

## Austin Howard Becker, PhD

E: abecker@uri.edu | P: 401-636-0430 | W:web.uri.edu/MACRL  
ORCID ID: 0000-0001-9224-7913 | Google Scholar H-index: 23

### Curriculum Vitae Updated 3/5/2026

#### TABLE OF CONTENTS

EXECUTIVE PROFILE.....	1
EDUCATION & CREDENTIAL.....	1
PROFESSIONAL APPOINTMENTS.....	1
AWARDS.....	2
GRANTS.....	2
PUBLICATIONS.....	4
PRESENTATIONS.....	12
IN THE MEDIA.....	23
TEACHING & ADVISING.....	24
SERVICE.....	28
OTHER ACADEMIC WORK EXPERIENCE.....	32
PROFESSIONAL TRAININGS.....	32

#### **EXECUTIVE PROFILE**

Austin Becker is a scholar–practitioner whose career has centered on the challenge of helping public institutions make better decisions under conditions of uncertainty. As a Professor and Chair at the University of Rhode Island, he leads interdisciplinary teams that build and deploy technology-enabled decision-support systems used by emergency managers, infrastructure operators, planners, and state and federal agencies. His work integrates high-resolution hazard modeling, systems thinking, and the realities of public-sector governance to improve institutional readiness for coastal and climate-related risks.

Before entering academia, Becker spent a decade as a tall ship captain and maritime educator — experience that continues to ground his work in the pressures, constraints, and practicalities of real-world decision-making. A Sloan Foundation Research Fellow in Ocean Science, with an international policy portfolio that includes UNCTAD and the Naval War College, he brings a rare combination of technological fluency, field experience, and applied policy leadership to questions of climate risk, infrastructure resilience, and public-sector innovation.

#### **EDUCATION & CREDENTIAL**

<b>PhD</b> , Emmett Interdisciplinary Program in Environment & Resources, Stanford University	2013
<b>Master of Environmental Science and Management</b> , University of Rhode Island (URI)	2006
<b>Master of Marine Affairs</b> , URI	2005
<b>Bachelor of Arts</b> , Hampshire College	1995
<b>Williams College/Mystic Seaport Maritime Studies Program</b>	1994

#### **USCG Merchant Mariner Credential.**

First issued 1997, Renewed 2022

*500-Ton Master, Oceans -- Motor, Sail, Auxiliary Sail, Towing*

#### **PROFESSIONAL APPOINTMENTS**

<b>Chair, Department of Marine Affairs</b>	2021 - present
<i>URI, Department of Marine Affairs</i>	
<b>Professor</b>	2024 - present
<i>URI, Department of Marine Affairs</i>	
<b>Program Director, Graduate Certificate in Coastal Resilience</b>	2023 - present

---

<i>URI, College of the Environment and Life Sciences</i>	
<b>Associate Professor</b>	2019 - 2024
<i>URI, Department of Marine Affairs</i>	
<b>Visiting Scholar</b>	2020 - 2023
<i>US Naval War College, Humanitarian &amp; Disaster Response Program, Newport, RI</i>	
<b>Chair, Environmental Planning and Design Track</b>	2015 - 2021
<i>URI, Master of Environmental Science &amp; Management Program</i>	
<b>Director of Graduate Programs</b>	2015 - 2020
<i>URI, Department of Marine Affairs</i>	
<b>Assistant Professor</b>	
<i>URI, Department of Marine Affairs</i>	2014 - 2019
<i>URI, Department of Landscape Architecture (joint appointment)</i>	2014 - 2016

## **AWARDS**

- ***URI College of the Environment and Life Sciences Service Excellence Award, 2025***
- ***URI Advanced Career Faculty Research and Scholarship Excellence Award Social Sciences, Arts, and Humanities***, awarded to two URI faculty per year to recognize faculty engaged in superior research, scholarly, or creative activities, 2023.
- ***URI Early Career Faculty Research and Scholarship Excellence Award Social Sciences, Arts, and Humanities***, awarded to two URI faculty per year to recognize faculty engaged in superior research, scholarly, or creative activities, 2018.
- ***Alfred P. Sloan Foundation Fellow in Ocean Science***, awarded highly-competitive research fellowship for the best early-career scientists from the United States and Canada in recognition of distinguished performance and a unique potential to make substantial contributions to their field (2017-2021).
- ***Awards as PhD student:***
  - o ***Lieberman Fellowship*** Awarded to Stanford graduate students for outstanding scholarship, teaching, and university service, 2011-2012.
  - o ***Certificate of Achievement in Mentoring in the School of Earth Sciences***, Stanford, 2011.
  - o ***Centennial Teaching Assistant Award*** for outstanding teaching by Stanford graduate students, 2011.

## **GRANTS**

### ***Pending external grants***

- *US Dept of Homeland Security, Completion Grant for USCG CHAMP (Lead PI, \$250K, pending)*
- *NSF, "Reducing Coastal Storm Risk with Property Level Impact Projections and Mitigation Strategies—Advancing Theory with Practical Application" (Lead PI, \$900k, pending)*

### ***Active external grants (\$2.3M total to URI)***

- *Rhode Island Dept. of Transportation: "Coupling coastal flooding, precipitation, and inland flood models for Warren, RI: A Development of the Rhode Island Coastal Hazards Analysis, Modeling, and Prediction System." 2025-2026 (Lead PI, \$425k)*
- *State of Rhode Island, Funding Support for Coastal Hazards Tools at URI (Co-PI, \$200K)*
- *NSF RII Track-2 FEC, Brown University Lead: "Community-Driven Coastal Climate Research & Solutions (3CRS) for the Resilience of New England Coastal Populations." 2023-27 (Co-PI, \$880K of \$6M).*
- *NOAA Blue Tech, "Advancing the Coastal Hazards Analysis and Prediction System," (Co-PI, \$800K)*

### ***Completed external grants (\$3.25M total to URI)***

---

- 
- *State of CT, Completion Grant for CT CHAMP (PI, \$115K)*
  - *US Department of Homeland Security and the Cyber and Infrastructure Security Agency, “Overcoming Constraints Applying CISA’s Infrastructure Resilience Planning Framework to Local and Regional Risk Reduction,” 2023-2024 (Lead PI, \$133K).*
  - *US Department of Homeland Security, through the Center of Excellence in Coastal Resilience under Grant Award Number 2015-ST-061-ND0001-01 (Lead or co-PI, \$1.9M of \$4.7M total to URI):*
    - o *“Application of the Infrastructure Resilience Planning Framework: A Case Study of Rhode Island’s Critical Infrastructure,” Funding from Cyber and Infrastructure Security Agency, 2023-2024 (Lead PI, \$405K).*
    - o *“Consequence Hazards Analysis Modeling and Prediction - Expansion to Connecticut and the US Coast Guard (CHAMP Year 10),” 2024-25 (Lead PI, \$256K).*
    - o *“Emergency Management, Planning, and Response Decision Making (CHAMP Year 9),” 2023-24 (Lead PI, \$300K).*
    - o *“Consequence Hazards Analysis Modeling and Prediction for Emergency Management, Planning, and Response Decision Making (CHAMP Year 8),” 2022-24 (Lead PI, \$250k)*
    - o *“Consequence Hazards Analysis Modeling and Prediction for Emergency Management and Response Decision Making (CHAMP Year 7),” 2021-23 (Lead PI, \$170k)*
    - o *“Hazard Consequence Threshold Models for Emergency Management and Response Decision Making (CHAMP Year 6),” 2020-21 (Lead PI \$300k)*
    - o *“Modeling the combined coastal and inland hazards from high-impact hurricanes (CHAMP Years 1-5),” 2016-20 (Co-PI, \$60K of \$1.5M)*
    - o *“Coastal Resilience for Overcoming Barriers to Motivate Community Action to Enhance Resilience,” 2016-2018 (Co-PI, \$230K of \$1.5M)*
  - *US Dept. of Defense Office of Local Defense Community Cooperation, “A hazard resilient future for Naval Station Newport within its coastal community: Military Installation Resilience Review for short-term preparedness and long-term planning,” Federal Award Identification Number HQ00052010066, 2020-22 (Co-PI, \$550k)*
  - *US Department of Homeland Security and US Army Corps of Engineers Broad Agency Announcement (BAA) for “Lessons Learned for Hazard Resilience Guide for Ports and the Marine Transportation System: The Value of Climate Change Resilience Planning for Seaports,” 2020-22 (Lead PI \$75k)*
  - *US Army Corps of Engineers BAA Award for “Measuring vulnerability to inform resilience: Pilot study for North Atlantic Medium and High-Use Maritime Freight Nodes,” US Army Corps of Engineers Engineer Research and Development Center, Broad Area Announcement Grant: W912HZ-16-C-0019, 2016-18 (Lead PI - \$280K)*
  - *Cruise Ship Charitable Foundation: A GIS inventory and risk assessment for critical coastal infrastructure land use in Caribbean Small Island Developing States, 2017-2018 (PI - \$7.5K)*
  - *Rhode Island Dept. of Transportation and Federal Highway Administration for “Vulnerability assessment for maritime infrastructure: Pilot method development for the Port of Providence,” 2014-15 (Lead PI \$120K)*
  - *Rhode Island Statewide Planning Program Challenge Grant for “A Comprehensive GIS-Based Inventory of Rhode Island’s Ports and Commercial Harbors.” Submitted with U.S. Team at URI Coastal Resources Center, 2007 (Co-PI \$15K).*

#### **Active Internal URI Competitive Grants**

- *Research Office Proposal Development Grant to support development for “Evaluating the Impacts of Hazard Decision Tools on Coastal Resilience Planning and Investments: Case Study of Aquidneck Island, Providence and Warren, RI.” 2025 (Lead PI, Active, \$20K)*

#### **Completed Internal URI Competitive Grants\_(\$80k total)**

---

- *Research Office Grant* to support development of Caribbean Coastal Infrastructure Inventory project, 2020 (\$5K)
- *Global Mobility Travel Grants for Faculty* to support travel to UNCTAD meeting, 2019 (\$2K)
- *Distinguished Visiting International Scholar Award* for visit from Prof. Adolf Ng, 2018 (\$8K)
- *Constantinides Grant* to support collaboration with Greek research institutes, 2018 (\$2.5K)
- *Social Science Institute for Research Education and Policy (SSIREP)*, 2017 (Co-PI \$1.5K)
- *Coastal Institute Leveraging Grant* - Development of disaster visualizations, 2015 (PI \$20K)
- *Coastal Institute Catalyst Grant* - Capacity building in GeoDesign technologies, 2015 (PI \$6K)
- *Division of Research and Economic Development Proposal Development Grant* for “Building Leadership for Climate Adaptation: A Review of Approaches and Assessment of Applicability to the Maritime Infrastructure Sector,” 2014-15 (PI - \$15K).

### **Non-Competitive Grants and Donations**

- *Anonymous Donor, 2026, to support work of Becker Lab, \$240k*
- *USDA Hatch Multi-State Project: University-Community Intermediaries: Supporting Informed Decision-Making Around Polarized Issues 2017-2019* (PI - 2 years of Graduate Research Assistant funding)
- *Rhode Island Foundation for Landscape Architecture Sustainability Studio 2015-16* (Co-PI \$10K)
- *URI Transportation Center Grant for Sustainable Design Studio: A planning, policy, and design studio for seniors and graduate students on storm planning for the Port of Providence, 2014* (Co-PI \$10K)
- *Rhode Island Foundation Mini-Grant* to fund two-day workshop, “Identifying Innovative Solutions to Guide Development in Providence Harbor.” Submitted with U.S. Team at URI Coastal Resources Center, 2007 (\$15K).

### **PUBLICATIONS**

(\*graduate advisee, \*\*undergraduate advisee)

#### **Edited Book (1)**

Ng, A.K.Y. **Becker, A.**, Cahoon, S., Chen, S., Earl, P., Yang, Z., eds. (2016). *Climate Change and Adaptation Planning for Ports*. Edited book in the series, *Routledge Studies in Transport Analysis*. Routledge, NY, NY, (286 pages).

#### **Refereed Journal Papers (50) (red font = in review or revision with publication)**

- Adams, S., **Becker, A.**, Avoidable Consequences: Using Advanced Storm Simulation to Help Emergency Managers Improve Outcomes. In Review *Journal of Emergency Management*.
  - Adams, S., **Becker, A.**, The Right Call: How Emergency Managers Make Storm Response Decisions Under Conditions of Uncertainty. In Prep *Journal of Natural Hazards*.
  - Fusco, R.\*, **Becker, A.**(corresponding author) (*In Revision*) “Critical Gaps in Seaport Resilience Planning: A Review of National Adaptation Plans from Small Island Developing States” *WIRES Climate Change*.
  - Fusco, R., **Becker, A** (corresponding author), (*In Review*). “Incentives for Closing the Resilience Gap in Port Planning” *Marine Policy and Management*.
  - **Becker, A.**, Brightman, H., Rubinoff, P., Ginis, I., Crowley, D., Stempel, P., Fusco, R.\*, (*In Revision*), “Coastal hazards preparedness through wargaming, modeling, and simulation: Application of a Military Installation Resilience Review to inform stakeholder-engaged planning for a maritime community.” *Sustainable and Resilient Infrastructure*.
  - McElroy, Kyle\*; **Becker, A.**, (*In Review*). “Navigating Flood Risk in U.S. Municipal Planning: A Review of Practices and Principles.” *Journal of Flood Risk Management*.
50. Hallisey,\* N.; **Becker, A. (corresponding author)**, Stempel, P., Krum, O. (2025). From Design to Decision Making: Emergency Manager Participation in the Development of Coastal Storm

---

Decision Support Tools *Journal of Disaster Science and Management*. Vol. 1, Issue 1. DOI: 10.1007/s44367-025-00022-2.

