Hurricane Floyd devastated eastern North Carolina in September of 1999, damaging or destroying approximately 20,000 uninsured homes and inflicting $6 billion in damages. Communities of color and economically disadvantaged areas were disproportionately affected by the hurricane and associated flooding, and they faced greater barriers to receiving disaster relief funds than their wealthier counterparts. A decade after Hurricane Floyd, the community of Maple Hill is still feeling the after effects of the flooding. Despite the enormous amount of natural disaster resources sent to eastern North Carolina, only a small portion of these funds reached the town. Now those resources have been exhausted, and residents remain concerned about health effects resulting from houses damaged by flood waters and contaminated by mold and mildew.

**THE COMMUNITY**

Maple Hill is a small, unincorporated town in rural Pender County, a coastal county in southeastern North Carolina. Maple Hill is home to 2,500 people and has a median household income of just over $30,000. The population of the town is 52% White and 46% Black.

Most of the families in Maple Hill have lived in the community for generations, and many of the Black residents are descendants of freed slaves who came to live in the area after Emancipation. Living in a primarily rural area, many residents keep livestock as a means of livelihood, and the community still relies on well water and septic tanks.
THE HAZARD

Floods are second only to fire as the most common natural disaster that threatens human life, and they are the top cause of property damage in the nation. The hazards of floods can be both immediate and chronic. Immediate hazards can include death from drowning, well and surface water contamination by sewer overflow and chemical spills, and destruction of property. The long term effects of floods include property damage and respiratory illnesses due to poor air quality from indoor mold and dampness.

People of low income are especially vulnerable to flooding because they are more likely to live in flood-prone areas where the land is more economical. For historical reasons, African Americans are even more likely than other groups to inhabit floodplains and to lack flood insurance. After Emancipation, resettlement communities for former slaves tended to be located in areas that were of less interest to white landowners, namely low-lying land in the floodplains.

Although homeowners within the 100-year floodplain are encouraged to purchase federal flood insurance through requirements for federally-insured mortgages, they may not do so. They may erroneously believe that homeowner’s insurance covers flooding or may not realize that they are living on a floodplain. Many African American families in these communities lack a clear title to their property as a result of long term exclusion from the legal system, making it even more difficult to purchase flood insurance. Moreover, the cost of this insurance is prohibitive for low income families, leaving them vulnerable to events such as Hurricane Floyd, which flooded land well into the 500-year floodplain.

WHAT HAPPENED?

In 1999, Hurricane Floyd dropped over 20 inches of rain in the eastern regions of the state. In Pender County, the floodwaters created by this rain rose above the 500-year flood stage level. Statewide, more than 48,000 people were forced out of their homes and into shelters.

People felt the immediate effects of the flood in multiple ways. Across eastern North Carolina, more than 50 deaths were attributed to the storm. Many wells, creeks, and rivers were contaminated by dead livestock, chemical spills, human sewage from wastewater treatment plants.

“There’s a lot of things happening because of Hurricane Floyd that we had never experienced before. We had a lot of people that passed away, young people and some old people. People . . . die but it seemed like after Hurricane Floyd came through . . . it’s like it had some disease behind it.”

-Community Member
and septic tanks, and the overflow of animal waste lagoons from industrial hog farms. As a result of the flooding, hundreds of homes were deemed uninhabitable.

State and federal government acted quickly to try to alleviate the problems caused by Hurricane Floyd. The North Carolina State legislature allocated $836.6 million of disaster relief funding. The North Carolina State Emergency Response Team (SERT) helped with clean-up and provided immediate relief after the flood along with volunteers from various organizations. The Federal Emergency Management Agency (FEMA) set up relief programs and encouraged residents to seek assistance through their temporary housing, grant, and buy-out programs.

Despite these efforts, disaster relief did not progress smoothly for all residents. Cases were reported of relief workers providing misinformation, and some residents reported that their applications to relief programs were repeatedly lost. Low-income landowners faced additional barriers to receiving recovery aid, such as a hesitance to assume government loans that they did not have the means to repay. Many residents were reluctant to take advantage of government buy-out programs designed to permanently relocate residents because they did not want to leave family homesteads.

Even as some residents were frustrated by slow progress in rebuilding, government employees were faced with changing rules guiding disaster aid and limited funds to administer programming. As time progressed, less money was allocated to disaster relief at the state and federal level and this left Maple Hill to compete with more affluent communities in the county for dwindling funds.

In the five years following Hurricane Floyd, 83 homes in Maple Hill were repaired, rebuilt, or bought out. However, more than 100 homes remained in need of flood-related repairs in 2006. Flooding has damaged building foundations and led to moisture within the structures which has resulted in mold growth in walls and

"After the hurricane . . . they moved a lot of [people] out of our community. They forced most of them because they would get no grant if they didn’t move, and they put them in other locales. . . . I know 15 or 20% if not more had to move out. Residents that had been here maybe 40, 50, 60, 70 years, they had to move out. . . . That was a blow for us in the community.”

- Community Member

THINKING TOWARD THE FUTURE

Development on wetlands areas in Eastern North Carolina, such as the construction of an interstate highway through Pender County in 1991, appears to have contributed to more severe flooding in recent years. To decrease future flooding, North Carolina has passed legislation to protect wetlands. Additionally, in order to reduce the environmental impacts of future flooding, the North Carolina legislature set aside $5.7 million to buy out hog farmers in flood-prone areas.

While these measures may alleviate future flooding, the impacts of the flooding after Hurricane Floyd are still being felt. Maple Hill community residents and local chapters of organizations like NC Fair Share continue to attend county commissioner meetings and to advocate alongside other communities for changes in national policy that will protect vulnerable communities. As community member Cindy Moore said, “We have heard that Hurricane Floyd is now part of history, that they are closing the book on it. But in our community, people are still suffering, still living with it.”

“Our home is not by any means back to what it was. And it really has affected us, mentally, emotionally, and physically too, because I had never had any problems with allergies or respiratory problems, but both of us have them now.”

-Community Member

This is part of a series of stories about how communities in North Carolina have faced environmental justice concerns. Sources include articles from newspapers such as The News & Observer (Raleigh, NC) and interviews with community members. A longer version with references is available on our website. Published in August 2008.