APPENDIX C

ACTIVITIES

PARTICIPANT INTRODUCTION FORM (SM p. 7)

This form will assist you in introducing yourself to the class. It is an outline of information that should be presented.

1. Name: _____

2. Emergency preparedness position: _____

   - Years at position: _____
   - Relationship of position to emergency planning: _____

3. Community's name: _____

   - Approximate population: _____
   - Greatest potential hazard threat: _____

4. What do you expect to gain from this course?

   _____

   _____

   _____

GROUP ACTIVITY: ASSESSING HAZARDS (SM p. 9)

A hazard/vulnerability analysis has a direct relationship to the emergency management plan. It provides a detailed picture of:

- Types of hazards,
- Predictability of those hazards, and
- Population and areas that experience the impact.

The hazard/vulnerability analysis provides emergency planners with information that will enable them to develop realistic plans based on concrete data. This is necessary because the recent turbulence in world affairs creates a situation in which the risk of attack may be increasing. Also although natural disasters are not increasing in number, the concentration of population and land-use development is increasing the damage from such disasters. In addition, manmade disasters from hazardous-material incidents, varying from train wrecks to utility failures, are increasing. For example, Federal Railroad Administration statistics show an almost threefold increase from 1971 to the present.

One task of the hazard/vulnerability analysis is to develop a hazard map. The term risk map was originally used to describe the areas most vulnerable to nuclear war. This concept has been expanded to include all natural and manmade hazard areas.

In the latter stages of the course, you will learn to evaluate a hazard/vulnerability analysis, including the completeness of a hazard map.

The purpose of this activity is to gain a greater understanding of hazards in terms of predictability and frequency and to discuss the utility of a hazard/vulnerability analysis in developing emergency plans.

Using the hazard analysis chart on page 11 of the preclass activity, answer the following questions:

1. Which hazards has your group identified as most predictable?

MOST PREDICTABLE HAZARD	REASON
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. Which three hazards have the highest frequency rates in your group?

- _____
- _____
- _____

3. How does the hazard/vulnerability analysis affect your emergency plan?

_____

_____

_____

_____

GROUP ACTIVITY: ASSESSING RESOURCES (SM p. 12)

1. Review the emergency resource list on pages 22-27 of the preclass activity. What items can your group identify that were not included in the list but should have been?

2. What resource shortages were identified during the preclass activity by members of your group?

3. Identify sources of acquiring the resource shortages that your group listed above.

GROUP ACTIVITY: LEGAL BASIS FOR PLANNING (SM p. 13)

Your instructor will assign your group four legal issues. Discuss each and explain how the laws dealt with it.

1. LEGAL ISSUE: _____

   DISCUSSION: _____

   _____

   _____

   _____

2. LEGAL ISSUE: _____

   DISCUSSION: _____

   _____

   _____

   _____

3. LEGAL ISSUE: _____

   DISCUSSION: _____

   _____

   _____

   _____

4. LEGAL ISSUE: _____

   DISCUSSION: _____

   _____

   _____

   _____

GROUP ACTIVITY: THE CHIEF EXECUTIVE OFFICER AND EMERGENCY PLANNING (SM p. 14)

Chief executive officers—both elected and appointed—are responsible for providing leadership in the area of emergency management as part of their responsibility in protecting the general welfare of the people.

In this course, the chief executive officer (CEO) is defined as the county executive, county manager, mayor, city manager, town manager, or village mayor. CEOs are ultimately responsible to the citizens of their jurisdiction for emergency management leadership related to mitigation, preparedness, response, and recovery. Gaining support from your CEO is critical in developing an emergency plan.

Developing this plan requires information from different people with diverse skills. Therefore, representatives from many government and private-sector organizations will be required to participate. The involvement of these people can occur only if the CEO supports the emergency planning project.

The CEO must have an understanding of the need for an emergency plan to provide full support for the project. To develop this understanding, the elected officials should be aware of a few points.

- Large-scale emergencies are different from normal, daily emergencies.

  — Emergencies, such as fires, crime, and auto accidents, are handled by regular government services, and emergency service personnel usually handle them skillfully. Frequency of occurrence ensures that these personnel are trained to handle everyday emergencies.

  — A large-scale emergency requires a different approach that may be unfamiliar to emergency service personnel. For example, a large-scale emergency saturates resources and requires that local agencies work effectively with the private sector and with federal, state, and other local agencies to perform emergency tasks. Too often emergency service personnel find themselves in unfamiliar emergency operations, presiding over personalities that do not mesh and involved in making quick decisions that have long-range implications.

