

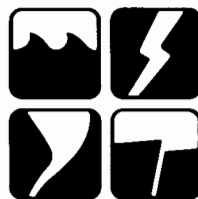
Natural Hazard Research

**THE PUBLIC POLICY RESPONSE TO
HURRICANE HUGO IN SOUTH CAROLINA**

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PREFACE

This paper is one of a series on research in progress in the field of human adjustments to natural hazards. The Natural Hazards Working Paper Series is intended to aid the rapid distribution of research findings and information. Publication in the series is open to all hazards researchers and does not preclude more formal publication. Indeed, reader response to a publication in this series can be used to improve papers for submission to journal or book publishers.

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SUMMARY

This project was initiated with the express intention of investigating the natural hazards public policy process as it unfolded in South Carolina following Hurricane Hugo. The report concentrates on what transpired in the city of Charleston and the state capitol, where the focus was on the actions of the governor and the General Assembly. The project's goal was to determine how and why policies that would reduce damages from future natural disasters were developed, considered, and implemented.

The main finding was that the state and municipal governments were not able to develop new natural hazards mitigation policies because they had very limited institutional capacities to thoroughly establish new policies. The report describes in detail the attempts of the state and Charleston to respond to Hugo without having the benefit of permanent commissions, agencies, or legislative committees dedicated to natural hazards that could offer policy suggestions.

In Columbia, as constitutionally required, the governor took charge of the state's recovery and created short-lived commissions to evaluate the recovery and suggest improvements. These suggestions were composed mainly of short-term solutions aimed at upgrading the ability of the state to restore order following future disasters.

Neither the governor nor the General Assembly thoroughly investigated a long-term mitigation strategy. When Hurricane Hugo struck, the state legislature had three separate hazard mitigation bills already before it, one to establish a mandatory statewide building code, one to mandate stormwater management, and one to amend the beachfront management act. Since Hugo, no major mitigation legislation has been introduced.

Of the three bills before the legislature, the two mandating building codes and stormwater management sought to increase mitigation activities in the state, while the amendments to the beachfront management act sought to soften tough restrictions on coastal construction. In the first legislative session after Hugo, the amendments to the beachfront management act were enacted. In the second legislative session after Hugo, the stormwater management bill was enacted. In the three years since Hugo, the statewide building code bills have been defeated in each legislative session. The continuing debate over building codes indicates that

legislators are still unsure whether mitigation should be a state policy function or determined by local municipal and county jurisdictions.

Charleston officials were able to turn to an expert within the city government's ranks for his opinion on possible earthquake mitigation. After they were told that the city was one of the best prepared for earthquakes in the south, the mayor and city council were satisfied that the city was prepared for future events and initiated no new policies.

The final section of the report discusses implications for natural disaster public policy. It is argued that a minimal institutional capacity, consisting of either a permanent commission, agency, or standing legislative committee dedicated to natural hazards is necessary for a governmental body to develop and update a long-term mitigation strategy. It is also argued that before that can be accomplished, the legislative arm of the governmental body must establish that it has jurisdiction over mitigation.

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INTRODUCTION

Just over three years ago, on September 22, 1989, Hurricane Hugo ravaged 24 of the 46 counties in South Carolina, causing approximately \$6 billion in damages. In a state whose annual budget was approximately \$3.6 billion in 1989, this was a major social and financial calamity.

One would presume that a disaster of this magnitude would attract the attention of public officials at the state and local levels and compel them to investigate why such large losses occurred and then to enact measures to reduce future potential losses, especially when one considers that South Carolina is highly susceptible to serious hurricanes, floods, tornadoes, and earthquakes. One would also presume that policymakers would act in accordance with their policymaking capacities while taking fiscal and administrative conditions into account. The purpose of the research reported here was to determine what happened in the public policy arena in the city of Charleston and at the state capitol concerning natural disaster mitigation. No attempt was made to look at activities of other private or public organizations; these were left for other research studies. The majority of the data were collected in the year following Hurricane Hugo; however, every attempt was made to update outcomes at the state level through the three year anniversary of Hugo.

This study is divided into seven sections. The first section describes the research design. It includes a discussion of a theoretical construct, *institutional capacity*, which is used to analyze the abilities and desires of policymakers to participate in natural hazards mitigation. The second section provides a brief description of the South Carolina government and political environment to determine the institutional capacities of the governor and the legislature to respond to a major natural disaster. The third section reports how the state has responded to previous emergencies, in order to illustrate its priorities in disaster response. The fourth section reports the actions of Governor Campbell in response to Hurricane Hugo, his recommendations for change, and the subsequent results of his efforts. The fifth section investigates the actions of the General Assembly to enact meaningful mitigation legislation in the aftermath of Hurricane Hugo. The sixth section concentrates on the Hugo-related policy decisions of the mayor and city council of Charleston. The seventh and last section discusses implications for natural disaster public policy.

In December 1992, an early, incomplete draft of this report was circulated to several individuals for peer review. One reviewer released a copy to reporters at the *Columbia State* newspaper. The reporters in turn sent a portion of the report to the governor for comment. In the January 17, 1993, edition of the *Columbia State*, two articles about the draft report were featured on page one, one including comments from the governor criticizing portions of the analysis. Following the seventh section of the report, an epilogue has been added, commenting on the governor's opinions.

SECTION I: RESEARCH DESIGN

This project was initiated with the express intention of investigating the natural hazards policy adoption process as it unfolded in South Carolina. Its main purpose was to uncover the important elements associated with the dynamics of policy setting. For the purposes of this study, the policy adoption process was defined as those steps leading to and including the formal enactment of a policy.

The study began on November 15, 1989, approximately two months after Hurricane Hugo struck, at a time when most state and local officials were just starting to evaluate their long-term hazard mitigation options. In order to investigate the policy adoption process dynamically and be able to determine what factors were critical in the process, it was necessary to identify influential individuals in Charleston and Columbia who were likely to play critical roles. Dr. Charles Lindbergh, Professor of Civil Engineering, The Citadel, provided the first set of names.

For the next year and a half, encompassing two full state legislative sessions, semi-structured interviews, both in person and by telephone, were conducted with over 100 individuals who emerged as key players in the policy adoption process. To complete the large number of interviews, approximately 12 weeks (in intermittent one- and two-week periods) were spent in either Charleston or Columbia. Written data were also collected to document the process. At the state level, the detailed results of annual surveys of state legislators conducted by the *Columbia State* newspaper and the Office of Research of the House of Representatives concerning opinions on legislative issues were made available, sparing the author from creating and administering duplicate questionnaires. Because no

equivalent surveys were conducted of Charleston officials, a questionnaire was prepared and administered to the majority of the city council.

Of the many persons interviewed for this study, seven were especially cooperative, giving much of their time for multiple conversations to update their impressions of the ongoing policy process. They were Dr. Charles Lindbergh; Dr. Peter Sparks, Professor of Civil Engineering, Clemson University; Dr. Blease Graham, Associate Professor of Government and International Studies, University of South Carolina; State Senator Glenn McConnell; State Senator Mike Rose; State Representative David Wright; and Mary Hudak of the Federal Emergency Management Agency (FEMA), Region IV.

In addition to the seven persons named above, others contributed much valuable information and opinions, often only slightly less frequently than the persons just mentioned. The following persons (and their titles at the time of the interviews) were interviewed one or more times:

- From the Office of the Governor, Dr. Fred Carter, Senior Executive Assistant for Finance and Administration; Roger Poston, Director of Finance and Administration; Stan McKinney, Director, Division of Public Safety Programs; Dr. James Bradford, Director, Office of Research; and Frans Coetzee, South Carolina Hazard Mitigation Officer. During several stays in Columbia, Dr. Carter provided both office space and a telephone. Although several attempts to interview the governor proved unsuccessful, others in the governor's office were extremely cooperative and responsive to almost every request.

- State Senators: James Bryan, Warren Giese, John Hayes, Hugh Leatherman, Isadore Lourie, Alex Macaulay, Yancey McGill, Theo Mitchell, Thomas Moore, Mike Mullinax, Verne Smith, Nell Smith, Sam Stilwell, David Thomas, James Waddell (Chair of the Finance Committee), Marshall Williams (President *Pro Tempore* and Chair of the Judiciary Committee), and Joe Wilson.

- State Representatives: Robert Sheheen (Speaker), George Bailey, Robert Barber, David Beasley, Robert Brown (Chair of the Labor, Commerce, and Industry Committee), Holly Cork, Ralph Davenport, Bennett Hendricks, Robert Kay, Harriet Keyserling, Herbert Kirsh, Jennings McAbee, Robert McLellan (Chair of the Ways and Means Committee), Gene

McLeod, Joseph Nesbitt, Richard Quinn, J. Roland Smith, Eugene Stoddard, Lenoir Sturkie, Ron Townsend, John Tucker, Candy Waites, and McKinley Washington.

- From the State Senate offices and committee staffs: Frank Caggiano, Clerk of the Senate and Director of Senate Research; Hogan Brown, Assistant Clerk of the Senate; Michael Couick and Susan Musser, Judiciary Committee; and Michael Ey, Finance Committee.

- From the State House offices: Stephen Elliott, Executive Director, and Sally Huguley, Research Assistant, Office of Research.

- Elected State Officers: Lt. Governor Nick Theodore and Adjutant General Major General Eston Marchant.

- From the State Emergency Preparedness Division: Paul Lunsford, Director; Stitt Wolfe, Operations Branch Manager; and Glen Jennings, Hazard Mitigation Officer.

- From State Boards, Commissions, Committees, and Departments: Dan Mackey, Executive Director, South Carolina Advisory Commission on Intergovernmental Relations; Jesse Coles, Executive Director, Bobby Bowers, Director of Research and Statistical Services, Dell Kinlaw, Assistant Director of Research and Statistical Services, and Dr. William Gillespie, Manager, Economic Research, Budget and Control Board; Gary Wiggins, Director, South Carolina Building Codes Council; Chris Brooks, Deputy Director, South Carolina Coastal Council; Thomas Hansen, Executive Director, Berkeley-Charleston-Dorchester Council of Governments; Rick Howell, Executive Manager, Division of General Services; and Margaret Davidson, Executive Director, South Carolina Sea Grant Consortium.

- From the County of Charleston: Linda Lombard, Chair, County Council; Ed Fava, County Administrator; Garland Daniel, Director, Building Inspection Services; Carl Simmons, Building Services; and Dennis Clark, Director, Emergency Preparedness Division.

- From the City of Charleston: Council members Mary Ader, Yvonne Evans, W. Foster Gaillard, Hilda Jefferson, Jerome Kinloch, Brenda Scott, Larry Shirley, W.L. Stephens, and John Thomas; Jim Budds, Executive Assistant to the Mayor; Doug Smits, Director, Department of Public Service; Yvonne Fortenberry, Director, Department of Planning and Urban Development; and Howard Chapman, Director, Department of Traffic and Transportation.

- From the City of Isle of Palms: Mark Williams, City Administrator.
- From newspapers: Barbara Williams, Editor, *Charleston Evening Post*; Thomas Nielson, Executive News Editor, *Charleston News and Courier*; Jeff Miller and Cindi Scoppe, Staff Writers, *Columbia State*.
- From other organizations: Mike Cone, Executive Director, and Bob Lyon, Assistant Director and General Counsel, South Carolina Association of Counties; and Don Wray, Executive Director, Municipal Association of South Carolina.
- And from universities: Dr. Ben Sill, Professor of Civil Engineering, Clemson University; and Dr. Charles Tucker, Associate Professor of Sociology, University of South Carolina.

Institutional Capacity

A central focus of this research was to assess the level of natural hazards policymaking abilities in the state capitol and Charleston to determine what impact these abilities had on their respective government's response to Hugo. The term "institutional capacity" was selected to represent the sum of policymaking abilities (those aspects of government which could influence policy choices), including historic precedents; jurisdictional claims and constraints; and experts within the government such as agencies, commissions, political caucuses, and legislative committees.

As used in this report, institutional capacity has been more broadly defined than the term "capacity," as it has been previously used in the literature. Capacity gained currency during the "new federalism" of the Nixon years when the administration of federal programs was transferred to state and local governments. At that time, questions arose concerning the ability of these government bodies to manage federally mandated programs effectively and efficiently, and attempts were made to codify capacity as a measure of local abilities, typically including policymaking, resource or fiscal management, and administration (Burgess, 1975; and Waugh and Hy, 1988, for example). Although many authors have used the term capacity in their evaluations of state and local governments, no standard definition has emerged. The simple definition proposed by Gargan (1981, p. 656), that capacity is a

government body's "ability to do what it wants to do," comes closest to what the majority of researchers have implied.

The major difference between institutional capacity employed in this study and capacity as used previously centers on the issue of jurisdictional choice. Prior investigators evaluated the management of programs that had been mandated or were already assumed to be proper governmental functions. In this study, the public policy process involving natural hazards mitigation included the decision of the local and state governments to determine if their level of government was the appropriate level to manage the programs. Consequently, institutional capacity represents an extension of the older term, capacity, to include the abilities of the government bodies to make jurisdictional choices.

SECTION II: SOUTH CAROLINA POLITICS

There are three characteristics of South Carolina politics that are critical to an understanding of how the state operates. First, South Carolina represents a "traditionalistic" political culture where "the continued maintenance of the existing social order" is the predominant goal (Elazar, 1984, pp. 118-119). Second, as described by Key (1949), South Carolina state government is dominated by the legislature, with the Senate holding primacy. Third, home rule, in which counties have complete political control over their jurisdictions and budgets, has not been fully implemented, and local politicians must share decision-making power with their state legislative delegations (Underwood, 1989).