- 49- McElroy, Kyle\*; **Becker, A.**, (2025). "Factors Influencing Flood Risk Management Integration in U.S. Municipal Planning: An Expert Mental Model Approach." *Journal of Flood Risk Management*.
  48. Adams, S.\*; **Becker, A.**; Ginnis, I.; Hallisey, N.\*; Stempel, P.; McElroy, K.\*; Krum, O. (2025) Practice as You Play: Using Homeland Security Exercise and Evaluation Program Exercises to Evaluate a Storm Decision Support Tool. *Journal of Coastal and Riverine Flood Risk*
  47. Verschuur, J., **Becker, A.** (2025). "Sustainability trade-offs of port adaptation at scale: A summary of research and a call for additional study. *PLOS One Climate*.
  45. Stempel, P., **Becker, A.**, Ginnis, I., Adams, S.\*, Crowley, D., Damon, C., Hallisey, N.\*, Krum, O., Mandeville, A., McElroy, K.\*, (2025) "Coastal Hazards Analysis Modelling and Prediction: Collaborative Model-Driven Multi-hazard Forecasting and Planning." *Digital Landscape Architecture*.
  44. Ng, AKY, Faury, O., Lau, Y., **Becker, A.**, Munim, Z., (2025)., Enhancing the Resilience of Maritime Transport: Theory and Practice," Editorial for the Virtual Special Issue (VSI) in *Transportation Research Part D: Transport and Environment (TRD)*.
  43. Ng, AKY, Poo, M., Want, Tianni, **Becker, A.**, (2025), "Dissecting Climate Adaptation Strategies and Planning of Ports from Different Theoretical Angles." *Maritime Transport Research Journal*
  42. Grant, R., Rhode-Barbarigos, L., Roy, S.S., Britton, L., Li, C., Rowe, **A., Becker, A.**, Hope, B., Bello, M. (2024) No port stands alone: PortMiami and the resilience of its Caribbean and Mesoamerican maritime network. *Maritime Economics & Logistics*. DOI: 10.1057/s41278-024-00283-3
  41. Adams, S.\*; **Becker, A.(corresponding author)**, Stempel, P., Hallisey, N.\*, McElroy, K.\*, Ginnis, I., Crowley, D. (2024), "Ocean State Rising: Storm Simulation and Vulnerability Mapping To Predict Hurricane Impacts For Rhode Island's Critical Infrastructure." *Journal of Emergency Management*. 22(7):47-61 <https://doi.org/10.5055/jem.0801>
  40. Stempel, P., **Becker, A.**, Nasr-Azadani, E. (2023), "Expert Perceptions of Uncertainty Communication in 3D Visualizations of Coastal Hazards." *Digital Landscape Architecture*.
  39. Kalaidjian, E.\*; **Becker, A.(corresponding author)**, Pinel, S. (2022). Insights into resilience planning theory and practice: A case study of U.S. Seaports. *Frontiers in Sustainability*. DOI 10.3389/frsus.2022.963555.
  38. Hill, D.\*; **Becker, A.(corresponding author)**, Vieira, A.\*\* (2022 )The U.S. shipbuilding and repair industry's considerations of coastal hazards resilience - a baseline survey. *Maritime Policy and Management*. DOI:10.1080/03088839.2022.2138597
  37. **Becker, A.**, Hallisey, N.\*, Kalaidjian, E.\*; Stempel, P., Rubinoff, P. (2022). Hazard consequence modeling for emergency management: A Participatory Action Research approach to enhance disaster response. *Journal of Homeland Security and Emergency Management*.
  36. McClean, E., **Becker, A.(corresponding author)**, (2021). Advancing seaport resilience: Strategies to overcome decision making barriers. *Frontiers in Sustainability*. <https://doi.org/10.3389/frsus.2021.673630>.
  35. **Becker, A.**, Hallisey, N.\*, Bove, G.\* (2021). Toward Regional Hazard Risk Assessment: A Method to Geospatially Inventory Critical Coastal Infrastructure Applied to the Caribbean. *Journal of Infrastructure Preservation and Resilience*. <https://doi.org/10.1186/s43065-021-00019-0>
  34. Stempel, P.\*; **Becker, A.**, Rubinoff, P., Fultineer, S., (2021). Beyond the Blue Blob: The Salience and Perceived Legitimacy of Alternative Sea Level Rise Visualizations. *Journal of Digital Landscape Architecture*. 10.14627/537705008.
  33. Stempel, P.\*; **Becker, A.**, (2021). Is it scientific? Perceptions of semi-realistic 3D storm surge visualizations. *Cartographica*.
-

- 
32. **Becker, A.**(2020). Climate change impacts to ports and maritime supply chains. *Maritime Policy & Management*, 47(7), 849-852. doi:10.1080/03088839.2020.1800854.
  31. Mokashi, A., **Becker, A.**, Corbett, J., (2020). America's Marine Highway Stakeholders: A System Scale Analysis of Influence in Decision Making. *Journal of Maritime Affairs*.
  30. Vanceylon, J., Lang, C., **Becker, A.**, (2020). Whatever Floats Your Vote: Understanding Voter Support for Public Port Infrastructure Investments. *Maritime Policy and Management*. DOI: 10.1080/03088839.2020.1754478.
  29. McIntosh, R.D.\* , **Becker, A.**(2020), "Applying Multi-Criteria Decision Analysis to Weight Indicators of Seaport Vulnerability to Climate and Extreme Weather Impacts for U.S. North Atlantic Ports." *Environment Systems and Decisions*. DOI: 10.1007/s10669-020-09767-y.
  28. Henry, J.\* , **Becker, A.(corresponding author)** , (2020). Port Stakeholder Perceptions of Sandy Impacts – A Case Study of Red Hook, NJ. *Maritime Policy and Management*. DOI: 10.1080/03088839.2020.1729434
  27. Sweeney, B.\* , **Becker, A.**, (2020), Considering Future Sea Level Change in Maritime Infrastructure Design: A Survey of US Engineers. *Journal of Waterway, Port, Coastal, and Ocean Engineering (ASCE)*. Vol 146, No. 4. doi.org/10.1061/(ASCE)WW.1943-5460.0000583.
  26. Bove, G.\* , **Becker, A.**, Sweeney, B., Vousdoukas, M., Kulp, S. (2020) A method for regional estimation of climate change exposure of coastal infrastructure: Case of USVI and the influence of digital elevation models on assessments. *Science of The Total Environment* 710.
  25. Mclean, E.L., **Becker, A.**(2019) Decision makers' barriers to climate and extreme weather adaptation: a study of North Atlantic high- and medium-use seaports. *Sustainability Science* 11, 835-847.
  24. McIntosh, R.D.\* , **Becker, A.**, (2019), "Expert Evaluation of Open-Data Indicators of Seaport Vulnerability to Climate and Extreme Weather Impacts for U.S. North Atlantic." *Ocean and Coastal Management*. Vol. 180, No. 1.
  23. Stempel, P.\* , **Becker, A.**, (2019). Visualizations out of context. Implications of using simulation-based 3d hazard visualizations. *ISPRS International Journal of Geo-Information: Special issue on Natural Hazards and Geospatial Information*. Vol 8, No 318; Doi:10.3390/ijgi8080318.
  22. Witkop, R.\* , **Becker, A.**, Stempel, P.\* , Ginis, I. (2019). Developing Consequence Thresholds for Storm Models through Participatory Processes: Case Study of Westerly Rhode Island. *Frontiers in Earth Science: Geohazards and Georisks*.Vol. 7. Doi: 10.3389/feart.2019.00133.
  21. **Becker A.**, Kretsch, E.\* , (2019) The Leadership Void for Climate Adaptation Planning: Case Study of the Port of Providence (Rhode Island, United States). *Frontiers in Earth Science*, 7. Doi:10.3389/feart.2019.00029.
  20. Casey, A.\* , **Becker, A.**, (2019). Institutional and Conceptual Barriers to Climate Change Adaptation for Coastal Cultural Heritage. *Coastal Management*, pp. 1-20. 10.1080/08920753.2019.1564952.
  19. Stempel, P.\* , Ginis, I., Ullman, D., **Becker, A.**, Witkop, R. (2018). Real-Time Chronological Hazard Impact Modeling. *Journal of Marine Science and Engineering*, Vol. 6, no. 134. Doi:10.3390/jmse6040134.
  18. Monioudi, I, Asariotis, R., **Becker, A.**, Dowding-Gooden, D., Esteban, M., Mentaschi, L., Nikolaou, A., Nurse, L., Phillips, W., Smith, D., Satoh, M., Snow-Bhat, C., Trotz, U., Velegrakis, A., Voukouvalas, E., Vousdoukas, M., Witkop, R.\* (2018). Climate change impacts on critical international transportation assets of Caribbean Small Island Developing States (SIDS): The case of Jamaica and Saint Lucia. *Regional Environmental Change*.
  17. Ng, A.K.Y., Zhang, H., Afenyo, M., **Becker, A.**, Cahoon, S., Chen, S.L., Esteben, M., Ferrari, C., Lau, Y.Y., Lee, P.T.W., Monios, J., Tei, A., Yang, Z. and Acciaro, M. (2018): 'Port decision-maker perceptions on the effectiveness of climate adaptation actions'. *Coastal Management*, vol. 46, no. 3, pp. 148-175.
-

16. **Becker, A.**, Ng, A.K.Y., McEvoy, D., Mullett, J., (2018). "Implications of climate change for shipping: Ports and supply chains." *Wiley Interdisciplinary Reviews: Climate Change*: vol. 9, no. 2, e508. Doi: 10.1002/wcc.508.
15. Ng, A.K.Y., Andrews, J., Babb, D., Lin, Y., **Becker, A.**(2018). "Implications of climate change for shipping: Opening the Arctic seas." *Wiley Interdisciplinary Reviews: Climate Change*: vol. 9, no. 2, e507. Doi: 10.1002/wcc.507.
14. Bukvic, A., Zhu, H., Lavoie, R. \*, **Becker, A.**(2018). "The role of proximity to waterfront in residents' relocation decision-making post-Hurricane Sandy." *Ocean & Coastal Management* 154:8-19. Doi: <https://doi.org/10.1016/j.ocecoaman.2018.01.002>.
13. Esteban, M., Takagi, H., Mikami, T., Bahbouh, L., **Becker, A.**, Nurse, L., Shibayama, T., and Nagdee, M., (2017) "How to Carry Out Bathymetric and Elevation Surveys on a Tight Budget: Basic Surveying Techniques for Climate Change Planning" *International Journal of Sustainable Future for Human Security*. N Vol 5, No 2, 2017.
12. **Becker, A.**, Hippe, A., McLean, E., (2017), Cost and Materials Required to Retrofit US Seaports in Response to Sea Level Rise: A Thought Exercise for Climate Response. *Journal of Marine Science and Engineering* 5 (3), 44.
11. **Becker, A.**, (2017), "Using Boundary Objects to Stimulate Transformational Thinking: Hazard Resilience for the Port of Providence." *Sustainability Science*. Vol. 12, No. 3, pp. 477-501.
10. Touzinsky, K, Rosati, J., Fox-Lent, C., **Becker, A.**, Luscher, A. (2016), Advancing Coastal Systems Resilience Research: Improving Quantification Tools through Community Feedback. *Shore and Beach*. Vol. 84, No. 4, pp. 30-38.
9. **Becker, A.**, Chase, N., Fischer, M., Schwegler, B., Mosher, K., (2016), "A method to estimate climate-critical construction materials applied to seaport protection." *Global Environmental Change*. Doi: 10.1016/j.gloenvcha.2016.07.008.
8. Romelczyk, E.\* , Becker, A.(2016), "Missing the tide? Workplace cultural differences as a barrier to seafarer mobility in the U.S. workboat and sail training sectors." *Maritime Policy and Management*. **(Nominated for MPM Best Manuscript 2016)**
7. **Becker, A.**, and Caldwell, M. (2015), "Stakeholder Perceptions of Seaport Resilience Strategies: A Case Study of Gulfport (Mississippi) and Providence (Rhode Island)." *Coastal Management*, 43 (1):1-34. Doi: 10.1080/08920753.2014.983422.
6. **Becker, A.**, Matson, P., Fischer, M., Mastrandrea, M., (2014), "Toward seaport resilience for climate change adaptation: Stakeholder perceptions of hurricane impacts in Gulfport (MS) and Providence (RI)." *Progress in Planning*. Doi: 10.1016/j.progress.2013.11.002.
5. **Becker A.**, Acciaro M., Asariotis R., Carera E., Cretegnny L., Crist P., Esteban M., Mather A., Messner S., Naruse S., Ng A.K.Y., Rahmstorf S., Savonis M, Song D., Stenek V., Velegrakis A.F. (2013) A Note on Climate change adaptation for seaports: A challenge for global ports, a challenge for global society. *Climatic Change*. Doi:10.1007/s10584-013-0843-z. (Cited in 2018 National Climate Assessment).
4. Kirchofer, A., Brandt, A., Krevor, S., Prigiobbe, V., **Becker, A.**, Wilcox, J. (2013), "Assessing the Potential of Mineral Carbonation with Industrial Alkalinity Sources in the U.S." *Energy Procedia*, Vol. 37, (Performed GIS analysis portion of this study).
3. Kirchofer, A., **Becker, A.**, Brandt, A., Wilcox, J. (2013), "CO2 Mitigation Potential of Mineral Carbonation with Industrial Alkalinity Sources in the U.S." *Environmental Science & Technology*. DOI: 10.1021/es4003982, (Performed GIS analysis portion of this study).
2. Fu, E., Newell, D., **Becker, A.**, Fischer, M., Schwegler, B. (2013), "Is Adaptation Sustainable? A Method to Estimate Climate-Critical Construction Resource Capacity." *Journal of Construction Innovation: Information, Process, and Management*. Issue 3, Number 2. Online at: <http://www.emeraldinsight.com/journals.htm?issn=1471-4175>.
1. **Becker A.**, Fischer M., Inoue S., and Schwegler B. (2012), "Climate Change Impacts on International Seaports: Knowledge, Perceptions, and Planning Efforts Among Port

---

Administrators,” *Climatic Change*, No. 110, pp. 5-29. Online at: <http://www.springerlink.com/content/x150wl76g57843k6/fulltext.pdf>. (Cited in 2018 National Climate Assessment).

### **Refereed Conference Papers (8)**

8. Pranav Sai, Isaac Ginis, Tetsu Hara, **Austin Becker**, Samuel Adams\* and Chris Damon (2024). Real-time Hazard and Impact Forecasting for Hurricanes and Nor’easters. Practice and Experience in Advanced Research Computing. Providence, RI (Award Winner).
7. Ng, AKY, Poo, CP, Wang, T, **Becker, A** and Lau YY (2023). Dissecting climate adaptation strategies and planning of ports from different theoretical angles. *Proceedings of the World Transport Convention 2023*, Wuhan, China, 14-17 June 2023. (Paper no. SS0301-P-004). **Winner of Excellent Paper Award.**
6. Stempel, P., Nasr-Azadani, E., Russ, C., **Becker, A.**, Ginis, I., Crowley, D., Grilli, A., Grilli, S., Walsh, J. P., Whaling, I., Rubinoff, P., Duhaime, R., And Damon, C. (2023), 'Dilemmas In 3d Landscape Visualization Of Coastal Hazards For Public Engagement', *Coastal Sediments 2023*, 2615-29.
5. Ng. AY., Poo, M., Wang, T., **Becker, A.**, Lau, Y., (2023). “A Theoretical Discussion on Ports’ Climate Adaptation Strategies and Planning.” Toronto, CA., May 7-10.
4. Stempel, P.\*, **Becker, A.**, (2018). "Effects of localization on perceptions of storm surge risk depicted in model driven semi-realistic visualizations." International Conference on Sustainable Development, NY, NY. September 26-28.
3. Toilliez, J., Mitchell, T., **Becker, A.**(2014), “Sea level change considerations for Marine Civil Works: COPRI Committee update.” Conference paper for ASCE International Conference on Sustainable Infrastructure Los Angeles/Long Beach, CA Nov. 7.
2. Ng, A.K.Y., Yang, Z., Cahoon, S., Chen, S., **Becker, A.**, Fischer, M. (2013), “Analyzing risk posed by climate change on ports using a fuzzy approach.” *Proceedings of the International Association of Maritime Economists (IAME) Conference*, Marseille, France, 3-5 July, 2013.
1. Ng, A.K.Y., **Becker, A.**and Fischer, M. (2013): ‘A theoretical discussion on climate change, port adaptation strategies and institutions’. *Proceedings of the Canadian Transportation Research Forum*, Halifax, NS, Canada, 10-11 June 2013.

