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THE FORT WAYNE FLOOD: A CASE STUDY

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CHAPTER 1

INTRODUCTION

Fort Wayne, Indiana, is located in the northeast sector of this midwestern state. From March 12 through March 19, 1982, Allen County, Indiana, and specifically the city of Fort Wayne, experienced a major flood. Two rivers, the St. Mary's and St. Joseph's join to create a third river, the Maumee, in Fort Wayne. All three rivers went above their respective flood stages in March, 1982, due to snowmelt and heavy rain. The extent of the subsequent disaster was beyond the normal, planned means of local officials and calls for volunteers to fill sandbags and rebuild dikes were extended through the media. Approximately 30,000 individuals, including about 18,000 students responded to the crisis and effectively turned back flood waters to save many homes. The high degree of organization required to coordinate this effort was largely in place prior to the flood. The scope of the disaster, however, stretched management capabilities beyond expectation. Volunteers filled gaps in disaster response—as they perceived—as well as offering services to local officials.

The emergence of all kinds of new and informal groups at times of disasters has long been casually noted. Historical descriptions of catastrophes frequently mention the many ad hoc groupings and temporary committees which are formed in such situations (see e.g. Kennedy, 1963; Mussari, 1974). Social sciences accounts also often allude to, although almost always in passing, to new groups without preimpact existence, operating in the impact or transemergency time period (see through the years, Form and Nosow, 1958; Bates et al, 1963; Committee on the Alaskan Earthquake, 1970).

In the little attention given to emergent groups, such groups seem to focus on tasks such as the coordination of interorganizational operations, the diffusion of public information, the mobilization of resources, the exercise of authority, the setting of policies, damage assessment, search and rescue, providing of emergency medical services, handling of the dead, clean up and home repair, etc. The emergent groups also appear to be composed of public officials as well as private citizens, as well as at times combinations of the two, plus elements from private organizations.

In the next section, the community characteristics are briefly depicted, including the more salient socio-geographic, demographic, economic, and political features. In section three, we indicate the disaster risks and experiences of the community, covering both natural and technological agents. The disaster preparedness of the area is described in section four, where we note not only the organizational aspects of the private and public preparedness plannings, but the efforts that have been made to link the planning for disasters generally. The section which follows presents a social chronology of the incident from the threat stage, through the organizational response stage, the volunteer effort, and the return to normal stage. In section six we set forth the descriptive aspects of emergence in this disaster. The section following the last one, provides an explanation of why this type of emergence occurred, including the internal and external factors that were involved.
As in all DRC studies, field material was obtained on a confidential basis. Thus, in this report no quotations are attributed to any identifiable individual unless that material is already part of a public record. As in most studies also, sometimes conflicting or inconsistent statements were obtained from different parties involved. Since such matters are not issues of absolute truth, but different perceptions and interpretations of the same things, no false attempt at reconciliation has been made. Some of the questions raised by the quality of the data we obtained are discussed in the appendix to the report.
CHAPTER 2

COMMUNITY CHARACTERISTICS

Ft. Wayne, as a part of the agri-industrial midwest can be viewed as typical of America's heartland. The city is a mix of urban sophistication and midwestern realism. One feels it is a city on the move, with plans to develop itself into a major midwestern urban area. Despite typical area problems with such things as unemployment, there is a sense of optimism in the air. This is especially strong when speaking with those individuals who fought and beat the floodwaters of 1982.

Ft. Wayne's location at the junction of three rivers in Allen County is in the heart of the industrial/agricultural mix of the midwest. Surrounding areas range from rolling farmland to the southwest and west, to hills in the northwest and west, to generally level areas south and east of the city. Scattered lakes are drained by the Maumee River. The typical midwestern climate has long warm summers (average 85 degrees) and moderately cold winters (average 20 degrees). The city itself is divided into over 100 neighborhood associations, some of which are highly organized and active. The mayor's office staff, the citizen's advocate, has developed flood watch programs in neighborhoods, and has conducted flood seminars.

The community prides itself on being a good industrial location, including overnight trucking distance of 21% of the total U.S. population (Chicago, 159 miles; Columbus, OH, 152 miles; Pittsburgh, PA, 298 miles). This 300 mile radius includes a population of approximately 49 million. The highway system used to reach this population includes, U.S. 30, U.S. 33, U.S. 27, U.S. 24, and Interstate 69. U.S. 30 is the traditional Ohio to Illinois truck route; I-69 links Michigan, Fort Wayne, and Indianapolis. A controversial bypass to skirt the southeast and north edge of the city will begin construction around 1985.

Automotive industries have been predominant in Fort Wayne, as indicated in 1979 when 26% of the county's total manufacturing employment of 47,600 were in transportation equipment work. An additional 32% of the manufacturing employment was in the areas of electrical and nonelectrical machinery. In January, 1982, the three largest manufacturers in the Fort Wayne area were International Harvester (which has since left), Magnavox, and General Electric. There are currently nineteen industrial parks in Allen County, ranging from light to general to heavy industrial zoning.

A total of 9,085 acres in Allen County are zoned for industrial use; 20% is now developed or occupied. Industrial parks have from 19-435 total acres available for use, however, an average of the industrial parks is still unused. (out of 2,686 total acres, 1,700 are still available for use). Fort Wayne occupies 55 acres, 11 of which (20%) are in flood-prone areas.

In March 1982, Fort Wayne SMSA had a resident labor force of 187,900, with an annual growth rate from 1970 of 1.8%. Over 75% of the metropolitan labor force resides in Allen County. Unemployment in the metropolitan area (March, 1982) was 12.8% compared to 12.9% statewide and 9.5% nationally.
Unemployment in 1982 for the SMSA ranged from 11.1% to 12.9%. Projected 1983 average monthly unemployment is 13.5%, and 15% is predicted by July. Actual March 1983 unemployment stands at 12.8% in the Fort Wayne area. Average hourly industrial earnings as of January 1982 were $10.19, based on interviews with 22 local employers. The range was from a low of $5.60 to a high of $13.30. The area is highly unionized, including the United Auto Workers, Allied Industrial Workers, IUE, and the Teamsters. Average weekly clerical wages range from $183 to $250.

The local school system serves 33,610 students (of which approximately 18,000 were flood fight volunteers). There are 37 elementary, 12 middle, and 6 high schools; about 6,800 students attend 18 area Catholic schools, and about 3,500 are students at 12 Lutheran schools (a total of 31%). Indiana-Purdue University at Fort Wayne (IPFW), St. Francis College, and Indiana Vocational Technical College (Ivy Tech) are post-secondary education campuses which serve up to nine counties in the region. IPFW has a current enrollment of over 10,000 credit seeking students and 5,000 in continuing education. Ivy Tech offers vocational training to 3,200 students.

