Building Flood Resilience in the South

SOUTHERN ENVIRONMENTAL LAW CENTER

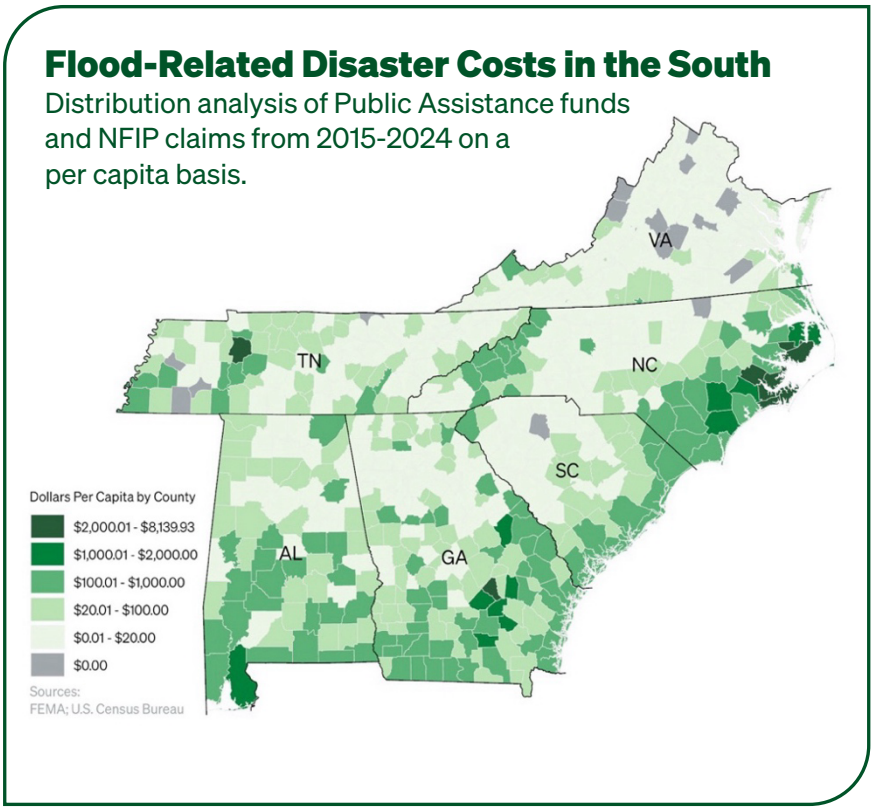
The South is home to beautiful landscapes, thriving communities, and growing economies, but also prone to devastating floods that disrupt local economies and threaten people's lives and livelihoods. Communities are grappling with these impacts on a regular basis and want leadership at all levels to prioritize effective solutions to lower risk.

Smarter development is key

The consequences of increased flood risk can take many shapes – flooded roadways that make travel dangerous or impossible, disruptions in utility and emergency services, damaged structures and infrastructure necessitating costly repairs, and in the worst cases, loss of human life.

SELC works closely with state and local leaders and directly with communities to address the root causes of growing flood risk, such as development of flood-prone areas, destruction of upstream natural areas and floodplain buffers, and outdated building practices not designed to withstand flooding.

Through our place-based approach, SELC is also using our state and local experience and expertise to identify and develop parallel federal policies to reduce flood risks and minimize risky building practices.



The federal government spends significant money on disaster recovery in both coastal and inland communities throughout the Southeast.

Guide new development to less risky areas and ensure it does not increase flood risk to neighboring properties

One of the most harmful and counterproductive practices still occurring is the construction of new houses and development in the floodplain. This puts more people and assets in harm's way. Further, replacing natural buffers that absorb stormwater with pavement and other impervious surfaces can push runoff onto neighboring communities and expose previously protected areas to severe flooding. To reduce costly damage to communities and families from extreme weather, local leaders must use land use planning and zoning tools to guide new investments to less risky areas and ensure new developments don't worsen risks for their neighbors.

For example, in the city of Suffolk, Virginia, historic watermen communities are struggling with increased stormwater runoff and the resulting flooding as developers fill the remaining lots between existing houses. SELC worked directly with the communities to make changes to the zoning regulations to reduce impervious surface allowances for new projects and require reasonable buffers between new buildings and adjacent properties so that runoff can be absorbed and slowed by natural terrain before it flows across lot lines and gathers into a flood.

Similarly, Charleston, South Carolina, grapples with flooding from storm surge, rising tides, and intense

precipitation while also accommodating a growing population and booming economic interests. To reduce flood risks, the city continues to refine and improve its approach to floodplain management to ensure that new development isn't endangering existing homes. For example, SELC supported the city's recent floodplain policy update to restrict the use of fill to achieve higher property elevation, a practice that can push more water into neighboring properties.

At the national level, the National Flood Insurance Program (NFIP) is a critical tool to help families rebuild homes after a disaster. However, the program has unintended consequences of subsidizing—and thereby encouraging—new development in flood-prone areas by offering a federal safety net if and when the property floods. To address this dynamic, some communities have developed more robust floodplain management standards to reduce new development in vulnerable areas. In addition, SELC is exploring NFIP reforms to help address this perverse incentive.

Build utilities and infrastructure to withstand and reduce flood risks even as storms increase in intensity and frequency

Increased tidal flooding, more intense rainstorms, and rising groundwater tables are already beginning to render areas unsuitable for septic and compromise existing septic systems both in the South's coastal areas and further inland, and the challenges will only increase. When septic systems are inundated, waste can back up into people's homes and also threaten local waterways. SELC is engaging in a much-needed update to Virginia's septic regulations to advocate stronger buffer protections between new septic systems and waterways, along with other heightened permitting requirements in flood-vulnerable areas.

Flooding is also increasingly closing or damaging other infrastructure across the South, including roads, bridges, and highways. Hurricane Helene damaged roads and bridges in nearly 7,000 sites across Western North Carolina, leaving families, businesses, and emergency services stranded. Early decisions in a project design process to locate new infrastructure and utilities outside of risky areas or to incorporate greater resilience features can help ensure they operate successfully—even during storms—for decades to come.

New infrastructure must also be designed to reduce flood risk to surrounding communities. A recent highway expansion and elevation project in Shiloh, Alabama resulted in persistent and damaging flooding to adjacent properties during even minor rain events. This is costly for the families and for the state and federal transportation agencies that need to remediate the situation. All parties would have benefited from project design practices that better account for flood risk early in the process.

Improve coordination among and between governmental entities and the public

To understand risk, build long-term plans, and make well-informed development decisions, many states and localities in the Southeast have designated centralized offices for resilience and recovery. In 2020, SELC helped craft legislation to establish the South Carolina Office of Resilience (SCOR) to better coordinate resilience investments across the state. Since then, SCOR has used data tools, community engagement, and dedicated funding to help local governments plan and develop in ways that reduce flood risk. Federal agencies would similarly benefit from a centralized office, coordinated across agencies and committed to understanding and addressing vulnerabilities with local leaders.

Translating local progress to federal priorities

The impacts of flooding are felt locally, but the solutions are found at all levels of government—from local governments to state agencies and legislators, and all the way up to decisions by Congress and the White House on how to invest federal resources. SELC is translating our local knowledge and experience into solutions in all of these venues to mitigate risks to our unique Southern communities and natural resources from the growing threat of flooding.

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