### **Book Chapters (11)**

12. Fernandez Pero, A., Verschuur, J., Becker, A., Climate change, disruptions and adaptation at ports. In *Maritime Sustainability*, Gordon Wilmsmeier and Jason Monios (eds.)
  11. Burroughs, R., **Becker, A.**(2020). Chapter 3 - Storm resilience and sustainability at the Port of Providence, USA. In in Ng., A., Monios, J., and Jiang, C. (eds). *Maritime Transport and Regional Sustainability*. Pp. 33-44. Elsevier. ISBN 9780128191347.
  10. McIntosh, R.D.\*, **Becker, A.**, (2017). Understanding the Regional Distribution of Seaport Climate-Vulnerabilities, In Linkov, I., et al (eds.). *Risk and Resilience* (Edited book). Springer, NY, NY.
  9. Zhang, H., Ng, A.K.Y., **Becker, A.**, (2017) A Critical Discussion on the Roles of Institutions on Ports’ Adaptation to the Impacts Posed by Climate Change, in: Leal Filho, W., Keenan, J.M. (Eds.), *Climate Change Adaptation in North America: Fostering Resilience and the Regional Capacity to Adapt*. Springer International Publishing, Cham, pp. 105-117.
  8. Ng, A., **Becker, A.**, Cahoon, S., Chen, S, Yang, Z., Earl, P. Time to Act: The Criticality of Ports in Adaptation to the Impacts Posed by Climate Change. (2016), In Ng, A. et al (eds). *Climate Change and Adaptation Planning for Ports in Transportation and Supply Chains* (Edited book). Routledge, NY, NY.
  7. **Becker, A.**and Ng, A. (2016), The state of climate adaptation for ports and the way forward, In Ng, A. et al (eds). *Climate Change and Adaptation Planning for Ports in Transportation and Supply Chains* (Edited book). Routledge, NY, NY.
-

6. Cahoon, S. Chen, P. Ng, A., Yang, **Becker, A.**(2016), Analyzing risks posed by climate change on transportation and supply chains: a fuzzy approach. In Ng, A. et al (eds). *Climate Change and Adaptation Planning for Ports in Transportation and Supply Chains* (Edited book). Routledge, NY, NY.
5. Messner, S., **Becker, A.**, Ng, A. (2016). Seaport Adaptation for Climate Change: The Roles of Stakeholders and the Planning Process. In Ng, A. et al (eds). *Climate Change and Adaptation Planning for Ports in Transportation and Supply Chains* (Edited book). Routledge, NY, NY.
4. **Becker, A.**, Toilliez, J., Mitchell, T., (2015), "Considering sea level change in designing Marine civil works – Recommendations for best practices." In: Esteban, M, Takagi, H., Shibayama, T., *Handbook of Coastal Disaster Mitigation for Engineers and Planners*. Elsevier, Butterworth-Heinemann. New York, NY. ISBN-10: -128010606.
3. Moore, F., Mankin, J., **Becker, A.**, (2015), "Disciplines: Integrating Climate and Social Sciences." Chapter 4 in *Climate Cultures: Anthropological Perspectives on Climate Change*, edited by Jessica Barnes and Michael Dove. ISBN: 978-0-300-19881-2.
2. **Becker, A.**(2014), "Maritime Transportation and Ports." *Encyclopedia of Natural Resources*. Doi: 10.1081/E-ENRW-120047591.
1. MacDonald, T., **Becker, A.**, Bellomo, D., Burkett, V., Cikir, J., Cutter, S., Dow, K., Hall, J., Honeycutt, M., King, P., Kirshen, P., London, J., McGregor, A., Melby, J., Patton, L., Russo, E., Smith, G., Thatcher, C., Trtanj, J. (2012) "Vulnerability and Impacts on Human Development." In: Burkett V, Davidson M (eds.) *Coastal Impacts, Adaptation, and Vulnerabilities. National Climate Assessment Regional Input Reports*. Island Press/Center for Resource Economics, pp 66-97. Doi:10.5822/978-1-61091-460-4\_4.

#### **Peer-reviewed Technical Reports (7)**

7. Kalaidjian, E. \*, **Becker, A.**(2023). Institutionalizing Resilience: Insights from Assessment Initiatives at Seaports. An Appendix to: United States Army Corps of Engineers and Cyber Infrastructure Security Agency. *A Resilience Assessment Guide for Ports and the Maritime Transportation System*. Online at: <https://www.cisa.gov/resources-tools/resources/marine-transportation-system-resilience-assessment-guide>.
6. McIntosh, R. \*, **Becker, A.**, Mclean, E., (2019). *Measuring vulnerability to inform resilience: Pilot study for North Atlantic Medium and High-Use Maritime Freight Nodes* Technical Reports (TR) for: Measuring vulnerability to inform resilience: Pilot study for North Atlantic Medium and High-Use Maritime Freight Nodes, US Army Corps of Engineers Engineer Research and Development Center, Broad Area Announcement Grant: W912HZ-16-C-0019.
5. Mclean, E., **Becker, A.**(2019). *Decision-maker Barriers to Extreme Weather Climate Change Adaptation for Seaports: A Cultural Consensus Model for Medium and High-Use Ports in the North Atlantic*. Technical Reports (TR) for: Measuring vulnerability to inform resilience: Pilot study for North Atlantic Medium and High-Use Maritime Freight Nodes, US Army Corps of Engineers Engineer Research and Development Center, Broad Area Announcement Grant: W912HZ-16-C-0019.
4. Grilli, A., Spaulding, M., Damon, C., Cean, T., Fugate, G., **Becker, A.**, (2019). "Application of the Coastal Environmental Risk Index (CERI) to Barrington, Bristol, and Warren, RI."
3. Opaluch, J., **Becker, A.**, Robadue, D., Kotowicz, D. (2018). "Overcoming Barriers to Motivate Community Action to Enhance Resilience." Final Project Report Submitted to: Coastal Resilience Center of Excellence, US Department of Homeland Security Center of Excellence, University of North Carolina, Chapel Hill.
2. **Becker, A.**Burroughs, R., Kretsch, E. \*, Haymaker, J., McIntosh R. \*, (2017), "Vulnerability Assessment for Maritime Infrastructure: Pilot Method Development for the Port of Providence." Workshop/project report for Rhode Island Dept. of Transportation.

- 
1. **Becker, A.** Wilson, A., Bannon, R., McCann, J., Robadue, D., Kennedy, S. (eds.), (2010), "Rhode Island's Ports and Commercial Harbors: A GIS-Inventory of Current Uses and Infrastructure."

**Non-Refereed Publications (24)**

24. **Becker A.** et al., "Connecticut CHAMP demonstration project report"
  23. **Becker, A.**, Hallisey, N., Rubinoff, P., Bonyng, G., McElroy, K., Damon, C., Mandeville, A. 2024. "Coastal Hazards Analysis, Modeling, and Prediction System for Emergency Management and Response", pp 42-70 in Coastal Resilience Center of Excellence (CRC) Year 9 Annual Report, Final Report of Activities and Accomplishments for the Period July 1, 2023 – June 30, 2024, University of North Carolina at Chapel Hill, August 26, 2024.
  22. **Becker, A.**, Hallisey, N., Rubinoff, P., Bonyng, G., McElroy, K., Damon, C., Mandeville, A 2023. "Coastal Hazards Analysis, Modeling, and Prediction System for Emergency Management and Response", pp 42-70 in Coastal Resilience Center of Excellence (CRC) Year 8 Annual Report, Final Report of Activities and Accomplishments for the Period July 1, 2022 – June 30, 2023, University of North Carolina at Chapel Hill, August 26, 2023,
  21. **Becker, A.**, Hallisey, N., Rubinoff, P., Bonyng, G., McElroy, K., Damon, C., Mandeville, A 2022. "Coastal Hazards Analysis, Modeling, and Prediction System for Emergency Management and Response", pp 42-70 in Coastal Resilience Center of Excellence (CRC) Year 8 Annual Report, Final Report of Activities and Accomplishments for the Period July 1, 2021 – June 30, 2023, University of North Carolina at Chapel Hill, August 26, 2022,
  22. Peek, Lori, Mary Angelica Painter, Gina Eosco, Alison M. Agather, Jonathon Mote, Cassandra Shivers-Williams, Jennifer Tobin, Jolie Breeden, and **Open Data Workshop Participants**. 2023. Final Report of the Workshop on Open Data and Reuse in Social Science Weather Research. Natural Hazards Center, University of Colorado Boulder.  
hazards.colorado.edu/research/weather-ready-research/open-data-workshop
  21. **Becker, A.**, 2022. "Coastal Hazards Analysis, Modeling, and Prediction System for Emergency Management and Response", pp 42-70 in Coastal Resilience Center of Excellence (CRC) Year 7 Annual Report, Final Report of Activities and Accomplishments for the Period July 1, 2021 – June 30, 2022, University of North Carolina at Chapel Hill, August 26, 2022,
  20. **Becker, A.**, Rubinoff, P., Ginis, I., Stempel, P., Fusco, R., Hallisey, N., McElroy, K., Eisenberg, D., Mueller, C., Crowley, D., Damon, C., Lofgren, B., Atkins, S., Brightman, H., Shanahan, E., Domanowski, C., (2022). "A hazard-resilient future for Naval Station Newport within its coastal community: A Military Installation Resilience Review for short-term preparedness and long-term planning. Prepared for the City of Newport through a grant from the Department of Defense Office of Local Defense Community Cooperation (Federal Award Identification Number: HQ00052010066). University of Rhode Island, Kingston, Rhode Island.
  19. **Becker, A.**, (2021), "Preparing Ports and Port Cities for Climate Change: Mitigation and Adaptation. "Online at <https://www.aivp.org/en/newsroom/preparing-ports-and-port-cities-for-climate-change-mitigation-and-adaptation/>.
  18. **Becker, A.**, (2021), "Coastal Hazards Analysis, Modeling, and Prediction System for Emergency Management and Response", in Coastal Resilience Center of Excellence (CRC) *Year 6 Annual Report*, Final Report of Activities and Accomplishments for the Period July 1, 2020 – June 30, 2021, University of North Carolina at Chapel Hill, August 26, 2021,
  17. **Becker, A.**, (2020), "Coastal Hazards Analysis, Modeling, and Prediction System for Emergency Management and Response", in Coastal Resilience Center of Excellence (CRC) *Year 5 Annual Report*, Final Report of Activities and Accomplishments for the Period July 1, 2019 – June 30, 2020, University of North Carolina at Chapel Hill, August 26, 2020,
  16. **Becker, A.**, (2019), "Coastal Hazards Analysis, Modeling, and Prediction System for Emergency Management and Response", in Coastal Resilience Center of Excellence (CRC) *Year 5 Annual*
-

- 
- Report, Final Report of Activities and Accomplishments for the Period July 1, 2018 – June 30, 20219, University of North Carolina at Chapel Hill, August 26, 2019,*
15. Kane, M.\*\* , Almeda, A.\*\* , Green W., **Becker, A.**, (2016), “Galilee: A Vision for a Resilient Port” Report from a 2016 Interdisciplinary Studio in Landscape Architecture at the University of Rhode Island. Funding support from the Rhode Island Foundation’s Spartina Fund. Online at: <http://web.uri.edu/lar/files/Pages-from-FINAL-Galilee-Report-image.jpg>. **Winner of Rhode Island Chapter of the American Planning Association, Best Presentation, student category.**
  14. **Becker, A.** (2016), “Hurricane Resilience: Long-range planning for the port of Providence.” Case study report for PIANC Working Group 178.
  13. Connell, R., Canevari, L., Wright, S., Robertson, WM, Cerezo, Reviero, A., Larson, R., Carr, C. Washington, R., Saucedo, E., Ramierz, E., Olivera, M., **Becker, A.**(2015), “Port of Manzanillo: Climate Risk Management.” Inter-American Development Bank, Washington, DC. Online at: [http://cdn.iic.org/sites/default/files/documents/pub/en/71\\_eng\\_pantalla.pdf](http://cdn.iic.org/sites/default/files/documents/pub/en/71_eng_pantalla.pdf).
  12. **Becker, A.**(2015), “Rhode Island Embarks on Collaborative Planning Process for Building More Resilient Ports.” FHWA Fostering Liveable Communities Newsletter, Issue 4, Number 3, October.
  11. Ng, A., **Becker, A.**(2015), “Port adaptation to the impacts posed by climate change: How can scholars, policymakers, and industrial professionals contribute?” *The Maritime Economist*, 1(1).
  10. **Becker, A.**, Englander, J. (2014), “Superstorms and rising sea levels: the new challenge for seaports.” *Port Technology International*, Maritime Information Services, Ltd., London, United Kingdom, Edition 64.
  9. **Becker, A.**, Englander, J. (2014), “Superstorms and rising sea levels present a new challenge for ports.” *Seaports Magazine*, American Association of Port Authorities, June.
  8. **Becker, A.**, (2014), “New paradigm for storm planning.” *Ports and Harbors Magazine*, International Association of Ports and Harbors, January/February.
  7. **Becker A.** (2013), “Building Seaport Resilience for Climate Change Adaptation: Stakeholder Perceptions of the Problems, Impacts, and Strategies.” PhD Dissertation, Stanford University, Stanford, CA.
  6. Cote, M., **Becker, A.**, Helmuth, B., Nijbroek, R. (2012), “Everything, Engineered: Water management in the Netherlands: Lessons for U.S. Counterparts.” White paper for American Association of Climate Officers.
  5. **Becker, A.**, Newell D., Fischer, M., Schwegler, B. (2011), “Will ports become forts? Climate change impacts, opportunities, and challenges.” *Terra et Aqua, Official Magazine of the International Association of Dredging Companies*, Number 122, pp. 11-17.
  4. **Becker, A.**, (2010), “Ready Whatever the Weather.” *Ports and Harbors Magazine*, International Association of Ports and Harbors, March 2010, 26-27.
  3. **Becker, A.**, J. Boyd, J. McCann, (Eds.) (*Draft in review*), “Working Waterfront, The Port, and Water Dependent Uses Chapter (Revisions to Providence Harbor SAMP Port Development Chapter 300)” Rhode Island Coastal Resources Management Council, North Kingston, R.I.
  2. **Becker, A.**, J. Boyd, C. Chaffee, S. Kennedy, J. McCann, N. Mitchell, R. Sheridan, M. Allard Cox, & A. Neville (Eds.) (2008), “Recommendations for Management of the Woonasquatucket River & Promenade Street District.” Rhode Island Sea Grant, Narragansett, R.I., 34pp.
  1. **Becker, A.** (2006), “Making the Waterfront Work: A Case for True Mixed-Use Redevelopment of Providence Harbor.” *41 Degrees North*, 3(2), pages 12-13.

### **Published Datasets (3)**

3. McElroy, K., **A. Becker.** (2023). "Building an Expert Mental Model: Protocols and Curated Transcripts", in Factors Influencing Flood Risk Management Integration in U.S. Municipal
-

---

Planning: A social science research project [Version 3]. DesignSafe CI. <https://doi.org/10.17603/ds2-c35n-1186>

2. McElroy, K., **A. Becker**. (2023) "Expert Mental Model Interview Protocols," in Instruments and Data for Influences on Flood Risk Management in Municipal Urban Planning: An Expert Mental Model. DesignSafe-CI. <https://doi.org/10.17603/ds2-bbsa-vz18> v1
1. **Becker, A.**, N. Hallisey, G. Bove. (2023) "A geospatial inventory of critical coastal infrastructure in the Caribbean: Methodology and dataset." DesignSafe-CI. <https://doi.org/10.17603/ds2-jvpf-3518> v1.

