

Bradley Dean, CFM, CE

Lead, Earth Systems Science Technology Center
Department of Homeland Security, Science & Technology Directorate

Contact Information

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Education

MS, Earth & Environmental Resource Management,
University of South Carolina

MS, Environmental Science,
Florida Institute of Technology

BS, Marine Science & Biology, Coastal Carolina University

Academic Appointments

Adjunct Faculty, Georgetown University School of Continuing Studies, Emergency and Disaster Management Program

Senior Fellow, Tulane University, School of Social Work, Disaster Resilience Leadership Academy

Licenses/Certifications

Certified Ecologist, Ecological Society of America

Certified Floodplain Manager, Association of State Floodplain Managers

Social Impact Partnership Design, Georgetown University

Contracting Officer's Representative II

DHS Technical Manager I

DHS Program Management - Mid

Key Successes

[Climate Resilience Game Changers Assessment](#)

[National Mitigation Investment Strategy](#)

[Climate Essentials for Emergency Managers](#)

[Stories of Resilience](#)

[Building Alliances for Resilience](#)

[Inspiration Book: Arts & Experiential Learning for Mitigation and Resilience](#)

[NBS: A Guide for Local Communities](#)

[NBS: Strategies for Success](#)

Mr. Dean is an experienced, senior professional that has successfully built partnerships to advance Whole Community natural hazard resilience and climate adaptation. Below is a snapshot of key achievements and specialized experience across his resilience career showing a proven track record of program delivery, impactful outcomes, project and budget management, technical expertise, and personnel leadership.

Specialized Experience

DHS Centers of Excellence Board of Directors. *DHS S&T.* As a Board Member for both the ADAC-Arctic and Coastal Resilience Centers of Excellence, Mr. Dean offers high-level, strategic guidance and expert insights on natural hazard resilience and climate adaptation. He ensures that the Centers' strategic initiatives are robust, forward-thinking, and aligned with leading practices. His leadership helps drive the Centers to effectively address emerging challenges and advance public safety and security through innovative and adaptive solutions.

National Institute of Building Sciences, Multihazard Mitigation Council Board of Directors. *Michael Baker International.* The [Multihazard Mitigation Council](#) (MMC) is an independent entity that informs hazard mitigation decisions in ways that lead to effective public policy. As a former board member, Mr. Dean was responsible for providing strategic insight and advisory council to the organization. The MMC was responsible for the landmark [Natural Hazard Mitigation Saves Reports](#).

National Risk Index Technical Review Panel Governing Board. *DHS S&T. Current Board Member.* Mr. Dean provides strategic direction and comprehensive oversight of the panel, ensuring that the underlying data, scientific methodologies, and results are rigorously scrutinized and validated. He advances collaboration with leading federal experts in natural hazard risk to uphold the highest standards of accuracy and reliability while championing the integrity and authority of the National Risk Index as a critical resource for risk assessment and decision-making.

Federal Flood Risk Management Standard. *White House Council on Environmental Quality (CEQ).* Mr. Dean orchestrated the alignment, coordination, and delivery of Federal Flood Risk Management Standard rules and policies across FEMA, Housing and Urban Development, and other key agencies. His leadership ensured the Standard significantly bolstered the Nation's resilience to flooding. Furthermore, he co-led the strategic evaluation and deployment of the Federal Flood Standard Support Tool, providing critical support for the effective implementation of the Standard.

National Security Council Interagency Policy Committees. *CEQ.* Mr. Dean represents the CEQ on the Climate Security and Climate Migration Interagency Policy Committees, ensuring strategic alignment and policy

integration. He will continue to provide expertise and guidance at DHS S&T, driving forward critical initiatives in climate resilience and security.

National Academies of Sciences, Engineering and Medicine Transportation Research Board, Standing Committee on Extreme Weather and Climate Change Adaptation (AMR50). *FEMA and DHS S&T.* As a current steering committee member for [AMR50](#), Mr. Deans provides strategic guidance and promotes high-level collaboration to align initiatives with organizational goals. He oversees project progress, aids in prioritizing and evaluating critical research and implementation guidance on extreme weather and climate adaptation for transportation infrastructure and its interdependencies. Additionally, he supports decision-making, engages key stakeholders, and ensures the quality and alignment of all activities with AMR50's mission.

