application of Bayesian Networks to hindcast barrier island morphodynamics. *Coastal Engineering*, 102, pp.30-43.
15. Nelson, T.R. and Hapke C.J., 2015. Shoreface response and recovery to Hurricane Sandy: Fire Island, NY. Coastal Sediments 2015, San Diego, CA.
16. Van Ormondt, M., Hapke, C., Roelvink, D., and Nelson, T., 2015. The effects of geomorphic changes at Fire Island on inundation during and after Hurricane Sandy. Coastal Sediments 2015, San Diego, CA. doi:10.1142/9789814689977_0221
17. Hapke, C.J., Brenner, Owen, Henderson, Rachel, 2015. Beach response and short-term evolution: Quantifying the geomorphic resiliency of barrier island beaches: Coastal Sediments 2015, San Diego, CA.
18. Hapke, C.J., Adams, P.N., Allan, J., Ashton, A., Griggs, G.B., Hampton, M.A., Kelly, J., and Young, A.P., 2014. Rocky Coast Geomorphology: A Global Synthesis – The USA. In Kennedy, Stevenson and Naylor (eds.): Rocky Coast Geomorphology – A Global Synthesis. Geological Society of London Memoir.
19. Barnard, P.L., van Ormondt, M., Erikson, L.H., Eshleman, J., Hapke, C., Ruggiero, P., Adams, P.N. and Foxgrover, A.C., 2014. Development of the Coastal Storm Modeling System (CoSMoS) for predicting the impact of storms on high-energy, active-margin coasts. *Natural Hazards*, Volume 74 (2), p. 1095-1125
20. Schwab, W.C., Baldwin, W.E., Denny, J.F., Hapke, C.J., Gayes, P.T., List, J.H., and Warner, J.C., 2014, Modification of the Quaternary stratigraphic framework of the inner-continental shelf by Holocene marine transgression: An example offshore of Fire Island, New York: *Marine Geology*, 355, 346-360.
21. Hapke, C.J., Brenner, Owen, Hehre, Rachel, and Reynolds, B.J., 2013, [Coastal change from Hurricane Sandy and the 2012–13 winter storm season—Fire Island, New York: U.S. Geological Survey Open-File Report 2013-1231](#), 37 p.
22. Lentz, E.E., Hapke, C.J., Stockdon, H.F. and Hehre, R.E., 2013. Improving understanding of near-term barrier island evolution through multi-decadal assessment of morphologic change. *Marine Geology*, 337, pp.125-139.
23. Hapke, C.J., Kratzmann, M.G. and Himmelstoss, E.A., 2013. Geomorphic and human influence on large-scale coastal change. *Geomorphology*, 199, pp.160-170.
24. Hapke, C.J., Kratzmann, M. and Himmelstoss, E.A., 2013, Geomorphic and human influences on regional shoreline change rates. In Nordstrom and Wright (eds.), Geomorphology of Barrier Island Systems: Geomorphology Special Issue Coastal Geomorphology and Restoration, 199, 160-170.
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