## **PRESENTATIONS**

*(I = Invited, E=Expenses paid)*

### **Keynote & Plenary Addresses**

4. Becker, A. (2023), Linking research to endusers through a Coastal Hazards Analysis, Modeling, and Prediction GIS. NorthEast Arc GIS Users Group Annual Meeting, Kingston, RI, May 17 (Keynote Speaker, IE).
3. **Becker, A.**, (2022), Implications of Coastal Resilience for Military Infrastructure," (Keynote Speaker). Regional Alumni Symposium, US Naval War College, Newport, RI, September 15 (I).
2. Becker, A. (2016). "The challenges of communicating climate change for coastal communities." Keynote speaker for Metcalf Institute fundraising event. Narragansett, RI, July 14th (I)
1. Becker, A.(2014) (Keynote speaker for research), "Climate resilience for ports and port cities: Setting a research agenda." Consortium for Ocean Leadership 2014 Public Forum: The Urban Ocean, Washington, D.C., March 14 (IE).

### **Invited Seminars & Colloquia**

15. **Becker, A.**, (2025)," Resilience & Early Warning Systems for New England's Coastal Infrastructure." The Things We'll Never Know: A Science Fair of Canceled Grants. US Capital. July 8 (Invited presenter).
  14. **Becker, A.** (2021). Advancing climate resilience for coastal infrastructure: Insights from a decade of applied research. Center for Coastal Physical Oceanography (CCPO) and Institute for Coastal Adaptation & Resilience (ICAR) Spring 2021 Virtual Seminar Series. March 15.
  13. **Becker, A.**(2021). Advancing climate resilience for coastal infrastructure: Insights from a decade of applied research. Lecture of Opportunity, US Naval War College, Newport, RI, Feb. 2.
  12. **Becker, A.**(2020). Advancing climate resilience for U.S. seaports: Insights from a decade of applied research. American Association of Port Authorities Energy and Environment Seminar and Expo. Oct. 29.
  11. **Becker, A.** (2019). "Overcoming Barriers to Long-term Climate Adaptation," Lecture of Opportunity, US Naval War College, Newport, RI, April 29.
  10. Mclean, E. and **A. Becker**. (2018). "Barriers to Climate and Extreme Weather Adaptations for Seaports: A Cultural Consensus Model for North Atlantic Medium and High-Use Port Decision Makers." American Association of Port Authorities, Energy & Environment Seminar, Sept. 10, New Jersey.
  9. **Becker, A.**(2016). "Hurricane Resilience and Impacts to Seaport Supply Chains." Invited Speaker for the 2016 Stu Clark Speaker Series at the University of Manitoba. March 4 (I,E)
  8. **Becker, A.**(2015). "Hurricane Resilience: Long Range Planning for the Port of Providence." URI Coastal Resources Center Seminar Series. Narragansett, RI, Nov. 10.
  7. **Becker, A.**(2014), "Building seaport resilience to climate change: A research agenda." Environmental Protection Agency Seminar Series, Narragansett, RI, March 5.
  6. **Becker, A.** (2014). "Climate Change Impacts in Rhode Island: The State of the Science," Staying Afloat: Adapting Waterfront Business to Rising Seas and Extreme Storms, The 13th Annual Ronald C. Baird Sea Grant Science Symposium, Newport, RI, Dec. 10.
-

- 
5. **Becker, A.**(2013), "Climate change consequences for seaports: Impacts, adaptation, and global implications." Seminar for College of Environment and Life Sciences, URI, Kingston, RI, April 12.
  4. **Becker, A.**(2012), Hurricane consequences in the face of climate change: Adaptation planning on a sector scale." Guest lecture for Prof. Rob Thompson's "Coastal Hazards" course, Marine Affairs Dept., URI, Kingston, RI, November 13.
  3. Newell, D., Fischer, M., Schwegler, B., **Becker, A.** (2010), "Ports & the Environment Seminar 2010: Distributed Technological Tools for Global Sea Level Rise Response Planning," Long Beach, CA, Oct. 4.
  2. **Becker, A.** (2007), University of Connecticut, American Experience Lecture Series, Guest Lecturer.
  1. **Becker, A.** (2006), URI, Integrated Graduate Research and Traineeship (IGERT) Program, Guest Lecturer.

### ***Peer-Reviewed & Competitive Conference Presentations & Posters***

71. Berry, E., **Becker, A.**, Hashemi, R., Tremper, C., & Stemple, P. (2025). Storm simulations and flood visualizations for adaptation planning: CHAMP, STORMTOOLS, and MyCoast RI planning and response tools for Rhode Island's critical infrastructure. Poster session presented at the MR2025: Mobility, Adaptation, and Wellbeing in a Changing Climate conference, June 16-19, Columbia University, New York City, NY.
  70. Berry, E., **Becker, A.**, Hashemi, R., Tremper, C., & Stemple, P. (2025). Storm simulations and flood visualizations for adaptation planning: CHAMP, STORMTOOLS, and MyCoast RI planning and response tools for Rhode Island's critical infrastructure. Poster session presented at the MR2025: Mobility, Adaptation, and Wellbeing in a Changing Climate conference, June 16-19, Columbia University, New York City, NY.
  69. Ginis, I., T. Hara, D. Crowley, J. Port, **Becker, A.**, S. Adams, P. Rubinoff, P. Stempel, C. Damon, K. McElroy and N. Hallisey (2024). Coastal Hazards, Analysis, Modeling, and Prediction for Emergency Management and Response. American Geophysical Union, Ocean Sciences Meeting. New Orleans, LA: CP23A-02..
  68. **Becker, A.** (2024), The Rhode Island Coastal Hazards Assessment, Modeling, and Prediction System, Natural Hazards Conference Researchers Meeting, Boulder, CO, July 15.
  67. **Becker, A.** (2023), Advancing climate resilience for ports and coastal infrastructure: Insights from a decade of applied research, University of Miami, Feb. 14.
  66. **Becker, A.**, (2023), Coming Ashore, Career Paths for Wayward Sailors, Tall Ships America Conference, Newport, RI, Feb. 8.
  65. **Becker, A.**, (2022), An assessment of port resilience assessments. PIANC Annual Conference, June 15.
  64. **Becker, A.**, (2022), Port challenges to climate change. 18th Biennial National Harbor Safety Committee Conference: Maritime Strong: Navigating Diverse Growth and Change, June 13-15.
  63. **Becker, A.** (2021). A Resilient Port of the Future. 2021 Port of the Future Conference, (Virtual), March 16.
  62. **Becker, A.** (2021). Advancing climate resilience for coastal infrastructure: Insights from a decade of applied research. Center for Coastal Physical Oceanography (CCPO)
  61. **Becker, A.** Hallisey, N. (2021), Geospatially Inventorying Critical Coastal Infrastructure: A Case Study in the Caribbean. CARIGEO Webinar # 3, Best Practices on Data Sharing, Sept. 21.
  60. **Becker, A.** (2021), Resilience and the Maritime Transportation Sector, TS Resilience Under Climate Change and a Dynamic Global Supply Chain Hosted by the U.S. Committee on the Marine Transportation System and the American Association of Port Authorities, May 11.
  59. **Becker, A.** (2021), Hazard Consequence Threshold Modeling. Department of Homeland Security Coastal Resilience Center, 6th Annual Meeting, University of North Carolina, Virtual Meeting, April 21-22.
-

- 
58. Hallisey, N., **Becker, A.**, (2020). Method to Geospatially Inventory Critical Coastal Infrastructure. American Geophysical Union Conference, Dec. 17.
  57. **Becker, A.** (2020). Advancing climate resilience for coastal infrastructure: Insights from a decade of applied research. Brown University Policy Lab Speaker Series. Nov. 17.
  56. **Becker, A.**, Rubinoff, P., Stempel, P., Ginis, I., Adams, S., Hallisey, N., Kalaidjian, E., (2020) Hazard Consequence Threshold Models for Emergency Management and Response Decision Making. American Shore and Beach Preservation Society, Oct. 15.
  55. **Becker, A.**, Kalaidjian, E.\* , (2020) Institutionalizing Resilience: Insights from Assessment Initiatives at U.S. Seaports. Florida Seaport Environmental Management Committee, Sept 1st.
  54. **Becker, A.**, Rubinoff, P., Stempel, P., Ginis, I., Adams, S.\*, Hallisey, N.\*, Kalaidjian, E.\*, (2020) Hazard Consequence Threshold Models for Emergency Management and Response Decision Making. Natural Hazards Center Researchers Meeting, Boulder, CO, July 15-16.
  53. **Becker, A.** (2020), Hazard Consequence Threshold Modeling. Department of Homeland Security Coastal Resilience Center, 5th Annual Meeting, University of North Carolina, Chapel Hill, NC, March 10-13.
  52. Mclean, E, **Becker, A.** (2019), Decision-makers Barriers to Climate and Extreme Weather Adaptation for Seaports presented at the Transportation Resilience 2019 - 2nd International Conference on Resilience to Natural Hazards and Extreme Weather Event, Washington, DC, November 13th.
  51. **Becker, A.**, Stempel, P., Menendez, J.\* (2019). "Visualizing Risk: Dynamic 3d Models of Storm Impacts On Coastal Structures In Rhode Island." Poster presentation at the Infrastructure Climate Network Meeting, Portsmouth, NH, April 4-5.
  50. Sweeney, B.\* , **Becker, A.**, (2019). "Designing Port Infrastructure for Sea Level Change: A Survey of U.S. Engineers." Poster presentation at the Infrastructure Climate Network Meeting, Portsmouth, NH, April 4-5.
  49. Mclean, E. and **Becker, A.**(2018). "Barriers to Climate and Extreme Weather Adaptations for Seaports: A Cultural Consensus Model for North Atlantic Medium and High-Use Port Decision Makers." Decision Support: Resilience panel (Jun. 21) at the Fifth Biennial Marine Transportation System Research and Technology Conference. Wash. D.C.
  48. Bove, G.\* , **Becker, A.** and M. Vousdoukas. (2018). "A GIS Inventory and Exposure Assessment for Critical Coastal Transport Infrastructure Land Use in the Caribbean Small Island Developing States." Decision Support: Resilience panel (Jun. 21) at the Fifth Biennial Marine Transportation System Research and Technology Conference. Wash. D.C.
  47. **Becker, A.**, McIntosh, R.\* , Mclean, E., (2018). "Indicating Climate Change Vulnerabilities
  46. **Becker, A.**, (2018), Working session on climate change for 2018 West and Central African Port Association Conference, Abidjan, Cote D'Ivoire, May 20-24.
  45. Mclean, E., **Becker, A.**, (2018), "Barriers to Climate Change Adaptation for Seaports: A Cultural Consensus Model for North Atlantic Medium and High-Use Port Decision Makers. Society for Applied Anthropology Annual Meeting, Philadelphia, PA, April 5.
  44. **Becker, A.** (2018). "Climate Change and the Working Waterfront." Working Port: A 21st Century Harbor Conference. Boston Harbor Now. Boston, MA, Jan 23-24.
  43. Ginis, I., Ullman, D., Hara, T., Kincaid, C. Rosa, K., Chen, X., Thomas, B., **Becker, A.**, Stempel, P.\* , Witkop, R.\* , Rubinoff, P., Huang, W., Orr, M., Thomas, R., Thompson, R., Belk, M., Morey, P., Conard, S., (2018). Advancing Modeling Capabilities and Impact Analysis Tools to Improve Preparedness for Major Hurricane Hazard Events." American Meteorological Society 98th Annual Meeting, Austin, TX, Jan. 11.
  42. Mclean, E., **Becker, A.**, Mcintosh, R.\* (2017), "Barriers to Extreme Weather Adaptation for Seaports – What do Decision-Makers say?" American Association of Port Authorities Environmental Committee, Nov. 15.
-

- 
41. Roman, C., **Becker, A.**, August, P., Neville, A., Rohr, N., Sassi, J., Swift, J. (2017), "Coastal Institute Climate Response Demonstration Sites." Coastal and Estuarine Research Foundation Conference, Nov. 6-10, Providence, RI.
  40. **Becker, A.** (2017), "Stimulating transformational thinking for maritime systems climate risk adaptation: Research overview." Florida Atlantic University, Ft. Lauderdale, FL, Oct. 4-6 (I,E)
    - Pillar Research Presentation, Oct. 4
    - Tower Forum Panel Discussion on Coastal Resilience, Oct. 5
    - Science to Solutions Seminar Series, Oct. 5
  39. Mclean, E., **Becker, A.**, McIntosh, R.\* (2017), "Decision-maker Barriers to Extreme Weather Adaptation for Seaports: A Cultural Consensus Model for Medium and High-Use Ports in the North Atlantic." American Indian Science and Engineering Society Conference, Denver, CO, Sept. 20-23.
  38. **Becker, A.**, (2017). "Climate risk adaptation for ports: Research for transformational thinking."
  37. Burroughs, R., **Becker, A.** (2017). "Can Stakeholders Change? The Seaport Resilience Enigma." Poster presentation at ICNET Workshop, University of New Hampshire, Portsmouth, NH.
  36. **Becker, A.**, McIntosh, R.\* , Mclean, E. (2017). "Indicating Climate Change Vulnerabilities
  35. Opaluch, J., **Becker, A.**, Rubinoff, P., Kotowicz D., Robadue, D. (2017). "Motivating Actions to Reduce Storm Vulnerability," Department of Homeland Security Coastal Resilience Center, 2nd Annual Meeting, University of North Carolina, Chapel Hill, NC, Feb. 1–3.
  34. **Becker, A.**, McIntosh, R.\* , Mclean, E. (2016). "Indicating Climate Change Vulnerabilities To Inform Seaport Resilience." Dept. of Homeland Security Center of Excellence for Coastal Resilience and University of North Carolina Maritime Risk Symposium University of North Carolina, Chapel Hill, North Carolina, Nov. 14-15, 2016 (I,E).
  33. **Becker, A.** (2016). "Adapting ports to climate change: Providence (RI) Case Study," AIVP Ports and Cities Conference, Netherlands, Oct 4-7.
  32. Thompson, R., **A. Becker**, D. Bidwell, and T. Smythe. Expanding opportunities and vulnerabilities in the Blue Economy. Presented at The 17th APEC Roundtable Meeting on the Involvement of the Business/Private Sector in the Sustainability of the Marine Environment. Taipei, Taiwan. August 31, 2016.
  31. **Becker, A.**, (2016). "Inspiring resilience thinking for seaport systems." Transportation Research Board Conference for Committee on Maritime Transportation System (CMTS), National Academy of Sciences, Washington, DC, June 21-22
  30. **Becker, A.**, (2016). "Inspiring resilience thinking for seaport systems." Green Ports for Blue Waters Conference, University of Rhode Island April 4-5,
  29. Green, W., **Becker, A.**, (2016). "Built environments and rising seas: Service learning recommendations for the future of the Port of Galilee." A presentation of student work resulting from a course on resilient planning, policy, and design. Keeping History Above Water Conference, Newport, Rhode Island, April 10-13 .
  28. **Becker, A.**, Burroughs, R. (2016). "More holistic planning for long-term coastal resilience? Port of Providence Demonstration Project." Social Coast Conference. Charleston, SC, Feb. 10.
  27. **Becker, A.** (2015). "Port Resilience: From knowledge to action." United States Coast Guard Resilience Review Team, Washington, DC, (via webinar), June 4, 2015.
  26. **Becker, A.**, Fischer, M., Schwegler, B., Chase, N. (2014). "Assessing Storm Vulnerabilities and Resilience Strategies: A Scenario-Method for Engaging Stakeholders of Public/Private Maritime Infrastructure." Poster presentation at American Geophysical Union Conference, San Francisco, CA, Dec. 12-19.
  25. Chase, N., **Becker, A.**, Fischer, M., Schwegler, B., (2014). Global Squeeze: Assessing Climate-Critical Resource Constraints for Coastal Climate Adaptation. Poster presentation at American Geophysical Union Conference, San Francisco, CA, Dec. 12-19.
-