NATO Unravelling the Cyber-Physical-Social Infrastructure Climate Change (CPSICC) Nexus Workshop. *DHS S&T.* In partnership with NATO's Science for Peace and Security Programme, Mr. Dean demonstrated exceptional leadership in the procurement, coordination, and execution of a high-profile Workshop. He successfully brought together over 50 experts from academia, government, industry, and policy-making across NATO member and partner countries. His strategic oversight was crucial in identifying key national and international experts, supporting event design and planning, and facilitating collaborative discussions. Through his leadership, the Workshop effectively addressed complex, multifaceted threats and fostered innovative solutions to be culminated in a DHS/NATO Report.

Resilient Nation Partnership Network. *FEMA.* Mr. Dean played a pivotal role as the visionary leader and manager of the Resilient Nation Partnership Network (RNPN), a key initiative aimed at fostering nationwide collaboration to reduce risks from all hazards. **Over a three-year period, he expertly expanded the Network from ~80 to over 1,500 diverse organizations**, including federal, state, local, tribal, territorial, nongovernmental, academic, and nonprofit entities. As the RNPN lead, Mr. Dean established strategic priorities and launched the Building Alliances initiative, orchestrating high-impact Forums on Climate Action and Equitable Resilience even before the release of the current FEMA strategic plan. These forums were conducted in partnership with the Mississippi River Cities and Towns Initiative, NASA, and NOAA, and engaged top-tier stakeholders including White House representatives, Governors, local officials, tribes, and academia. His leadership resulted in the creation of three influential resources—[Building Alliances: Stories of Inclusion](#), [Climate Action and Equity](#); [Building Alliances for Climate Action](#); and [Building Alliances for Equitable Resilience](#)—culminating in the launch of [Stories of Resilience](#), which elevated and amplified stakeholder voices across the nation.

Mitigation Framework Leadership Group (MitFLG). *FEMA.* Mr. Dean served as the MitFLG Secretariat and managed senior level, interagency teams and steering groups, to provide a coordinating structure for mitigation across the federal government and with partners in mitigation nationally. He led the development of the [National Mitigation Investment Strategy](#) and interagency responses to the following reports of the Government Accountability Office (GAO): [GAO-20-317T - Climate Resilience: A Strategic Investment Approach for High-Priority Projects Could Help Target Federal Resources](#); [GAO-20-100SP - Disaster Resilience Framework: Principles for Analyzing Federal Efforts to Facilitate and Promote Resilience to Natural Disasters](#)

Community Engagement and Risk Communications (CERC), Nationwide United States. *FEMA.* As part of the \$250M Risk Management Directorate contract, Mr. Dean managed an annual portfolio of approximately \$5 million, overseeing the Climate National Outreach Strategy, Partnerships, Coastal, Levees, and Future Conditions portfolios. He provided both technical and programmatic leadership, managing multiple contract teams comprising over 20 staff members. His role involved delivering expert guidance and strategic oversight to effectively mitigate the impacts of climate change and natural hazards, ensuring that initiatives were executed with precision and aligned with FEMA Resilience & RMD goals.

National Academies Resilient America Roundtable. *FEMA. Project Manager.* Mr. Dean served as the Project Manager and Contracting Officer's Representative for the National Academies Resilient America Roundtable, overseeing the rescoping and procurement of the \$1.25 million project. His leadership was essential in guiding the project to success, resulting in the production of four significant reports: [Equitable and Resilient Infrastructure Investments](#); [Resilience for Compounding and Cascading Events](#); [Motivating Local Climate Adaptation and Strengthening Resilience: Making Local Data Trusted, Useful, and Used](#); [Enhancing Community Resilience through Social Capital and Connectedness](#). He ensured the effective management and execution of the project, delivering impactful insights and strategies for enhancing resilience.