Allen County 1980 census data shows a total of 294,335 persons reside in the area. 1978 data show that there is 671 square miles in the county with a population density of 434 per square mile. A majority of the residents are urban dwellers (236,479 or 80%) compared to those in rural homes (57,856 or 20%). Families, 76,694, are included in the data, but average household size is not indicated. Married-couple families compose the largest household type with 64,160 out of 104,403 households. When these families are limited to those households with one or more persons under 18 years, the total drops to 35,443. There are more female householders (14,457) than male householders (9,155). Those female households with one or more persons under 18 years are 7,383; similar male households are 1,294.

There are slightly more females (151,669 or 52%) than there are males (142,666 or 48%). The population is also 89% white (262,908), with 9% black (26,396). Median age in Allen County is 28.6, which reflects the 30% sector of the area population who are in their twenties. If the age range is 20-44, then 60% of the population is concentrated in a 24 year span. The median age by sex is female 29.5 and male 27.6.

Fort Wayne's 1980 population was 172,349, with 17.7% minority residents (14.4% Black, 2.2% Hispanic). The SMSA population was 382,961, with 9.2% minority residents (6.9% Black, 1.6% Hispanic). This indicates a slightly higher number of minority members are urban rather than rural dwellers. Overall, these socio-demographic statistics tend to reflect national population patterns.

Politically, Allen County is a Republican area, as well as the rest of Indiana. The state voted strongly for Reagan in the 1980 presidential election. The governor is a Republican. Fort Wayne's mayor is a Democrat running for reelection in 1983. The county administrators are largely Republican. Mayor Moses operates the city administration through a systems approach to problems.
Overall, the community of Fort Wayne is statistically quite representative of the urban Midwest. The population reflects national trends. Economically, the unemployment rate is higher than average but expected given Fort Wayne's industrial base and geographical location. Perhaps the only surprise is a Democratic incumbent administration in the midst of Republican territory.
CHAPTER THREE

DISASTER RISKS AND EXPERIENCES

Fort Wayne and Allen County encounter most of the natural disasters common to the midwest during the year, including tornadoes, floods, blizzards, high winds, and damaging thunder/hail storms. Storage and/or processing of volatile chemicals, as part of the industrial economy, present technological risks. The problems of technological hazards are minimal, however, in light of the repeated prevalence of severe natural disasters.

Data collected by the National Weather Service from 1953 to 1980 show that Indiana ranks third with twenty-three annual tornadoes, behind Texas and Oklahoma. New tornado warning sirens were installed in 1983 to cover about 25% of Allen County. Radar at Baer Field Airport also serves as part of the warning system. Tornadoes affecting the area tend to be minor, with the exception of some major outbreaks which covered significant portions of the midwest.

During the April 3-4, 1974 "Super Outbreak", 49 people were killed by tornadoes in the eastern part of Indiana (the same time period as the Xenia tornado). Indiana averages eight tornado deaths annually, third behind Texas and Michigan. A 1978 Purdue University study estimated that parts of Allen County likely to be hit by a tornado is 49 in 100,000. South Bend and Elkhart are most likely to be hit, with Evansville least likely. Fort Wayne averaged one tornado per year in the last 27 years. Damaging tornadoes were reported by the Fort Wayne media in 1973, 1978, and 1982 (according to public library records). All of these incidents had only minor property damage and injuries. The Palm Sunday tornadoes which took 140 lives in Northeast Indiana missed Fort Wayne.

Damaging hailstorms occur on the average of twice a year, however, more destruction has been caused by wind with the most significant windstorms in 1948, 1954, and 1982. Five thousand insurance claims were filed for damage incurred in the 1948 Good Friday windstorm. On July 20, 1954, media reports stated that winds estimated at over 100 mph were responsible for one death (a former Fort Wayne fire chief) and the closing of city services and traffic for several days. A church steeple and a radio station tower were toppled in this storm. The June 1982 winds clocked at 59-75 mph, in addition to severe thunderstorms, destroyed or damaged six airplanes at Baer Field. There was minor damage to surrounding areas. The winds in Fort Wayne have proven strong enough to knock over a 200 ton crane in January, 1976.

Snow ground cover during the year in Allen County averages thirty days. In 1918, 40 mph winds swept blizzard snows into 16 foot drifts. A 1973 St. Patrick's Day storm deposited 13" snow amidst 50 mph winds. The effects of the blizzard of January 26, 1978 lasted one week with area roads impassable until after January 31. By the third day of the blizzard there were eleven recorded Indiana deaths and President Carter had declared a state of emergency. Snow depth reached over 17 inches in this blizzard alone, over half the average snowfall. Fifty mile per hour winds contributed to near zero visibility. A records amount of snowfall fell in 1981-82, accumulating to 81.2 inches. The heavy amount of snowfall has contributed to the area's flooding problems.
Major flooding has occurred on the average of every five years since 1823. Floods between 1828 to 1907, where little information is available, were mainly between December and March.

**Flooding Table: 1828-1907**

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<td>1907</td>
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*Source: Fort Wayne-Allen County Flood Protection Plan, April 1982.*

Major floods in this century happened in 1908, 1930, 1936, 1943, 1950, 1959, 1978, 1981, and 1982. Most of these floods were caused by combinations of snow, ice and rainfall in unusually heavy amounts. The same neighborhoods were repeatedly flooded: Nebraska, Swinney Park, Spy Run, Bloomingdale, Pemberton, Riverhaven, Lakeside. Fort Wayne and Allen County were declared federal disaster areas in 1959, 1981, and 1982. A second cause of the flooding is due to the confluence of the three rivers in Fort Wayne. The watershed (geographical areas that drain into a primary waterway) for the St. Joseph River is 1,100 square miles while the St. Mary's watershed is 850 square miles.

The 1913 flood was the result of the most severe midwestern frontal storm ever recorded. Nebraska, Bloomingdale, and Spy Run neighborhoods went under four feet of water. Lakeside and Maumee River dikes were partially destroyed by flood waters, accompanied by damage to 5,500 private homes and businesses. Most of the city was without electricity and water was rationed and boiled before use. Water covered 5,000 city acres and left about 15,000 people homeless.