- 
24. Toilliez, J., Mitchell, T., **Becker, A.** (2014), "Sea level change considerations for Marine Civil Works: COPRI Committee update." ASCE International Conference on Sustainable Infrastructure Los Angeles/Long Beach, CA Nov. 7.
  23. **Becker, A.**, Cox, K.\*, Peterman, A. (2014), "Stakeholder drivers for building natural-disaster resilient seaport systems." The Coastal Society and Restore America's Estuaries Conference, Washington, DC, Nov. 11-14.
  22. **Becker, A.** (2014), "Assessing vulnerability of maritime infrastructure: A case study of Rhode Island." 2014 NSBPA Conference on New England Coastal Issues, Taunton, MA, Sept. 17-18.
  21. Toilliez, J., Mitchell, T., **Becker, A.** (2014), "Best Practices for Sustainable and Resilient Coastal Development through Consideration of Local Sea Level Dynamics." 91st Coastal Engineering Research Board Meeting, San Francisco, CA, 9-11 September.
  20. **Becker, A.** (2014), "Stakeholder vulnerability assessment of Maritime Infrastructure: A case study of Rhode Island." Transportation Research Board Conference on Innovative Technologies for a Resilient Marine Transportation System, National Academy of Sciences, Washington, DC, June 24-26.
  19. **Becker, A.** Weiss, L\*., O'Brien, T. (2014), "Building leadership for climate adaptation: A review of approaches and assessment of applicability to the maritime infrastructure sector." Transportation Research Board Conference on Innovative Technologies for a Resilient Marine Transportation System, National Academy of Sciences, Washington, DC, June 24-26.
  18. Toilliez, J., Mitchell, T., **Becker, A.** (2014), "Sea level change guidance." ASCE International Conference on Sustainable Infrastructure Los Angeles/Long Beach, CA Nov. 2014.
  17. **Becker, A.** (2014), "Moving toward resilience: A research agenda for sustainable seaports." Green Boats and Ports for Blue Waters Conference, URI Graduate School of Oceanography, April 14.
  16. **Becker, A.** (2013), "Building seaport resilience to climate change: Stakeholder perceptions of strategies from the Ports of Gulfport (MS) and Providence (RI)." Conference on Transatlantic Solutions to Sea Level Rise Adaptation: Moving Beyond the Threat, Old Dominion University, Norfolk, VA, Oct. 30-31. (I,E)
  15. **Becker, A.** (2013), "Embarking on our next 100 years: Building seaport resilience for climate change." Association of Pacific Ports 100th Annual Conference, Redwood City, CA.
  14. **Becker, A.** (2012), "Climate change and the consequences of natural disaster in seaport systems: A case study of Gulfport (MS) and Providence (RI)," Fourth International Conference on Climate Change, University of Washington, Seattle, USA, July 12-13.
  13. **Becker, A.** (2012), "Climate change and ports: Qualitative analysis of consequences, plans, and requirements." United Nations Economic Commission for Europe (UNECE) International Conference on Adaptation of Transport Networks to Climate Change, Alexandroupolis, Greece, June 25-16. (I,E)
  12. **Becker, A.**, Fischer M., Matson P., Newell D. (2011), "Adaptation strategies for seaports: Global implications and local perspectives." United Nations Conference on Trade and Development (UNCTAD) Ad Hoc Expert Meeting on Climate Change Impacts and Adaptation: A Challenge for Global Ports, Geneva, Switzerland, Sept. 30. (I,E)
  11. Newell, D., Fischer, M., Schwegler, B., **Becker, A.** (2011), "Climate change adaptation for seaports: Engineering and policy for a sustainable future." Coastal Zone 2011: Chicago, IL, July 17.
  10. **Becker, A.**, Newell D. (2011), "Climate change adaptation for seaports: Engineering and policy for a sustainable future." Arup, San Francisco, CA, Feb. 8.
  9. **Becker, A.** (2010), "Seaports and Climate Change." Waseda University, Tokyo, Japan, Dec. 19, (webcast).
  8. Newell, D., Fischer, M., Schwegler, B., **Becker, A.**, Chase, N. (2010), "Preparing Ports for Sea Level Rise." Cities and Ports, 12th International Conference: Buenos Aires, Argentina, Nov. 17.
  7. **Becker, A.** (2010), "Hot Topics in Climate Change Science." American Sail Training Association Annual Conference, Long Beach, CA, Nov. 15. (I,E)
-

- 
6. **Becker, A.**, Fischer, M., Matson, P. (2010), "Impacts of Climate Change on Seaports: A Survey of Knowledge, Perceptions and Planning Efforts Among Port Administrators," Coastal Zone 2009 Conference, (proceedings at <http://www.csc.noaa.gov/cz/>), Boston, MA, July 21.
  5. **Becker, A.**, Fischer, M., Schwegler, B. (2010), "Impacts of Climate Change on Seaports: A Survey of Knowledge, Perceptions, and Planning Efforts of Port Administrators," The Coastal Society, Shifting Shorelines: Adapting to the Future Annual Conference, (proceedings in press), Wilmington, NC, June 14.
  4. **Becker, A.**, Fischer, M., Schwegler, B. (2010), "Climate Change Adaptation: IAPH/AAPA Member Plans and Perceptions," presented at International Association of Ports and Harbors Mid-term Conference, Savannah, GA, June 7.
  3. **Becker, A.**, Schwegler, B., Matson, P. (2010), "Impacts of Climate Change on Seaports: Preliminary Results of a Survey of Knowledge, Perceptions and Planning Efforts Among Port Administrators," Sea Level Rise 2010 Conference, Corpus Christi, TX, March 2. (I,E)
  2. **Becker, A.**, McCann, J. (2009), "Toward Understanding the Dynamics of Water Dependent Uses and Coastal Policy Through Rhode Island's Ports and Commercial Harbors Inventory," Coastal Zone 2009 Conference, (proceedings at <http://www.csc.noaa.gov/cz/>), Boston, MA, July 21.
  1. **Becker, A.** (2006), "Urban Waterfronts in the 21st Century: Shaping Policy for the Port of Providence," The Coastal Society Annual Conference, St. Pete Beach, FL, May 15.

### ***Government, Testimony & Policy Briefings***

12. **Becker, A.**, (2025), URI Tools for Coastal Planning and Management. Testimony to the RI Climate Change Commission, Providence, RI. Jan. 15. Video at: <https://capitolvri.cablecast.tv/show/10718?site=1>
  11. **Becker, A.** (2024), The Rhode Island Coastal Hazards Assessment, Modeling, and Prediction System, CISA Extreme Weather Working Group, Feb. 8.
  10. **Becker, A.** (2023), Resilience Challenges for Americas Ports, National Academy of Sciences Marine Board, Port Resilience Panel Topic with NOAA, Nov. 13
  9. **Becker, A.** (2023), The Rhode Island Coastal Hazards Assessment, Modeling, and Prediction System, Science for Disaster Reduction Working Group, Sept. 7.
  8. **Becker, A.**, Rubinoff, P., (2023), A hazard resilient future for Naval Station Newport within its coastal community Military Installation Resilience Review (MIRR) for short-term preparedness and long-term planning Briefing for Hampton Roads Planning Commission, Virginia, Jan 24.
  7. **Becker, A.** (2021), Port Adaptation and Resiliency: Key Issues for Business and Investment. World Ocean Council Port Coastal Adaptation Working Group Meeting, Aug. 4.
  6. **Becker, A.** (2017), "Coastal infrastructure resilience to extreme events: Geoscience in planning, design, and construction." Building the Modern World: Geoscience that Underlies Our Economic Prosperity Geoscience and the U.S. Economy Congressional Briefing Series, Webinar (300+ viewers), Aug. 2.
  5. **Becker, A.**, (2017). "Climate risk adaptation for ports: Research for transformational thinking." Climate change impacts and adaptation for coastal transport infrastructure in Caribbean SIDS, UNCTAD National Workshop - Saint Lucia 24 – 26 May and Kingston, Jamaica, 29 May – 3 June. (I,E)
  4. **Becker, A.** (2017), "Coastal infrastructure resilience to extreme events: Geoscience in planning, design, and construction." Building the Modern World: Geoscience that Underlies Our Economic Prosperity Geoscience and the U.S. Economy Congressional Briefing Series, Rep. Lowenthal (CA), Sponsor, June 12.
  3. **Becker, A.** (2015). "Hurricane Resilience and Impacts to Rhode Island Ports." Testimony before RI House Commission on Economic Risk Due to Flooding and Sea Level Rise. Dec. 15.
  2. **Becker, A.** (2015). "Climate change adaptation for the maritime freight sector: Moving from knowledge to action." Economic Commission for Europe, Inland Transport Committee Working
-

---

Party on Transport Trends and Economics Group of Experts on Climate Change impacts and adaptation for transport networks and nodes, Seventh session, Geneva, Switzerland (via webinar), June 3.

1. **Becker, A.**, Fischer, M., Schwegler, B., Hippe, A., Chase, N., Newell, D., Mosher, K. (2013). "The upper bound: Estimating resource requirements to adapt the world's seaports to climate change." The Institute for Prospective Technological Studies/European Commission's Joint Research Center, Scoping Workshop on Sea Ports and Climate Change, Brussels, Belgium, March 4-5. (I,E)

### ***Industry & Professional Forums***

14. **Becker, A.** (2020). Advancing climate resilience for seaports: Insights from a decade of applied research. UNCTAD Multiyear Expert Meeting on Transport, Trade logistics and Trade facilitation (8th session) Climate Change Adaptation for Seaports in Support of the 2030 Sustainable Development, Oct. 27.
  13. **Becker, A.**, (2025), Ports 101: Seaport Resilience Planning. Ports 25. Providence, RI. June 1.
  12. **Becker, A.** (2024), The Resilience Imperative for Ports and Coastal Infrastructure. UNCTAD Global Supply Chain Forum, Bridgetown, Barbados, May 21-25 (Video Link).
  11. **Becker, A.** Session Moderator, (2021), Assessing Resilience: Case Studies and a Path Forward for the Marine and Inland Waterborne Transportation System. Webinar presented by PIANC and the World Ocean Council. Aug. 25.
  10. **Becker, A.**, Kalaidjian, E.\* (2020) Institutionalizing Resilience: Insights from Assessment Initiatives at U.S. Seaports. AAPA Environment Committee Meeting, July 15th, 2020.
  9. **Becker, A.**, (2019). "Climate risk adaptation for ports: Research for transformational thinking." UNCTAD Ad Hoc Expert Meeting on Climate Change Adaptation for International Transport: Preparing for the Future , Geneva, Switzerland, April 16-17.
  8. **Becker, A.**, Bove, G.\* , D'Aversa, N.\* , (2017) "A GIS Inventory and Risk Assessment for Critical Coastal Infrastructure Land Use in Caribbean Island Small Island Developing States." UNCTAD Regional Workshop on climate change impacts and adaptation for coastal infrastructure in the Caribbean, Barbados, Dec. 6-7.
  7. **Becker, A.**, McInotsh, R.\* , Mclean, E. (2017). "Indicating Climate Change Vulnerabilities To Inform Seaport Resilience." Climate Change Adaptation for Ports and Navigation Infrastructure: A North American PIANC Seminar and Workshop, NY, NY, Feb 23 – 24.
  6. **Becker, A.**, (2016). "Transformational Thinking for Port Adaptation," UNCTAD Technical Expert Meeting on Climate change impacts and adaptation for coastal transport infrastructure in Caribbean Small Island Developing States, 29 June- 1 July 2016.
  5. **Becker, A.** (2015). "Hurricane Resilience: Long Range Planning for the Port of Providence." Narragansett Bay Propeller Club Annual Meeting, Middletown, RI, Nov. 9.
  4. **Becker, A.** (2013), "Port perceptions of sea level rise: An overview." World Ocean Council's Sustainable Oceans Summit, Washington, D.C., 22-24 April.
  3. **Becker, A.**, Fischer, M., Inoue, S. (2010), "Climate Change Adaptation: Results of a global survey of ports." Joint UNECE - UNCTAD Workshop, Geneva, Switzerland, Sept. 8.
  2. **Becker, A.**, Fischer, M., Schwegler, B. (2010), "Climate Change Adaptation: AAPA/IAPH Member Plans and Perceptions," presented at AAPA Harbors, Ports, and Navigation/GreenPorts America, Charleston, SC, April 26.
  1. **Becker, A.**, Fischer, M., Schwegler, B. (2010), "Impacts of Climate Change on Seaports: Results of a Survey of Knowledge, Perceptions and Planning Efforts Among Port Administrators." American Society of Civil Engineers Ports 2010: Building on the Past, Respecting the Future, Jacksonville, FL, April 25-28.
-

---

**Workshops, Panels, Organized Sessions & Moderator Roles**

13. **Becker, A.** (2025), Panelist for Maritime Risk and Resilience Symposium, South Florida University (I)
12. **Becker, A.**, (2025), Panelist for True Blue Panel, Innovate Newport (I)
11. **Becker, A.** (2024), Climate Resilience Challenges for Ports, Inter-American Defense Board (IADB) III Workshop on Maritime Security: Strategies for Hemispheric Maritime Security considering the Climate Change Impacts, August 6, 2024 (I).
10. **Becker, A.**, (2023), Sensitive Data Handling Lessons from Engagement with Rhode Island's Critical Infrastructure Sector. Natural Hazards Workshop, Boulder, CO, July 10-13.
9. **Becker, A.** (2023), Data storage and sensitivity issues with critical infrastructure research projects. Univ. of Colorado, Boulder, April 8. (Workshop Participant).
8. **Becker, A.** (2023), Resilience Planning for New England Coastal Communities. New England Region Coastal Resilience Workshop, Oct. 14.
7. **Becker, A.**, (2022), Coastal Resilience Research Overview. USGS Panel Discussion on Coastal Social Science, July 12.
6. **Becker, A.**, Kallaidjian, E.\* (2021), Resilience planning for transportation organizations: Insights from the U.S. Seaport Sector," Maritime Transportation System Resilience Assessment Guide Workshop- Oct. 5 and Oct. 7.
5. **Becker, A.**, (2018), "Leadership Void for Adaptation Planning," International Workshop on Climate Change and Adaptation Planning for Ports, Transport Infrastructures, and the Arctic (CCAPPTIA). University of Manitoba, Winnipeg, MB, Canada, May 3-4.
4. Millar, D., Toilliez, J., **Becker, A.** (2018). Sea-level Change Considerations for Marine Civil Works COPRI Committee Update on Best Practices. 2018 Real Property Institute of Canada Marine Infrastructure National Workshop, Ottawa, Ontario, Jan 9-10.
3. To Inform Seaport Resilience." Workshop on Hurricane Resilience, Charting a Path Toward a More Resilient Marine Transportation System: A Workshop to Examine Lessons Learned from the 2017 Hurricane Season, Washington, D.C., May 30-31.
2. **Becker, A.**, Fischer, M., Schwegler, B. (2011), "Global resource estimates for adapting seaports to climate change: Connecting science, engineering, and policy." A UC Berkeley and Woods Institute sponsored workshop on Understanding Climate Change Effects on San Francisco Bay: What can modeling offer? December 16.
1. Tower Forum Panel Discussion on Coastal Resilience, Oct. 5

