

A vision for safe and thriving coasts

What's at stake

America's coasts and floodplains are vital to our country's communities, economy and wildlife. Counties in the coastal zone comprise 42% of the U.S. population and contribute 48% of the national gross domestic product, while over 1,800 native species of plants and animals reside across the Atlantic and Gulf coasts.

At the same time, these communities, infrastructure and resources are at immense risk from sea level rise, hurricanes and heavy precipitation events. Coastal and riverine flooding is the largest source of financial exposure for the federal government behind only Medicare and Social Security – expected costs from storm-related winds and flooding total \$54 billion a year. Unless we act, climate change will only exacerbate these threats.

Our approach

We can build meaningful coastal resilience to create a safer, more prosperous and equitable future. Building resilience is a national priority for elected officials from both major parties because no region or population is immune to the impacts of climate change. To do this right, we must build resilience into policy and decision-making, harness the power of nature through restored wetlands and barrier islands, engage local residents and stakeholders in designing solutions and lead with science.

Every \$1 spent upfront on resilience reduces the cost of disaster recovery by \$6.

Our focus areas:

1. Expanding cutting-edge science and modeling to inform planning and decision-making over time.
2. Guiding proactive, inclusive and adaptive policy, planning and governance to secure long-term funding.
3. Advancing natural infrastructure to reduce flood risks and restore ecosystem health and productivity.
4. Engaging communities and stakeholders to build their own vision of a more resilient, equitable future.



Climate change disproportionately impacts vulnerable, low-income, minority and other disadvantaged communities. Approximately 40% of Americans living in coastal counties fall into an elevated coastal hazard risk category, including children, the elderly and low-income households. EDF is committed to developing and implementing locally-designed and supported solutions that will help vulnerable communities to not just recover from disasters but secure a safer, more prosperous, resilient and equitable future in the face of climate change.



Where we work

Over a decade of progress in Louisiana

Louisiana is considered ground zero for sea level rise and climate change. Since the 1930s, the state has lost an area the size of Delaware in coastal wetlands. EDF has worked in Louisiana for almost 40 years to build a more resilient future by:

- Shaping and advancing a bipartisan 50-year, \$50 billion Coastal Master Plan to slow land loss and secure a more resilient and sustainable Mississippi River Delta. This includes advancing large-scale sediment diversions to harness the power of the Mississippi River to restore tens of thousands of acres of coastal wetlands.
- Working with partners to convene a community-driven resilience program that informed the state's investment of \$41 million in resilience projects including floodproofing and elevating homes, planned relocations and increasing access to mental health and other community services.
- Embedding resilience into the heart of state government, resulting in the appointment of the state's first chief resilience officer charged with ensuring every state agency has a plan for confronting climate change.
- Advising state leadership to craft a first-ever climate mitigation plan to reduce greenhouse gas emissions.

Building resilience across North Carolina

Between 2016 and 2019, North Carolina was hit with four major storms that caused tens of billions of dollars in damages. EDF is focused on advancing solutions to help communities and farmers across North Carolina's coastal plain become more resilient to extreme weather and a changing climate by:

- Building science and modeling to identify potential of natural infrastructure solutions to reduce downstream flood impacts.
- Advising on the state's new resilience plan, which emphasizes science-based, natural solutions to reduce risk.
- Engaging farmers, residents and local officials in the Neuse and Lumber river basins to grow local capacity and foster community-driven solutions.

“EDF is really taking a holistic, concrete approach to building resilience in a climate-threatened world. This is exactly what we need to do.” – Alice Hill, EDF Trustee

Confronting sea level rise in New York and New Jersey

Coastal New York and New Jersey account for over 80% of the states' populations, more than 10 million jobs and face major climate change threats. New Jersey is expected to face an additional six feet of sea level rise by 2100, while nearly 700,000 New Yorkers will live within the 100-year floodplain by 2050. The lives lost and \$71 billion in property damages from Hurricane Sandy was a wake-up call. We are working to build resilience by:

- Engaging regional community and business leaders to deploy a toolkit of resilience principles and best practices to

inform policy, planning, and investments that can change the trajectories of New York's and New Jersey's coasts.

- Advocating for innovative solutions to fund resilience, like New York Gov. Andrew Cuomo's proposed Restore Mother Nature Bond Act – which would provide \$3 billion to fund natural infrastructure and climate adaptation for clean water and jobs, with an important focus on environmental justice communities.

Developing a cohesive strategy for coastal resilience

Coastal regions around the world face serious threats. EDF is working to increase coastal resilience by:

- Expanding effective strategies and solutions to other geographies, such as Florida, Virginia, Cuba and beyond.
- Advocating for improved coordination of federal and state efforts to result in the implementation of meaningful, on-the-ground coastal resilience programs.
- Fostering networks of key agency leaders and staff from across the country who are working on resilience at all levels of government. These exchanges provide a forum for knowledge sharing to identify common needs for advancing resilience planning and implementation at a greater scale.
- Advocating in support of bipartisan federal legislation and policies to fund and implement resilience projects and programs across state, tribal and local governments.

Support our work

Your support of our program can have a big impact to help our coastal communities and ecosystems thrive despite climate change. To learn more, visit www.edf.org/coastalresilience.

Our experts



Steve Cochran

Associate Vice President, Coastal Resilience
scochran@edf.org



Natalie Snider

Senior Director, Coastal Resilience
nsnider@edf.org



Will McDow

Director, Resilient Landscapes
wmcadow@edf.org



Mark Rupp

Director, State-Federal Policy & Affairs, Ecosystems
mrupp@edf.org

Contact: Jacques Hebert
Communications Manager
Environmental Defense Fund
edf.org
blogs.edf.org/growingreturns

T 504 264 6849
C 504 250 3699
3801 Canal Street, Suite 400
New Orleans, LA 70119
jhebert@edf.org

