CHAPTER X

PIKE COUNTY, KENTUCKY

Backround

Pike County, the largest county in Kentucky, covers 780 square miles in the southeastern part of the state. The county's population is 81,000. The Tug Fork of the Big Sandy River flows along Pike County's northeastern boundary; the Russell and Levisa forks of the Big Sandy River run through the western half. The county government is headed by an elected county judge/executive. A five-member fiscal court acts as the legislative body.

Pike County's economy is directly linked to coal, with coal production virtually the only industry n the area. The few manufacturers who have located in the area make equipment used in the production of coal. Coal companies and their employees are the purchasers of the majority of local services.

Description of the Disaster

The flash flooding that occurred on the morning of July 15, 1979, in the Freburn, Phelps, and Majestic sections (approximate population 6,000 to 7,000) of Pike County was caused by a localized storm that produced between 4.5 and 6 inches of rain over a period of three hours in a seven square mile area. The storm produced flash flooding in the local streams and creeks, which in turn carried away vehicles and damaged or destroyed houses, bridges, and roadways. As a result of the July, 1979, storm, three deaths occurred and almost ten homes were either badly damaged or destroyed.

A Presidential Disaster Declaration was issued for the affected portions of Pike County on July 19, 1979. This declaration was the first instance in which federal disaster operations were coordinated by

the area's regional FEMA office. The approximate total expenditures under federal disaster programs in Pike County were: $700,000+ for temporary housing, $450,000 for individual and family grants, and $1,390,000 for public assistance.

Flooding is not an unusual event in Pike County. Because of the local topography, the entire county is vulnerable to flooding. The county's terrain is mountainous and rugged, with the only flat land in the narrow river valleys and hollows. Roadbeds, railways, and homes are built along the banks of the numerous creeks. Runoff from the mountains is fast because of strip mining activities that clear mountainsides of vegetation and build mining roads up the mountains. The runoff causes erosion, which in turn increases the siltation rate of the creeks and streams, thereby decreasing their carrying capacity. This vulnerability is a function of topography, land use, and economics. The entire county has a large network of streams and creeks that drain into two forks of the Big Sandy River.

The largest flood of record, which occurred in April, 1977, affected not only Pike County, but also 44 other counties in a four-state area and caused an estimated $200 million in damage. The flood of 1977 exceeded the 100-year level in Pike County and is looked on as the flood that raised the community's consciousness. Most of the people interviewed repeatedley referred to the flood of 1977, which struck the city of Pikeville heavily.

In contrast to the 1977 flood, the flood of 1979 occurred in the eastern section of the county in Freburn, Phelps and Majestic. The flash flood, which was contained within this small area (approximately seven square miles), was typically localized. The only level land available for building sites is also located in the flood plain, thus a

large part of Pike County's flood problem is interwoven with housing and community development problems.

An increased need for housing units brought about by the growth of the coal industry forces people to occupy homes in the flood plain. Land is extremely expensive because of the value of the mineral rights, and, as a result, the local mortgage market is extremely tight. In some cases, down payments of 50% are required, with a payback period of only 10 to 15 years. The above factors help to explain why nine out of ten new homes in Pike County are mobile homes.

The county judge had a great deal of experience dealing with the effects of floods in Pike County and was no stranger to Presidential Disaster Declarations. When asked about the flood of July, 1979, many people referred to the flood of 1977 as a great learning experience. The feeling seemed to be that if the community could rebuild after the 1977 flood, the floods since then (1978, 1979) were manageable.

At the first indication of an impending flood, the county judge convened a meeting of those people who would be involved in a possible emergency response. The group included the county flood plain manager, the county flood coordinator, the county inspection and codes enforcement officer, the executive vice president of the county Chamber of Commerce, and the disaster and emergency services director. The judge appeared to be the central actor in these meetings as well as in all county administrative activities. At this meeting, preparations were checked and coordination reviewed. In the event of an actual flood, each person has asigned tasks to be carried out. This organization appears to have evolved over the years that the judge (who recently was defeated in a bid for a third term), has been in office.

The county mobilizes its business community through the Chamber of Commerce. Although Pike County is basically rural, the Chamber of

Commerce has a full-time paid staff of three and a membership of 300 businesses. the chamber has two special standing committees to deal with the flooding problem: the Warning Committee and the Flood Committee. Among the chamber's members are some of the county's major employers, including the coal companies, even though the coal operators have their own association.