**Sector-Specific & Local/Regional Briefings**

20. **Becker, A.**, (2025), Connecticut Demonstration of the Coastal Hazards, Analysis, Modeling, and Prediction System (CHAMP): Emergency Planning, Management, and Response. State Emergency Response Committee (SERC) Meeting. November 20.
  19. **Becker, A.**, (2025), Coastal Hazards, Analysis, Modeling, and Prediction System (CHAMP): Emergency Planning, Management, and Response. Rhode Island Flood Mitigation Association. Jan 24.
  18. **Becker, A.**, (2024), Coastal Hazards, Analysis, Modeling, and Prediction System (CHAMP): Emergency Planning, Management, and Response for RI, CT, & the U.S. Coast Guard. The 2024 Puerto Rico Symposium on Microgrids, Special Session on Natural Hazards and Resilient Infrastructure sponsored by the UPRM Coastal Resilience Center (UPRM-CRC), Mayaguez, Puerto Rico, Dec. 3.
  17. **Becker, A.**, (2022), Resilience initiatives at the Port of Providence: 2010 – present. Envision Resilience Rhode Island, Feb. 2.
  16. **Becker, A.**, McElroy, K, (2022). The Rhode Island Coastal Hazards Assessment, Modeling, and Prediction System for the Wastewater Treatment Facility Sector. Rhode Island Clean Water Association, Sept. 9, Warwick, RI.
-

15. **Becker, A.**, Kallaidjian, E.\* (2021), Resilience planning for transportation organizations: Insights from the U.S. Seaport Sector. 34th Rhode Island Transportation Forum, Oct. 29.
14. **Becker, A.** (2021). Research Overview. Sea Education Association Class Talk (Virtual), April 1.
13. **Becker, A.** (2020). (2020) Hazard Consequence Threshold Models for Emergency Management and Response Decision. Rhode Island Critical Infrastructure and Key Resources Committee, Oct. 6.
12. Ginis, I., **Becker, A.**, (2020) Rhode Island Hazard and Impact Modeling System for Emergency Management. Scientific Support for Emergency Environmental Response (SSEER) Annual Meeting. Zoom Meeting, Aug. 4.
11. **Becker, A.** (2019), "Coastal Hazard Impact Assessment." Climate Preparedness and Resilience Community of Practice Lead, CW Guidance Program US Army Corps of Engineers Headquarters, Washington, DC, Sept. 11.
10. Stempel, P., **Becker, A.**, Ginis, I., Ullman, D., Rubinoff., P., Overstrom, N. (2019). "Rethinking model-driven realistic storm-surge graphics." Rhode Island Coastal Ecology, Assessment, Innovation, and Modeling (RI C-AIM) Research Symposium 2019, Kingston RI. April 10.
9. **Becker, A.** (2018). "Stimulating Transformational Thinking for Long-Term Climate Resilience." University of Rhode Island Coastal Resiliency Symposium, Oct. 16, Narragansett, RI.
8. **Becker, A.**, and Mclean, E. (2018). "Adaptation Planning for Ports." 95th Annual US Army Coastal Engineering Research Board (CERB) Meeting, Providence, RI, Aug. 7-9.
7. **Becker, A.** (2016). "Toward a more resilient coast: Tools to Engage Decision Makers," US Naval War College, Newport, RI, Jan. 9.
6. **Becker, A.** (2016). "Toward a more resilient coast: Research program overview," CELS Advisory Council Annual Meeting, Kingston, RI, Oct 21.
5. **Becker, A.**, (2016). "Initiating Multi-Stakeholder Dialogue to Address the Wicked Challenge of Port-System Adaptation," North American Symposium on Climate Adaptation, New York, New York. Aug. 16-18.
4. **Becker, A.** (2016). "Adapting ports to climate change: Providence (RI) Case Study," Adaptation Futures 2016, Rotterdam, Netherlands May 11-13.
3. **Becker, A.**, Burroughs, R., Kretsch, E.\* , Haymaker, J., McIntosh, R.\* , Miller, J.\*\* (2015). "A methodology toward holistic long-term resilience planning: Rhode Island Pilot Study." URI Leadership Summit. Kingston, RI, Sept. 19-20.
2. **Becker, A.** (2012), "Hurricane consequences in the face of climate change: Case studies of two seaport clusters, Providence (RI) and Gulfport (MS)." Marine Policy Symposium, Roger Williams University, Bristol, RI, November 14-15.
1. **Becker, A.**, J. McCann, S. Kennedy, P. Rubinoff. (2007), "Applying Place-based Coastal Management Tools in the Redevelopment of Rhode Island's Urban Metro Bay Shoreline," The Proceedings of the Water Access 2007: A National Symposium on Working Waterways and Waterfronts, Norfolk, VA, page 41, May 9.

***Student Advisee & Research Associates Presentations (Red Font = Scheduled)***

35. Ostwind, David S. "Domestic Evacuation by Sea: Learning from the Past to Save Lives in the Future." Panel, 2025 McMullen Naval History Symposium, U.S. Naval Academy, Annapolis, MD, September 18, 2025.
34. Hallisey, N., **Becker, A.**, Stempel, P., Adams, S (2025). CHAMPioning Researcher-Practitioner Partnerships: A Decision Support Tool for Emergency Managers. 50th Annual Natural Hazards Research and Application Workshop, Univ. of Colorado, Boulder, CO, July 16.
33. Hallisey, N., Stempel, P., **Becker, A.** (2024) "From Prediction to Practice: Barriers to Adoption of Emergency Management Tools." 49th Annual Natural Hazards Research and Application Workshop Researchers Meeting. Speaker Presentation. Boulder, Colorado, July 17-18.

- 
32. McElroy, K., **Becker, A.** (2024), Coastal Hazard, Analysis, Modeling, and Prediction System (CHAMP): A Planning and Response Tool for Rhode Island's Water Quality Infrastructure, RIDOH Emergency Preparedness and Response Informational Session. Speaker Presentation, Providence, RI, February 6.
  31. Adams, S., **Becker, A.**, (2023) "Points of Interest: Implementing Simulation-Based Storm Hazard Consequence Prediction." Rhode Island Association of Emergency Managers 2023 Conference. Speaker Presentation, East Providence, RI, June 23.
  30. Adams, S., **Becker, A.** (2024) "The Coming Storm: Making Decision Support Tools Relevant to Emergency Managers." 49th Annual Natural Hazards Research and Application Workshop Researchers Meeting. Speaker Presentation. Boulder, Colorado, July 17-18.
  29. McElroy, K., **Becker, A.**, (2024), The State of Research Networks Today, OSHEAN 25th Anniversary Member Forum, Research Panel Member, Providence, RI, June 11.
  28. Bonyng, G., **Becker, A.** (2024), RI-CHAMP: A Planning and Response Tool for Rhode Island's Critical Infrastructure. Rhode Island Flood Mitigation Association 2024 Annual Meeting, Kingston, RI, May 23.
  27. Adams, S., **Becker, A.**, Ginis, I., Bonyng, G. (2024), RI-CHAMP: A Planning and Response Tool for Rhode Island's Critical Infrastructure, United States Coast Guard Rhode Island and Southeastern Massachusetts Area Committee Meeting, Westport, MA, May 22.
  26. Adams, S., (2023), "Implementing the Rhode Island Coastal Hazard, Analysis, Modeling, and Prediction System (RI-CHAMP) for Emergency Management and Response." 2023 Rhode Island Preparedness Conference. Breakout Session Speaker. East Providence High School, East Providence, RI, June 23.
  25. McElroy, K., (2023), "Rhode Island Coastal Hazard, Analysis, Modeling, and Prediction System (RI-CHAMP)." Rhode Island Flood Mitigation Association 2023 Conference. Speaker Presentation, University of Rhode Island, Kingston, RI, May 25.
  24. McElroy, K.\*, Adams, S.\*, Ginis, I., Hallisey, N.\*, **Becker, A.** (PI), (2022). "Rhode Island Coastal Hazard, Analysis, Modeling, and Prediction System." American Shore and Beach Preservation Association Annual Conference, (September 17), Long Beach, CA.
  23. McElroy, K.\*, Adams, S.\*, Ginis, I., Hallisey, N.\*, **Becker, A.** (PI), (2022). "Rhode Island Coastal Hazard, Analysis, Modeling, and Prediction System." Rhode Island Flood Managers Association Annual Conference, August 12. East Providence, RI.
  22. Adams, S., McElroy, K., **Becker, A.** (PI), (2022). "Rhode Island Coastal Hazard, Analysis, Modeling, and Prediction System." Guest Presenters for LEPC2: Local Emergency Planning Committee Meeting on 6/14/2022. Providence, RI.
  21. McElroy, K.\*, **Becker, A.**, Hallisey, N.\*, Ginis, I., Damon, C., Rubinoff, P., Adams, S.\* (2021). "Rhode Island Coastal Hazard, Analysis, Modeling, and Prediction System (RICHAMP)." 46th Annual Natural Hazards Workshop, Virtual Event, July 11-14.
  20. McElroy, K.\*, Hallisey, N.\*, Adams, S.\*, (2021). "Rhode Island Coastal Hazard, Analysis, Modeling, and Prediction System (RICHAMP)." Center of Excellence in Coastal Resilience Annual Meeting (April 21) and U.S. Department of Homeland Security Centers of Excellence Summit, Virtual Event (May 19-20). Video presentation [HERE](#).
  19. DiPanni, R.\*\*\*, **Becker, A.**, Hallisey, N.\*, (2020). "Polygon overlap comparison among individual mappers to determine the replicability of a methodology to geospatially inventory critical coastal infrastructure." URI Undergraduate Research Symposium, Dec. 15.
  18. Kalaidjian, E.\*, (2020). "Institutionalizing Resilience: Insights from Assessment Initiatives at Seaports". Maritime Risk Symposium, December 12.
-

- 
17. Sweeney, B.\*, **Becker, A.**, (2019). "Designing Port Infrastructure for Sea Level Change: A Survey of U.S. Engineers." Ports Conference, Pittsburgh, PA, September 15-18, 2019.
  16. Sweeney, B.\*, **Becker, A.**, (2018). "Designing Port Infrastructure for Sea Level Change: A Survey of Engineers." International Conference on Coastal Engineering (ICCE). Baltimore, MD, July 30-Aug 3.
  15. Witkop, R.\*, **Becker, A.**, Stempel, P.\*, (2018). "Incorporating facility manager knowledge into storm impact models: A case study of critical facilities in Westerly, Rhode Island," Rhode Island Floodplain Managers Association, Smithfield, RI, April 5
  14. Witkop, R.\*, Stempel, P.\*, **Becker, A.**, (2017). "Coupling local scale, high resolution, qualitative data to interface with numerical storm models," American Geophysical Union Annual Conference, New Orleans, LA. Dec. 12.
  13. D'Aversa, N.\*, **Becker, A.**, Bove, G\*., (2017). "Caribbean Infrastructure Inventory." American Geophysical Union Annual Conference, New Orleans, LA. Dec. 12.
  12. McIntosh, R.\*, **Becker, A.**, (2017). "Indicating Climate Change Vulnerabilities To Inform Seaport Resilience." Workshop on Enhancing Port Resilience, Florida Atlantic University, Dec. 2.
  10. Kretsch, E.\*, **Becker, A.** (2016). "Leadership and Responsibility for Long-Term Hurricane Resilience: Port of Providence, RI." Transportation Research Board Conference for Committee on Maritime Transportation System (CMTS), National Academy of Sciences, Washington, DC, June 21-22.
  9. McIntosh, R.\*, **Becker, A.** (2016). "Toward a Comparative Index of Seaport Climate-Vulnerability." Transportation Research Board Conference for Committee on Maritime Transportation System (CMTS), National Academy of Sciences, Washington, DC, June 21-22.
  8. Stempel, P.\* (2016). "Data Driven Visualization." Estuarine and Coastal Modeling Conference 2016, Narragansett, RI, June 14-15.
  7. McIntosh, R.\*, **Becker, A.** (2016). "Towards a Comparative Index of Seaport Climate-Risk: Development of Indicators from Open Data." Poster presentation at American Geophysical Union 2016 Ocean Sciences Meeting, New Orleans, LA, Feb. 21-26.
  6. Kretsch, E.\*, **Becker, A.** (2016). "Leadership and Responsibility for Long-term Hurricane Resilience: Stakeholder Perceptions in the Port of Providence, RI." Social Coast Conference. Charleston, SC, Feb. 11.
  5. Garcia, V.\*\*, McIntosh, R.\*, **Becker, A.** (2015). "First Steps Towards A Comparative Index of Seaport Resilience." URI Coastal and Engineering Fellows Poster Session, URI, Dec. 15.
  4. Miller, J., **Becker, A.**, Burroughs, R., Kretsch, E. (2015). "Perceptions of Hurricane Risk Amongst Port of Providence Stakeholders." URI Coastal and Engineering Fellows Poster Session, URI, Dec. 15.
  - 3.. Kretsch, E.\*, **Becker, A.**, Burroughs, R., Haymaker, J., McIntosh, R.\*, Miller, J.\* (2015). "Impacts of Storm Events and Resilience Options for Port Communities: Rhode Island Pilot Study." Coastal Structures and Solutions to Coastal Disasters Joint Conference. Boston, MA, Sept. 9-11.
  2. Kretsch, E.\*, **Becker, A.** (2015) "Stakeholder Involvement in Understanding the Economic Impacts of Climate Change and Storm Events on Maritime Infrastructure: Rhode Island Pilot Study." 7<sup>th</sup> Annual International Climate Change Conference. April 10-11. Vancouver, CA.
  1. Romelczyk, E.\*, **Becker, A.** (2015). "Maritime Industry Attitudes Toward Tall Ship Experience." 42nd Annual Tall Ships America Conference. February 5, 2015. Philadelphia, PA.
-

