Pamela A. Green

Providence, RI, USA | pg@pamelaagreen.com | pamelaagreen.com | LinkedIn

CAREER PROFILE

Water resources and environmental risk scientist with 20+ years of experience helping organizations understand and act on water and natural-hazard risks through science-driven, client-focused solutions. Combines deep expertise in water resources, resilience, and risk analytics with geospatial data science and modeling to design evidence-based, fit-for-purpose tools that support decision-making in policy, investments, and operational strategy. Works with municipalities, private sector clients, and NGOs to move from risk assessment to mitigation and resilience solutions, including flood analysis, sustainability and resilience planning, benefit-cost evaluation, stakeholder engagement, and decision-support systems. Leads end-to-end project delivery from proposal through analysis and implementation; led cross-disciplinary teams on projects up to $2 million, secured $5 million in funding, and published 50+ scientific articles.

Core competencies: Water, Natural Hazard, and Environmental Risk Analytics, Water Resources Management, Corporate/Finance Risk, Collaborative Leadership and Multi-stakeholder Engagement, Research Design and Development, Spatial Data Science, Science Communication and Guidance, Project Management, Python, GDAL/OGR, Spatial SQL, PostGIS/PostgreSQL

CAREER HIGHLIGHTS

- Led coastal and inland flood risk and resilience projects for public-sector and private asset owners, managing a team of water resources engineers and planners from site assessment through benefit–cost analysis, design alternatives, concept designs, and grant proposals.
- Built proof-of-concept water and natural-hazard risk analytics tool for an S&P 500 financial technology company serving ~8,000 global investment clients and 200,000 individual users.
- Developed custom science-based water risk metrics that informed €1.8 billion in sustainable asset selection for a pension fund provider serving 4.3 million participants.

PROFESSIONAL EXPERIENCE

SLR Consulting, Boston, MA 2024–2026
Global consultancy providing expert guidance in natural-hazard resilience and water management, specializing in data-driven solutions to enhance water security and sustainability.

Climate Resilience Scientist (Water Resources & Risk Analytics), 2024–2026
Leads water, flood, and natural-hazard resilience projects, stakeholder engagement, spatial modeling, scenario analysis, and regulatory/grant compliance for sustainable water solutions.

- Led coastal and inland flood resilience projects managing a team of water resources engineers and planners for flood risk site assessment, impact analysis, benefit-cost analysis, sustainable design alternatives for climate resilience, concept designs, and grant proposals
- Streamlined geospatial analysis workflows by automating watershed mapping and developing a LiDAR processing pipeline, reducing production time from hours to minutes and delivering scalable and validated tools for flood analysis and reporting
- Developed natural hazard resilience action plans for municipalities, aligning public and municipal priorities to deliver strategies and actions for community and asset resilience

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TerraBlue Science LLC, Providence, RI 2023–2024
Sole proprietorship, environmental consulting group offering scientific expertise and bespoke tools for water risks, nature-based solutions, and sustainable water management.

Principal Water and Environmental Risk Scientist, 2023–2024
Subject matter expert supporting product development and market strategy in water risk analytics; develops sustainability metrics and science-based tools for sustainable corporate and investment decisions; expertise translating scientific research into real-world solutions.

- Designed and built a framework mapping sustainable water opportunity locations worldwide to guide private sector engagement in the expanding water and climate solutions market
- Built proof-of-concept water and natural-hazard risk analytics tool for an S&P 500 financial technology company serving ~8,000 global investment clients and 200,000 individual users.
- Expanded income potential by $100,000+ for consulting clients by providing proposal support in climate and land use change impacts on water resource vulnerability and resilience

CUNY, Advanced Science Research Center and CCNY, New York, NY 2008–2023
Environmental sciences research group focusing on synthesis studies of the interaction between human activities, the environment, and the water cycle.

Senior Research Scientist, **Advanced Science Research Center,** 2015–2023
Designed global water security research, leading cross-cultural, inter-disciplinary teams; built functional metrics and frameworks for sustainable water management worldwide.

- Developed custom science-based water risk metrics that informed €1.8 billion in sustainable asset selection for a pension fund provider serving 4.3 million participants.
- Generated 60+ science-based metrics of severe climate risks impacting 40% of the world's population to guide UN human development goals by creating an analytic framework to forecast future water security and green and gray infrastructure impacts
- Developed the first planetary freshwater boundary indicator advancing science knowledge on sustainable freshwater Earth system limits impacting one-third of the world's population; landmark studies published in *Nature* portfolio journals
- Maximized workflow efficiency and team productivity on a $1.7 million NASA project managing a 20-member research team to deliver a groundbreaking coastal risk tool

Research Associate / Hydrologist, Environmental Crossroads @ CCNY, 2008–2015
Conducted advanced research in human-climate-water cycle interactions; developed strategies for sustainable water management; built indicators for global water security.

- Developed trade-off tool for the World Bank to assess downstream flood loss and water quality costs, guiding climate resilience finance and water policy planning in Africa
- Informed strategies for sustainable urban growth via models to forecast water stress in rapidly growing major cities in developing nations, impacting 3 billion urban dwellers

EDUCATION

M.E. in Environmental Engineering, University of Florida, Gainesville, FL
B.S. in Zoology, University of Rhode Island, Kingston, RI