In 1959, two large ice jams combined on the St. Mary's River, forcing evacuation of 200 persons before dynamiting. Most were families from the Waynedale area, where two square miles were underwater. Four other neighborhoods were also flooded and the Mechanic Street dike had to be continually rebuilt. President Eisenhower issued a federal disaster declaration for the area due to the extensive damage.

Weather conditions from January through March of 1978 set the stage for a major spring flood in northeast Indiana, which can serve as a case in point for the severe area flooding. Unusually heavy snows began on January 9,
creating a 5 inch snow base by mid-January. The Blizzard of 1978, on January 26, brought the Maumee River Basin snow accumulation to 17 inches at Fort Wayne and 22" at Waterloo and Berne. (The water equivalent of Fort Wayne's snowfall was 3.0" by the end of the month). February snowfalls kept the accumulation from diminishing and increased the water level to 4.2" by mid-month; this fell to 2.0" on February 28th due to above-freezing temperatures. March snowfall was 2", but began to decrease as the temperatures rose; the water equivalent remained at 2.0" on March 13.

By March 19 most of the snow had melted and rain began to fall, continuing until March 21. The combination of melting snow and precipitation resulted in flooding in the St. Joseph and St. Mary's Rivers. This flood situation was the worst in Fort Wayne since 1913. The Maumee River remained at flood stage from March 17 to April 2. High flood stages on major area streams created backwater conditions on the smaller tributaries.

On June 13, 1981 (the day of the Cardington, Ohio tornado), Fort Wayne received over 3.5" of rain within three hours (7:00 a.m. - 10:00 a.m.). Flash flooding occurred in all areas of the city, caused mainly when storm sewers and open ditches overflowed. Street department crews erected barricades and placed sandbags. Flood stage was reached in the Maumee by 2:30 p.m., and was five feet over by 10:45 p.m. The Army Corps. of Engineers credited the city's 1980 dike improvements with saving millions of dollars in flood damage.

Overall, it is easily discernible that Fort Wayne has a significant flood history due to the midwestern climate and tri-river confluence. The city's repeated flood experiences have created an awareness of the problem and an initiative to mitigate the consequences. To this extent, we are able to discuss the possibility of whether a disaster subculture exists.

The term "disaster subculture" has been defined in the disaster literature as a set of cultural defenses which are developed to cope with recurrent dangers, and includes "those adjustments, actual and potential, social, psychological and physical, which are used by residents of such areas to cope with disasters which have struck or which tradition indicates may strike in the future."

((Moore, 1964:195) It is also said that "a disaster subculture serves as a blueprint for resident's behavior before, during, and after impact. It includes such cultural elements as norms, values, beliefs, knowledge, technology, and legends." (Wenger, 1977:41; see also Anderson, 1965; Osborn, 1970; Weller and Wenger, 1973; Hannigan and Kueneman, 1978).

Such an orientation is associated with but is not exclusively dependent of repeated exposure of a population to repetitive kinds of threats of dangers. "This prior disaster experience offers a residue of learning that can influence preparations for and responses to future disaster events. In some communities with extensive experience, routinized patterns of effective disaster behavior have been developed, to the extent that some students of disaster behavior refer to them as 'disaster subculture' communities."

(Wenger, 1977:23-24)
The subculture develops at least on two levels. The first is among the residents of the threatened or impacted areas. They may develop particular attitudes and beliefs about the danger. In particular, they come to anticipate that there will be occurrences of similar dangers in the future. When the event occurs, therefore, it is responded to as a somewhat anticipated situation and requires less adjustment behavior than otherwise would be the case. At a second level, emergency organizations in areas with disaster subcultures also come to expect the recurrence of certain kinds of threats. Therefore, when the anticipated event does occur, preparedness measures can be relatively easily implemented.

We can suggest that a disaster subculture does exist on these two levels in Fort Wayne. Residents, especially those in flood-prone areas, have become accustomed to repeated flooding. The various neighborhood organizations active in flood programs suggest that residents prepare for disaster. Some neighborhoods have become active in learning how to prepare for flooding in their areas. A staff member in the Mayor's office serves as liaison between citizen groups and the city. This official also helps to disseminate information and establish Flood Watch Programs in neighborhoods. This activity is coordinated with the NEST task force leaders. The anticipation of future occurrences necessary for a disaster subculture to develop is evident. On the second level, emergency organizations have come to prepare for repeated flood hazards. We see this in the extensive planning done by the city and community voluntary organizations, as discussed in the following chapter.
CHAPTER FOUR

DISASTER PREPAREDNESS

Flood preparation has been a strong concern of Ft. Wayne area citizens for many years. The current mayor has also recognized this need. In January 1981, the mayor established the Natural Emergency Services Task Force (NEST) as an interdepartmental group responsible for natural disaster emergency planning, management, structure and response preparedness. This task force approaches disaster situations through a team management concept.

Disaster coordination is divided into a six-member alert team, with a natural disaster coordinator and a civil defense director who is largely in control of technological, nuclear, city, state and federal responsibilities. There is also a county civil defense director. Both civil defense offices are located in the Fort Wayne City-County Building, as well as the city EOC. The remainder of the mayor's staff is young, well-educated, and oriented into the systems approach. The main method of approaching problems on the city level is in a systematic, comprehensive, team management concept. The staff places emphasis on knowledge exchanged among members of the team or task force. A high degree of integration and coordination among the staff was repeatedly discussed in interviews as a goal and an accomplishment.

The mayor is the executive director of all natural emergency planning services and policy decisions, with the task force subordinate to his authority. Members of the task force are on 24-hour call for disaster response and carry emergency phone and page lists at all times. In an emergency, city personnel and equipment, including utilities, can be used by the EOC in emergency responses.

The procedure to be used in a disaster is as follows. The mayor opens the EOC, directing the communications department to alert the emergency personnel on the pager list. Civil Defense and public affairs departments alert non-city resources of the emergency. While the citizen participation director notifies relevant neighborhood associations, and the public information officer notifies the media. The public affairs officer sets up a non-emergency citizen phoneline while the civil defense director initiates the volunteer program and contacts the emergency radio network. EOC staff, after receiving on-site recommendations, decide if private contractors are to be called in. The purchasing director develops a list of these companies plus the costs per hour of equipment and labor, as well as an inventory of all civil city and city utilities equipment used.

The majority of this disaster plan deals with the one major perceived threat which is flooding. The plan is based on the importance of communication and decision making roles on-site at the vulnerable neighborhood. The engineer on-site is the primary decision-maker and is to be in constant contact with the EOC. Volunteer skills, labor, and time are recognized as the major factors involved in efficient and quick response floodfighting. The plan is intended to be under revision after each natural disaster from which the community and staff could learn.