The political dynamics of South Carolina can best be illustrated by examining the roles of the governor and state legislature. For over 50 years, investigators (Coleman, 1935; Key, 1949; Peirce, 1974; Bass and DeVries, 1976; Uslaner and Weber, 1977; Underwood, 1986; and Moore and Graham, 1989, for example) have agreed that the South Carolina governor is among the weakest in the nation, with few official powers to initiate or implement public policy. Long-term public policies depend on the initiative and the will of the General Assembly. In essence, the roles of the governor and the legislature in determining public policy are what the legislature chooses to allocate.

Institutional Capacity of the Governor

The state constitution gives the governor very few formal powers and responsibilities. The governor is considered to be the chief administrator in the state; however, the implementation of laws passed by the legislature is shared with other elected state officials and boards and commissions appointed primarily by the legislature. The power of the governor to direct policy outcomes significantly depends on personality and the governor's ability to informally influence the legislature. The office of the governor, therefore, has a limited capacity to propose and implement public policy.

Of the formal responsibilities given the governor, one of the most important, but a rather weak requirement, is to report to the General Assembly on the condition of the state and to make legislative recommendations. This is formally accomplished when the governor delivers the state-of-the-state address shortly after the General Assembly convenes each year. In addition, the governor, as commander-in-chief of the state militia, may call out the National Guard to restore order.

On a practical level, in the event of a natural disaster, the governor has the statutory responsibility to exercise his judgment and discretion in managing the state's response to a disaster as he sees fit. Federal law (the Robert T. Stafford Disaster Relief Act, P.L. 100-707, Title IV, Section 401) also prescribes that the state governor command the forces needed to respond to an emergency for which the president has issued a disaster declaration. Under these mandates, the governor is primarily concerned with the restoration of order and the immediate recovery needs of victims and is free to make decisions without involving the legislature. As a matter of fact, disaster response is one of the few areas where the governor has absolute authority to govern.

Paradoxically, while the governor has the sole authority to determine the state's disaster response, he has no direct line of authority over its implementation. By an act of the legislature (Act 199, Section 21, 1979) with the support of then Governor Richard Riley, the Emergency Preparedness Division (EPD) was established as a separate entity of the Adjutant General's office and given the statutory responsibility for coordinating all state, county, and municipal agencies in developing state emergency plans and conducting statewide emergency efforts to ensure the safety of the citizens of the state. The governor's lack of direct control

over EPD exists because the Adjutant General is an elected constitutional officer, the only elected Adjutant General in the United States.

If one were to measure the success of a modern South Carolina governor, two criteria that emerged during post-reconstruction in the early development of the "new south" would stand out (Thompson, 1919; and Woodward, 1951). First is the number of new jobs and monies generated from new industrial development. Because the state does not have a strong industrial base or considerable natural wealth, its future standard of living depends on its ability to attract industrial development. Second is the maintenance of civil order. Political insiders agree that the primary job of the governor is to make the state look attractive to potential investors, and one important ingredient is a conservative image not marred by civil unrest.

Institutional Capacity of the General Assembly

According to the state constitution, the power to make laws resides in the General Assembly. How the power is exercised is uniquely South Carolinian.

The political culture that dominates the legislature resembles the traditionalistic culture defined by Elazar (1984). The purpose of lawmaking is to maintain the existing order, to defend traditional patterns of political activity. New programs are politically acceptable if they serve the interests of the governing elite. To maintain order, real political power resides within a relatively small and self-perpetuating elite with the correct family ties or social position. At the same time, those outside the inner circle are expected to be politically inactive and not challenge decisions of the governing elite. If traditional legislative government in South Carolina could be explained by a single principle, it might be that the state responds to few needs, and the masses are satisfied because their long-held expectations of inaction are met.

In order to maintain the status quo, the two legislative bodies, the Senate and the House of Representatives, have developed elaborate procedural mechanisms to prevent the passage of change-oriented or otherwise unacceptable legislation. Compared to other states, South Carolina can be termed a *bill-killing* state. From the data presented by Francis (1989, pp. 54-57) indicating the number of bills introduced and passed in all state legislatures in 1981,

the South Carolina General Assembly was among the state legislatures which had passed the fewest bills in both actual number and as a percentage of those introduced; 1,300 bills were introduced and 272 (21%) passed both houses. By contrast, in Georgia, one of the highest bill-passing states, 1,598 bills were introduced and 998 (62%) passed both houses.

The main reason the South Carolina General Assembly passes so few bills is because the House and Senate have each established and maintained informal and formal rules and procedures allowing as few as one Senator or one Representative to essentially veto legislation they oppose (Mittler, 1990). Under the guise of legislative courtesy, the Senate and the House have established what amounts to a procedural veto that permits single individuals to postpone or deny consideration of a bill until all objections are aired and accommodated. Instead of adhering to the democratic ideal espoused by Jefferson (1856) of majority rule, South Carolina insists upon unanimous agreement before the existing order is changed.

Using the Legislative Process to Maintain the Status Quo

In the legislative process, any bill that has opposition will either die in the committee to which it has been referred or die on the *contested calendar* if the bill has been reported out of committee. For a bill to have any chance of being enacted, it must avoid being placed on the contested calendar. In the conduct of daily business in both the House and the Senate, the call of the contested calendar is the last scheduled item on the agenda, but customarily each house adjourns before the contested calendar is called, thereby preventing controversial bills from being heard on the floor of either chamber.

There are two ways a bill gets placed on the contested calendar. First, after a bill is introduced in either house, it is referred to a standing committee for consideration. The bill generally does not get advanced to the committee agenda until its author is certain that no committee member will oppose the bill. In the event that a bill is reported out of committee to either house without an unanimous favorable vote, the result is fatal. A single committee member opposed to the bill can file a minority report expressing opposition. When that occurs, the bill is placed on the contested calendar. In an analysis of all bills introduced in

the 1989-1990 legislative sessions conducted by the author, no bill reported out of committee with a minority report was enacted.

Even with unanimous committee support, a bill may still reach the contested calendar. When a bill is reported out of committee with unanimous support, it is placed on the *uncontested calendar*, the main item of daily business considered by the legislature. However, if a single senator or currently five (increased from three in 1991) representatives oppose the bill, they can express their opposition by placing their names on the bill (termed a *desire to be present* in the Senate and *objecting* in the House) which moves it to the contested calendar. As long as at least one senator or five representatives keep their names on the bill, the bill remains on the contested calendar, where its chances of being enacted are slim.

Both the Senate and the House have procedural recourse to remove bills from the contested calendar over the objections of a minority, but the rules are so stringent that the House seldom employs its rules and the Senate restricts the number of contested bills that may be considered at any time. If the Senate reaches the *motion period* in the daily order of business, a senator may make a motion to move a bill from the contested calendar to *special order*, allowing the bill to be heard on the floor. However, senate rules permit only three bills to be on special order at any one time and two-thirds of those members present must agree to the motion.

Rescuing a bill from the contested calendar does not guarantee smooth sailing from then on. On the contrary, if the bill originated in the Senate, it must garner full Senate approval and then withstand the scrutiny of the House and a possible conference before being enrolled. Very few controversial bills successfully clear all these hurdles. For example, in the 1990 legislative session, the Senate made 12 Senate bills special order, and of these, seven died later in the Senate, four were passed by the Senate and died in the House or in conference, and only one was eventually passed by both houses and enacted.

Using the motion period in the Senate to move House-originated bills to special order has a more positive effect. Having already secured House approval, Senate concurrence is one of the last steps needed for a House-originated bill to become law. Thus, the probability of enrollment is much higher if a House-originated bill reaches the floor of the Senate. In the

1990 legislative session, the Senate made nine House bills special orders, and of these, one died in the Senate and eight were passed by the Senate and later enacted.

Justifying Retention of the Status Quo

Although the rules and procedures in the legislature are clearly undemocratic, defying the Jeffersonian principle of majority rule, they survive for a number of reasons, including inertia and a fear of change. Among the most prominent is that South Carolina is one of many southern states that adhere to another traditional principle of Jefferson that the best government is the one that assumes the fewest functions and interferes least with the individual. Slow change through careful deliberation and consensus building is considered good policy by those in power.

Until 1974, county governments were not self-governing. Each county had a legislative delegation composed of its state senator and one or more representatives who oversaw the development of the annual county budget or supply bill, which was submitted to and passed by the state legislature. Thus, both policy and financial decisions were made by state legislators. In order for the legislative delegations to retain total control over their counties at the state capitol, the procedural veto given each senator allowed counties to prevent unwanted state mandates from being enacted.

The state stranglehold on local government eased after the federal Supreme Court ruled that states must reapportion their state legislatures exclusively on population. The change strained the relationship between the counties and legislative delegations to the point that the state constitution was amended in the 1970s to permit greater home rule. However, the connection between the legislative delegations and the counties has not been totally severed, and the procedural veto is still widely used to protect the parochial interests of legislators' constituents.

Standing Committees, Professional Staff, and Legislative Capacity

To accomplish its work and to maintain control over the consideration of new legislation, the House and Senate refer all bills, after their introduction, to standing committees. In the 1990 legislative session, there were 15 Senate and 11 House standing committees. Senators were members of four or five committees, and the chairs were determined by seniority.

Representatives were members of one or two committees, and the chairs were elected by the committee members. Typically, because of their experience and length of service, the senior senators who were chairs of the Senate's most important committees dominated legislative business.

Prior to Hurricane Hugo, no standing committees in either house had claimed any jurisdiction over natural hazards issues. As a consequence, there was no legislative history in these areas, and there were no identifiable champions of disaster-related legislation at the time of Hugo. When Lambright (1984) investigated the role of states in the process of policy innovation in earthquake and other natural hazard preparedness, he characterized South Carolina as being in an early policy stage that he termed *emergent*.

In addition to the use of the procedural veto, the fact that the General Assembly is composed of part-time legislators who have not provided themselves with paid professional staff adds to the reasons why the legislature considers few major pieces of controversial legislation. Committees have been assigned paid professional staff; however, these people report directly to their respective committee chairs, who channel staff resources to promote their individual agendas. Because chairs, especially in the Senate, are senior members of the legislature and have absorbed the traditions of the General Assembly, the chairs, for the most part, have become keepers of the faith, conservative, and protective of the status quo.

The power of the individual legislator who is not a committee chair comes from the power inherent in the procedural veto. These people may not have the resources to develop and promote comprehensive new legislation, but they do have the ability to prevent others from enacting legislation of which they disapprove. Because it is likely that the vast majority of the legislators will attempt at some time in the legislative session to enact bills that are aimed at enhancing the lives of their key constituents, the procedural veto is used sparingly for fear of reprisal. According to one astute political observer, the threat of its use is, however, sufficient to make the General Assembly appear to resemble a giant *log roll* as legislators trade favors with one another to accomplish very limited goals.

Fiscal Conservatism

Among the most revered aspects of the status quo is the legislative allegiance to conservative fiscal policy. It is widely believed that economic prosperity is correlated to fiscal stability. A rich state history illustrates how and why this attitude is so strongly held. When South Carolina first became a state, government was dominated by conservative businessmen who believed that credit worthiness was a sign of economic health. Transferring their business principles to the running of the state, they chose to do without when revenues were scarce rather than risking any attack on the state's credit rating.

Events following the Civil War left a bitter memory and solidified future generations in the adherence to traditional fiscal ways. According to Scott (1893) and Wallace (1951), carpetbag governors borrowed against the future, issuing large amounts in bonds to pay for reconstruction projects; however, they and their friends pocketed the proceeds and left the state with exorbitant obligations. After the carpetbaggers were eventually voted out of office in 1876, the legislature was forced to repudiate much of the debt, an act necessary to relieve the state from an unbearable financial burden, but also one which discredited the state in financial circles and wrecked its economy.

Vowing never to allow the state to be humbled financially again, delegates to a constitutional convention in 1895 rewrote the state constitution to limit the ability of the state and its political subdivisions to incur bonded indebtedness. Before the state could issue any bonds, two-thirds of the qualified electors of the state were now required to vote in favor of any increase in the debt or obligation of the state after the same proposal was first approved by the legislature.

During the twentieth century, the legislature has continuously defended the state's credit rating, viewing it as a barometer of the economic health of the state as well as a badge of honor. An example of the state's reluctance to increase borrowing in difficult times is given in Workman's biography of Edgar Brown, who was chair of the Senate Finance Committee for over 30 years. In 1933, in the midst of the depression, teachers were being paid in script because the state could not raise sufficient funds to pay its debts. To help resolve the problem, the legislature voted to reduce teachers' salaries. According to Brown, "We couldn't borrow money and we lived within our means. Say what you will, think what you

may—if we hadn't tightened our belts, the state would have been wrecked" (Workman, 1963, p. 28)

Reflecting on the legacy of reconstruction and the relationship of the legislature to the state's bonded debt, Brown also said,

The inadequacy of our schools was caused by our inability to pay for better schools. We were poor; we were bedraggled. We were still bonded to the hilt by the bonds that the scalawags and carpetbaggers had foisted on us. We carried those bonds along, paying off in property taxes, and we never did default on any of our bonds, even though we knew that at times the carpetbaggers and scalawags had spent the money for liquor, forms of entertainment—and had spent as much as \$4,000 for copper spittoons to put in the Senate House. (Workman, 1963, p. 32)

Today South Carolina maintains Best's highest "Aaa" bond rating, a measure of the legislature's fiscal prowess.

SECTION III: STATE RESPONSES TO PREVIOUS EMERGENCIES

A state's disaster response is highly dependent on its preparation and experience. In the decades prior to Hurricane Hugo, South Carolina was fortunate to escape major natural disasters and the need to mount a massive response. Since 1968, only two emergencies, the 1968 "Orangeburg massacre" and the 1984 tornadoes and thunderstorms, were serious enough to have engendered actions that can be considered precursors of post-Hugo actions.