An interesting relationship was noted between the county government and the coal companies concerning response to flood disasters. Generally, the coal companies were quite helpful in providing personnel and hevy equipment for the initial clean-up following a flood. The county judge knew which coal companies would provide personnel and equipment and did not hesitate to ask for their assistance in an emergency. However, every local government official interviewed agreed that it would be improper for them to try to enlist the coal company's support in mitigation measures. Local officials were very grateful for the help of the coal companies and felt very reluctant to ask for any type of additional assistance with the flooding problem.

The judge was very successful in securing federal money in the form of general revenue sharing, CDBG funds, and Farmers Home Administration funds. In addition, the state returns a substantial amount of money to Pike County in the form of coal severance taxes (over $3 million in fiscal year 1980-81). This is particularly important because the state has instituted a Proposition 13-type cap on local tax rates and this, combined with the tightening of federal grant money, has severely limited the activities of the county government.

The judge also subscribed to a commercial newsletter that announced the availability of grant money. From these announcements, he decided which grants to apply for based on recommendations of a private consultant who is retained to write grant applications. The judge was

successful in using this approach to obtain federal grant money not only under normal conditions, but also in flood recovery efforts.

The county emergency services director was pleased with the state's response to the disaster. The only problem encountered was logistical: the lack of housing in the flood area forced the approximately 30 state employees who responded to the disaster to commute over 100 miles daily between the asistance centers and their lodgings.

Mitigation and Recovery

Because Pike County has had a long history of flood disasters, flood mitigation actions are a continual concern. While some flood mitigation projects are in response to a single flooding incident, most are of a more general nature and are in recognition that the area is extremely vulnerable to flooding.

In July, 1979, the county was in the emergency phase of the NFIP. Now in the regular program, the county has enacted and is enforcing flood plain regulations. Several mitigation actions have been taken as a direct result of the flooding of July 15, 1979:

1) No rebuilding has been allowed in the flood plain as indicated on the flood hazard boundary maps. While this is a good start, a problem has been encountered because the flood hazard boundary map does not sufficiently identify flood-prone areas. Because of the topography of this region, a majority of the flooded land was not identified as being in the flood plain. Smaller scale flood maps are needed to obtain the full benefits from the NFIP and from the new flood plain regulations.

2) A request was made for HUD Section 407 disaster funds for an alternative flood-free housing program. Initially affecting 80 households, this program is administered by the Pike County Housing Authority and is designed to eliminate the future flood damage in the flood plain.

This voluntary program provides several options: 1) nonparticipation; 2) acquisition and relocation; 3) relocation to a higher elevation on the same property; or 4) elevation of the structure in place.

Many other mitigation measures in Pike County were undertaken not as a direct result of the 1979 flood, but in response to previous floods or in recognition of the continuous hazard posed by flooding. For example, in response to the April, 1977 flood, the Central Appalachian Development Association was created to reduce or mitigate flood damages in the area and three neighboring states. Pike County has directly benefited from these cooperative efforts setting up an area-wide flash flood warning system. this system uses a combination of volunteer observers and remote sensing rain gauges linked by microwave radio to a computer in nearby Frankfort to provide accurate information on which to base flood warnings. With additional federal funds, the commission has contracted with the Corps of Engineers to perform stream rehabilitation and to clear and snag creeks in the county.

Other programs supporting flood mitigation affecting Pike County are run by the water resources division of the state national resources bureau. This division operates the Community Flood Damage Abatement Program. through this program, Pike County has been awarded state funds to create a flood insurance informational education program. A new emergency operations plan that has been written for Pike County is a result of a cooperativeeffort of the county, the state, and the Big Sandy Develoment District. This plan includes an annex covering the operation of the Flash Flood Warning System.

Interviewers' Perceptions

Pike County's flooding problems are tied to its housing problems. In the past, the lack of developable land has forced development of

flood-prone areas. The enforcement of new flood plain regulations together with better flood mapping should stop this practice. But the pressures to develop land within the flood plain will be tremendous. Community development funds to provide water and sewer service to new housing developments on flat-topped mountans would also foster flood mitigation. The innovative use of grant money will be needed to accomplish this.

At the state and local level, the new warning system should help to reduce damages in Pike County. The new Pikeville/Pike County Emergency Operations Plan, while a step in the right direction, should include more information on the vulnerability of the county to flooding and individual operational plans for when a flooding emergency occurs. In Pike County it is not a question of whether a flood will occur, but when.