The plan coordinates emergency team/EOC responsibilities with seven other community entities. First is the National Weather Service (NWS) which provides prediction and warning of floods. The city/EOC/alert team is to work closely with the NWS to accurately warn and enhance the ability to fight the flood.
Second, the Army Corps of Engineers operates under public law an emergency fund which provides, through the Chief of Engineers, flood emergency preparation, flood fighting and rescue operations, repair of flood control works, emergency supplies for clean drinking water, and advance measures. Third, FEMA makes funds available for clean up and repair of public damages given a presidential disaster declaration.

Fourth, church groups and civic organizations provide volunteer services, food preparation and victim assistance. These groups work directly with the Red Cross as the lead agency. Fifth, the Emergency Radio Network (ERN) provides communication capabilities throughout the flood fighting effort. Members work under EOC direction with a base station set up in the EOC after contact from the civil defense director. ERN officers meet with EOC and NEST members pre-flood to clarify needs, responsibilities, and capabilities.

Sixth, the Salvation Army provides food service to flood fighters and flood and clothing distribution to flood victims. It works directly with the Red Cross. The Fort Wayne Salvation Army also operates an Adult Rehabilitation Center, where about 45 people are employed. This center, including employees and equipment, is available for use during an emergency and serves as a nucleus around which an emergency operation can be built. In addition, the Army has another set of volunteers--people who are involved in the various facets of its operation--of about 100 persons who take on emergency tasks.

Seventh, the American Red Cross performs tasks during a flood emergency including emergency shelter and housing and provision of medical services. The Allen-Wells Counties Red Cross sets a pre-flood season planning workshop for all participating agencies, organizations and local church disaster-relief teams. The NEST coordinator, citizens participation director and civil defense director are responsible for coordinating effort here; a Red Cross representative is on 24-hour duty at the EOC.

The extensive disaster plan by the Red Cross, as compared to other units, is worth noting here. The updated January 1983 plan covers disaster action planning, disaster committee structure, and government and relief agency agreements. Disaster action includes establishing a disaster headquarters (first choice chapter house), providing shelters, food, and first aid, assessing damage, and establishing government liaison. Additional emphasis is placed upon evaluation of the situation, determination of the degree of Red Cross action, and mobilization of appropriate personnel.

An extensive division of labor and delineation of responsibilities ranging from medical services to communications to shelter services (et al) is included. The Fort Wayne chapter house has a radio bay station and Western Union telex for communication purposes linking the chapter house to the disaster van, Red Cross cars, the shelters, and national Red Cross units across the country. The radio network is licensed by the FCC. The Allen County Emergency Preparedness Council (civil defense) and the Allen-Wells RC have a written agreement to cooperate efforts during natural disasters, war-caused disasters, and civil disorders. In the agreement, the unit basically makes itself and its services available to the appropriate governmental officials.
Cooperation between local, state and federal agents and the RC is stressed, in keeping with the congressional charter. The agreement, and usually the entire plan, is reviewed yearly. New agreements are signed every three years. The current agreement exists between the RC, county civil defense, city civil defense, and the mayor's office.

A number of additional volunteer units also work with the city including 4-wheel drive clubs, Allen County REACT, Ham Operators (who operate the EOC), civil defense volunteers, civil air patrol, all national guard units, and state police volunteers.

In summary, the governmental entity of Ft. Wayne has taken on the functions of civil defense in the area of flood fighting especially. All emergency decisions are made through the mayor via a team management concept. Emphasis has been placed on integrating community volunteer organizations into the overall disaster plan. Disaster preparedness here is reliant upon strong inter-organizational communication.
CHAPTER FIVE

SOCIAL CHRONOLOGY OF THE 1982 FLOOD

INTRODUCTION

Two to seven inches of water equivalent of melting snow, in combination with two inches of rain from March 8th through March 20, 1982, caused severe flooding in sections of Indiana, Ohio, Illinois, and southern Michigan. By March 25, major disaster declarations were issued in six Ohio, two Michigan, and five Indiana counties. Flooding was responsible for six deaths and approximately fifty million dollars in direct damages, as well as causing the evacuation of about 15,000 persons. Fort Wayne, Indiana floods forced 10,000 evacuees to seek shelter, and damaged 1,500 homes and 100 businesses. (Allen) County damages were estimated at $20 million. Near record or record flooding was reported on all three Fort Wayne rivers.

The winter of 1981-82 had produced rains and/or snowfall on frozen ground, which were heavier than normal. On February 9, a record snow depth of 20" on the ground was reported in the city. Water equivalent by March 10 ranged from 2.5" to over 5" in some areas. On March 11, a ten day period of mild, showery weather with temperatures continuously above freezing began which exacerbated the above-normal precipitation. About ¾" of rain fell on March 12, although residents remember it as a sunny, pleasant day of 60 degree weather. (The temperatures rose from 27 degrees to 55 degrees overnight). Rainfall from March 11 through March 20 averaged between 1.5" to 2". Runoff from snow and rain, in combination with the relatively flat terrain of the area produced prolonged periods of flooding. It is to an examination of the effects of the flood and the city response that we now turn.

THE MAJOR HAPPENINGS

Wednesday, March 10, through Thursday, March 11

Temperatures in the 40's, rivers begin to rise, some rain.

Friday, March 12

6:00 a.m. - City Engineer checks flood stages hourly. St. Mary's at 21 feet downstream (six feet above flood stage) St. Joseph's thawing and receiving runoff; temperature 54 at midnight.

1:30 p.m. - NWS flood warning issued.

3:00 p.m. - Pumps started at Spy Run. Mayor calls Task Force and top EOC staff to meeting. Street Department informed to fill sandbags

Saturday, March 13

1:00 a.m. - Thunderstorm warnings issued.

6:00 a.m. - City Engineer checks dikes.

8:00 a.m. - EOC opened by city and Task Force. Call for volunteers-little response to Lafayette Street Department.
8:00 a.m. - Marine Reserves go to dikes; St. Mary's River broke the
( cont.) Nebraska dike, 3,000 people evacuated, some by emergency
rescue boat; firemen cut off utilities. Few hundred
volunteers respond to City County Building; Shelters
open at Precious Blood and Trinity Episcopal churches.