The Orangeburg Massacre

During the 1960s, South Carolina remained relatively immune from civil rights-related violence that other states experienced. The state, however, did experience one major incident that led to the killing of three black students on the South Carolina State campus located in Orangeburg on February 8, 1968. According to Nelson and Bass (1970), the owner of a local bowling alley refused to allow black students to use his facilities. In response, the students protested, holding demonstrations to demand integration. To quell a potential riot, Governor Robert McNair sent in state highway patrolmen trained in riot control to support local police. On the night of February 8, students were gathered on campus while police, with loaded weapons, were stationed around the perimeter to prevent an outbreak of student violence. As

evidence later showed, some police felt provoked and fired on an unarmed crowd, killing three and wounding 27.

The actions of Governor McNair reflect both the statutory powers of the governor and his motivations. When initially informed by local officials that state police might be needed because of a potential civil riot, the governor responded by sending in trained riot control officers under the personal supervision of the Chief of the State Law Enforcement Division (SLED), the state's top law enforcement officer. Although black leaders throughout the state were contacted and asked to intervene with the students, there seems to have been no attempt by the governor to defuse the situation by meeting with black student leaders or creating a commission to investigate the reasons behind the confrontation and arrive at a peaceful solution. Instead, the governor's actions seemed directed at maintaining law and order through a show of force.

Following the massacre, no official investigation was conducted by the governor. However, according to Nelson and Bass (1970), communications breakdowns among state officials were cited as principal reasons for the failure to keep order. At the top of the state hierarchy, the governor's decision to remain in Columbia kept him too far from a fast-changing event to keep an accurate picture of what was occurring. On the scene of the incident, there was a breakdown in command when top police officials gave orders authorizing individual police officers to shoot if they felt in danger. Nelson and Bass imply that the state leaders concluded that future incidents would be prevented with improved riot control techniques resulting from the implementation of unspecified changes in communications protocol and the purchase of up-to-date communications hardware systems.

The state legislature was not asked by Governor McNair to participate in either the determination or the implementation of the state's handling of this event. In the aftermath of the tragedy, the state legislature, like the governor, did not conduct a formal investigation. Furthermore, no new laws were passed as a consequence of the tragedy.

The 1984 Tornadoes

The only natural weather event severe enough to become a presidentially declared disaster was a series of tornadoes and thunderstorms that struck on March 28, 1984 and laid

waste to portions of many upcountry counties, notably Abbeville, Fairfield, Marlboro, and Newberry. In accordance with state statutes, Governor Richard Riley coordinated the state response with the assistance of the Emergency Preparedness Division (EPD). An *After Action Report* prepared by the EPD (1984) recorded that the state emergency operations plan was successfully implemented by coordinated federal, state, and local agencies. According to the report, the recovery process was evaluated as being very acceptable; however, to improve future disaster responses, EPD recommended that communication systems in the major state response agencies be improved to function in the event of disruptions to normal power and telephone services, that the Budget and Control Board (BCB) have authorization to draw on other agencies to handle the assistance program, and that workshops be held concerning the roles of state agencies under a presidential declaration of disaster.

None of the EPD recommendations required state legislative action or approval. Like the response following the Orangeburg massacre, the state legislature did not initiate nor did it pass any legislation to mitigate future disasters.

Past Actions: Conclusions

Experiences at Orangeburg and with the 1984 tornadoes indicate that, in the face of emergencies or disasters, South Carolina governors acted primarily to maintain or restore order in strict adherence to their statutory powers. The state legislature, in both cases, did not encroach on the powers of the governor to conduct the state's emergency response and did not consider or pass legislation that might improve the state's ability to respond or to reduce the seriousness of future emergencies.

SECTION IV: GOVERNOR CAMPBELL AND HURRICANE HUGO

At the time of Hurricane Hugo, the state had not responded to a severe emergency for over seven years, and the current governor, Carroll Campbell, had not participated in the management of a major state disaster response. The only expertise in the state in managing a disaster response, as well as the state's institutional memory, resided in EPD.

Managing the Immediate Recovery

The *After Action Report* prepared by the Office of the Governor (1989) reports that 16 days prior to Hurricane Hugo, the governor's Chief of Staff (Warren Tompkins), his Senior Executive Assistant for Finance and Administration (Fred Carter), the Director of Public Safety (Stan McKinney), staff from EPD, and other emergency response officials began to meet regarding Tropical Storm Gabriel. In the next two weeks, Gabriel had passed without incident, but Hurricane Hugo began to threaten the state. Without mentioning why, the *After Action Report* tersely notes that three days prior to Hugo only those officials who reported directly to the governor (Tompkins, Carter, and McKinney) met "to review the state's emergency management procedures" (Office of the Governor, 1989, p. 3).

On September 22, 1989, the day Hurricane Hugo made landfall, President Bush signed a Declaration of Disaster at the request of Governor Campbell permitting Governor Campbell and his staff to implement their plan for the state's recovery. They concentrated their efforts on the immediate needs of the state. To receive federal assistance, the governor signed a standard agreement with the Federal Emergency Management Agency (FEMA) on behalf of the state. Included were provisions stating that, as a condition of taking federal loans or grants, the state "shall evaluate the natural hazards in the area in which the grants or loans are to be used and shall take appropriate actions to mitigate such hazards," and that "(t)he State understands that future Federal disaster assistance may be curtailed in situations where hazard mitigation plans have not been implemented properly."

As part of the State-FEMA agreement, the governor named Paul R. Lunsford, Director, EPD, as the Governor's Authorized Representative (GAR) to execute all necessary documents for disaster assistance on behalf of the state and also named him as the State Hazard Mitigation Coordinator. In support of Lunsford, the governor named Stitt M. Wolfe, Operations Manager, EPD, as Alternate GAR.

To coordinate activities between the governor's office and FEMA, Stan McKinney was named State Coordinating Officer (SCO) and Fred Carter was named Alternate SCO. The choice of these four men to spearhead the state's response reflected the fact that EPD was the state agency charged with disaster preparation and response, Stan McKinney had represented the governor's office in pre-Hugo disaster drills with FEMA, and Fred Carter was a

prominent member of the governor's staff given the task to oversee the state's recovery efforts.

From the start of the recovery, the governor relied almost exclusively on Carter and McKinney to manage the recovery process and relegated Lunsford and Wolfe to relatively minor duties. Because there is no clear chain of command linking the governor to members of the Adjutant General's staff, the choice not to involve EPD officials fully in the management of the recovery avoided turf battles, streamlined the decision process, and concentrated control over recovery decisions. At the same time, this decision denied the state the full measure of expertise at EPD, including the smooth implementation of disaster recovery plans already worked out with local emergency response officials (Rubin and Popkin, 1990). Due to his position in the governor's office, Fred Carter made most of the executive and policy decisions in consultation with Governor Campbell and Warren Tompkins. Stan McKinney was assigned to the North Charleston disaster field office where he took charge of the day-to-day recovery operations.

EPD's formal role in the management process officially ended on November 20th when the governor amended the State-FEMA agreement by replacing Lunsford as GAR and Wolfe as Alternate GAR with two additional members of his staff, John R. Cates, Jr. and Abraham S. Khalil.

From the accounts of many of those interviewed for this study, the consensus seems to be that the governor and his staff did an outstanding job managing the immediate post-Hugo recovery, especially when one considers how ill-prepared they were for such an event. However, the question remains whether the state used its most knowledgeable employees at EPD effectively and efficiently in the planning and the coordinating of the recovery process. In an independent analysis of the state disaster recovery, Rubin and Popkin (1990) reported that local emergency response officials were confused when attempting to implement established procedures with EPD and being simultaneously asked to work through the governor's command staff. The researchers concluded that the existence of two command networks led to "serious coordination problems and conflicts . . . between county and municipal emergency managers and political executives" (Rubin and Popkin, 1990, p. 17).

Managing the Long-Term Recovery

Partially due to federal requirements that placed the governor in charge of the state's disaster response and partially due to the governor's desire to assert his power over the General Assembly, the state's long-term plans were established by the governor and panels created by him.

The Interagency Hazard Mitigation Team Report

The first attempt to evaluate the state's long-term recovery and related mitigation strategy came when the federally required *Interagency Hazard Mitigation Team Report* was being written. This document, an outline of mitigation goals and recommended solutions, was jointly prepared by state and federal agency representatives. As was the short-term recovery plan, the contents of this report were heavily influenced by the governor's office and had little direct input from EPD; Paul Lunsford was not even credited as a contributor.

The *Interagency Report*, released in December 1989, listed six general issues and 42 specific recommendations. First, the report noted that the state and county Emergency Operations Centers (EOCs) were not constructed for or equipped to meet the demands of a major disaster. Recommended were the creation of adequate facilities to accommodate their needs, a process to develop necessary standard operating procedures, and a training program to "insure that personnel can carry out assigned responsibilities" (Region IV Interagency Hazard Mitigation Team, 1989, p. 11).

Second, the report found that communications between the state and local governments were not effective either because they were disconnected or necessary equipment was not available. Recommended were the creation of a comprehensive communications plan and the purchase and installation of required equipment.

Third, the report noted that the loss of power affected critical infrastructure, facilities, and transportation systems. Recommended were the detailed identification of critical facilities and power needs so power companies and state agencies could develop statewide plans to direct resources according to priority.

Fourth, the report noted the damage done to the beach and dune system as well as buildings and other structures. Recommended were the restoration of beaches, stabilization of

dunes, debris removal and development and implementation of plans to rebuild that would take National Flood Insurance Program (NFIP) updated standards into account.

Fifth, the report noted that there is no mandatory statewide building code in South Carolina. Recommended was the passage by the General Assembly of a mandatory statewide building code incorporating mandatory seismic design provisions. The report also recommended the state adopt improved building standards for coastal construction and mobile homes that comply with NFIP design requirements.

Finally, the report recommended that key state agencies participate in the development and implementation of the required state postdisaster Section 409 *Hazard Mitigation Plan* due 180 days after the event. The *Interagency Report* noted that the EPD should be the lead agency because the state Hazard Mitigation Officer responsible for the production of this report along with FEMA officials is a budgeted EPD position. As part of the long-term mitigation process, the report also recommended that the legislature enact statewide mandatory stormwater management to protect against riverine flooding.

Overall, the interagency report included discussions of problems that could be resolved by the incorporation of official studies, emergency response procedures, and the purchase of recommended communications systems. Except for the support of two legislative initiatives, both of which had been introduced in the legislature prior to Hugo, the recommendations could be implemented without the involvement of or the approval by the General Assembly.

The Governor and the General Assembly

Throughout the recovery process, the governor kept the General Assembly out of the policy-making process. The Democrat-dominated General Assembly had adjourned in June and was not scheduled to reconvene until January 1990. According to the state constitution, only the governor can call a special session of the legislature. State Senator Isadore Lourie, a leading Democrat, petitioned the Republican governor approximately a week after the hurricane to call a special session. However, according to the *After Action Report* (Office of the Governor, 1989, p. 12), the governor replied on October 4 "that it was too early to determine if there was a need to call a special session." No other written request was sent to the governor, and no special session was called.

The lack of legislative participation in the disaster recovery plans was apparent in the drafting of the *Interagency Report*. No state legislators formally participated, and none were mentioned in the list of contributors.

When the General Assembly finally convened in January 1990, for its annual session, a bipartisan group of senators drafted legislation to create a blue ribbon committee to investigate the recovery process and make recommendations for improvements. However, before they were able to generate sufficient support from their colleagues or formally introduce a bill to establish the committee, their effort was pre-empted by independent actions of Governor Campbell. On January 17th, by executive order, the governor established the Governor's Emergency Management Review Panel consisting of 15 local, state, and national authorities to "review state and local responses and plans for natural and man-made [sic] disasters" and prepare a report by June 1, 1990. The announcement was made at the state-of-the-state address to the General Assembly and broadcast to the public on radio and television.

The Governor's Emergency Management Review Panel

According to Executive Order 90-04, January 17, 1990, the governor established a select panel to complete "a comprehensive and effective review of emergency management procedures and programs . . . so that future operations and programs will benefit when other disasters occur." The governor selected Warren Tompkins and Fred Carter to represent the Office of the Governor, and appointed Tompkins as panel chair. No member of the General Assembly was named to the panel.

Because the people in charge of the review were the same as those being reviewed, the panel and its output cannot be considered impartial. Well recognized government auditing standards require independence of all reviewers, including those involved in performance reviews. One of the general standards of government auditing established by the Comptroller General of the United States (GAO, 1988, pp. 3-4 to 3-5) specifies (in bold print) that "In all matters relating to audit work, the audit organization and the individual auditors, whether government or public, should be free from personal and external impairments to independence, should be organizationally independent, and should maintain an independent

attitude and appearance." Personal impairments include "Official . . . relationships that might cause the auditor to limit the extent of the inquiry, to limit disclosure, or to weaken or slant audit findings in any way" (GAO, 1988, pp. 3-6). If internal auditors are to be used, they "should also be sufficiently removed from political pressures to ensure that they can conduct their audits objectively and can report their findings, opinions, and conclusions objectively without fear of political repercussion" (GAO, 1988, pp. 3-8 to 3-9).

Even the mere hint of impropriety should be avoided. As Steinberg and Austern (1990) argue, all potentially unethical situations should be avoided by public officials because a conclusion can be drawn by outsiders, either warranted or unwarranted, that the practice of government is not being conducted efficiently, effectively, or ethically.

