

# JON CALABRIA, PhD, PLA

Professor | College of Environment and Design | University of Georgia

## RESEARCH FOCUS & ECONOMIC IMPACT

Applied research in ecological engineering, stormwater infrastructure and coastal protection generates significant economic value through ecosystem service enhancement, infrastructure cost savings and adaptive planning strategies. Research portfolio includes millions in funded projects addressing critical environmental and economic challenges in transportation infrastructure, coastal protection, watershed management and urban systems.

### Core Expertise & Applications

**Ecological Restoration & Engineering:** Coastal marsh restoration, thin layer placement, applications in stormwater systems that reduce infrastructure costs while enhancing ecosystem function and land values

**Stormwater Infrastructure Design:** Cost-effective water management systems that reduce municipal treatment costs, protecting transportation infrastructure and improving water quality for communities

**Coastal Protection Planning:** Engineering with Nature approaches for military installations and coastal communities, protecting critical infrastructure and supporting working waterfronts

**Wildlife Corridor Design:** Reducing wildlife-vehicle collisions on transportation corridors, decreasing maintenance costs and liability while maintaining habitat connectivity

## EDUCATION

**PhD, Wildlife and Fisheries Biology, Master of Landscape Architecture,** Clemson University

**Bachelor of Landscape Architecture,** University of Georgia

## MAJOR FUNDED PROJECTS (Selected)

**Ecological Systems & Communities with CRP,** US Army Corps of Engineers, \$2.8M (current)

**Engineering With Nature Regional Engagement Network,** US Army, \$2.5M (2020-2022)

**Shoreline Protection for Navy Base at Mayport, FL,** National Fish & Wildlife Foundation, \$500K (current)

**Coastal Marsh and Community Protection, Tybee Island,** NFWF, \$221K (current)

**Review of GDOT Imperiled Species Protection Measures,** Georgia DOT, \$658K (2018-2021)

**Total Research Funding (PI & Co-PI):** Millions across 35+ grants supporting infrastructure durability, conservation and economic development

## PROFESSIONAL EXPERIENCE

**Professor,** College of Environment and Design, University of Georgia (2023-present)

**Associate Professor,** University of Georgia (2016-2023)

**Extension Associate,** Biological and Agricultural Engineering, NC State University: Led stormwater and conservation demonstration projects (2001-2010)

**Landscape Architecture Consultant,** Private practice serving public and private clients on conservation, restoration, greenway and water quality projects (1992-present)

## SELECTED APPLIED RESEARCH PUBLICATIONS

Lu, J., Calabria, J. (2026). Prioritizing urban streams for ecological enhancement in the Southeast Piedmont using a structural equation modeling-based tool. *Environmental Modelling & Software*, 195

van Rees, C.B., et al. including Calabria, J. (2023). Reimagining infrastructure for a biodiverse future. *Proceedings of the National Academy of Sciences*

Suedel, B.C., Calabria, J., et al. (2022). Engineering coastal structures to centrally embrace biodiversity. *Journal of Environmental Management*, 323

Calabria, J., et al. (2022). Effect of curve numbers on family benthic index in headwater streams in western North Carolina. *Environmental Challenges*, 7

## IMPACT & RECOGNITION

### Economic Development Contributions

- Led stormwater infrastructure projects reducing management costs for municipalities and airports
- Developed coastal protection strategies for military installations and working waterfronts
- Designed ecological restoration projects enhancing property values and ecosystem function
- Created transportation corridor solutions reducing wildlife collisions and maintenance costs

### Professional Recognition

- Board Member, Georgia Board of Landscape Architects (2023-2026)
- Team Impact Award, UGA Research (RISE Team, 2022)
- Honor Award, Georgia ASLA - Historic Fourth Ward Park Analysis (2019)
- Creative Teaching Award, University-wide Winner (2016)

## PROFESSIONAL SERVICE & LEADERSHIP

**Editorial Leadership:** Associate Editor, Journal of Ecological Engineering Design; Editorial Board, Journal of Environmental Management

**University Governance:** Committee on Facilities (Chair 2023-24), University Promotion & Tenure Review Committee

**Professional Organizations:** American Society of Landscape Architects, American Ecological Engineering Society

**Graduate Education:** 51 graduate students advised (PhD and Master's), developing next generation of applied researchers

## TECHNICAL CAPABILITIES

**Design & Analysis:** Natural channel design, stormwater infrastructure planning, bioretention systems, coastal ecosystem restoration

**Assessment Tools:** GIS-based suitability analysis, landscape performance metrics, hydrologic modeling, structural equation modeling

**Field Methods:** Benthic macroinvertebrate sampling, water quality monitoring, vegetation establishment, ecological assessment

**Project Delivery:** Multi-agency coordination, community engagement, construction documentation, performance monitoring

**Licensure:** Licensed Landscape Architect in Georgia and Carolinas