Sunday, March 14

10:00 a.m. - Mayor Moses and State Representatives view river and
devastation from Air National Guard helicopter.
12:00 p.m. - Mayor calls Governor for help; city and surrounding
county declared a disaster area.
Volunteers arriving at Street Department to sandbag, by
evening, volunteer sandbagging moved to coliseum.

Monday, March 15

12:00 p.m. - National Guard goes on duty officially.
2:00 p.m. - Mayoral boat ride through Nebraska.
4:00 p.m. - Governor arrives to view Nebraska and Lakeside.
Quarter of a million sandbags on the 69-year old dikes are
not effective, dikes are weakening.
National media focuses on the city.

Tuesday, March 16

Rain; storm sewer blows near Pemberton dike, first sign
of trouble there. Some schools and businesses are closed.
Temperatures are near 70; tornado is sighted near Baer Field
and can be seen from downtown City-County Building. Lakeside
and Lawton evacuated.
5:00 p.m. - Mayor takes Reagan to Sherman Boulevard dike to sandbag and
7:00 p.m. to shelter evening. NWS revises flood crests.

Wednesday, March 17

10,000 have evacuated; the volunteer battle for Pemberton
dike is underway, one thousand volunteers were on the dike
every hour. Pemberton was the consistency of toothpaste.

Thursday, March 18

Mayor, City Engineer, and General from the Army Corps of
Engineers tour Pemberton; effort to save it has worked,
rivers crest.

Friday, March 19

Sandbagging at Edgewater Dike. National Guard continues
to patrol for potential looting, rivers begin to drop.

Saturday, March 20-Monday, March 22

Evacuees begin to return home.
Monday, March 22

National Guard off duty. All shelters closed except Precious Blood, which remained open several more days. 5:00 p.m. emergency lifted; EOC closed.

THE ORGANIZATIONAL RESPONSE

The response to the flood of 1982 was coordinated through the mayor's office with NEST members staffing the EOC. While we are interested in the various levels of organizational response such as this, it is important to bear in mind that our emphasis here is on the high number of volunteers, or emergence, that occurred. It is safe to assume that the emergence occurred due to the severe extent of the flood, rather than the lack of planning. Flood waters and damage far exceeded the capacity of city workers, and volunteers were essential to stem the tide. A program had developed in the disaster planning stages to recruit and coordinate volunteers. We see the highest number of somewhat organized volunteers during the sandbagging efforts. What followed in the recovery stage was more definitive, relatively unplanned emergence. The problems associated with defining, conceptualizing, and analyzing such emergence will be addressed in the following chapter. Our focus here is to roughly outline the organizational response.

On Friday, March 12, the NWS issued flood warnings while the mayor met with top EOC staff. City pumps were started in flood-endangered neighborhoods, while street department crews began to fill sandbags. High school volunteers, previously recruited by the city, were expected on Saturday to fill sandbags. The next morning turned out to be the warmest day of the year and few volunteers showed up.

The mayor opened the EOC at 8:00 a.m., Saturday morning, extending a call through the media to volunteers needed for sandbagging. Initial response through Sunday was slow. The combination of the warm, spring weather and localized neighborhood flooding (which was not widely perceived) mitigated recruiting efforts. Marine Reserves in the city on a training weekend, were sent to monitor the dikes. The Nebraska dike broke, forcing 3,000 residents to evacuate, some by rescue boat. The Fire Department shut off all utilities to the flooded areas. The Red Cross opened shelters at Precious Blood Catholic (previously undesignated as a shelter) and Trinity Episcopal Churches.

At 10:00 a.m., Sunday morning the mayor and elected state representatives viewed river conditions and flood damage from an Air National Guard helicopter. By noon, the mayor had called the governor for a city/surrounding county disaster declaration, which was granted. More volunteers were arriving at the street department to sandbag. By evening, these efforts had been moved to the city's coliseum, where volunteers were coordinated in the basement area. This was not a pre-planned procedure, but proved highly effective in training volunteers and getting crews together.

The National Guard had begun to patrol the dike areas, but officially went on duty at noon, Monday. The mayor again viewed the damage, this time via a boat ride through the Nebraska neighborhood. Two hours later the governor viewed Nebraska and Lakeside. National media began to focus attention on Fort Wayne. Over a quarter of a million sandbags were placed on the 69-year ole dike, but they were still weakening.
Schools and businesses closed on Tuesday, thus permitting many students to volunteer for the sandbag effort. The temperature remained high and flood waters continued to rise; the NWS raised the flood crest stages to higher levels as rain contributed to the problems. A storm sewer blew near Pemberton dike, signalling new problems there. Two more neighborhoods, Lawton and Lakeside, were evacuated. A tornado was sighted near Baer Field Airport, but could be seen from the mayor's office downtown. Shortly after, around 5:00 p.m., the President's plane landed in Ft. Wayne (he was returning from a trip out west). The mayor escorted the President to the Sherman Boulevard dike where he placed a couple of sandbags and then visited an evacuee shelter.

An intensive effort to save Pemberton dike was underway by Wednesday. Ten thousand residents had been evacuated by now. One thousand volunteers were on the dike every hour, holding back flood waters from a dike that was the "consistency of toothpaste". The volunteers were ordered to evacuate at 2:00 a.m. (Thursday) but refused to leave despite personal danger. Many people also refused to return to the coliseum for hot food and dryer clothes.

Back at the coliseum, volunteer coordinators were forced to give bus tickets to people wanting to go to the dikes. Volunteers who returned to the coliseum went back to the bus lines immediately. Good communication between the volunteer coordinators (City Public Works department heads) and the City's Purchasing Department provided a good flow of resources such as kerosene heaters, flares, cots, flashlights, gloves, and boots. Local stores donated cases of raincoats and boots. Restaurants sent free food. The Salvation Army, Red Cross, and church groups provided hot and cold food for the volunteers. The Red Cross also assisted in logging volunteers, having people sign liability releases, and providing medical care. A few police officers were present but not needed.

Traffic congestion was a problem outside, so the stage area was used to train parking control volunteers. Other areas were used to show how to fill a sandbag and then build a wall of them. Contests were set up between schools, complete with emergent cheerleaders and prizes. Stereo equipment was brought in for entertainment and impromptu singers and magicians kept up group spirits. The most difficult time was at night when volunteers were cut by 50%. The highest peak of volunteers (30,000) was reached around Wednesday and began to slowly dwindle over the next few days. About 18,000 were students but over 12,000 were community residents, some were from outside the area. DRC interviewees identified many unemployed volunteers. Local unions extended a large effort in sandbagging, food preparation and delivery, money collection, shelter workers and clean-up. The unions worked directly with the Red Cross to coordinate their responses.