The due date of the panel's final report was set six days prior to the mandatory adjournment of the General Assembly. If the governor intentionally wanted to prevent an investigation of his handling of the state's recovery and the possibility of a controversy emerging (the Governor was up for reelection in 1990), he could not have done a better job of defusing the situation and avoiding General Assembly scrutiny than by initiating his own investigation and then selecting Tompkins and Carter to conduct the review.

Before issuing its final report, subcommittees of the review panel met several times to take testimony from concerned citizens and technical experts prescreened by the panel staff. Because no official minutes of these meetings were kept, it is difficult to say what inputs the panel received, what types of discussion took place, and what, if any, recommendations were presented to and then rejected by the panel. As a review of the recovery process, the final report (issued in July after the General Assembly adjourned) was not much of a document. Rubin and Popkin (1990, p. 47) commented that "since the task force was operating in an election year, the recommended changes were modest." The review panel's report did not mention the actions of the governor and his staff or present an in-depth analysis of any topic. Problems that were mentioned appeared to be those for which simple noncontroversial solutions could be found. In terms of content, the report often reiterated and sometimes paraphrased the conclusions and recommendations made in the *Interagency Report* produced seven months earlier.

In a May 30 review panel meeting in which the panel presented its findings to the governor, chair Warren Tompkins said the focus of the report was not to dwell on what went wrong because "a lot went right." First he, and then Governor Campbell, emphasized that the state did a superior job for the most part, but there were some problems that needed attention. The most serious problems could be divided into three categories: 1) communications, 2) understanding and relating to FEMA, and 3) varying levels of competence in county and state agencies. Tompkins and the governor emphasized that what was needed by the state was an improved, coordinated communication system; increased understanding of the roles of the state and FEMA, so that intergovernmental operations would work more smoothly next time; and training so that critical local and state staff attain a minimum level of competence.

Although Hurricane Hugo was magnitudes larger than the 1984 tornado disaster, involved more agencies, affected more individuals and businesses, and precipitated more damage, the 1984 *After Action Report* and the 1990 review panel report (Governor's Emergency Management Review Panel, 1990) contained remarkably similar recommendations. What had the state done since 1984 to improve its ability to respond to major disasters? The review panel did not address this question.

Despite Tompkins' comments to the contrary, the limited and benign content of the final report seems to indicate that the outside experts appointed to the governor's panel were guided through the review by the governor's staff and not given the opportunity to conduct an impartial investigation of the recovery process or to make independent judgments that could be incorporated into the panel's findings and recommendations. The limited time that outside experts could spend on their review panel duties seems to have also contributed to the lack of an in-depth probe.

The failure of the review panel to fully address how South Carolina handled the Hugo recovery may make the state vulnerable to a major disaster in the future. The expertise gained by the governor and his staff will be lost to the state when the present governor and his staff are replaced by the next governor. A critical omission of the review panel was not to investigate and publish judgments in their final report concerning the relationship between the governor's office and EPD. Many questions remain unanswered. Why did the governor

take total charge of the recovery and not allow EPD to participate in the formulation of executive decisions? Where should EPD be located in the state government for it to be most effective? Should those in charge of recovery be permanent civil servants or temporary staff reporting to the governor? An unrelated state commission created by the governor to make recommendations to modernize state government (Executive Order 91-07, March 6, 1991) recommended that EPD be placed in the Office of the Governor but gave no explanation for its conclusion (South Carolina Commission on Government Restructuring, 1991).

In addition to the relationship between the governor and EPD, the review panel failed to report on the role of the General Assembly or the Budget and Control Board in the recovery process. Again, many questions remain unanswered. Why did the governor refuse to call a special session of the General Assembly? Why did the legislature not take any part in the review panel? Why did no members of the General Assembly give testimony at any of the review panel hearings? What could the General Assembly do to improve the recovery process? Because state funding and the securing of federal monies are integral parts of any disaster response, the role of the Budget and Control Board in the recovery process could have been questioned, as it was in the aftermath of the 1984 tornadoes (but apparently not answered).

The State Hazard Mitigation Plan

The reluctance of the governor to permit anyone in EPD to hold a leadership position in the decision-making process continued after the critical initial phase of recovery ended. The federally required Section 409 *Hazard Mitigation Plan* was written under the auspices of Governor Campbell, who lobbied successfully to have FEMA fund the position of the State Hazard Mitigation Officer position under Stan McKinney. This was an important decision because the Hazard Mitigation Officer is responsible for working with FEMA to develop the hazard mitigation plan.

Under statute, the position of Hazard Mitigation Officer was located in EPD. At the start of the recovery, the position was unfilled. Several weeks went by before Glen Jennings was named to that position. Jennings participated in the drafting of the *Interagency Report*, but shortly afterwards, was removed from the job. Instead of finding a replacement for Jennings

within EPD, the governor used the opportunity to ask FEMA for permission to fund the position under Stan McKinney.

In March 1990, Frans Coetzee, then a logistics officer in the Marines, was named as the state's Hazard Mitigation Officer. Delays due to the severity of the event and the time taken to hire Coetzee caused a postponement in the delivery of the *Hazard Mitigation Plan* until September 1990.

To produce a meaningful report, the governor formed a panel of experts from the public and private sectors, the South Carolina Council for Multi-Hazard Mitigation, to assist Coetzee. Among the members were Fred Carter and Stan McKinney from the governor's office and four EPD representatives including Paul Lunsford. They were tasked with producing the first comprehensive mitigation program for South Carolina.

Subcommittees of the council defined and evaluated 10 hazards facing the state: beach erosion; dam failure; drought/dry spell; earthquake; flooding; forest fire; hurricane; summer storm; tornado; and winter storm. For each hazard, they assessed the state's vulnerability, its capability to respond, and then made proposals to mitigate the dangers. Their efforts were published in the *Hazard Mitigation Plan* (Office of the Governor, 1992).

The state's first hazard mitigation plan had limited goals. It was intended to be the initial step in a long-term process "to establish the foundation for the subsequent implementation of a comprehensive mitigation program" (Office of the Governor, 1992). To promote the implementation of mitigation, it supported *effective* mitigation defined as "common sense measures" acceptable to the people of South Carolina that could be implemented quickly by state agencies and local governments with little or no involvement of the General Assembly. The plan provided the state with its first comprehensive evaluation of its hazard risks and a few simple, straightforward solutions to get the mitigation process going.

The multihazard plan built on the findings and recommendations of the interagency team report and the emergency management review panel's report that preceded it. Issues were analyzed in more detail and accompanied by the recommended implementation of short-term fixes—mostly training programs, emergency plans, and official studies to evaluate alternative mitigation measures to resolve technical questions. Like its predecessors, the multihazard plan recommended the passage of a statewide building code.

Funding the Recovery and the Hazard Mitigation Plan

Section 406 of the Stafford Act prescribes that the federal government and the state share in the costs to repair, restore, and replace damaged public structures. The law requires that the federal government pay at least 75% of the total public assistance costs. In most states, including California following the Loma Prieta earthquake in October 1989, the state agrees to pay its maximum 25% share. In addition to these costs, in accordance with Section 404 of the Stafford Act, the federal government may contribute up to 50% of the cost of hazard mitigation measures determined to be cost-effective, up to a ceiling of 10% of the public assistance grants made under Section 406.

In South Carolina, Governor Campbell negotiated an agreement with the federal government to keep the state government's financial contribution to the recovery effort to a minimum. Being a close personal friend of President Bush, the governor was able to get the normal federal-state cost sharing provisions modified. In Amendment Number 1 to the State-FEMA agreement, the federal government authorized that the federal share be 75% of eligible public assistance costs up to \$10 per capita, and 100% when the \$10 per capita ceiling was exceeded. Thus, the state had its share capped at \$8.25 million dollars (calculated at 3.3 million people x \$10 per capita x 25%). On January 15, 1991, the Budget and Control Board (BCB, 1991) reported that the federal government had provided \$259.3 million or 97% of the public assistance funds distributed in South Carolina. The governor's actions saved the state just under \$60 million had the state agreed to the normal 75-25 federal-state cost-sharing arrangement. (The formula used in South Carolina was originally developed to assist West Virginia a few years earlier to recover from serious floods and was recently employed to determine Florida's share of public assistance following Hurricane Andrew.)

In addition to the public assistance funds, FEMA agreed to contribute \$10 million for mitigation if the state would contribute matching funds. To generate these funds as well as funds for other Hugo-related needs, including the state's share of grants provided for individual assistance (approximately \$25 million) the governor supported a state bond issue for approximately \$40 million. The General Assembly, at the insistence of Representative McLellan, Chair of the House Ways and Means Committee, refused to go along, ostensibly because the state could not afford the additional debt service. Without these funds, the

governor had few options open to him; no one, including the governor, openly supported a tax increase. He chose to pass the financial obligation for the state's share of the mitigation funds on to those specific state agencies and communities that would directly benefit from the mitigation efforts. Although this added an additional burden to communities badly affected by Hugo, the governor's decision at least did not deprive these communities of the opportunity to support projects they favored.

Implementation of the Plans

Although much time and energy were spent in forming panels, generating reports and recommendations, and building expectations that the state would begin to implement mitigation projects, very little actual implementation seems to have happened. According to a single published analysis of the state's economic recovery from the hurricane (commonly called the Fontaine report after the company that prepared it for the state), in the year following Hugo, after the initial clean-up and repairs were completed, "the perception of many is that the Hugo recovery is complete and was almost totally successful" (Office of the Governor, Division of Intergovernmental Relations, 1991, p. 40).

Since the governor let local communities and state agencies submit proposals to receive hazard mitigation grants, FEMA has received 50 project applications as of December 9, 1992 (FEMA, 1992). The vast majority of the 34 approved projects were either proposals to develop local beach management plans (7) or proposals to purchase and install emergency power generators (18). Of the approved projects, only six have been completed—five beach management plans and one beach renourishment. In terms of hazard mitigation goals specified in the Stafford Act, the set of proposals submitted to FEMA seem to represent marginal mitigation activities, probably because local communities concentrated on improving their basically weak preparedness.

Today (or at least up to the time a draft of this report was leaked to the *Columbia State* newspaper in January, 1993), Hurricane Hugo is old news in South Carolina. If individual agencies or communities implemented mitigation projects on their own, only they know about them. The state has not conducted a survey to determine the impact of the *Multi-Hazard Mitigation Plan*. The lack of state follow-up and the limited number of isolated mitigation

projects submitted to and approved by FEMA indicate that the state as a whole has not dramatically improved its ability to mitigate potential future damages from natural disasters and will be in a similar position to what it was in before Hugo when the next disaster strikes.

Conclusions

The actions of Governor Campbell and his staff in response to Hurricane Hugo were reminiscent of those of previous administrations to earlier emergencies. The governor took control of both the short-run recovery process and the long-term mitigation planning and used his powers to limit the participation of the EPD and to exclude the participation of the General Assembly.

As a consequence of the governor's choice to go it alone, proposed mitigation to prepare South Carolina for the next disaster was limited to recommendations that could be implemented easily and did not require legislative approval. There has been no systematic follow-up to determine the degree of implementation, and although it seems insignificant, there is unfortunately no way at this time to establish how much more prepared South Carolina will be when the next disaster strikes.

Financially, despite the \$6 billion loss suffered by the state, the governor managed to keep the state share of the recovery funds to a bare minimum, including a scant \$8 million for public assistance. This sends three conflicting messages to the people of the state. First, on the one hand, the governor served the short-term interests of the state by reducing its financial burden. Second, on the other hand, the governor's actions can be interpreted as implying that the state cannot be relied upon to be a major financial contributor in a recovery effort. Third, if the federal government was so willing to let the state off the hook for its share of the recovery, the people will expect similar treatment after the next disaster. This may create a false sense of security for the people if the next president demands that victims pay their fair share of the recovery and establish elaborate mitigation efforts that limit future losses, both goals of the present federal disaster recovery laws.

From a national perspective, the willingness of the federal government to provide disaster assistance that limits financial obligations of states undermines the states' obligation to initiate actions aimed at reducing damages from future natural hazards. As noted by

Kunreuther (1973), the GAO (1980), and Mittler (1992), exceedingly generous federal grants are fiscally irresponsible because they do not encourage mitigation, and, therefore, represent poor public policy.

SECTION V: THE GENERAL ASSEMBLY AND HURRICANE HUGO

According to several political theorists (Cohen et al., 1972; Kingdon, 1984; and Alesch and Petak, 1986), an event the size of Hurricane Hugo should have been sufficient to cause the state legislature to place mitigation issues on the front burner of its agenda. The magnitude of losses and the concerns of the general public made it appear that a window of opportunity had been opened for supporters of legislation to gain a favorable hearing. In this section, what the General Assembly actually did is reported and then compared to what theories would predict.

Actions in the General Assembly Before Hurricane Hugo

Because of the difficulty of getting controversial new programs accepted and approved by the General Assembly, most new ideas must be introduced in several consecutive two-year sessions before passage becomes feasible. The rules and procedures of the Senate and House described earlier force proponents into combat with defenders of the status quo, whom they must overcome before even the thought of enactment can be taken seriously. Success, if it comes, generally is due to the patience, perseverance, and persuasiveness of a bill's supporters and their ability to get re-elected so bills can be reintroduced in subsequent sessions. Some members of the legislature will oppose a bill merely because they believe it has not been around long enough for full consideration to have occurred, and again, it only takes one well-placed member to enforce delay.

