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REPORT ON TRIP TO CHARLESTON COUNTY, SC  
AFTER HURRICANE HUGO

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QUICK RESPONSE RESEARCH REPORT #33

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Report on Trip to Charleston County, SC  
After Hurricane Hugo

by  
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Objectives

Originally, I planned to focus on the beginning of the intergovernmental processes after a major disaster was declared in SC after Hurricane Hugo, in October 1989. It was not possible to get into the Charleston, SC area immediately after the disaster and pursue that research plan for several reasons: (a) the magnitude of the storm and wide-spread destruction lead to massive, lengthy power outages; (b) tens of thousands of persons were displaced from their homes and in need of food and shelter; and (c) the public officials whom I would want to interview would be too busy with operational needs to take time to talk with me. Therefore, it did not make sense for a researcher to go in right away and add to the burden in the immediate aftermath.

On-site Situation

I was able to visit the Charleston County area five weeks after Hurricane Hugo hit. The revised objectives of my on-site visit were to obtain information about the early planning for recovery and about the efficiency and effectiveness of the intergovernmental relations process as recovery planning got underway. Going on-site five weeks after Hugo struck proved to be good timing. The downtown Charleston area was recovered enough for me to find lodgings and meals; and public officials and citizens were willing to reflect about their experiences of the last several weeks and to talk with me. I spent three days on site.

Owing to the early reports by the media about delays in starting the relief and recovery efforts and whose fault they were, and to the fulminations of Senator Hollings who was quick to call FEMA a "bunch of bureaucratic jackasses," it was especially difficult to find out what really was going on in the Charleston county area.

Basic Facts and Figures

Hurricane Hugo hit SC on October 21-22. registering winds up to 135 mph and spawning some tornadoes as well. While the

eye of the storm passed over downtown Charleston, the brunt of the damage was felt in the east and north of Charleston county.

The National Hurricane Center was able to give the SC area significant advance warning. Evacuations were promptly ordered and large numbers of persons were moved inland. Thanks to considerable prior study, data, and computerized programs for evacuation planning, the large scale evacuations help to minimize deaths and injuries from the hurricane.

In the aftermath of Hugo, the original Presidential declaration was amended four times, and finally included 24 counties in SC. In addition, some counties in NC received a declaration.

Estimates vary widely, but some basic working numbers are as follows:

- damage caused by Hurricane Hugo to the Atlantic Coast = \$5 B.
- 9,000 homes destroyed
- 27,000 homes with major damage
- 20,500 applicants for temporary housing
- 292,000 unemployed persons in SC

The problems, issues and needs for the recovery phase are enormous -- almost overwhelming. Psychologically, it is unfortunate that the San Francisco earthquake garnered all the media attention, not to mention a huge federal appropriation for recovery. I think the governmental officials and, of course, the citizens of Charleston, would like to have remained in the national spotlight and been the focal point for recovery for a longer period of time.

While 24 or so counties in SC have received a declaration, I focussed most of my attention on the Charleston county area, which is a sizeable area containing 19 entities-- including unincorporated areas.

### Approach

I visited the Disaster Field Office, set up by FEMA, which housed the key federal agency representatives, Red Cross and other voluntary agencies, State Officials and leaders of the Interagency hazard Mitigation Team. In addition, I met with local officials and others in their offices and elsewhere. I had formal interviews with about six persons and informally talked to dozens more.

### Issues Worthy of Further Attention

There are many major issues and problems connected with the local, State and federal governments' plans and actions in terms of their response to and recovery from Hurricane Hugo. In the initial trip report, prepared at the end of October, I identified a number of issues that might be worthy of research. Since then I have learned of several researchers who were involved in Quick Response and/or other research efforts. As a consequence of my Quick Response visit, I prepared a research project proposal that focussed on the intergovernmental relations aspects of the recovery from Hurricane Hugo in SC. Some of the issues I identified after my site visit are:

(a) Intergovernmental Relations: federal, State, county and local coordination. The evacuation process prior to the Hurricane's touchdown in SC was mainly a positive example. Subsequently, interactions among the emergency management personnel at each level of government involved generally did not go well. The Declaration Process did not go smoothly. The Governor and the Mayor of Charleston were critical of FEMA early on the in the process of working together.

(b) State Emergency Management Capability. The organizational arrangement and capability of the state's emergency services division and its relationships with the county emergency management agencies should be examined. For reasons I do not know, the Governor chose to by-pass this chain of command and set up a parallel process from his office to local elected officials to gain intelligence about the impact of the hurricane.

The States ability (or inability) to assess the damage done and to perform the steps needed for a Presidential declaration.

(b) City and County Emergency Management Capability.

Even within one county, Charleston County, there was a wide range of local emergency management capability among the 19 entities in the county.

(c) Required Hazard Mitigation. FEMA's Sections 409 requirements and the mitigation grant option under Section 404 provide the opportunity and the environment for doing natural hazards mitigation. While the hurricane event will get primary attention, will federal, State and local officials use this required mitigation review process as an opportunity to press for attention to seismic safety during the recovery period?

(d) Federal Hazard Mitigation Team. Role and functions of the federal Interagency Hazard Mitigation team should be

studied. There were some problems connected with the initial mobilization and composition of the team. Not yet known are the nature and quality of the team's recommendations. Worth watching will be the extent of follow-through by all levels of government involved in implementing the recommendations.

(e) Use of Hazard Mitigation Tools. Regarding hazard mitigation, the relatively recent Sec.404 of FEMA's enabling legislation created a program and earmarked funds for implementing hazards mitigation measures. To what extent will this program be used, and how effectively, in the aftermath of Hugo?