---

## IN THE MEDIA

### *State & National Media*

- Featured interview on [Global & National Security Institute](#) on Port Resilience Crisis: Can Ports Keep Up with Extreme Weather? (Jan. 13, 2026)
  - Featured on [Ocean State Media](#) (Rhode Island's NPR station) to discuss coastal hazard tools in Rhode Island. (Jan. 5, 2026).
  - Profiled in [New York Times](#), "Lost Science He Helped Cities Anticipate Damage From Storms" (Nov. 13, 2025)
  - Featured on [Rhode Island Sea Grant](#) news site, "Sea Grant's Vital Role in Advancing Rhode Island's Coastal Hazard Resilience." (August 18, 2025).
  - Featured in [The Boston Globe](#), "Inside the URI tools keeping Rhode Island ahead of the next big storm" (August 11, 2025).
  - Interviewed for [NPR Story](#) that aired on *All Things Considered*, "Canceled grants get the spotlight at a Capitol Hill 'science fair'." (July 9, 2025)."
  - Interviewed for [Rhode Island PBS Weekly News Hour](#) and [Boston Globe](#) article, "'An attack on science': Trump's cuts to research threatens R.I.'s budding life sciences sector (May 2025).
  - Research highlighted on [Coastal Resilience Center website](#) (2023), "RI-CHAMP Makes Storm Impact Modeling Simple. Coastal Resilience Center: A Department of Homeland Security Center of Excellence."
  - Interviewed for article in the [Financial Times](#) (2023) "Climate is a supply chain problem that can't be ignored, by Helen Thomas.
  - Interviewed for article in [Washington Post](#) (July 18, 2022), "Rising Seas Are the Next Crisis for the World's Ports, Analysis by Francis Wilkinson."
  - Interviewed for article in [YaleE360](#) (March 10, 2022), "How Climate Change Is Disrupting the Global Supply Chain." (also picked up by PBS News, Wires, and others).
  - Article in [EcoRI](#) (Aug. 9, 2021), "Worst-Case Scenario: Big Storm Could Unleash Problems on Port of Providence Area."
  - Research from numerous projects featured in [Supply Chain Dive](#) (June 1, 2021), "Some ports plan for storm risks, but most do not."
  - Visiting Scholar position highlighted on [U.S. Naval War College News](#) (Oct. 28, 2020), "NWC Visiting Research Scholars Examine Intersection of Defense, Humanitarian Response."
  - Project featured on [Newport Buzz](#) (Oct. 10, 2020), [Newport Daily News](#) (Oct. 15, 2020), [Providence Business News](#) (Oct. 15, 2020), [WPRI-TV](#), Oct. 15, 2020, "City to Collaborate with Navy and URI on Coastal Threats."
  - Project featured on [Science Daily](#) (Oct. 13, 2020), [Phys.org](#), (Oct. 13, 2020), [Up News Info](#), (Oct. 14, 2020), and [URI Today](#) (Oct. 13, 2020), "URI Researchers: Port Engineers Need Guidance On How to Incorporate Sea Level Rise Into Construction Designs."
  - Project featured in [Westerly Sun](#) (Oct. 8, 2020), "Westerly pilot study helps develop new models to predict storms' impacts on infrastructure."
  - Provided background information for "[Stormy Waters](#)" piece in [The Economist](#) (September 2020),
  - Work featured on [DHS Center of Excellence website](#) (August 2019), "URI Partners Continue Work With Rhode Island Emergency Managers.
  - Disaster visualization work of graduate advisee Peter Stempel featured on front page of [Providence Journal](#), (Nov. 27, 2016), "Rising seas, rising stakes, R.I. researchers project future flooding."
  - Profiled for [Inventing Heron Project: A Place to Learn About Career Possibilities and Beyond](#). (Summer 2014).
-

- Interviewed for “Port response to sea level rise” podcast on [Generation Anthropocene: A podcast for our new geologic age](#) (Feb. 19, 2013).
- Research featured in the [Stanford Earth Scientist Newsletter](#) (Fall 2011) and *The Stanford Report* (May 16, 2011), “Seaports need a plan for weathering climate change, say Stanford researchers.”

### **URI Media**

- Featured in [URI Rhody Today](#), “URI Ph.D. graduate, professor explore challenges of flood risk management in newly published paper.” (Feb 18, 2026)\_
- Featured in [URI Rhody Today](#), “Functional forecasting: URI team uses Homeland Security exercises to evaluate storm decision support tool as part of Katrina lookback issue” (Feb. 4, 2026)
- RI Legislature Approved Funding featured in [Rhody Today](#) story, “Rhode Island legislators approve crucial appropriation for unique weather-related tools at URI.” (July 22, 2025).
- Research highlighted in [URI Magazine](#) (Summer 2024), “Swelling the Banks.”
- Research highlighted in [URI Rhody Today](#) (Aug. 9, 2023), “URI researchers part of NSF-funded team working to address impacts of a warming planet on coastal communities.”
- Research featured in spotlight article in [URI Momentum Research & Innovation Magazine](#) (Spring 2022), “Rhode Island Coastal Hazards, Analysis, and Prediction,” by Clea Harrelson.
- Research featured in [Aboard GSO](#) (July 2022), “Actionable Information: Isaac Ginis’ team is making dramatic improvements in storm-damage prediction.”
- Featured on [URI CELS Site](#), “CELS Professor Receives Prestigious Sloan Research Fellowship.”
- Graduate advisee Alanna Casey featured on [URI Today](#) (2016), “Alanna Casey awarded URI Center for the Humanities Graduate Research Grant.”
- Graduate advisee Peter Stempel featured in [URI Big Thinkers](#) (2016), “CELS grad student innovates ways to visualize climate change.”
- LAR 444 Studio Course featured at [URI News](#) (2015), “URI landscape architecture, environmental science and management, marine affairs students propose projects for Port of Galilee“
- Profile featured in [URI Big Thinkers](#) (2015), “CELS Professor aims to strengthen our nation’s ports.”
- Research featured in [41 Degrees North](#) (Winter 2015), “Preparing Ports to Ride out the Storm.”

### **Other Media**

Rhode Island Coastal Hazards Analysis and Modeling Project (RICHAMP)

Website: [www.richamp.org](http://www.richamp.org)

Project video: <https://www.youtube.com/watch?v=6fSwgcZQvPI>

Decision Support Dashboard example: [Website](#)

GIS Hub Caribbean Infrastructure inventory (developed by Noah Hallisey\*):

<https://caribbean-coastal-critical-infrastructure-inventory-uri.hub.arcgis.com/>

## **TEACHING & ADVISING**

### **Lead Instructor**

#### **University of Rhode Island**

*Directed Studies in Marine Affairs (MAF 591, MAF 592)*

Terms: Spring 2014 – Present. Oversaw 25+ directed studies for graduate students in various topics related to port planning, coastal resilience, disaster visualizations, GIS, and hazard modeling.

*Marine Affairs Seminar (MAF 651) – Average 20 students*

Term: Fall 2024, 25

*Port Planning and Policy (MAF 564) – Average 9 graduate students per semester*

Terms: Spring Semester 2014-20, 2024, 2026

*Marine Affairs Senior Capstone (MAF 410) – 25 seniors*

Terms: Spring Semesters 2018-20, 2022

*GIS Applications for Marine and Coastal Management (MAF 465) – Average 18 students*

Terms: Fall Semesters 2016-19, 2021-22; Spring Semester 2017

*Marine Affairs PhD Research Seminar (MAF 650) – Average 6 PhD students*

Terms: Fall Semesters 2016-19, 2021

*Introduction to GIS for Landscape Architects (LAR 302) – 18 seniors*

Terms: Spring Semester 2016

*Landscape Architecture Sustainability Studio: Working Waterfront Storm Resilience (LAR 444)*

Terms: Fall Semester 2014-15 (co-taught with Prof. Will Green)

### **Stanford University**

*Climate Change Adaptation for Seaports: Engineering & Policy for a Sustainable Future (CEE 229)*

Terms: Winter 2009-12 Co-instructors: Prof. Martin Fischer and Dr. Ben Schwegler

*Climate Change Adaptation in the Coastal Built Environment (CEE 129s/229s)*

Terms: Winter 2011, Spring 2012 Co-instructors: Prof. Martin Fischer and Dr. Ben Schwegler

### **Teaching Assistant**

#### **Stanford University**

*Our Coastal Society: An Interdisciplinary Seminar on Ocean/Coastal Themes (IPER 229)*

Term: Winter 2011

Instructor: Prof. Meg Caldwell

*Research Approaches for Environmental Problem Solving (IPER 220)*

Term: Spring 2010

Instructor: Profs. Peter Vitousek and Nicole ArDoin

### **Postgraduate Advising -- \*resulted in publication(s)**

---

**Post Docs and Research Associates Supervised**

- 2024 – Present, Post Doctoral Research Associate IV, Dr. John Nelson  
 2023 – Present, Research Associate IV, Greg Bonyng (co-supervised w/ URI EDC)  
 2018 – Present, Research Associate IV, Chris Damon (co-supervised with URI EDC)  
 2018 – Present, Research Associate IV, Aimee Mandeville (co-supervised with URI EDC)  
 2015-19, Post Doc, Dr. Elizabeth Mclean\*  
 Research topic: Decision-maker Barriers to Extreme Weather Climate Change Adaptation for Seaports: A Cultural Consensus Model for Medium and High-Use Ports in the North Atlantic\*

**PhD -- 11 as major advisor***Current PhD Students*

- 2026 – present, PhD, Zach Solomon, TBD  
 2026 – present, PhD, Vassilis Tsigourakos, TBD  
 2022 – present, PhD (ABD), Nicole Lengyel Costa, Dissertation title (working): Assessing Long-Term Sustainability in a Small Commercial Fishing Port: The Port of Galilee, Rhode Island  
*Current position: Principal Biologist at RI Department of Environmental Management Division of Marine Fishers*  
 2021 – present, PhD (ABD), Noah Hallisey, Dissertation title (working): What's that risk? Investigating user experience and user interface of flood risk mapping tools for emergency management

*Graduated PhD Students*

- 2019 - 2026, PhD (ABD), Sam Adams, Dissertation title: Points of Interest: Implementing Simulation-Based Storm Hazard Consequence Prediction  
*Current position: Director of Emergency Management, University of Rhode Island*  
 2022 – 2025, PhD, David Ostwind, Dissertation title (working): Employing Catastrophic Incident Sealift to Save Lives and Alleviate Suffering After a Disaster.  
*Current position: Director Planning and Exercises Division, Response Directorate, Federal Emergency Management Agency.*  
 2021 – 2025, PhD, Rosemarie Fusco, Dissertation title: Incentives for Closing the Resilience Gap in Port Planning  
*Current position: Project Manager, GZA GeoEnvironmental, Inc.*  
 2020 - 2024, PhD, Kyle McElroy, Dissertation title: Analysis of Incorporating Flood Risk Information into City of Providence Urban Planning  
 2014 - 2018, PhD, Robert (Duncan) McIntosh  
 Dissertation: Towards a Comparative Index of Seaport Climate Vulnerability: Developing Indicators from Open-Data\*  
*Current position: Senior Regional Maritime Specialist at Asian Development Bank*  
 2014 – 2018, PhD, Peter Stempel  
 Dissertation: Depicting the consequences of storm surge and sea level rise: risk communication opportunities and ethics\*  
*Current position: Associate Professor, Dept. of Landscape Architecture, Penn State*  
 2014 – 2018, PhD, Alanna Casey  
 Dissertation: Climate Change & Coastal Cultural Heritage: Insights from Three National Parks\*  
*Current position: Coastal Manager, California Coastal Commission*

**PhD - 3 as committee member**

- 2021 – 2024, Oceanography PhD, Deb Crowley, Dissertation title: TBD  
 2019 – 2022, BUS PhD, Leo Hong, Dissertation title: Blockchain Performance in Supply Chain

---

 Management

2015 -- 2018, MAF PhD, Clara Dacerbo

Dissertation: Resilient Response in an Age of Uncertainty: Emergency Response Organizations' Resilience During Disasters

*Current position: Director of Providence Emergency Management Agency*

***MAMA (Master of Arts in Marine Affairs) - 7 as major advisor***

2025, Skye Howard, Thesis title TBD

2024, Abigail Murray, Thesis title: Cruise Industry Perceptions of Coastal Hazards

2021, Ellis Kalaidjian\*, Thesis title: The Value of Climate Change Resilience Planning for Seaports

2019, Benjamin Sweeney\*, Thesis title: Port and Marine Infrastructure Engineers' Considerations of Sea Level Change in Maritime Infrastructure Projects

2018, Robert (Bobby) Witkop\*, Thesis title: Developing Consequence Thresholds for Storm Impact Models: Case Study of Westerly, Rhode Island

2016, Eric Kretsch\*, Thesis title: Stakeholder Perceptions of Adaptation Leadership: Port of Providence

2016, Mathew Frediani, Thesis title: Building Hazard Resilience: Marina Owners' Priorities

***MAMA - 1 as committee member***

2017, Nelle D'Aversa, Thesis title: Perspectives on Emerging Monitoring Technologies: Understanding Factors That Affect Adoption

***MMA (Master of Marine Affairs) - 14 as major advisor***

2025, Kaylee Dipasquale, Major project title TBD

2023, CAPT David Borbeau, Major project title: Coastal Resilience Risk Analysis of Rhode Island Coast Guard Units: A CHAMP Approach to Hazard Consequence Prediction

2023, Josie Cartaya, Major project title: Consequence Thresholds for Aids to Navigation

2022, Bruce Lofgren, Major project title: Climate Resilience Planning on Aquidneck Island

2021, CMDR David Hill\*, Major project title: Climate perceptions: A Survey of US Shipbuilding Industry

2019, MMA/JD, Mitch Ramic, Major project title: Insurance framework for port risk

2019, Jill Hughes, Major project title: Maritime training programs in the U.S.

2019, Jose Menendez-Lopez, Major project title: Design Aspects of Sea Level Rise Communication

2018, Gerald Bove\*, Major paper title: A model for determining resiliency of the air transport network in the Caribbean

2018, Vanessa Anderson, Major paper title: Green Port Initiatives: Best Practices for the Port of Providence

2016, MMA/JD, John Ryan Henry\*, Major paper: Stakeholder Perception of Storm Impacts to Port Stakeholders in Red Hook, New York after Hurricane Sandy Indicates Interdependence for Disaster Recovery and Resilience

2015, Eric Romelczyk\*, Major paper title: Sail Training for Professional Seafarers: Views and Attitudes Among Maritime Recruiters in the United States Workboat Sector\*

2014, Mat Rosa\*, Major paper title: Governance Baseline Profile of Climate Change Adaptation Planning for Coastal Resources in Santo Domingo, Dominican Republic

2014, MMA/JD, Kaitlyn Cox, Major paper title: A Leadership Roadmap: Stakeholder drivers for building natural-disaster resilient seaport systems

***MESM (Master of Environmental Science and Management) - 2 as major advisor***

2017, Rita Lavoire\*, Geospatial Factors that Influence Willingness to Relocate away from Coastal Areas after a Hurricane

---

---

2017, Nelle D'Aversa, A GIS Inventory of Critical Coastal Infrastructure Land Use in Caribbean Small Island Developing States: Classification and Criteria Methodology

### **Other graduate advising**

- 2025 Defense Chair, MS, Pranav Sai, Graduate School of Oceanography  
 Defense Chair, MS, Lauren Kowalski, Graduate School of Oceanography  
 2024 PhD Defense Chair, PhD, Deb Crowley, Graduate School of Oceanography  
 2022 Comp Exam Chair, PhD, Deb Crowley, Graduate School of Oceanography  
 Comp Exam Chair, PhD, Liubov Dumarevskaya, Natural Resources Science (GIS)  
 Defense Chair, PhD, Xiahui Zhou, Graduate School of Oceanography  
 2021 Defense Chair, MS, Jarron Vanceylon, Resource Economics.  
 2020 Defense Chair, MS, Il-Kyeong Ma, Graduate School of Oceanography.  
 Defense Chair, PhD, Xuanyu Chen, Graduate School of Oceanography. Impacts of Shoaling Ocean Surface Waves on Wind Stress and Storm Surge.  
 Defense Chair, PhD, Business Administration, Gawon Yu, Right-shoring: Offshoring to Reshoring for A Sustainable Manufacturing Decision in Healthcare.  
 2019 Defense Chair, MS, Biological and Environmental Science, Alex Sousa, Spectroscopic Investigations of Organo-Mineral And Microbe-Mineral Interactions in Serpentinites.  
 2015 External Examiner: World Maritime University (External Reviewer of Masters Thesis).