During the first session of the 108th South Carolina General Assembly beginning January 10, 1989, without fanfare, two radical ideas with the potential to increase the state's ability to protect its citizens and structures from natural disasters had been placed before the legislature. On March 1, Senator Glenn McConnell introduced S. 460 mandating a statewide building code, and on March 9, Representatives David Wright and Roland Corning introduced H. 3661, "The Stormwater Management and Sediment Reduction Act," to control

riverine flooding and runoff from storms in the state. In addition to these bills, but potentially having the opposite effect, Senator James Waddell and others introduced S. 391 on February 16 to modify the recently implemented 1988 Beachfront Management Act. According to the South Carolina Coastal Council, this bill, if enacted, would gut one of the strongest coastal protection acts in the United States.

Mandatory Statewide Building Codes

S. 460 was the result of a decade-long citizens' effort to protect the state from earthquake hazards. During the 1980s, engineers and scientists had made great strides in understanding the earthquake risk in South Carolina and the southeastern United States. Under the leadership of Charles Lindbergh, Professor of Civil Engineering at The Citadel, they had determined that mitigation measures such as building codes needed to be improved, adopted, and implemented for structures to withstand potential earthquake shaking (SCSSC, 1986).

During the mid-1980s, Lindbergh, Gary Wiggins, Director of the South Carolina Building Codes Council, and others came to the conclusion that the lack of a mandatory uniform building code in the state created seriously inadequate building practices and standards, "placing the health, safety, and welfare of the public at unnecessary and unacceptable risk" (Lindbergh, 1988, p. 1). They formed Citizens and Organizations for Minimum Building Standards (COMBS) in 1987 to advocate the adoption of statewide mandatory building codes.

After securing the support of professional associations and public agencies such as the Homebuilders Association of South Carolina, the South Carolina Building Codes Council, the Carolinas Branch of the Associated General Contractors of America, and the South Carolina Coastal Council, COMBS produced a booklet explaining the building code problem and what could be done to resolve it, including draft legislation to establish a mandatory statewide building code (Lindbergh, 1988). Armed with this document, Lindbergh and other members of COMBS met with Senator McConnell in 1988 to persuade him that building codes were necessary throughout the state and to enlist his support to sponsor the legislation. Following

several meetings, Senator McConnell found their arguments compelling and agreed to champion their cause.

S. 460 was an improved version of draft legislation included in the COMBS document. After it was introduced, the building code bill was referred to the Judiciary Committee, where Senator McConnell was the ranking Republican and sixth most senior member. Typical of most controversial bills, Senator McConnell had no intention of pursuing this legislation during the 1989 session. However, the bill's introduction was important to demonstrate the existence of the issue on the legislative calendar and to notify others of his interest in pursuing the issue at a later date.

Shortly after the introduction of S. 460, Representative Ralph Davenport was enlisted to introduce companion legislation in the House. On March 13, H. 3675 was formally introduced. The House version contained an additional section, inadvertently omitted from S. 460, which required the certification of all building inspectors. It was referred to the Labor, Commerce, and Industry (LCI) Committee, where Ralph Davenport was not a member. If proponents of the bill had intended to actively pursue legislation during the 108th General Assembly, this referral was not a good outcome; management of a bill is difficult when its author is not part of the committee deliberating the issue.

Stormwater Management

On Labor Day, 1987, twelve inches of rain fell in five hours in the city of Irmo (a suburb of Columbia) and the surrounding area. Two days later four to five inches of more rain fell. During that period, Irmo was deluged with several feet of water caused by the unexpected runoff of water from upstream areas. Representative David Wright was mayor of Irmo when the rain and floods came. This experience led him to investigate what could be done to prevent similar occurrences.

Following his election to the House in November 1988, Representative Wright began working with the South Carolina Land Resources Conservation Commission to develop legislation that would create an effective stormwater management program protecting all parts of the state from flooding caused by actions in other parts of the state. When subdivisions are constructed, for example, water runoff patterns change and increase the

flood potential of downstream communities unless the subdivision and local jurisdiction in which it was constructed develop adequate flood drainage systems to prevent such occurrences. The regional nature of this problem and the lack of multicounty jurisdictions have led several flood-prone states, including Pennsylvania, Maryland, and New Jersey, to enact state-mandated programs.

Representatives Wright and Corning introduced H. 3661 to mandate the creation of county sediment control programs and to direct the South Carolina Land Resources Conservation Commission to promulgate regulations. The bill was referred to the Committee on Agriculture and Natural Resources. Neither Wright nor Corning was a member of this committee.

A companion bill, S. 513, was introduced in the Senate by Senator Joe Wilson and six co-sponsors on March 14, 1989. It was referred to the Senate Committee on Agriculture and Natural Resources where three co-sponsors, Senators Lourie, Rose, and Setzler, were members.

When Representative Wright introduced this legislation, he also had no intention of actively pursuing passage of the bill in either the 1989 or the 1990 legislative sessions. Introduction of the bill allowed the clock to start running and provided a platform to discuss details with potential supporters and opponents in order to develop changes that could be incorporated into a new version introduced during the 1991 session, when Representative Wright would begin more active campaigning on its behalf. Because he was a freshman legislator, Representative Wright believed he needed the initial two-year period to establish himself in the House and gather enough momentum to carry the full General Assembly after his re-election.

Amendments to the Beachfront Management Act

The Beachfront Management Act was a major piece of legislation introduced and enacted in 1988. The state, through the South Carolina Coastal Commission, was given powers to regulate construction along the coast. Since the Home Rule Act thirteen years earlier, the General Assembly had just once explicitly given a state agency power over local jurisdictions. The Education Improvement Act of 1984 authorized the State Superintendent of

Education to intervene and operate a local school district after the State Board of Education ruled the quality of education in that school district was impaired.

Just months after the passage of the Beachfront Management Act, several conservative senators led by Senator Waddell, chair of the powerful Judiciary Committee, had second thoughts about what the last General Assembly had done. Influential lobbyists and constituents helped convince the bill's sponsors that the Beachfront Management Act may have gone too far. S. 391 was introduced to amend the act, essentially removing the power of the Coastal Council to restrict or prohibit construction of structures along the beachfront, or, in other words, to increase development opportunities and reduce potential liabilities if courts determined that the state should reimburse landowners for "taking" their properties.

During the 1989 legislative session, S. 391 survived a major battle. After being favorably reported out of the Agriculture and Natural Resources Committee with amendments, it was objected to and placed on the contested calendar. Later, through special order, it was sent to the floor of the Senate for second and third readings, eventually surviving extensive debates. Near the end of the session, it was sent to the House for their consideration, where it was referred to its Agriculture and Natural Resources Committee on June 1, 1989. The session ended before the House could act on the bill.

Actions of the General Assembly Immediately After Hurricane Hugo

When Hurricane Hugo struck on September 22, 1989, the General Assembly was not in session and was not scheduled to reconvene until January 9, 1990. As mentioned earlier, Senator Lourie asked Governor Campbell to call a special session of the legislature, but the governor refused. Thus, there was no organized legislative response to the disaster.

Legislators who wished to respond proactively to Hurricane Hugo had two options. First, they could write and prefile bills that would be introduced at the start of the next legislative session. Ten bills were prefiled, four in the House and six in the Senate. (These are discussed later with hurricane-related bills introduced after the session convened.) Second, they could hold hearings on bills that were held over from the last session. An ad hoc subcommittee of the Judiciary Committee chaired by Senator McConnell and including Senators Hayes, Mitchell, Lee, and Stilwell was formed to hear testimony on S. 460. Senator

McConnell believed that the time was right for the passage of a statewide building code, and he called a hearing for October 18, 1989.

Hearing on Mandatory Statewide Building Codes

Although the aftermath of Hugo may have looked like a window of opportunity for a major building code initiative, the October hearing belies this conclusion. Most of those who testified or responded in writing supported the general notion of a mandatory statewide building code, but they could not support the original version of S. 460 without amendments. Others were not convinced that the state could intrude on current county home rule prerogatives to determine the extent of building codes within their boundaries. If the hearing proved anything, it demonstrated why proponents of controversial issues generally work behind the scenes for years to negotiate an acceptable piece of legislation before they bring it before the legislature.

Several amendments were agreed to at the hearing, including one which added the mandatory certification of building inspectors that had been included in H. 3675. However, two important political groups, the State Fire Commission and the Association of Counties, had not been won over. The Association of Counties was an especially tough foe, as one of its main purposes was to prevent the enactment of state mandates to local government, especially those that did not provide funds needed for compliance. The association had also gone on record as being opposed to building code legislation almost a year earlier when a proposed bill was being circulated (SCAC, 1989a).

Bob Lyon, Assistant Director and General Counsel of the County Association, testified at the hearing that some counties had previously rejected adopting a standard building code, and that, if passed, counties would have to raise taxes to pay for the code program. In support of this position, he presented evidence showing the costs of building inspection in those counties that had adopted building codes (SCAC, 1989b). The figures indicated that all but Lexington County were unable to generate enough funds from permits to make inspections a self-sufficient operation.

At the end of the hearing, a vote was taken to adopt the bill as amended. The vote was 3-1 in favor. Senator Stilwell sided with the Association of Counties, claiming he opposed a

state mandate and was not willing at this time to have the state impose building codes on counties that chose not to have them. Without a positive vote from him, the bill would certainly not get out of the full committee with a favorable report.

After the hearing ended, the Association of Counties took the opportunity to make its position on S. 460 more widely known. In an article in the *Columbia State* newspaper of December 17, 1989, Mike Cone, Executive Director of the association, was reported as saying that inspections would be expensive, especially in rural counties, and that the state should pay for any and all expenses. Just prior to its annual meeting in December to discuss policy positions and legislative goals for 1990, the County Association reviewed S. 460 in its newsletter and repeated its policy position of opposing the bill (SCAC, 1990). County officials throughout the state were thus alerted to the existence of the bill and the association's policy position and, if they agreed with that position, could support their association by putting pressure on their state representatives to kill the bill.

Opinions of the General Assembly After Hurricane Hugo

Because one Senator or three House members (changed to five in 1991) can kill any bill before the legislature, it is important to know how all individual members feel on critical issues. In December, the *Columbia State* newspaper conducted its annual survey of all members of the General Assembly on 21 issues it thought the legislature would consider in 1990, and the House of Representatives Office of Research conducted its annual survey of House members on 27 issues it thought would be considered in 1990.

In the *Columbia State* survey, state legislators were asked whether they supported or opposed amending the Beachfront Management Act and enacting the mandatory statewide building code. They were not asked to comment on stormwater management. Of the 154 combined responses of the 170 total legislators (46 senators and 124 representatives), 38 strongly supported, 57 moderately supported, 19 moderately opposed, and 10 strongly opposed passing the beachfront management amendments (30 did not know or did not respond). Even more support was shown for the building codes. Here, 48 strongly supported, 69 moderately supported, 24 moderately opposed, and 6 strongly opposed the mandatory codes (7 did not know or did not respond).

In the House Office of Research study, the members were asked what priority they gave to beachfront management as measured on a 5-point scale, 5 being *High* and 1 being *Low*, but they were not specifically asked about building codes or stormwater management. They were, however, asked about "Hurricane Hugo recovery," a term that could be interpreted by some to include building codes. Sixty-six of the 124 members responded to the survey. Of the 27 issues, Hurricane Hugo recovery received the highest number of 5s—46—and ranked second behind health care costs as the highest priority issue. Beachfront management ranked 14th with an equal number of respondents ranking the issue high and low. In a second question, where members were asked to name the top three issues for 1990, Hurricane Hugo recovery came out on top.

As indicated by the *State* survey, there was strong support among legislators for the passage of statewide building codes and the amendments to the Beachfront Management Act. In most states, assuming the poll results were an accurate representation of potential voting behavior, the polls would indicate more than sufficient support to pass both bills by a wide majority, if the bills were put to a vote. However, in South Carolina, the fact that six persons strongly opposed the building codes bill and 10 strongly opposed the beachfront management amendments indicated the bills would have a difficult time.

Actions of the General Assembly in 1990

When it reconvened in January, the General Assembly was ready to take on Hurricane Hugo recovery. The bills mandating statewide building codes and stormwater management, and the amendment to the Beachfront Management Act were already on the docket, and 24 bills prefiled or introduced during the session dealing with specific aspects of the Hugo recovery were available for legislative action. The fate of each is described in turn.

Mandatory Statewide Building Codes

At the start of the 1990 session, the building code bill had widespread support. The major newspapers had endorsed the idea in articles and editorials, the governor spoke in favor of it, and the Interagency Hazard Mitigation Team report urged its adoption. According to the *Columbia State* legislative survey, the majority of legislators also favored passage. To

top off matters, the governor, in his state-of-the-state address, singled out the bill for special consideration and pleaded passionately for its enactment.

While the bill received enthusiastic support from many quarters, it was evident in three subcommittee meetings on the bill, held in January and February, that the enthusiasm was not completely shared by the State Fire Marshal, who supported mandatory building codes in principle but also saw S. 460 as a vehicle to promote his own fire-related agenda. A month of give and take was needed before compromise amendments were drafted and agreed to by the Fire Marshal and the subcommittee.

The Senate hearings on S. 460 were not going as smoothly as supporters envisioned months earlier. At the end of January, to complicate matters, the House Labor, Commerce, and Industry (LCI) Committee sent H. 3675 to its Real Estate Subcommittee chaired by Representative George Bailey for hearings on February 8. Representative Bailey was not familiar with the bill or the discussions going on in Senate hearings, and none of the members of the Real Estate Subcommittee were committed to H. 3675. Representative Davenport, not being a member of the subcommittee, realized that he could not control debate nor could he predict how the subcommittee would treat the bill. He feared that the Fire Marshal, who had not yet come to an agreement with the Senate subcommittee concerning acceptable amendments to S. 460, or others might use this opportunity to persuade the House subcommittee to agree to amendments that the Senate subcommittee disapproved. To prevent that from occurring, Representative Davenport asked that H. 3675 be tabled, thus killing it for the session.