On Thursday, it was evident the volunteer effort had prevented the Pemberton dike from collapsing. The new sandbag dam was twelve feet high, thirty feet across, and five blocks long. Our 300,000 bags had been filled and placed by hand. More than one-third of the total volunteers worked on this dike alone. A tour of the dike by the mayor, city engineer, and a general from the Army Corps of Engineers provided evidence that the effort was effective. The rivers crested.
Some sandbagging was done at the Edgewater dike on Friday. The National Guard continued to patrol for potential looting. Finally, the rivers began to drop. From Saturday through Monday evacuees began to return home. The National Guard went off duty on Monday. Only Precious Blood Catholic Church shelter remained open past Monday; it closed several days later. At 5:00 p.m. on Monday the emergency was lifted and the EOC closed; recovery was underway.

It is possible to suggest that the most definitive emergence occurred during the recovery process. All recovery plans were developed by a hired consultant toward the end of the flood emergency time period. Most of the other trans-impact emergence had some pre-existing structure to it, the recovery process was new.

Flood recovery was coordinated by a consultant brought into the city through the mayor's office (he later remained on the staff). The efforts were directed through a programmatic response in order to better reach all portions of the affected neighborhoods. From a number of interviews, it appears that participants in the program feel that the city was more responsive to victim's needs than some local agencies and the federal assistance program. Basically, the city's intent was to help flood victims through the federal bureaucracy, coordinate local services, and offer immediate cleanup and volunteer help to those needing assistance. The city also administered the Flood 82 Inc. Foundation, which supplied up to $250 grants to victims through local and national monetary donations. Four task forces coordinated by a policy committee were to return the city to normalcy and create a plan for preventing such a recurrence within a 45-day time table. These plans were mandated by the mayor and designated to bring speedy disaster relief.

The policy group coordinated the four task forces, oversaw the city's progress towards flood recovery goals, and established an overall direction for the flood recovery effort. (see charts on next three pages) This group met regularly over a two-month period and consisted of representatives from the mayor's office, the controller, recovery director, task force leaders, board of works, community development and planning, and civil defense. Communication to the policy group occurred through task force leaders.

The first task force (or phase one) met weekly to review and discuss various aspects of the flood emergency. Specifically, this task force asked whether the city's flood plan was adequate, including warning, EOC, volunteer system, emergency and inter-governmental communications, public information, citizen assistance, flood management, security, personnel, and any other problems. This committee was composed of individuals from the mayor's staff, public relations, neighborhood liaison, citizen's advocate, city engineer, and civil defense among others. The final product was to be an up-dated and expanded flood plan and a revised general emergency management structure. Fort Wayne's extensive flood plan was recently adopted by FEMA as the urban model for the midwest.
STRUCTURE

The Mayor
Policy Group

Phase I  Phase II  Phase III  Phase IV
Disaster-Effort Recovery, Re-Construction Prevention & Flood
Critique and Assistance & Development Festival

Phase I will involve a small group of key individuals responsible for coordinating the City's flood-fighting efforts. The task force will meet over a period of sixty days to critique the City's existing flood plan, review the management of the flood emergency and to forge a revised emergency plan based upon the City's 1982 experience.

Phase II will involve a concentrated 45 day effort by approximately 15 task force members to market and deliver the services essential to recovery from the impact of the flood.

Phase III is a thirty day comprehensive planning effort to identify land-use development and flood prevention alternatives, and to select a specific strategy to prevent a recurrence of the 1982 Flood. The Prevention & Development Task Force will also have responsibility for developing all requests to the Federal and State governments for flood-related capital improvements.

Phase IV will involve the creation of a two day festival as a thank you to the thousands of young people who helped during the emergency. The Phase IV group will also be responsible for thanking the people and businesses who assisted City government via letter, newspaper advertisement and other means.
GOALS

The Flood Recovery Effort will have the following objectives:

1. To facilitate the re-occupation of flooded neighborhoods as quickly and smoothly as possible.
2. To minimize the fiscal impact of the flood on affected homeowners.
3. To minimize the fiscal impact of the flood on affected businessmen.
4. To prevent health and safety problems associated with the aftermath of a flood.
5. To repair and restore the City's capital assets destroyed by the flood with a minimum cost to local taxpayers.
6. To coordinate the efforts of all agencies seeking to help flood victims and to make the assistance process as convenient and efficient as possible.
7. To identify the short-term needs of flood victims and to meet those needs through federal, state, local or charitable contributions.
8. To identify the reasons for the '82 flood.
9. To make all beneficial repairs and improvements in the City's levee system.
10. To identify all structural and land-use changes in the floodplain which might prevent a recurrence of the flood.
11. To implement the most cost-effective alternative for flood control available.
12. To critique the City's efforts during the flood emergency.
13. To thank and reward the many people who assisted the community during the flood.
Phase II, or the second task force, was on recovery and assistance, and headed by the consultant, a specialist in human services delivery. This team was made up of city employees reassigned from normal duties to devote full attention to the flood recovery effort. Responsibilities of this group included coordinating the Disaster Assistance Center (DAC), working with FEMA to obtain reimbursements for damage to public facilities, developing clean-up and follow-up, and managing the Fort Wayne Flood 83 Inc. Foundation.

The DAC was set up above the one-stop FEMA center in the Central Catholic Building to provide community services to flood victims. Before leaving the DAC, victims were given an exit interview and informed of available services. Local assistance functions at the center included public information, grant intake and administration, community liaison and volunteer recruitment, clean-up operations, resolution of temporary housing and reoccupancy problems, follow-up and victim liaison and advocacy. A number of social service agencies were available such as church charities, Area Council on Aging, Salvation Army, Red Cross, Mennonite Disaster Teams and the Berethren disaster assistance. Other agencies were available by request or referral. A Flood Assistance Referral Index for victims was developed by the Allen County Economic Opportunity Council. Local neighborhood presidents and other volunteers worked long hours in the center.

City personnel were used as supervisors at DAC and volunteers explained FEMA applications and community resources available. Victims were aided in identifying their concerns, filling out forms, and directed to various agencies. In short, the city helped guide flood victims through the bureaucracy of applying for aid.

Clean-up was a joint city and county effort, including assessing homes and turning utilities on. There were two major clean-up drives. The first was a neighborhood association clean-up. A local business paid three bus loads of employees to participate. These individuals convened at a neighborhood center, and went out with garbage trucks to clean up neighborhoods and remove damaged furniture. Volunteers ran ahead of the trucks to knock on doors of residents to offer assistance. Other local volunteers went directly to the neighborhood center.