### **Undergraduate advising, Coastal & Environmental Fellowship Mentor**

- 2024 Sarah Berdnowski  
 2023 - Levi Lewis  
 2021 - Athena Vieira  
 2020 - Ryan DiPanni  
 2019 - Samantha Radov  
 2015 - Vanessa Garcia

## **SERVICE**

### **Editorial Boards**

- Guest Editor**, *J. of Transp. Research Part D – Transport & Env.* (2023 IF 7.6) 2022-2024  
**Associate Editor**, *J. of Maritime Policy and Management.* (2020 IF 3.778) 2019 - 2022  
**Guest Editor**, *Frontiers in Sustainability*, Special Issue on [Sustainability in Seaports as Collaborative Entities.](#) 2022  
**Guest Editor**, *J. of Maritime Policy and Management*, Special Issue on “Impacts of Climate Change on Ports and Supply Chains.” 2018-2020

### **National Committees**

- Affiliate Expert**, Civilian-Military Humanitarian Response Program, US Naval War College. 2017 - present  
**Sea Level Change Task Committee**, American Society of Civil Engineers 2015 - present  
**Senior Fellow and Lead of Urban Ports Demonstration Site**, URI Coastal Institute. 2014 - 2023  
**Vice Chair of Advisory Board**, MetCalf Institute for Marine & Environmental Reporting (also member of Strategic Planning Committee 2018 - present) 2018 - 2022  
**Steering Committee**, ICNet – Infrastructure and Climate Network, an NSF funded network of academics, students, and practitioners dedicated to accelerating climate science and engineering research in the Northeastern United States. 2016 - 2020  
**Faculty Fellow**, SciWrite Program, National Science Foundation program in Innovations in Graduate Education track in NSF’s Research Traineeship Program. 2017 - 2019
-

**International Committees**

<b>Member</b> , The International Forum on Climate Change Adaptation Planning for Port, Transportation Infrastructure, and the Arctic (CCAPPTIA)	2019 - present
<b>Associate Expert</b> , AIVP – The Worldwide Network of Port Cities.	2015 - present
<b>Member Expert</b> , United Nations Conference on Trade and Development (UNCTAD) Group of Experts on Climate Change Impacts and Adaptation for International Transport Networks.	2011 - present
<b>Associate Expert</b> , <i>University of Manitoba Transport Institute.</i>	2015 - 2018

**Department Service (URI, Dept. of Marine Affairs)**

<i>Search Committee Member, Asst. Prof. Expertise in Fisheries Policy &amp; Management</i>	2022 - 2023
<i>Search Committee Chair, Asst. Prof. Expertise in Marine and Coastal Law</i>	2021 - 2022
<i>Co-lead, Dual LAR/MMA dual degree program with Rhode Island School of Design</i>	2017 - present
<i>Co-lead of Graduate Certificate in Coastal Resilience (in development)</i>	2017 - 2023
<i>Director of Graduate Programs</i>	2015 - 2020
<i>Admissions Committee Chair</i>	2015 - 2020
<i>Website Coordinator</i>	2014 - 2020
<i>Tall Ships America/MAF Liaison</i>	2014 - present
<i>Faculty Advisor for URI Coastal Society Chapter</i>	2014 - 2020
<i>Undergraduate Program Advisor</i>	2014

**University Service (URI) and College of the Environment and Life Sciences (CELS)**

<i>Search Committee Chair, Env. and Natural Resources Dept.</i>	2026
<i>Member, Marine and Ocean Sciences Exploratory Task Group</i>	2025
<i>Search Committee, Dean of CELS</i>	2024 - 2025
<i>Board Member, Social Science Institute for Research, Education, &amp; Policy (SSIREP)</i>	2022 - present
<i>CELS Diversity Committee</i>	2022 - 2024
<i>CELS Research Committee</i>	2022 - 2025
<i>CELS Scholastic Standing Committee Meeting</i>	2022 - present
<i>CELS task force on recruitment/retention of diverse faculty, staff, &amp; graduate students</i>	2021 - 2023
<i>Strategic Planning Committee for Landscape Architecture at URI</i>	2021 - 2022
<i>Faculty Fellow, URI Social Science Institute for Research, Education, &amp; Policy</i>	2017 - present
<i>Search Committee, Fiscal Clerk, CELS</i>	2021
<i>Search Committee, Coastal Resilience Lecturer, Graduate School of Oceanography</i>	2018 - 2019
<i>Faculty Search Committee, Natural Resource Sciences (GIS Asst. Professor)</i>	2018 - 2019
<i>Faculty Search Committee for Coastal Resources Center Director / GSO Faculty Position, Graduate School of Oceanography</i>	2016-2017
<i>Session Moderator, URI Academic Summit Big Innovative Ideas for URI's Future</i>	2016
<i>Proposal Reviewer, Undergraduate Research Awards</i>	2016
<i>Task Force Member, Joint Committee on Academic Planning (JCAP)</i>	2015-2016
<i>Faculty search committee for Visiting Assistant Professor, Social Movements, U.S. Global Relations, Race &amp; Gender, College of the Environment and Life Sciences</i>	2014
<i>Conference Planning Committee Working at the Edge, RI Sea Grant Baird Symposium</i>	2014
<i>Co-Lead of new initiative at URI, Design Collaborative at the Coastal Institute: For Research, Science, Engineering, and the Arts</i>	2014

**University Service (Stanford University)**

<i>Peer Advisor, E-IPER Program</i>	2010-2013
-------------------------------------	-----------

---

<i>Teaching Consultant, Center for Teaching and Learning</i>	2011-2012
<i>Student Representative, E-IPER Student Liaison Committee</i>	2011-2012
<i>Founder/President, The Coastal Society, Stanford University Chapter</i>	2009-2012

### **State and National Service**

<i>Southern MA &amp; RI Harbor Safety Committee, Voting Member</i>	2025-present
<i>Roger Williams Marine Affairs Institute, Advisory Board Member</i>	2023 - 2024
<i>NOAA Advisory Committee for Environmental Science Indices</i>	2022 - 2024
<i>Research expert, U-LINK: RESILIENCE CHALLENGE, University of Miami</i>	2022 - 2024
<i>Board of Directors (Chair), Oliver Hazard Perry Rhode Island</i>	2021-present
<i>Sea Level Adaptation Committee, Mystic Seaport Museum</i>	2019- 2022
<i>Session Moderator, Natural Hazards Workshop, Boulder, CO, July 10-13.</i>	2023
<i>Proposal Review Panel, Large Scale Proposals, National Science Foundation</i>	2022, 2025
<i>Steering Committee, Lead of Climate Change Working Group, Naval War College &amp; Brown University Civilian-Military Humanitarian Response Workshop</i>	2017- 2021
<i>Proposal Review Panel, National Science Foundation</i>	2019
<i>Discussant for Science for the Land-Sea Interface: Informing Coastal and Nearshore Marine Policy, AAAS 2017 Annual Meeting, Boston, MA, Feb. 20,</i>	2017
<i>Session Moderator, 2016 North American Symposium on Climate Adaptation</i>	2016
<i>Planning Committee and Session Moderator, Transportation Research Board (TRB) and the U.S. Committee on the Marine Transportation System (CMTS) conference, From Sail to Satellite: Delivering Solutions for Tomorrow's MTS. 4<sup>th</sup> biennial research and development conference at the National Academy of Sciences Building, Washington, D.C., June 21-23, 2016</i>	2015 - 2016
<i>Board of Directors, Tall Ships America</i>	2012 - 2016
<i>Invited expert, Joint Agency Coastal Infrastructure Resilience Workshop: Mobile Bay, AL. Sea Grant National Oceanic and Atmospheric Administration (NOAA), Committee on the Marine Transportation System (CMTS), U.S. Army Corps of Engineers, Engineer Research and Development Center (USACE-ERDC)</i>	2015
<i>Chair for 2015 Tall Ships America Conference Committee, Tall Ships America,</i>	2014 - 2015
<i>Invited expert, Scripps Institute Workshop on Sea Level Rise Adaptation in the Pacific</i>	2014
<i>Workshop assistant, Successful Adaptation: Identifying Effective Process and Outcome Characteristics and Practice-Relevant Metrics, Stanford University</i>	2013
<i>Session moderator, National Marine Sanctuary Foundations' Capital Hill Ocean Week, "How Vulnerable Are We? A Timeline for the Changing Coast,"</i>	June 2013
<i>Contributing author to Coastal Impacts, Adaptation and Vulnerability: A Technical Input to the 2012 National Climate Assessment. Burkett, V.R. and Davidson, M.A. [Eds.]. Cooperative Report to the 2013 National Climate Assessment.</i>	2012
<i>Supporting author, US National Climate Assessment Report, Technical Input on Coasts Chapter</i>	2011-2012
<i>Vice President, Fox Point Neighborhood Association, Providence, RI</i>	2006-2008
<i>Member, Rhode Island Economic Policy Council, Providence, RI</i>	2006-2008
<i>Planning Committee, Coastal Society TCS 20 Conference, St. Pete Beach, FL</i>	2006
<i>Board Chair, Providence Maritime Heritage Foundation, Providence, RI</i>	2003-2004
<i>Member, Provincetown Harbor Committee, Provincetown, MA</i>	1997-1998

### **International Service**

<i>Expert Group Meeting in preparation for HLPF 2025: <a href="#">Advancing sustainable</a>.</i>	2025
--	------

---

---

<a href="#">inclusive, science- and evidence-based solutions for the 2030</a> Agenda and its SDGs for leaving no one behind; Working Group 5: Sustainable Blue Economy and SIDS, <i>Invited delegate</i>	
United Nations Regular Process for Global Reporting and Assessment of the State of the Marine Environment, <i>Member of Pool of Experts</i>	2018 - present
AIVP, Building the City Port of 2030 Conference, <i>Session Moderator</i> , Riga, Latvia	2019
UNCTAD National Workshop Saint Lucia and Jamaica, "Climate change impacts and adaptation for coastal transport infrastructure in Caribbean SIDS", <i>Invited Expert, May 24 -June 1, 2017.</i>	2017
15 <sup>th</sup> Worldwide Conference on Cities and Ports, Rotterdam, <i>Planning Committee and Rapporteur</i>	2016
PIANC Ports Working Group 150: Sustainable Ports: A Guide For Port Authorities, ISBN: 978-2-87223-218-5, <i>Technical Expert</i>	2010-2014
US/Netherlands Connection 2012, Water Infrastructure & Climate Adaptation Team, <i>Invited delegate</i>	2012

### **Reviewing**

#### **External Reviews for Promotion & Tenure Cases**

University of South Florida, candidate promotion to Full Professor (2025)

#### **Grant Proposal Reviews**

URI Research Office (2022-26), URI Social Science Research, Education, and Policy (2023-26), National Science Foundation (2018, 2022, 2025); Dept. Of Homeland Security (2024); Natural Environment Research Council of the United Kingdom; WOTRO Science for Global Development; Washington Sea Grant Program; Alabama/Mississippi Sea Grant Consortium; Research Council of Norway; NOAA (2023)

#### **Publication Reviews**

2026 -- *Journal of Emergency Management*  
 2025 – *Ocean & Coastal Management; Discover Environment; Journal of Emergency Management*  
 2024 – *Heliyon; Transportation Research Part D; Anthropocene Coasts; Maritime Policy & Management; J. of Emergency Management*  
 2023 – *Nature Climate Change; International Journal of Disaster Risk Reduction; Nature Communications Earth & Environment; Regional Environmental Change*  
 2022 – *Climate Risk Management; Frontiers in Environmental Science*  
 2021 – *PNAS; Anthropocene Coasts (Outstanding Reviewer Award); International Journal of Disaster Risk Reduction; Journal of Environmental Planning and Management; Ocean and Coastal Management; Maritime Policy and Management; Frontiers in Climate; Maritime Transportation Systems Resilience Guide*  
 2014 – 2020 - *Coastal Engineering; Nature Communications; Nature Climate Change; AAAS Science Advances; Journal of Waterway, Port, Coastal, and Ocean Engineering (ASCE); Journal of Environmental Planning and Policy; Journal of Environmental Planning and Management; Journal of Regional Environmental Change; USAID Climate Adaptation Guide; Journal of Climatic Change; Risk Analysis: An International Journal; Journal of Maritime Policy and Management; Journal of Mitigation and Adaptation Strategies for Global Change; European Journal of Transport and Infrastructure Research; International Journal of Disaster Risk Reduction; Journal of Ocean and Coastal Management; Transportation Research Part D: Transport and Environment; World Ocean Assessment II; Transportation Research Part A*

---

**OTHER ACADEMIC WORK EXPERIENCE**

**Stanford Woods Institute for the Environment**, Stanford University 2012-2013  
*Research Associate, Climate Change Adaptation*

**Stanford at SEA**, Stanford University and Sea Education Association Spring 2011  
*3<sup>rd</sup> Mate, Science Instructor*

Sailed 3,000 miles on oceanographic research vessel from Hawaii to Palmyra.

**Rhode Island Sea Grant (RISG)/ URI Coastal Resources Center**, Narragansett, RI 2005-2008  
*Marine Research Associate II*

Advised state and local officials on policy; planned and facilitated stakeholder workshops and conferences; wrote grant proposals and assisted in fundraising efforts; drafted policy recommendations and planning documents.

**PROFESSIONAL TRAININGS**

- NSF I-CORPS Program (6 weeks, 2025)
- National Center for Faculty Development and Diversity (NCFDD) Department Chair Success Program (12 weeks, 2025)
- Facilitating Engaging Meetings (4 weeks, 2025)
- Effective Communication at Work (1/2 day, 2025)
- Emotional Intelligence, Radical Candor, and Challenging Conversations (2024)
- Managing Difficult Faculty and Staff (2024)
- Safe Zone LGBTQ Training (2022)
- Process Based Writing (2015)
- 20 years of experience (1991-2011) as captain/crew on educational training vessels, power and sail, to 135 feet, including: *Sloop Providence*; Schooners *Harvey Gamage*, *Spirit of Massachusetts*, *Lettie G. Howard*, and *Soundwaters*; Brigantine *Robert C. Seamans*
- Curricula development for leadership-training, environmental science, maritime heritage, teambuilding
- Certifications (now expired) in RADAR, Shipboard Firefighting, Marine Electrical Systems and Engine Repair, FCC Radio Operator, CPR/First Aid, Cannon and Mortar, Wilderness First Responder, and others pertinent to role of ship captain
- Conversational Spanish