Curriculum Vitae

DHS Science & Technology Directorate 12/2023 – Present

Lead, Earth Systems Science Technology Center

- **Earth Systems Science Technology Center:** Oversaw the launch, strategic development, and representation of the Earth Systems Science Technology Center, advancing public safety and security with cutting-edge resilience solutions.
- **Leads program and technology management for strategic projects:** Directs the selection and oversight of external partners and performers, ensuring project alignment with strategic goals, quality control of deliverables, and effective transition and impact measurement. Notable projects include:
 - NATO's Cyber-Physical-Social Infrastructure Climate Change Nexus \$250,000
 - National Web-based Dam-break Flood Inundation Mapping & Decision Support System Improvements \$1,620,000
 - Low-head Dam Public Safety Assessment Tools \$700,000
 - Systems Engineering Support to DHS S&T Climate Science \$1,298,613
- **Enhanced preparedness and resilience:** Contributed to the DHS S&T and NOAA Extreme Weather Workshop and the resulting Opportunities for Improved Preparedness and Resilience Report, fostering improved national readiness.
- **Strengthens mission performance:** Sponsors and manages projects to enhance the effectiveness of DHS components, headquarters, and local emergency management organizations.
- **Manages key interagency collaboration:** Oversees the Department's Interagency Agreement with NASA for the US Global Change Research Program, fostering collaborative, interagency climate and resilience research efforts.
- **Provides expert guidance on climate adaptation:** Offered subject matter expertise on natural hazards resilience and climate adaptation to various departments, including FEMA, Customs and Border Protection, and CISA.

White House Council on Environmental Quality 03/2024 – 10/2024

Director for Flood & Resilience Policy (Detail)

- **Lead Representation on High-Impact Climate Initiatives:** Acted as the CEQ's strategic liaison with the US Global Change Research Program, influencing climate research, services, and national security policy development to advance federal climate resilience efforts. Subject matter expert and coordination lead for multiple sections of White House Climate Resilience Game Changers Assessment.
- **Climate Security Strategy:** Represented CEQ on the National Security Council's Climate Security and Climate Migration Policy Committees, shaping national strategies for climate resilience and migration management.
- **Enhanced federal flood resilience:** Co-led the Flood Resilience Interagency Working Group, driving the development and implementation of Federal Flood Risk Management Standard and coordinating interagency efforts and across the Executive Office of the President.
- **Provided expert advisory on climate and disaster risk:** Offered critical guidance to the CEQ and EOP staff on climate change adaptation, extreme weather safety (both flooding and extreme heat), national preparedness, and flood risk management, strengthening federal responses to climate-related challenges.
- **Elevated White House presence and influence:** Represented the White House at key events such as the White House Environmental Justice Summit & the National Adaptation Forum, amplifying federal leadership on disaster resilience.

Federal Emergency Management Agency 06/2019 – 12/2023

Partnerships Lead, Office of Resilience Strategy: 03/2023 – 12/2023

- **Spearheaded FEMA's Climate Communications and Partnerships:** Led the agency's first effort to coordinate climate communications and forge strategic partnerships, significantly enhancing FEMA's climate resilience initiatives.
- **Developed and Delivered the Office of Resilience Strategy's Partnership Strategy:** Crafted the initial Partnership Strategy, laying the groundwork for sustainable technological & strategic solutions for stakeholder engagement.
- **Supported Standup of FEMA's Climate Branch:** As the Climate Communications & Partnerships Lead, played a pivotal role in the Branch's creation and growth through strategic budget management, planning, and recruitment.
- **Led the FEMA Climate Community of Practice:** Directed a 200+ member group, fostering a cohesive climate resilience community across the agency and driving collective progress toward climate goals.

- **Strategic Guidance to Key FEMA Networks:** Delivered expert climate advice to critical networks like the RNPN, National VOAD, and Faith-Based & Neighborhood Partnerships, embedding climate considerations into core efforts.
- **Managed High-Impact Interagency Collaboration:** Oversaw the DHS/FEMA's Interagency Agreement with NASA, aligning FEMA's efforts with national climate goals through the US Global Change Research Program.