(f) Multi-Hazard Mitigation. A closely related question is whether seismic safety considerations will be meshed with flood mitigation in the conduct of the required sec. 409 hazard mitigation plan to be completed by the State and with the optional use of Sec.404 program.

The IHMT 's role and report could serve as a catalyst for increased local attention to and action regarding seismic safety.

(g) Large Number of Displaced Persons. While I am not sure of the exact numbers, perhaps as many as 50,000 persons were displaced from their homes by Hugo. This disaster may present the largest amount of residential destruction seen to date by the U.S. disaster community. It raises interesting questions about how to deal with large number of homeless persons after a catastrophic earthquake. This should be studied.

(h) The Political Setting. In the aftermath of Hugo, FEMA meet with a highly politically-charged environment in Charleston area and at the state level. The local and Congressional political figures and also the media seemed to do a disservice to the FEMA efforts.

(i) Training, Education, and Preparedness. It appears that recovery planning is not being adequately factored in to emergency preparedness activities, not only in SC but in many other states. Planning for recovery is either not being done or is being done poorly. Why?

- Recovery planning is not being taught or is not being taught well;
- It is not being learned or understood; and/or
- It is not being applied at all or effectively

A colleague involved in emergency preparedness training for local officials commented that emergency managers focus on the operational aspects of response and lack either the interest or ability to do comprehensive, long-term recovery planning.

The State of SC did not have any staffer involved in hazard mitigation prior to Hugo. At the time of my visit the staff official temporarily filling that job was an operations person on loan to the DFO. Will the state create and fill the position of State Hazard Mitigation officer in the post-Hugo environment and what will be the results?

(j) Coastal Zone Management. There are a host of issues connected with coastal zone management and with the rebuilding of coastal structures. I did not get into these issues because I knew that other Quick Response Research and perhaps the National Academy Reconnaissance Team had done so.

#### Additional Information Post-Visit

Managerial Deficiencies at FEMA. The organizational problems at FEMA are compounded by the number of vacancies in key politically-appointed positions. Ten months into the Bush administration, virtually all major leadership positions are vacant or are being held by holdover appointees from the last administration. There is not one Bush administration appointee in place at the agency. [Democratic Study Group Report.]

Crucial Timing. In SC, there is a window of opportunity for improved emergency preparedness and emergency management. In the wake of Hugo, a high degree of attention from each level of government; the expectation of significant sums of public assistance (as well as individual and family assistance) payments; the mandated requirements of the state's hazards mitigation plan (Sec. 409 of FEMA's regulations) and the availability of Sec 404. Hazard mitigation implementation monies. Further, there have been significant seismic safety planning activities on-going in the state, supported by Federal money.

What changes, if any, will be made in the organization arrangements for state and county emergency management? What personnel changes, staffs increased, office locations changed or efforts to increase the professionalism of emergency management services?

Will the pressures to deal with seismic safety process succeed? Will adoption and implementation of state-wide seismic safety building codes occur in the coming year?

In the context of disaster preparedness activities, planning for recovery is either not being done or is being done poorly. Why?

- Recovery planning is not being taught or is not being taught well;
- It is not being learned or understood; and/or
- It is not being applied at all or effectively. Possible explanation is that emergency managers focus on the operational aspects of response and lack either the interest or ability to do comprehensive, long-term recovery planning.]

Poor Recovery Performance. The recent Hurricane Hugo was catastrophic in terms of its wide-ranging destruction. Damage to structures, lifelines and public property were the most costly to date in the U.S. The hurricane impacted two U.S. territories and two States seriously enough to warrant Presidential disaster declarations.

About one week after Hugo hit the mainland U.S., the Loma Prieta earthquake occurred. While the federal government was ready with a catastrophic earthquake plan, FEMA decided not to trigger that plan. In terms of disaster response, both the American Red Cross and the Federal Emergency Management Agency (FEMA) were seriously over-extended in terms of personnel and financial resources and their ability to meet the needs of victims stretched thin.

The Loma Prieta Earthquake had two important effects on the recovery efforts from Hurricane Hugo: (1) it made large demands on federal dollars and personnel resources and (2) it reminded people of the known vulnerability of the VI, PR and coastal SC of their own vulnerability to earthquakes.

For researchers and practitioners with many years of disaster experience, it is painful to see how poorly that useful information based on research and experiential learning is being taught and or retained by those responsible for disaster management. Special attention will be paid to gaining insight into why the education and training programs are being absorbed in such an uneven manner across the U.S.

## SOURCES OF INFORMATION

### Periodicals

News clippings on Hurricane Hugo in the Washington Post, the New York Times, and the Charleston News and Courier, and the Charleston Evening Post.

Special disaster issue of the Charleston Post-Courier, includes summary of disaster coverage from Sept. 22-26, 1989.

"In the Eye of the Storm: Is Government Prepared for Disaster?" in Government Executive, December, 1989.

### Interviews

FEMA Public Information Officers (2)  
Red Cross/Private Voluhntary Organization Liaison  
Federal Hazard Mitigation Team Leader  
State/Governors's Authorized Representative  
Prof. Joyce Bagwell, Baptist College (phone)  
Prof. Charles Lindbergh (phone)  
Charleston County Emergency Management Coordinator  
Citizens  
Media

### Reports

FEMA, "Interagency Hazard Mitigation Team Report," Hurricane Hugo, FEMA 843-DR-SC, October 1989.