The second drive was called the Adopt a Home Program where groups of volunteers (designed for high school students) cleaned out victim's homes. This drive was more intensive and personal. Neighborhood presidents took requests for assistance and gave lists to volunteer supervisors. Volunteer groups, in some cases led by the neighborhood presidents, then went to a home to clean. Groups were also given maps of local neighborhood areas and knocked on doors at random to offer assistance.

The third task force, or phase III, was on prevention and development of further flooding. An increased propensity for serious flooding along the three rivers had been discovered and documented by a member of a local citizen group (sandbag coalition). To prevent such flooding, or a recurrence of the 1982 disaster, this in-house task force was to define actions to mitigate and limit future flooding. The mayor requested that alternatives for cost-effective methods of flood control be developed within thirty days.
The fourth task force, or phase IV, was not fully developed. This was to be a flood festival rewarding the volunteers who saved the homes and property of city residents. This was to be a two-day festival in late April. A rock concert was held for the city's youth with an Indiana rock and roll singer who recently (post-flood) achieved national recognition on the music charts. The entertainer provided a benefit concert for the student volunteers.

Fort Wayne received the All-American City Award after the 1982 flood, largely for the volunteer effort in the flood. This is a pattern similar to other cities DRC has studied, including the All-American City of Grand Island Nebraska (1980 tornadoes) and Laguna Beach, California, who received the Disneyland Community Award (landslides).

FLOOD STUDIES

Two studies were conducted in Fort Wayne after the 1982 flood. The first, by a local research firm, was a random survey conducted for the News-Sentinel and published May 8, 1982. The second study, by the Fort Wayne Mental Health Center, was completed in early 1983 under a grant for the National Institute of Mental Health (NIMH).

The News-Sentinel survey was concerned mostly with attitudes. From 303 respondents, 93% felt that local officials provided an excellent to good performance. Fifty-one flood victims rated the performance of excellent to good at 78%. Ninety percent of the random sample rated the mayor's performance as excellent to good, as compared to 67% for the flood victims.

Half of the random respondents felt the presidential visit during the flood helped, while 48% saw no difference. Fifty-three percent of the victims saw the visit as helpful, where 45% saw no difference. Random respondents felt they were adequately warned (76%) about major flooding in the city, while the victims were split on the issue, 51% yes and 49% no.

Both random and victim respondents felt that community spirit was stronger in Fort Wayne (87% random yes; 86% victim yes).

The NIMH study focused on interviewing 1,000 flood victims in five inundated neighborhoods (Riverhaven, Nebraska, Spy Run, Bloomingdale, and Belle Vista). The instrument began with a BSI or Brief Symptom Inventory questionnaire. This was followed by a stress survey on life experiences and the flood, and ended with a flood disaster counseling program assessment. Demographic information documenting household size and composition, economic status, and type of damage was also included. The survey counselors had planned to look for emotional problems caused by the flood and did crisis intervention in the field. A few respondents could attribute their coping with the disaster through emotional mechanisms such as depression, obsessive-compulsive tendencies, and anxiety. Few phobias were encountered, however children did exhibit fear (of rain not ending, for example). The elderly neighborhood residents had been shaken up the most, especially those who had been evacuated. Counselors also referred respondents to other agencies for material needs such as furniture, cement and drywall.
In the work of surveying, a caseload of sixty persons was generated within the first two weeks. One counselor took on the responsibilities of the caseload while other surveyors continued the interviewing. An informal flood counseling program thus emerged. The impact of the flood, however, was difficult to distinguish from mental health needs stemming from unemployment or other life events related to stress. The flood was seen as the final blow by many victims who would have needed counseling despite the flood, according to the caseworker.

The findings from these studies confirm prior DRC work on community response, attitudes and mental health.
CHAPTER 6

EMERGENCE

This chapter's purpose is to discuss the nature of emergence in Fort Wayne during the flood of 1982. There were a number of levels on which emergency occurred, and analyzing these will prove interesting and enlightening in terms of past literature concerning this phenomenon. This section will basically deal with structural and task emergence among various organizations and emergent groups which formed to fight the flood.

The mayor's NEST and EOC staff cannot be said to have experienced a great deal of either type of emergence. The staff merely enlarged the scope of their activity as the flood threat increased, although limits of human exhaustion were stretched to near their capacities. As resources (non-human) were needed, the request for equipment, etc., were relayed to the necessary staff members who could obtain them. The same thing occurred with mobilizing volunteers. A small group of individuals were trained pre-flood for sandbagging. The sandbagging continued, but was moved from the Street Department to the coliseum (not planned). Restaurants and businesses also extended themselves with food and supplies.

Marines were used to evacuate victims and patrol dikes. This was an unanticipated event, but was not necessarily a new task or structure for the Marines. They had been in the area on training, and responded to the flood. National Guard units were located in Fort Wayne and were called on to patrol the dikes and provide security for neighborhoods.

Women's church groups also supplied food for volunteers, an activity quite normal for their organizations. The scope of their activity, however, was undoubtedly larger than was routine. Food was mostly taken to the coliseum for the sandbag volunteers. Large tables were set up with both hot and cold food.

Local unions, via a community service representative, met with Red Cross officials to coordinate clean up, shelter operations, food and money drives. These were new tasks in light of the disaster situation. Unions are often community-oriented, such as the cooperation between them and local United Way Fund drives. There was task emergency in the sense that their activities centered significantly around the flood and required that new skills be learned to be useful. The unions gathered money, clothing, provided some transportation, and served as shelter managers.

At the Disaster Assistance Center during the Flood recovery, two community organizations, the Area Aging Council and Allen County Economic Opportunity Council offered services to flood victims. Their offer of help was in line with their community responsibilities, but centered on pulling resources together for a specific population, the flood victims. Other community services were listed in a referral index provided to applicants for flood relief.
The sandbagging was planned for in advance, but the number of volunteers to coordinate proved rather large. Some of the new structures which emerged to deal with the dilemmas brought by this large influx of volunteers were seen at the coliseum. For example, the large number of volunteers created a traffic congestion problem in the parking lot. The stage area in the coliseum was then turned into a training area for parking controllers. Entertainment was provided to keep the volunteers' spirits up and retain their efforts, especially throughout the night.

Red Cross volunteers worked at tables set up to register volunteers. This was necessary to relieve the city of responsibility for any injuries incurred by volunteers. These volunteers were required to sign a release of liability form, which had been set up in advance of the flood.