  — Many emergency plans, while detailed in both depth and scope, are prepared with little input from emergency service and community representatives. The social dimension of the emergency planning process—sharing knowledge and experience among participants during the planning process—is more important than the plan itself.

- Hazard/vulnerability analyses provide the CEO with an accurate description of the potential hazards that may strike the community and their possible impact on the community.

- Legal issues define the CEO's responsibilities, powers, and authority for mitigating, preparing for, responding to, and recovering from large-scale emergencies.

It is vitally important that the CEO understand these critical areas of emergency plan development.

Discussion Questions

- What are some ways to educate the CEO about the critical areas of emergency plan development?

_____

_____

_____

_____

NOTES

GROUP ACTIVITY: INVOLVING THE PRIVATE AND PUBLIC SECTORS (SM p. 31)

Target at least five public- and private-sector organizations that should be involved in emergency planning. List them below and outline a strategy for gaining their support for the planning process.

Organization	Strategy
1.	
2.	
3.	
4.	
5.	

GROUP ACTIVITY: COMPARISON OF COMMUNITIES' FUNCTIONAL ASSIGNMENTS (SM p. 50)

The purpose of this activity is to develop an awareness of the differences among communities with respect to the organizations involved in the emergency plan.

A large-scale emergency usually involves more than one jurisdiction. This creates a situation in which emergency plans must be coordinated among several jurisdictions. To facilitate this coordination, an understanding of how the jurisdictions are organized for the purpose of emergency planning is necessary.

To complete this activity, turn to pages 33-35 of the preclass activity. Your instructor will assign three functional areas to you. Compare and contrast how group members completed their matrices for the assigned functional areas.

Record the differences on the chart on the next page.

COMPARISON OF COMMUNITIES' FUNCTIONAL ASSIGNMENTS

Assigned Functional Area: _____

Similarities _____

_____

_____

Differences _____

_____

_____

==========

Assigned Functional Area: _____

Similarities _____

_____

_____

Differences _____

_____

_____

==========

Assigned Functional Area: _____

Similarities _____

_____

_____

Differences _____

_____

_____

INDIVIDUAL ACTIVITY: THE LEADERSHIP STYLE EVALUATION (SM p. 61)

Conclusions

Your instructor will post a chart on the wall. The purpose of this chart is to rank leadership styles according to their usefulness in developing an emergency plan. Review the completed chart and discuss the following questions.

Discussion Questions

- What conclusions can you draw about the effect of leadership styles on developing an emergency plan?

- During a large-scale emergency, do you think the preferred leadership styles might change? Why?

CONCLUSIONS DRAWN FROM STRENGTH DEPLOYMENT INVENTORY (SM p. 66)

Integrating a wide variety of people with different skills is important in developing a comprehensive emergency management plan. You can accomplish this only if you understand how you relate to other people and how other people relate to you. The Strength Deployment Inventory will help you to make this assessment.

Group Discussion Question

- What conclusions may be drawn about your changing behavior and how it affects:

  — Developing an emergency plan?

  — Participating in emergency operations?

GROUP ACTIVITY: GROUP DECISIONMAKING (LOST AT SEA) (SM p.69)

Conclusions

This exercise helps you to draw these conclusions:

- Group solutions tend to be better than individual solutions because more brain power is applied.
- When a very large group is attempting to solve a problem, many good ideas are not heard because many people either cannot or will not participate. Dividing a group into subgroups is an excellent way to ensure that all points of view are considered.
- An outside expert called in to critique group solutions can often assist the group in refining its solutions

Group Discussion Question

- What impact do these conclusions have on developing an emergency plan?

GROUP ACTIVITY: INITIATING CHANGE (SM p. 81)

Think back to the activity from day one that assessed the support of your elected officials by comparing the increase in your emergency management budget with the rate of inflation. For the moment, imagine that your budget line fell below the inflation line (as it may have). Select an organizational change strategy for attacking the problem, principles of change that apply to that strategy, and actions to be taken to overcome the problem.

