

Preventing Future Floods ^[1]

Humans can't prevent hurricanes, but we can do a lot to minimize flooding and the damage they cause. Unfortunately, in the United States, without meaning to, we often do a great deal to make floods worse.

A *floodplain* is an area of low-lying ground next to a river that is subject to flooding. How big a floodplain is depends, of course, on how big the flood is. Scientists and planners talk about floodplains in terms of how often they are likely to flood. Land in a ten-year floodplain is expected to flood once in ten years, while land in a hundred-year floodplain is expected to flood once in a hundred years.

Floodplains change in size and shape when land is developed. Because ground that has been paved or built on can't absorb water, more rainwater runs off in developed areas than in natural areas. (That's why urban areas are more susceptible to [flash floods](#) ^[2].) By steering development outside of floodplains and by using floodplains instead as "green spaces" for recreation, cities and counties can minimize flooding. Of course, building new homes and businesses outside floodplains also keeps them out of harm's way when a flood does occur.

After Hurricane Floyd, some communities in eastern North Carolina began looking seriously at how they might better manage their floodplains to minimize the damage from future floods. The report below, published by FEMA, explains the strategy adopted by the city of Kinston. The city's plan includes both prevention and recovery -- buying up and removing houses from the floodplain, for example, and using GPS data to aid in disaster recovery.

Explains how the city of Kinston, North Carolina, began managing its floodplains after the devastation of Hurricane Floyd.

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