The Senate subcommittee and the Fire Marshal eventually arrived at a mutually acceptable solution. However, as it became obvious the subcommittee may have fashioned a bill that could be supported by the full Judiciary Committee, the Association of Counties stepped in and challenged the constitutionality of S. 460 on the grounds that a state mandate to counties that was not accompanied by an appropriate funding mechanism violated Section 4-9-50 of the South Carolina Code of Laws, which states in part that the State "shall provide sufficient funds for county implementation." From the County Association's point of view, this was a classic bill-killing technique that could at worst delay further deliberations and could at best kill the bill if it was judged unconstitutional.

Senator McConnell took the association's constitutional challenge seriously and on February 22 sent a letter to the Attorney General of the state asking for an opinion and also for a determination that if Section 4-9-50 was violated, whether or not the funding of state mandated building codes should be through the State Appropriation Act. If the Attorney General agreed with the Association of Counties' position, Senator McConnell was ready to drop the bill because, if it was passed, it would be suspended until the state appropriated funds for its implementation through the yearly budgetary process. With many demands on the state treasury, no one could be certain that appropriations would be forthcoming or that the House Ways and Means Committee would report favorably on specific appropriations. (The state constitution states that bills raising revenue shall originate in the House; House Rule 4.4 states that the House cannot consider an appropriations bill until it has been referred to the Ways and Means Committee.)

On March 8, Patricia D. Petway, Assistant Attorney General, sent a reply. She concluded that counties, not the state, would be required to provide funding in the event the building code bill was enacted. Senator McConnell had won a victory, but it proved to have only tactical value. Time was slipping away. Before it could become law, the bill still needed to be heard by the full Judiciary Committee, have second and third readings in the Senate, and then go to the House for their consideration.

The subcommittee met again on April 5th. Problems with the fire codes were satisfactorily resolved, and the Attorney General's response satisfied the subcommittee that the Association of Counties' challenge was without merit. By a 4-0 vote in favor (Senator Mitchell not being present), the subcommittee sent the bill to the Judiciary Committee.

The next hurdle facing S. 460 was the full Judiciary Committee hearing held on April 17. Because the possibility existed that the County Association or one of its members could influence at least one Senator on the committee, Professor Lindbergh and other supporters of the bill conducted a survey of counties and cities with building codes to determine if the costs of administering their building code programs exceeded the revenues generated from permit fees. If this proved true, they would verify evidence presented earlier by the County Association; if not, they would refute important evidence presented by the opposition.

The results of the survey did not corroborate the evidence provided by the Association of Counties. Of the 46 counties, 17 populous ones, representing over 75% of the state's population, had adopted building codes. Building officials in 16 of these 17 counties were contacted for the survey. The results showed that building code programs in 13 of the 16 counties responding to the survey were fully supported by fees. Of the three remaining counties, Spartanburg County reported that a local ordinance prohibited building permit income to exceed 75% of the administrative costs; Lee County believed fees exceeded costs but did not have the figures to back up their conclusion; and Edgefield County did not possess sufficient information to answer the question. Two of the counties, Anderson (revenues of \$207,000 versus a budget of \$151,000) and Greenville (revenues of \$1,400,000 versus a budget of \$800,000), stated that they generated excess revenues. Similarly, of six cities contacted, five reported more revenues than expenses, and the sixth claimed it currently set its fee schedule to cover 80% of the administrative costs but was planning on raising the fees so the operation would become self-sufficient.

In the hearing, after the Association of Counties testified against passage of the bill, Professor Lindbergh presented the results of his survey and then made the point that no one who testified in any of the hearings to date had spoken against building codes; the debate was always focused on other issues. Although he did not realize it at the time, his observation was prophetic. The bill was reported out of committee, but was accompanied by a minority opinion signed by Senator Bryan. In a later interview with him, Senator Bryan stated that he personally favored mandatory building codes but was opposed to this bill at this specific time because the adoption of building codes in Laurens County had become a campaign issue in the county's upcoming June election. As a courtesy to his constituents, he believed strongly that they should have their say without state interference. When asked what he would do next year if the bill was reintroduced, he said no matter what the outcome of the county vote, he would not oppose it. Senator Bryan's opposition killed the Senate bill.

Among the other members of the Judiciary Committee, Senator Stilwell still was not convinced that a mandate was proper, but he was spared putting his name on the minority report when Senator Bryan did. In a conversation with him in June, Senator Stilwell said he

still had the same reservations about the bill and might oppose it if it was reintroduced in the next session.

When H. 3675 was killed by the House Real Estate Subcommittee, the future looked bleak for building code legislation. However, on April 11, Representative Davenport introduced H. 4981, an updated version of S. 460 that incorporated amendments approved by the Senate subcommittee. This time the bill was referred to the Medical, Military, Public and Municipal Affairs Committee where Davenport is a member. Before committee hearings were set, Representative Davenport said that he had negotiated its passage through the committee with the Association of Counties when he agreed to help them get other bills out of this committee in exchange for their support of this bill. On April 25, the bill was favorably reported out of committee and headed to the floor for second reading.

The rapid success of the H. 4981's committee passage buoyed the hopes of the bill's supporters. However, time was fast becoming an insurmountable hurdle. Even if the bill was able to get immediate attention on the House floor, the Senate might refuse to hear it. Legislation sent by the House cannot be accepted by the Senate after May 1 unless two-thirds of the Senate agree to suspend the rules (Senate Rule 49).

Before H. 4981 reached the uncontested calendar for second reading, four members of the House (Representatives Hendricks, McAbee, McLeod, and Smith) objected to the bill and moved it to the contested calendar. Subsequently, Representatives Hendricks and Smith removed their objections. However, after Hendricks removed his, Representative Kirsh objected. Supporters of the bill lobbied each representative to try to get them to remove their objections, but the remaining three stood their ground. Thus, the House version of the building codes bill was killed before it reached the House floor.

To understand the nature of the objections raised by the Representatives McLeod, McAbee, and Kirsh, each was asked individually why he opposed H. 4981. In general, they shared the opinions expressed by the Association of Counties. Specifically, Representative McLeod was the most adamant in his opposition, expressing a dislike for building codes and support for home rule. Representative McAbee was not convinced that mandatory building codes would not impose a cost on counties; he said he favors building codes and would support legislation next year if he was convinced that the permit fees generate more revenue

than administrative cost outlays. Like Representative McLeod, Representative Kirsh strongly supported the position that counties should decide if they want building codes; he thought he would feel the same way next year. Of all the members of the House and Senate who went on record with their opposition to the building codes legislation, Representative McLeod was the only one who claimed that House opposition to state mandates and specifically to this legislation was substantial and predicted that the bill would not be passed if it was reintroduced.

Stormwater Management

While supporters of building code reform acted as if Hurricane Hugo had opened a window of opportunity, Representative Wright disagreed with their assessment and purposefully kept the proposed stormwater management act out of the limelight. Because the bill tried to rectify a number of water-related problems and because it had not been spawned by Hugo, he also did not believe that there was anything to be gained by tying its future to the Hugo bandwagon. After analyzing the situation, Representative Wright concluded that his bill was not yet in the shape needed to withstand legislative scrutiny and would not be so until the South Carolina Land Resources Conservation Commission had developed a procedure that would integrate stormwater management and the existing statewide erosion and sediment reduction program. He ignored the fact that the Interagency Hazard Mitigation Team Report supported quick passage of his bill.

During the 1990 session, the stormwater management bill remained in committee with no action taken in either the Senate or the House. Unlike the building code bill and the beachfront management act amendments, it also attracted no attention.

Amendments to the Beachfront Management Act

Following Hurricane Hugo, approximately 150 badly damaged or destroyed buildings on South Carolina beaches were affected by Beachfront Management Act rules. Depending on their proximity to setback lines, some owners would not be permitted to rebuild and others would be permitted to construct scaled-down replacements. The fate of these structures became the crux of arguments held in the House as the Subcommittee on Agriculture, headed by Representative Lenoir Sturkie, tackled the amendments to the Beachfront Management

Act. The House in general was inclined to retain the strict standards of the current law and not accede to the provisions in the Senate bill.

Instead of battling the Senate, the House could have chosen to do nothing that would kill S. 391. However, Hurricane Hugo pointed out weaknesses that the House felt needed addressing. Moreover, the demands of victims of Hurricane Hugo and the potential liabilities to the state—if courts decided the prevention of rebuilding constituted a taking and therefore required compensation from the state—compelled the House to act. Considering that beachfront homes sell for upwards of \$1 million, if the state had to pay market price for all properties where construction was prohibited, the cost to the state was estimated to be in the tens of millions of dollars, a cost which many fiscally conservative legislators argued the state could not absorb.

As S. 391 was being debated, the subcommittee threw out most of its provisions and substituted more stringent ones of its own. And as the debate continued, clear lines were being drawn between the Senate version of the bill, which represented the interests of developers and fiscal conservatives, and the House version, which represented the interests of advocates of environmental conservation and the public.

The House version of S. 391 was favorably reported out of the Agriculture Committee on April 4, referred to the Ways and Means Committee, and then reported to the floor on April 26. On May 3, one representative objected on the floor of the House to debate on the bill, but his objection was insufficient to stall second reading. The bill was passed on May 8 and returned to the Senate with amendments.

After it failed to concur with House amendments, the Senate asked for a conference committee to work out the differences between the two versions of the bill. Senator McConnell chaired the committee consisting of himself and Senators Hayes and Long and Representatives Sturkie, Bennett, and Barber. The conference committee failed to agree on an acceptable compromise by the time when the General Assembly adjourned on June 7, but the committee was able to finalize its negotiations prior to a special session called by the governor on June 19, when the bill was ratified. S. 391 was the only Senate-originated bill rescued from the contested calendar in 1989 that eventually became law.

The amendments passed by the General Assembly reduced the powers of the Coastal Council to restrict or deny construction on the beach, but not to the extent of the Senate version. The main point was the elimination of the so-called "dead-zone" where no construction was possible. It was replaced by an area subject to stringent restrictions. In this case developers and those concerned about the financial implications of the dead-zone prevailed over the conservationists and those concerned about public welfare.

Hugo-Related Bills Introduced in the 1990 Session

If a policy window opens following disaster, Cohen et al. (1972) and Kingdon (1984) argue that appropriate policies must be available for consideration, otherwise nothing happens. Because natural disasters had been relatively rare in recent years and no legislative committees were concerned about natural hazards, there were no indications that any substantial mitigation policies would be submitted to the legislature.

Following the hurricane, approximately 24 minor bills and joint resolutions were introduced in the 1990 session. Ten of these bills were prefiled. Eleven were introduced in the House and 13 in the Senate.

Exactly how many bills can be considered to be Hugo-related is uncertain because some bills introduced in one house had companion bills introduced in the other body and because the language of some bills was ambiguous, making it difficult to evaluate whether they were actually influenced by Hugo. In this study, when there was some confusion over designating a bill to be Hugo-related, only those bills that were indexed under the "Hurricane Hugo" heading in the *Digest, House and Senate Bills and Resolutions* published by Legislative Information Systems (1990) were accepted.

The majority of the Hugo-related bills (13 of the 24) were financially oriented. Six attempted to allocate funds or issue bonds to pay for specific projects, and seven attempted to create tax credits or exemptions for specific costs related to the hurricane. Eleven of these bills died in the committees to which they were referred, most in the House Ways and Means or Senate Finance committees. Two bills were reported favorably out of committee, but both failed later in the legislative process. Again, state legislators were not willing to expend

money to restore the state after the disaster, preferring belt-tightening to the issuance of new bonds.

Three bills were introduced to prevent price gouging and to establish penalties for those convicted of doing so. Two died in committee and one died on the Senate floor.

A bill permitting the emergency burning of trash passed the House and died in a Senate committee. A bill allowing workers not to make up lost days but to still receive wages died in committee.

Three bills related to insurance were introduced. Two died in committee. One bill, S. 1114, modifying definitions in windstorm and hail insurance, was enacted.

Three bills permitting school children, teachers, and staff not to have to make up lost days due to the hurricane were introduced. Two failed, but H. 4190, a joint resolution, was enacted.

In summary, following Hugo, South Carolina legislators filed 24 bills, all quick fixes to deal with immediate problems. Two were passed, one altering insurance definitions and the other effectively shortening the school year.

Actions of the General Assembly in 1991 and 1992

In less than a year after Hurricane Hugo, most political insiders believed that issues concerned with the state's recovery had dropped from the legislative agenda. The *Columbia State* did not consider building code reform or any other recovery-related issue sufficiently important to be included in its annual legislative survey. The House Office of Research did not include Hurricane Hugo recovery as one of its 23 priority issues for the 1991 session, but it did include statewide building codes. The vast majority of the 85 House respondents, 62, scored the latter a 3 or less on the 5-point scale. As measures of the drop in priority of post-Hugo public policies over the past year, House members ranked statewide building codes nineteenth with an average 2.89 priority ranking in December 1990 after ranking Hurricane Hugo response second with an average 4.41 priority ranking in December 1989.

Notwithstanding the apparent lack of interest among their legislative colleagues, proponents of both mandatory building codes and stormwater management were planning on

prefiling their bills before the 109th General Assembly convened. A brief history of the fate of these two initiatives is provided below.

Mandatory Statewide Building Codes

The trials and tribulations continued. Most importantly, in November 1990 Representative Ralph Davenport was defeated in his bid for re-election. The proponents of the bill did not have a ready replacement.