Strategy _____

Principles

-
-
-

Actions to be taken

-
-
-

CASE STUDY: THE WILKES-BARRE FLOOD (SM p. 88)

COMMUNITY CONTEXT

During the summer of 1972, life for thousands of people in flood-stricken Wilkes-Barre, in the eastern part of Pennsylvania, was far from normal. The heavy rains that accompanied Hurricane Agnes produced disastrous flooding that left this community in a state of social disarray and physical ruin. The entire business district was inundated, and approximately 30,000 local residents had to be evacuated and temporarily sheltered. In fact, many of those who were dislocated had to spend months or, in some cases, even years in temporary housing units. Fortunately, flood-related injuries were minimal and only four people died as a result of the flood.

The Hurricane Agnes flood was one of the nation's largest disasters in terms of property damage. Roughly 14,000 housing units in the Wilkes-Barre community alone were damaged. Three colleges, two hospitals, and various churches, social agencies, nursing homes, recreational facilities, and corporate plants and offices were also damaged by the flood waters. The massive physical damage in the city and surrounding areas provided an impetus for a large-scale disaster relief effort by the federal government.

The federal government's response in providing temporary housing facilities for displaced families was a very important factor in this particular disaster. Since many families were unable to return immediately to their former residences, the Department of Housing and Urban Development (HUD) was delegated the responsibility of supplying temporary quarters for them. The task quickly became complex. This disaster was unlike most disasters in America during which individuals were provided with emergency shelter only for the impact stage and (possibly) the immediate post-impact period. In this case, thousands of individuals were housed in temporary living units for prolonged periods. This procedure frequently takes place in catastrophes occurring outside the United States, but rarely in America, where it has not been done during the last four decades.

Wilkes-Barre is best characterized as a working-class, industrial city with a population of roughly 60,000 residents, exhibiting strong ethnic roots. Data from a Disaster Research Center (DRC) survey in 1972 showed that approximately 59 percent of the families had incomes under $10,000, while 87 percent of the families had incomes under $15,000.

Much of the population consists of second- and third-generation descendents of German, Irish, Italian, Lithuanian, Polish, Slovak, and Welsh immigrants. A significant factor in the post-flood housing situation was that the population was considerably older than the national average. In addition, the houses were quite old.

The 1972 flood was one of several Wilkes-Barre had experienced during the last century. The most recent one before 1972 occurred in 1936 and did

considerable physical damage. It was the most devastating of the earlier floods, with property damage exceeding $9 million (measured in 1936 dollars). Although no one was killed, approximately 15,000 people had to be evacuated.

The 36 years separating the '36 and '72 floods were relatively free from major flood threats. The levee system was improved and the dikes were raised several feet during this period. The dikes held effectively each of the three times that the river crested above 30 feet. While the levee system responded adequately, warnings were issued by construction specialists (although they went unheeded) that the burgeoning development of the flood plain would inevitably result in higher and higher river crests and, eventually, a major flood. Business, industry, and residential development tended to gravitate toward the flood plain, not only in Wilkes-Barre but also in communities to the north. Fields that used to absorb much of the rainfall were developed and/or paved, consequently increasing the amount of runoff that drained into the river.

There were some resources in the area for dealing with disasters, although certain pre-impact weaknesses in organizational disaster preparedness were also apparent. On the positive side, the County Civil Defense (CD) Office did have a significant communications system. This consisted of 12 standby telephones, 10 private lines, and 4 lines connected to the County Courthouse switchboard, which were, however, located in the sub-basement of the Courthouse (in the flood plain). This building also housed the local emergency operating center (EOC). A police and fire communications center was conveniently located in a separate room adjacent to the EOC.

In addition to its communications system, the CD had access to an abandoned industrial complex, which it used as a fire and rescue training center. Disaster training was also provided through the local college, which had a contract with CD to offer six to eight courses per semester in emergency operations.

The CD was a predominantly volunteer organization with the exception of one executive director and two secretaries. It was operated by 75 volunteers and directed by a volunteer as well. Several of the key officials had considerable emergency and crisis experience and came from military backgrounds. One of the top officials, who also served as the river observer for the local community, had direct contact with the Flood Forecasting Service.

Some predisaster planning, especially for floods, had also been undertaken. The CD conducted a training exercise in 1971 to simulate response to a 37-foot flood threat. It also kept an updated listing of phone numbers and locations of emergency-relevant organizations and personnel. During the winter preceding the flood, an eight-week course for radio operators (e.g., citizens band personnel) was conducted, giving individuals an opportunity to exercise their skills in simulated emergency situations.

On the other hand, a comprehensive plan designed to deal with natural disasters did not exist. Before the 1972 flood, the most recent planning

document for a large-scale emergency was a 1959 County Disaster Plan geared toward a nuclear threat, which was useless for a natural disaster situation.