Communications & Partnerships Specialist, Risk Management Directorate: 06/2019 – 03/2023

- **Managed a \$5M Annual Portfolio:** Project manager, driving key climate and resilience projects, including the Climate National Outreach Strategy, Partnerships, Coastal, Levees, Future Conditions, Future of Flood Risk Data, and National Academies of Sciences portfolios. Created strategic vision, resolved complex issues, set clear expectations, and consistently achieved project deliverables. COR for the FMIX Call Center Software License Procurement.
- **Strategic Leadership in Resilience Planning:** Evaluated and provided expert advice for resilience initiatives on the FEMA 2022-2026 Strategic Planning team, influencing the agency's long-term climate and resilience strategies.
- **Expanded the Resilient Nation Partnership Network (RNPN):** Led and grew RNPN from approximately 80 to over 1,500 organizations in just three years, significantly broadening FEMA's national resilience efforts through cross-sector partnerships and strategic programmatic design and implementation.
- **Pioneer for FEMA's Nature-Based Solutions:** Led the development and launch of FEMA's first nature-based solutions resources, website, and definition for BRIC, positioning the agency as a leader in NBS resilience practices. Contributed as a FEMA representative to the White House Nature-Based Solutions Working Group and subsequent report.
- **Advanced Climate Literacy in Emergency Management:** Advisor for the National Exercise Division's Climate Adaptation Regional Exercise Series, enhancing climate literacy across the emergency management community.
- **Secretariat for the Mitigation Framework Leadership Group:** Provided leadership and coordination as the Secretariat, guiding national efforts to enhance mitigation and resilience strategies.
- **Directed Climate Adaptation and Resilience Research:** Scoped, procured, & managed the \$1.2M National Academies Resilient America Roundtable contract, establishing research priorities to drive applied resilience outcomes.
- **Special Act Award for COVID-19 Response Leadership:** Led the Supply Chain Task Force Situational Awareness Section during a 78-day deployment, in collaboration with the DoD, creating new processes for data and information sharing, data management, and geospatial resource development to enhanced national response.

Michael Baker International 06/2016 – 06/2019

Supervisory Resilience Planning Practice Lead: 11/2018 – 06/2019

- **Oversight and Strategic Leadership:** Provided direction and guidance to direct reports (including Performance Improvement Plans), collaboratively developing policies, plans, and strategic goals to drive team success. Managed the Resilience Planning Team and leading business development efforts to expand all-hazard resilience consulting services, resulting in enhanced service delivery and client engagement.
- **Regional Resilience Subject Matter Expert:** Served as the primary resilience expert and point of contact in the Mid-Atlantic Region, driving tangible resilient designs and outcomes for Federal, state, and local initiatives.
- **Facilitated High-Impact Resilience Workshops:** Led and facilitated resilience workshops for localities and Federal agencies, advancing practical understanding and application of resilience strategies.
- **National Representation at Conferences:** Represented Michael Baker International's resilience expertise at national conferences and events, positioning the firm as a leader in the resilience consulting space.
- **Founded Hazard Mitigation Planning Technology Initiative:** Established the Hazard Mitigation Planning and Resilient Communities story map initiative, leading the development of interactive geospatial communication tools for FEMA.
- **Developed and Delivered Nature-Based Solutions Trainings:** Created and conducted three FEMA Risk MAP Nature-Based Solutions Trainings, equipping stakeholders with critical knowledge to implement resilient solutions.

Coastal Scientist & Coastal Communications Specialist: 06/2016 – 11/2018

- **Project Manager for Award-Winning Innovation Lab:** Led the inaugural Michael Baker Planning Innovation Lab, successfully implementing technology-based outreach & engagement resources for Annapolis, MD, for the Nation's first Cultural Resource Hazard Mitigation Plan. Project earned the 2018 URISA Distinguished Single System Award.
- **Mid-Atlantic Resilience Subject Matter Expert:** Served as the go-to expert on coastal ecology, resilience planning, resilient transportation, and related engineering projects, providing trusted guidance and expertise.