On the Senate side, Senator McConnell decided to prefile early (September 1990) to guarantee that the new building code bill (S. 140) would be heard quickly and reach the Senate floor before the calendar got crowded. The early prefilings also alerted the Association of Counties and gave it time to develop and publicize its policy position (SCAC, 1991). Apparently the debate in the last legislative session had some effect, because the association supported building codes in concept. However, its support was conditional, based on changes in the bill that would minimize the state's role in the process, provide funds for local compliance, and extend the phase-in period. This stand made it obvious that the County Association was still opposed to the bill and that major changes would have to be negotiated for the bill to have any real chance of being enacted in this two-year session.

On the first day of the 1991 session, the bill was referred to the Labor, Commerce and Industry (LCI) Committee of the Senate. Senator McConnell unsuccessfully tried to have the bill reconsidered and then referred to the Judiciary where he believed passage was more probable. Although McConnell was a less senior member on LCI, he was able to persuade the committee chair to form an ad hoc subcommittee with him as chair to hear the bill.

Despite Senator McConnell's initial fears about the bill's referral, the ad hoc subcommittee met without incident and reported the bill favorably to the full committee. When the full committee met on February 27 to consider the bill, the County Association informed Senator McConnell that it would oppose the bill unless the section certifying building inspectors was removed. To get the bill on the floor, where future considerations could include more positive amendments, Senator McConnell agreed, and the committee reported the bill out favorably with amendments.

Before a second reading could take place, three senators (Bryan, Stilwell, and Mullinax) opposed it, making known their "desire to be present." In the Laurens County election of the previous year, anti-building-code advocates unseated the incumbents by a wide margin, sending Senator Bryan a message that he should continue to oppose building code legislation. Apparently Senator Bryan heard the message. Senator Stilwell continued to oppose state mandated programs. Senator Mullinax objected because he opposed a section of the bill that gave the state fire marshal exclusive jurisdiction over state buildings, eliminating jurisdiction of local fire districts. Only two months had passed since the legislature reconvened, yet the building code legislation essentially died when the bill got moved to the Senate's contested calendar. Neither Senator Bryan nor Stilwell could be swayed to change their positions, and the bill remained on the contested calendar for the remainder of the 1991 and 1992 sessions.

Stormwater Management

While Senator McConnell was busy fighting for building code legislation in the public arena, Representative Wright was building a formidable coalition of support behind the scenes and away from public scrutiny. The Land Resources Conservation Commission had completed its development of the bill, making it compatible with existing legislation and regulations. Now, with both a viable bill and the backing of the Land Resources Conservation Commission, Representative Wright was able to secure the support of homebuilders, developers, the Department of Agriculture, and several environmental groups including the Sierra Club. When the stormwater management bills (H. 3342 and its companion S. 376) were prefiled in mid-December (after the Association of Counties had published its 1991 legislative position), they had the support of many legislators. The House bill had 25 co-sponsors and the Senate bill had 8 co-sponsors.

The Senate bill was heard first by its agriculture committee. It was reported out favorably with amendments on April 2. No objections were raised and the bill remained on the uncontested calendar. It was heard and approved on second and third readings the next two days and sent to the House on April 4. There it was quickly approved and enrolled on May 7. Shortly thereafter, the governor signed the bill into law.

One of the reasons why the stormwater management bill was able to get through the legislative process was that Representative Wright maneuvered the bill around the Association of Counties. To keep the association off guard, the stormwater management bills were always introduced after the association published its legislative analysis and held its annual legislative meeting in December. In this way, even though the bill mandated county action and could impose financial expenditures on local governments, the County Association was unable to take a stand on the bill at the critical time just prior to the start of the legislative session, and, thus, most of the association's members were left unaware of its existence. In addition, Bob Lyon, the real political force in the County Association, had been a mayor of Irmo before Representative Wright and may have sympathized with the bill's aims.

Conclusions

By the end of the 1992 legislative session, the General Assembly had met for three years to consider Hugo-related legislation. In that time, very little was accomplished, and some of what was achieved was negative. Highlights included the passage of the Beachfront Management Act amendments in 1990 and the passage of the Stormwater Management and Sediment Reduction Act in 1991, although both bills had been introduced before Hugo and stormwater management proponents had managed to keep their bill disassociated from the hurricane.

The one major bill most people associated with Hurricane Hugo, mandating statewide building codes, was stalled in the legislature, unable to surmount opposition from the South Carolina Association of Counties. This bill, too, had been introduced prior to the hurricane, but its proponents tried to incorporate the fact that buildings built to code fared better in the hurricane than those not built to code to gather support for their cause.

The legislative reaction to Hurricane Hugo did not completely follow some widely held precepts of public policy theory. The belief that a window of opportunity is likely to open following a major event, allowing new public policies to be enacted, was not in evidence. All three major bills related to natural disasters that the legislature dealt with after Hugo were introduced before Hugo at a time when there was calm. And no major bill concerning natural

disasters was introduced following Hugo. In accordance with another precept, however, it was true that public policies can only be introduced if their proponents have prepared acceptable legislation ready to be introduced. There was no indication that anyone had a policy waiting for introduction in case of a major disaster, and no policies were introduced.

What happened in South Carolina after Hurricane Hugo can be explained with greater ease by simply understanding the policy-making process in the state. Laws cannot be changed by a simple majority in the legislature. For change to occur, unanimous approval is needed, and that takes time. The efforts of the proponents of the stormwater management act highlight the necessary steps of interactively molding a bill that can be accepted by everyone. In that effort, over two years were spent gathering support and negotiating with potential opponents. When Hurricane Hugo occurred, the process of getting to a final acceptable bill was not interrupted; in fact, proponents went out of their way to disassociate the bill from the hurricane and keep to their original schedule. Only when an acceptable bill was fashioned over a year later did the proponents bring it to public hearings, and then it was merely to ratify what had already been worked out behind the scenes.

SECTION VI: CHARLESTON IN THE WAKE OF HURRICANE HUGO

Charleston was the first city in South Carolina to incorporate and manage many of its own affairs. After an aborted attempt in 1722, the city successfully passed an incorporation act in 1783. Since then, the city has been more free of state domination than any other municipality and, as a result, has been an innovator in many public policy areas, including natural hazards mitigation. Charleston was the first city to adopt building regulations in 1907 and was also the first to adopt the seismic building design requirements of the Southern Building Code for new buildings in 1981.

The mayor and the majority of the city council that adopted the seismic element of the Southern Building Code were first elected in 1974 and were still in office when Hurricane Hugo struck. Several members participated in the national study of state and local politics surrounding natural hazards conducted by Rossi and his colleagues in 1977 (Rossi et al., 1982). At that time, the majority of political influentials surveyed were positive concerning natural hazard mitigation (Mittler, 1989, p. 263). Therefore, it could be expected that city

officials would be positively inclined toward policy options that would protect the city from future natural hazards.

Institutional Capacity of the Mayor and City Council

While the intellectual support of the mayor and city council is essential for a city to create an environment for the development of appropriate public policies, unless municipal institutions are actively involved with those policies, very little will actually get done. Most changes or additions to the city of Charleston's ordinances are suggested by standing committees of the city council and boards and commissions appointed by the council. At the time of Hurricane Hugo, no board, commission, or standing committee had claimed jurisdiction over natural hazards mitigation, and none were contemplating related public policies.

The mayor is a full-time elected official. The city council serves as a legislative body and contains the mayor and 12 part-time members, elected by district. As a group, the city council has a wealth of experience in building-related affairs, resulting from the accumulation of service on various commissions such as the Planning and Zoning Commission and the Commission on Redevelopment and Preservation and on standing committees such as public safety, community development, and real estate. In addition, W.L. Stephens, the longest serving member, who was first elected in 1960, is a civil engineer with several decades of professional experience.

At the time of Hugo, the institutional expertise concerning natural hazards and mitigation in the city was largely that of Chief Building Inspector, Doug Smits, who was responsible for the 1981 adoption of the seismic element in the building code. Smits was one of the few professionally trained engineers in the state employed as a building inspector, and, at the time Hugo struck, he was a member of the board of directors of the Southern Building Code Congress. He was also an original member of the South Carolina Seismic Safety Consortium. The mayor and city council often turned to him for advice concerning building codes and natural hazard mitigation.

Charleston's ability to respond to a major disaster was limited by its available resources. As a city, Charleston is small; it had approximately 80,000 residents and operated on an

annual municipal budget of just over \$40 million in 1989. It was likely that if the city chose to take on more work than its employees could be expected to handle in the wake of Hurricane Hugo, then the city would have to raise taxes to pay for the work.

The Charleston Response

Despite its limited resources, Charleston responded to the hurricane comprehensively. Unlike the state, the city did not view the payment of hurricane-related debts as an alternative to normal budget items as if these budget considerations were a zero-sum game. It issued bonds to cover its short-term cash flow needs and enacted its 1990 appropriations bill with an approximate 11% (17 mills) one-year-only increase in the property tax to cover obligations due to Hurricane Hugo and also to maintain the existing level of municipal services. In terms of mitigation, the city conducted a formal evaluation of its recovery process and considered long-term solutions to limit the effects of future disasters.

Evaluating the Recovery Process

The first goals of the mayor and the city council were to get the city back on its feet economically and to clean the debris from the neighborhoods. Even though the attainment of these goals was to take months, Mayor Joe Riley had the foresight to have the recovery process evaluated while the recovery was underway and memories were fresh. He "formed a recovery task force comprised of public and private community leaders to look at the response of local governments, agencies and the community to the hurricane" (Mayor's Recovery Task Force, 1990, p. 3). From this group five study committees were formed to evaluate five critical areas: 1) business and industry; 2) housing; 3) infrastructure and public facilities; 4) insurance and FEMA; and 5) social services.

The task force collected data from October to December 1989. In its report to the mayor, the task force came to one "overwhelming conclusion," recommending that the Trident area (comprising the three counties of Berkeley, Charleston, and Dorchester) create a centralized preparedness plan and emergency operations center. The task force believed that the recovery from Hugo was hampered by the uncoordinated response of the many local, county, state, and federal governments. In order to make the plan workable, the task force

provided a long list of detailed items that could be undertaken by public agencies, businesses, community and nonprofit agencies, and ultimately by individuals at risk.

While the task force was meeting, the city council was quick to respond to potential problems. In the first council meeting after the hurricane, convened on October 3, an emergency ordinance on price gouging was formally affirmed.

Long-Term Considerations

During the first six months after Hugo, the mayor and city council explored two issues that they believed would improve the city's ability to reduce long-term risks from major disasters. These were earthquake preparedness and rezoning in the case of nonconforming uses.

Earthquake preparedness. One month after Hugo at the October 24 council meeting, councilmember Ford requested that the chief building inspector or the city engineer brief the council on earthquake codes. A month later, at the November 20 meeting, according to the council minutes, Doug Smits "expressed with pride that the City of Charleston is recognized as one of the forerunners in seismic code enforcement on the east coast." After Smits answered several questions concerning the codes and reminded the council that the city had adopted the most recent version of the seismic elements of the Southern Building Code, the council was satisfied that the city had already done what it could to ensure the future construction of seismic-resistant buildings and turned to other issues.

Rezoning and nonconforming uses. During the rebuilding process, the city council faced the question of what it could do with demolished structures that did not meet current ordinances. Several members of the council believed this was a good opportunity to rezone the properties and eliminate nonconforming uses, especially those that posed a hazard to the community. Eventually, however, the subject was dropped when the city's legal counsel pointed out in the meeting of May 8, 1990, that (according to council minutes) "the South Carolina Supreme Court says in a case where a structure has been demolished that a non-conforming use is not abandoned unless the owner intends to abandon it." Furthermore, he added when buildings are destroyed in a casualty, most cities allow owners "a one-year period for a non-conforming use to come back."

When nonconforming use structures are reconstructed, they must still meet current building code requirements. They are not immune from wind, flood, or seismic elements in the currently applicable code.

Attitudes of the City Council

While on the surface it looks like Charleston chose to implement no new long-term mitigation, the council's deliberations indicate that several avenues were explored, but circumstances influenced a very knowledgeable body to refrain from taking further action. To test the hypothesis that the city council understood both the threat posed by hurricanes and earthquakes and what they could do to protect the city from future disasters, the author attempted to interview all the council members and the mayor. Ultimately, nine council members were interviewed for approximately one hour each between May 23 and May 25, 1990. During the hour, amid a general discussion of the hurricane and the city's response, 15 similar questions were posed, and answers were recorded by the interviewer. The interview schedule is shown in Table 1.

Interview Results

Council experience. From question 15, which asked council members how long they had served on the council, the average length of service was 11.5 years. The range of time served was from a few months, for two recently elected members, to 29 years. Six of the nine interviewees had over 10 years experience. As a group, this was a very experienced set of council members.

Building code knowledge. In response to question 1, two council members said they were not very knowledgeable about building codes, four said they were somewhat knowledgeable; and three said they were very knowledgeable. The degree of knowledge, in general, corresponded to the number of years that the respondents sat on the council. Given that virtually all of the council sit on at least one standing committee, board, or commission that deals with codes, an overall high degree of knowledge is reflected in the responses.