Only one shelter which opened during the emergency was previously undesignated as a Red Cross shelter. Shelter managers and workers, as well as the allocation of food were all coordinated somewhat through a neighborhood community services center as well as the Red Cross. This was a new task for the neighborhood center, and both a new task and new structure for the church to take on.

The most intriguing group emergence occurred during the flood recovery. This was an entirely new structure designed by a consultant brought into the city by the mayor. An example of emergence was in the clean up effort where groups of volunteers were given maps and sent around knocking on doors offering aid to victims. The larger committee structures developed for the recovery, had both task and structural emergence.

Some organizations seemed to have no task or structural emergence at all. These included the National Weather Service, Army Corps of Engineers, Mennohite Disaster Services, and Church of the Brethren Disaster Services. All were active in the Ft. Wayne Flood.
APPENDIX

Documents collected relevant to Fort Wayne Study:

1. Maps - Allen County - flooded areas drawn in
   Flood Insurance areas (under revision)
   Worst Conditions - Fort Wayne (1913)
   Fort Wayne flooded areas, 1982
   Various Street Maps

2. Disaster Plans - Red Cross Plan including responsibilities chart
   Flood Plan - FEMA Urban Model
   Fort Wayne/Allen County Flood Protection Plan
   Protection Plan abstract

3. Tape recording of Presidential Disaster Declaration

4. Flood Recovery - Flood Recovery Structure Plan
   After Flood Suggestions from Civil Defense
   Memo on Disaster Assistance Center
   "How to get money" from Flood 82 Inc.
   Agencies funded by city and amounts
   Flood Assistance Referral Findex
   Work Schedule - DAC - intercom system numbers
   Local Disaster Related Emergency Services
   Adopt a Home Program letters to volunteers
   Checks issued from city - listing April and July
   Press Releases on home/flood inspections and
   pumping basements
   List of food brought in from Hazard, Kentucky

5. Readers' Digest story plus original manuscript

6. National Weather Service Report on flood (case study) also
   flood warnings and statements

7. Bloomingdale Neighborhood Services - Descriptive information,
   Articles on volunteer effort
   Xerox photos of Reagan's visit to shelter
   List of volunteers and responsibilities
   List of shelter residents and ages
   Letter from Reagan
   List of food dispensed

8. Socio-Economic Data - Census and health data, Indiana/Allen County
   Economic Development Plan

9. Newspapers and assorted articles from community papers

10. Data from flood survey by marketing firm

11. Tourist and historical information brochures

12. Labor release letters
13. Allen County Public Library - Fort Wayne weather vertical file

14. Notes on untaped interviews, phone conversations

15. Photographs of the flood of 1982

16. Press releases

17. Documents from specific organizations:

**State Police**
- "Overview of Project Incert"
- Incert Organizations
- Incert Activation
- Flood Water Level
- Presidential motorcade route
- Ft. Wayne Area Map showing flooded areas
- Photographs of Ft. Wayne during the flood period

**Ft. Wayne City Civil Defense Office**
- Interagency flood hazard mitigation report
- List of flood shelters
- "Civil Defense" Waiver of Liability and Letter of Understanding
- Flood Plans
- City Council Resolutions relating to the flood (3 in number)
- Letters from Tom Rody re: pre-flood preparations (2 in number)
- Map of the river basins
- Memorandums of the city attorney re: flood emergencies (3 in number)
- FEMA Ft. Wayne flood disaster fact sheet
- Hazardous Material report form for the city of Ft. Wayne

**Emergency Radio Network**
- Organizational chart
- Letter to the editor from James Schory
- By-laws of ERN
- ERN Flood Report, 1982

**Salvation Army**
- Material Assistance Budget
- Description of RADAR
- Fort Wayne Flood, 1982 --- Fact Sheet
- Flood Recovery Services
- How to get money from Ft. Wayne Flood '82, Inc.
- Organizational Chart
- Casework Handbook

**Allen County Civil Defense Office**
- Emergency Communications Network
- Advisory Council Members
- Ordinance #78-5-1 establishing the civil defense office
- Flood levels
- Preliminary Report of Flood Activities by Allen County
- Allen County Map with flood areas highlighted
Interviews Relevant to Fort Wayne Study

1. City Engineer
2. Chair, Emergency Task Force
3. Newspaper Reporter
4. Director of Neighborhood Services Center
5. Flood Recovery Director
6. Red Cross Disaster Services Director
7. Coordinator of Volunteer Effort at DAC
8. Coordinator of Volunteer Effort at Coliseum
9. Volunteer Sandbagger
10. Volunteer Sandbagger
11. Mental Health Caseworker, Flood Survey
12. Public Relations for Mayor's Office
13. Director of Development and Planning
14. Seminar Flood Organizer
15. Neighborhood Association President
16. United Way Labor Representative
17. Neighborhood Liaison from Mayor's Office
18. St. Vincent Department Store Manager
19. Food Bank Coordinator
20. Salvation Army
21. Indiana Army National Guard
22. City Civil Defense
23. County Civil Defense
24. Construction Inspector
25. Health Inspector
26. Citizen's Group Member
27. Citizen's Group Member
28. Neighborhood President
29. Television Co-Anchor
30. Television Reporter
31. Radio Station News Director
32. Local Priest
Alternative 4

Combination of Solutions

- Proposed Pumping Stations
- Proposed Levees and Floodwalls
- Channel Improvements
- Trier Ditch Cut-Off (40%)
Maumee River Basin

- Watershed Divide
Urbanized Area

- Urbanized Area
- City Limits

FIGURE 1
ST. MARY'S RIVER BASIN

ST. JOSEPH RIVER BASIN

MAUMEE RIVER BASIN

VICINITY MAP

PREPARED BY TOM RODY

3/11/82
DISASTER COMMITTEE STRUCTURE

The Chapter Disaster committee is made up of chairpersons of sub-committees, e.g. Shelter, Mass Feeding, Communications, Damage Assessment, Nursing, Supply, Transportsations, Family Services, Records and Reports, Chairperson of the Disaster Action team and two representatives from Wells County. Each sub-committee chairperson works with the Disaster Chairperson and Disaster Director in establishing a continuous training program for the members of their sub-committee members.

The disaster director is assisted by other chapter staff, who act as liaison to various sub-committees.

All training of disaster personnel is based on the 3000 Series Disaster Service Regulations and procedures.

![Diagram of Disaster Committee Structure]