Even though the CD exercises were beneficial, they were inadequate in two important respects. First, the exercises were primarily confined to the county CD personnel, excluding the various local and private organizations from having an opportunity to define and clarify their own roles in a full-scale emergency. Second, concrete plans were not formulated for particular organizations, individuals, and locations. For example, while it was recognized that the evacuation of large numbers of people during a major disaster was an important consideration in disaster planning, no specific plans for the location or operation of mass care shelters were delineated.

Although the police and fire departments had communications facilities in the same building as the CD, there was little, if any, serious discussion between these organizations concerning evacuation procedures. In fact, the fire department and CD shared minimal communications, primarily because of technical problems. The fire department's radio systems were fragmented, some having low-frequency and others having high-frequency equipment. The meetings that were held to discuss emergency operations did not seem to be very fruitful in integrating the various emergency organizations.

The overall coordination of the various responders was also affected significantly by a multiplicity of various political subdivisions. Hence, the integration of the resources within the county was minimized by inadequate communications and coordination between the small municipalities, whose planning was typically done in a piecemeal fashion with little effort to integrate the activities of the various jurisdictions.

THREAT CONDITIONS

It appears that people were unconcerned with Hurricane Agnes until the night of June 21 (Wednesday), when heavy rains began to fall. Many residents supposedly were uncertain about the potential effects of the rain; they perceived the threat to be the water accumulating in their own community from the heavy rains falling in the immediate vicinity. The real threat, however, was 90 miles away. Since the water tables of the northern communities were unable to handle the excessive volume of water spawned by the heavy rains, catastrophic flooding resulted.

In 1936, the community experienced a relatively severe flood that served as a benchmark for judging the impending emergency. Heads of various organizations, as well as everyday citizens, judged the threatening conditions according to experiences associated with the 1936 flood. Not surprisingly, then, many decisions were based on the scope of the previous flood. A hospital administrator, for example, firmly believed that the flood would not inundate the first floor of the hospital because it had not done so before. Thus, some equipment was moved from the basement to the first floor, only to be damaged later by the flood waters, though most was wheeled up to the second floor where it escaped damage.

Many people had difficulty envisioning the river's exceeding the record heights of the 1936 flood. The upgraded levee system had not only prevented flooding in the past, but had instilled a sense of security in the population as well. In many cases, citizens' perceptions of the possibility of a flood were, therefore, distorted by the mere presence of the levee system and its past success. Many households were held captive by their knowledge of the past, unable to appreciate fully the urgency of the situation.

WARNING

The warning period for the flood was approximately 6 to 12 hours, which afforded the emergency organizations substantial time to prepare for the initial impact. Although heavy rains actually began Wednesday evening, the levee did not overflow until Friday morning. The seemingly relentless rains prompted the Flood Forecasting Service to update its crest predictions as more and more water entered the river system.

A flood watch was first issued Wednesday evening. CD officials met to discuss and monitor the crisis situation Thursday evening. Also on Thursday, 30 to 40 National Guard personnel were called in to patrol the dikes and look for leaks. Radio and television were used to alert the National Guard of this operation and request assistance.

The relatively lengthy pre-impact period allowed the CD ample time to organize its strategy and implement its warning system. The predictability of the river's crest allowed the CD to issue timely evacuation warnings, and it was even able to request that people continue sandbagging until they heard a whistle signaling that the time had come to evacuate. CD officials were able to discuss various problems and possible alternatives; for instance, officials could assess the wisdom of asking people to help sandbag the levee by gathering input from various sources. The decision to evacuate hospitals and low-lying areas was made in a similar fashion. In short, while an emergency situation was evident, it evolved in such a way that decisionmaking could proceed through much consultation.

On Friday morning, an emergency flood information network was established, comprising 13 local radio stations, with input at CD headquarters to centralize dissemination of information. CD would give priority messages to the information network (at 15 minutes past the hour) for immediate broadcast (e.g., what areas were in danger and should be avoided, and what was happening in general). Credibility was maximized by having the same message presented over 13 different stations. Until Thursday at 6 P.M., the radio warned, "Beware of flash floods, especially in the low-lying or flood-prone areas." A warning was also issued Thursday night stating that there would be high water and that residents might have to evacuate. People were advised to stay tuned to the station for further developments. Specific evacuation warnings were issued to persons in the flood plain by police and fire officials, using bullhorns and patrolling vehicles.