- **Enhanced Public Awareness of Natural Hazards:** Supported FEMA, states, & local communities by delivering high-quality training and communication products that heightened public awareness of natural hazards, leading to proactive risk reduction actions to safeguard lives and property.
- **Collaborative Leadership in Flood Risk Communication:** Worked with federal agencies to effectively communicate flood risk and flood mapping processes, ensuring cohesive and informed public messaging.
- **National Representation and Technical Assistance:** Represented FEMA's Community Engagement and Risk Communication contract at events and conferences nationwide, providing direct technical assistance on hazard mitigation, flood risk, nature-based solutions, and coastal resilience.

NOAA Office for Coastal Management (The Baldwin Group) 08/2014 – 06/2016

Program Analyst/Nature-Based Solutions for Coastal Hazards Trainer – Policy, Planning, and Communications Program: 06/2015 – 06/2016

- **Managed Executive Correspondence and Rapid Response:** Oversaw critical correspondence and rapid response requests for the Office for Coastal Management (OCM) from NOAA leadership, the Department of Commerce, the Office of Management and Budget, and Congress, ensuring timely and accurate communication on key issues.
- **Strategic Planning Efforts:** Supported OCM's annual and long-term planning functions, including the development of the Annual Operating Plan, contributing to Office strategic direction and operational efficiency.
- **Developed Strategic Briefings for Leadership:** Crafted briefings and presentations for Office and Agency leadership, effectively communicating strategic priorities to both internal and external audiences.
- **Advanced National Resilience Education:** Served as an instructor for Nature-Based Solutions for Coastal Hazards trainings, enhancing resilience education for diverse stakeholders across the country. Developed content, conducted outreach, and provided technical assistance on nature-based solutions, hazard resilience, and climate adaptation.
- **Liaison for Nature-Based Engineering Initiatives:** Acted as the liaison for the Systems Approach to Geomorphic Engineering program, leading collaboration among Federal, State, and Local agencies, NGOs, academic institutions, and private businesses to promote nature-based resilience strategies.

Remote Sensing Specialist – Geospatial Sciences Program: 08/2014 - 06/2015

- **Led QA/QC and Distribution of LiDAR Data:** Managed the processing, quality assurance, and distribution of LiDAR data, including Digital Elevation Models. Successfully processed 63 LiDAR projects for NOAA's Data Access Viewer and the U.S. Interagency Elevation Inventory, including 8 priority datasets, ensuring high-quality data for widespread use.
- **Established Standardized Operating Procedures:** Co-led the development of the *Creating Digital Elevation Models from Lidar Using ArcGIS* standard operating procedure, streamlining processes and improving data usability.
- **Expanded Stakeholder Engagement through Innovative Communication:** Initiated the "Lidar Links" Newsletter, designed two story maps, and authored four NOAA GeoZone blogs to enhance engagement with stakeholders.
- **Advanced National Elevation Data Accessibility:** Responsible for the processing, dissemination, and quality assurance of all LiDAR elevation data for the Digital Coast platform, including the Data Access Viewer, Sea Level Rise Viewer, Lake Level Viewer, and Coastal Flooding Impact Program, increasing public access to critical elevation data for flood risk.

Academic Appointments

- **Georgetown University School of Continuing Studies:** Adjunct Faculty, [Emergency and Disaster Management Program](#) – Instructor for the *GIS for Emergency Management* and *Hazard Mitigation Planning* graduate level courses.
- **Tulane University, School of Social Work:** Senior Fellow, [Disaster Resilience Leadership Academy](#) – Instructor for the *Resilient Partnership Design* and *Climate x JEDI* graduate level courses.

Non-profit Board Appointments

- **National Institute of Building Sciences Multihazard Mitigation Council Board of Directors** (01/2019 – 06/2019) – stepped down due to conflict of interest with new FEMA role.
- **The Undivide Project Advisory Board Member:** Nonprofit focused on undoing the "Digital Divide" by working directly with communities (09/2022 – 02/2024)

Peer Reviewed Publications

- Dean, B.J., Ellis, J.T., Irlandi, E., (2013). [Measuring Nearshore Variability in Benthic Environments: An Acoustic Approach. Oceans and Coastal Management.](#) December 2013.
- Jean Ellis and Bradley Dean (2012) [Gulf of Mexico Processes.](#) Journal of Coastal Research: Special Issue 60: pp. 6 – 13.