BEHAVIOR PATTERNS

Despite the dissemination of warning messages, however, the public did not always obtain relevant information concerning the weather and flood probabilities. Part of the problem was that radio broadcasts of the CD director's messages were given very late Thursday night and during the early morning hours on Friday. Many people apparently went to bed Thursday night, believing that only very low-lying areas were in danger. In addition to the CD warnings, the mayor had asked for voluntary evacuation of low-lying areas and also requested some stores to move their merchandise. A few supermarkets were convinced that they should move their food to refrigerated trucks, which were later used to supply an evacuation center. As stated before, some people heard the various warnings but ignored them. On the other hand, as early as Thursday afternoon (the day before the flood), the local telephone switchboard was bombarded with calls requesting information from the CD on the status of the river and the likelihood of an evacuation.

Because the flood developed relatively slowly, people were initially able to evacuate their homes rather smoothly and with minimal confusion. Interestingly enough, however, some people chose to remain in their homes because they felt secure and certain that the river would not top the dikes. In other cases when people did not take the flood threat seriously, personal belongings were not moved to higher floors. As a result, many people lost possessions they could have salvaged.

What process (leadership/teambuilding) problems were you able to identify?

What actions could have been taken to improve the situation?

ACTION PLANNING FRAMEWORK 1 (SM p. 94)

Tasks to Be Managed	What Must Be Done (Actions/Activities)	Who Has Responsibility (Lead Responsibility and Other Responsibility)	Organizational and Individual Strengths and Weaknesses with Which to Deal	How the Task Will Be Managed or Performed
Alert the public				
Mobilize emergency personnel and equipment				
Maintain 24-hour monitoring and alerting function				
Alert internally — Various local government departments — Public officials				
Inform/educate the public				

ACTION PLANNING FRAMEWORK 1 (continued)

Tasks to Be Managed	What Must Be Done (Actions/Activities)	Who Has Responsibility (Lead Responsibility and Other Responsibility)	Organizational and Individual Strengths and Weaknesses with Which to Deal	How the Task Will Be Managed or Performed
Inventory community resources				
Prepare emergency management plans				
Establish outside emergency management contacts — Individuals — State/federal programs — Private/public organizations				
Search and rescue operations				

ACTION PLANNING FRAMEWORK 1 (continued)

Tasks to Be Managed	What Must Be Done (Actions/Activities)	Who Has Responsibility (Lead Responsibility and Other Responsibility)	Organizational and Individual Strengths and Weaknesses with Which to Deal	How the Task Will Be Managed or Performed
Evacuate residents				
Restore essential community services				
Continually assess damage and situation				
Maintain community order				

ACTION PLANNING FRAMEWORK 2

Objectives	Activities	Target Completion Dates
Establish planning team	1. Develop list of possible members	January 5
	2. Discuss list with key local officials (i.e., with some of the most obvious members)	January 10
	3. Discuss team composition with some other good county emergency management coordinator	January 15
	4. Discuss team composition with state emergency planners	January 18
	5. Check refined list with key local officials	January 21
	6. Send letters inviting the selected individuals to join the team	February 1
	7. Hold first meeting	March 1

HOMEWORK

Write three objectives in relation to planning in your home situation and the associated activities required to accomplish those objectives.

Objectives	Associated Activities
1.	
2.	
3.	

SMALL GROUP ACTIVITY: EVALUATING THE HAZARD/ VULNERABILITY ANALYSIS (SM p. 110)

The purpose of this activity is to practice using a set of evaluation criteria established for determining the completeness of a hazard/vulnerability analysis. Portions of the Model Community's hazard/vulnerability analysis (pages 113 to 124) will be used as a basis for this evaluation. An evaluation instrument was designed (see Student Manual pages 132 to 153) to assist you in evaluating both the Model Community's and your own hazard/vulnerability analysis. In addition, this evaluation instrument provides criteria for evaluating the comprehensive emergency management plan.

The first step in this activity is to use the evaluation instrument to determine the effectiveness of selected portions of Liberty County's hazard/ vulnerability analysis. Using the hazard analysis section of the evaluation instrument, your group will assess the completeness of the assigned sections of the Model Community's hazard analysis.

Instructions

Place points in columns on a 1-to-5 scale based on your assessment of the completeness of assigned portions of the Model Community's hazard analysis. If a disaster category does not appear, you may assume that the disaster does not represent a threat to the Model Community.