When asked how sufficient building codes were to protect Charleston from a major hurricane, one respondent thought codes were not very sufficient; four thought they were

Table 1: Interview Schedule Administered to Charleston City Council Members

Name _____	<u>Question</u>	
1.	How knowledgeable are you about building codes?	1-Not very; 2-Somewhat; 3-Very
2.	Are building codes sufficient to protect Charleston from a major hurricane in the future?	1-Not very; 2-Somewhat; 3-Very
3.	Are building codes sufficient to protect Charleston from a major earthquake in the future?	1-Not very; 2-Somewhat; 3-Very
4.	How knowledgeable are you about land use and zoning laws?	1-Not very; 2-Somewhat; 3-Very
5.	Are land use and zoning laws sufficient to protect Charleston from a major hurricane in the future?	1-Not very; 2-Somewhat; 3-Very
6.	Are land use and zoning laws sufficient to protect Charleston from a major earthquake in the future?	1-Not very; 2-Somewhat; 3-Very
7.	Is there someone on the city council whose opinion you seek out concerning building codes and land use laws?	Yes or No; If yes, who?
8.	What has Charleston done to help protect the city from a future natural disaster?	
9.	What should Charleston do to help protect the city from a future natural disaster?	
10.	Do you support seismic retrofit of old buildings?	Yes or No
11.	Will the city pass a seismic retrofit ordinance in the next five years?	1-Yes; 2-Maybe; 3-No
12.	In the next ten years, how likely is it that Charleston will be affected by:	
a)	a major hurricane?	1-Not very; 2-Somewhat; 3-Very
b)	a major earthquake?	1-Not very; 2-Somewhat; 3-Very
c)	a major flood?	1-Not very; 2-Somewhat; 3-Very
d)	a major tornado?	1-Not very; 2-Somewhat; 3-Very
13.	Did you remain in Charleston during Hugo or evacuate?	Remain or Evacuate
14.	On a scale from 1 to 10 with 10 being the worst, how would you rate Hurricane Hugo in terms of damage that could be caused by a natural disaster?	
15.	How many years have you served on the council?	

somewhat sufficient; and four thought they were very sufficient. When asked a similar question concerning earthquakes, four believed codes were not very sufficient; four believed codes were somewhat sufficient; and one did not know.

The difference in these last two responses may exist because each member had the opportunity to tour the city after the hurricane and make personal judgments about the adequacy of the codes in relation to wind and water damage, but they were inexperienced concerning earthquakes. The low level of belief in the sufficiency of earthquake-related building codes was echoed in the response to the question concerning the support of a seismic retrofit ordinance for existing buildings. Here, seven of the nine respondents supported retrofit.

Political reality also seems to have influenced the council members. Although seven favored a retrofit ordinance, only two believed an ordinance would be passed in the next five years, while four said maybe and three said no. In explaining their answers, most council members thought it was a good idea but that it would not be cost-effective and constituents would oppose the law. There seems to be a general willingness on the part of the council to enact more stringent codes, but no politically acceptable ones appear to be available for them to act on.

Land use and zoning knowledge. As a group, the council members considered themselves more knowledgeable about land use and zoning laws than building codes. Four members thought they were somewhat knowledgeable about land use and zoning laws, and five thought they were very knowledgeable. This result is not surprising, given that the majority of time in city council meetings is taken up with these issues.

When asked how sufficient land use and zoning laws are in protecting Charleston from a future hurricane, two said these laws were not very sufficient; six said they were *somewhat* sufficient; and only one said they were very sufficient. After being asked the same question concerning earthquakes, five said these laws were not very sufficient; three said they were somewhat sufficient; and, again, only one said they were very sufficient.

The basic belief that land use and zoning laws are inadequate to protect Charleston from future natural disasters was reflected in discussions held in council meetings only weeks before these interviews were conducted, when several members attempted to rezone

nonconforming uses of some properties. A sense of frustration about their inability to rezone was prevalent after legal counsel informed the council that case law supported the right of the property owner to restore nonconforming uses after the demolition of the damaged structure.

Opinion leaders. In response to question 7 asking respondents if they sought someone on the city council's opinion concerning building codes and land use laws, three identified no one and the remaining six all identified W.L. Stephens, civil engineer and 29-year veteran of the council. Of these six members, three also mentioned seeking the advice of two other members, each of whom had served over 14 years on the council. Interestingly, these two members both identified Stephens as the opinion leader they turned to.

If Stephens actually has enough influence to sway other council members, then the council might be reluctant to enact new ordinances concerning building codes, land use, or zoning. In general, Stephens felt the current laws were somewhat or very sufficient to protect Charleston from hurricanes and earthquakes.

Hugo experience. When evacuation orders were given to residents along the coast to flee inland, the governor did not include the city of Charleston. Evacuation was therefore optional. Among the council members, three did evacuate, five chose to remain, and one reported being out of town when the storm warning came.

After the hurricane passed and council members had the opportunity to evaluate the damage to the community first hand, most felt that the damage was about the worst a natural disaster could do. On a scale from 1 to 10, with 10 being the worst possible, one respondent considered the damage level an 8; three considered it a 9; and five considered it a 10.

Future disaster probabilities. Hurricane Hugo seemed to have left an impact on the council members. Four believed another major hurricane is somewhat likely to strike Charleston in the next 10 years, and five believed it is very likely. Even though a major earthquake has not hit the Charleston area for over a hundred years, only one respondent believed a major earthquake was not very likely to occur in the next ten years; while five believed it is somewhat likely; and three believed it is very likely.

As points of comparison, two council members indicated that they believed it was not very likely that a major flood would inundate Charleston in the next ten years; four indicated it was somewhat likely; and three indicated it was very likely. A major tornado hitting

Charleston was seen as the least likely major disaster that could befall the city in the next ten years. Four believed it was not very likely; four believed it was somewhat likely; and only one believed it was very likely.

A scan of each individual's responses shows almost random relationships between probabilities of future disasters and degrees of sufficiency of building codes and land use and zoning laws. Opinions about the adequacy of codes and zoning seem to be based more on knowledge than on a heightened awareness of future disasters.

Other issues. In response to the two open-ended questions allowing council members to describe what the city has done or might do to protect itself from future natural disasters, the only issue that a majority brought up was the mayor's task force to evaluate the recovery process. No one suggested that any plan of any type was on the horizon.

Conclusions

Mayor Riley and the city council of Charleston seem to have acted competently following Hurricane Hugo. Almost immediately following the event, Mayor Riley formed a task force to evaluate the recovery and make recommendations while the issues were still fresh in the minds of the citizens. The city council took up both short-term recovery issues, such as price gouging, and long-term issues, such as building codes for earthquakes. All issues were given as complete a hearing as possible.

Both the mayor and the city council seemed prepared to enact whatever laws might aid the city's recovery and prevent damages from future disasters. However, because there are no standing committees of the council or boards and commissions with an interest in natural disasters, the city does not have the institutional capacity to generate acceptable programs when the need arises. It might be in the best interests of the city to create a municipal entity that has jurisdiction over natural hazards that can provide an ongoing analysis of the city's needs and recommend implementable solutions.

SECTION VII: IMPLICATIONS FOR NATURAL DISASTER PUBLIC POLICY

Public policy adoption, let alone natural disaster public policy adoption, is a poorly understood process. Currently held theories (for example those suggested by Cohen et al.,

1972; Kingdon, 1984; and Hilgartner and Bosk, 1988) have enumerated a host of favorable conditions that, if present, might increase the probability that an issue reaches the public agenda. Among the most widely held are the four first suggested in the garbage-can model (Cohen et al., 1972). These include the acceptance among policymakers that a problem exists; the availability of potentially appropriate solutions; the existence of champions to keep their issues alive in the policy adoption process; and an opportunity for an issue to be raised with the appropriate public body.

Unfortunately, what the policy process models also share is a generality that makes them unable to enumerate precisely what conditions are either necessary or sufficient for an issue to reach the public agenda or to reach the legislative agenda or to actually get enacted. The typical explanation for this vagueness is that there is uncertainty associated with a process in which many issues are competing for the limited attention of policymakers.

The inability of the models to have predictive value is further enhanced by two aspects of the approach taken by their creators. First, the authors have focused exclusively on the process faced by *important* issues that have not often been addressed by policymakers. For these issues, the theoretical concern is to determine how they get on the policy agenda for initial consideration. What has not drawn the attention of previous theorists are the conditions surrounding the thousands of noncontroversial and controversial issues that have surmounted that hurdle and are routinely handled, and the characteristics of the policy process that keep them on the legislative agenda for years. By ignoring routine matters, the theorists have failed to recognize the desirable aspects of the policy process that keep issues alive, information that could influence the initial strategy of getting on the policy agenda.

Second, policymakers are assumed to be passive, preferring not to make decisions. This is a direct consequence of the first theoretical approach. New issues, especially controversial ones, are potentially explosive, keeping most policymakers at bay until public debate defuses them and makes them safer to handle. As a result, policymakers who act passively because poorly thought-out statements might jeopardize their careers are incorrectly assumed to be passive all the time. Consequently, the current theoretical models are not really models of the complete public policy process at all. Instead, they comprise checklists that advise proponents of new ideas concerning what they need to do to pique the interests of policymakers.

One aspect of the public policy process that partially determines how issues will be handled is the institutional capacity of the public body. From a theoretical standpoint, institutional capacity includes the sum of informal and formal agents that a public body turns to for professional and technical advice in the disposition of an issue. Agents typically include recognized experts, personal staff, political caucuses, legislative committees and their staff, and official commissions, boards, and agencies. Institutional capacity also includes how issues are handled and the constraints placed on policymakers by constitutions, statutes, ordinances, regulations, rules, procedures, and customs. As a rule, the actions of a government body are determined by its access to professional and technical advice, jurisdictional constraints, and procedural constraints.

The general finding of this study is that policymakers at the state level and at the municipal level (Charleston) operated within their institutional capacities in their dealings with long-term natural hazard mitigation. In the remainder of this section, the relationship between institutional capacity and the public policy process as it relates to long-term natural disaster mitigation is explored.

The state government response in South Carolina represented the collective actions of policymakers operating in a system that has no institutional capacity to confront long-term natural disaster issues. Historically and by law the governor is limited to solving short-term disaster recovery problems and re-establishing law and order. The legislature is constitutionally empowered to determine statewide long-term natural hazards policy but is still uncertain whether it wishes to exercise its jurisdiction over this issue. As of today, there are no professional staff assigned to these concerns; there are no standing committees with historical jurisdiction in these areas; and there have been no state commissions created to study the issues and recommend policy changes to the legislature.

When Hurricane Hugo struck, there were no pre-established governmental agencies, commissions, or committees for the governor and the state legislature to turn to for professional and technical advice. Under those circumstances, the state did the only thing it could in an emergency, it turned to the political process to fashion its response. Unfortunately, the political process represents an unpredictable, haphazard process, subject to nongermane principles and power relationships. When the political process alone, as a

substitute for professional and technical input, is relied on to generate appropriate responses there is no guarantee that these responses will be forthcoming.

Following Hugo, the governor took the initiative to develop the state's response while the General Assembly looked on. The governor and his temporary investigative panels stayed within statutory bounds, concentrating on short-run issues. Simultaneously, the legislature, having no precedent to act, never even broached the subject of whether it, a state body, had jurisdiction over long-term natural disaster issues. Its failure to enact a statewide building code demonstrated that several legislators believe these are local issues to be decided at the county and municipal levels. As a result, the state's policymakers went through the motions of responding to Hugo, but, ultimately, no one suggested nor did anyone implement a plan to increase the state's institutional capacity to deal with future natural hazards. No new permanent government bodies were established to monitor natural hazard mitigation developments and recommend changes to improve the state's ability to reduce damages from future disasters. The only improvement was that the Land Resources Conservation Commission has taken charge of stormwater management; however, that seems to be an isolated success that has no ramifications for other mitigation efforts.

The city of Charleston was somewhat better prepared than the state. Although it too had no pre-established commissions, boards, or council committees with a history of dealing with natural disaster issues, the mayor and council recognized that the city had known experts they could turn to for advice. These experts gave their opinions, and the city council made decisions based on the advice.

Having experts at the disposal of policymakers, but not having dedicated agencies with subject jurisdiction, is the lowest level of institutional capacity. Here there is no need to turn solely to the political process to resolve mitigation issues, but the solution set is typically limited to the ideas and programs suggested by the individual experts (who have not been tasked to develop policy options).

In situations where government bodies have either no institutional capacity or the minimal capacity represented by a few experts at their disposal, there are several reasons why, in the face of an emergency such as a hurricane, significant increases to the institutional capacity will not occur. Most important, such change challenges status quo

relationships, questions jurisdictional arrangements, and can alter the political landscape. Even if expert advice is compelling, there is no guarantee that policymakers will heed that advice and enact appropriate legislation. Decisions can be held up or avoided entirely when policymakers are fearful of negative consequences or when they consider themselves insufficiently knowledgeable to judge what is needed or unaware of alternatives.

The minimal level of institutional capacity needed for policymakers to consistently develop technically based, politically appropriate responses is the legislative commitment to the issue, generally embodied in a standing legislative committee or subcommittee with dedicated staff or in a permanent commission empowered to investigate and recommend appropriate legislation. Depending on the will of the policymakers, the commission can be staffed and be under the jurisdiction of the legislature alone, or under the executive and the legislature. The critical element is that there is a clear relationship in lawmaking between the commission and the legislature.

The experiences in California following the Loma Prieta earthquake one month after Hurricane Hugo illustrate what can happen when a state government has a significant institutional capacity to respond to a major earthquake. (See Mittler, 1991a and 1991b, for a brief history of earthquake mitigation in California.) Unlike the South Carolina General Assembly, the California legislature operates exclusively on majority rule; no equivalents to the procedural veto or the contested calendar in South Carolina exist. California is also a bill-passing state; in fact, it is difficult to truly kill a bill, as rules and customs of both houses allow bills to be reconsidered often, even after receiving negative majority votes as they proceed through the legislative process.

In contrast to their counterparts in South Carolina, legislators in California are full-time and have full-time professional staff. As a consequence, several individual legislators and staff members are extremely knowledgeable concerning earthquakes and what can be done to mitigate their damages. In addition, when the Loma Prieta earthquake shook northern California, there existed two legislative committees that dealt exclusively with earthquake issues—the Senate Subcommittee on Earthquake Insurance and the Assembly Committee on Earthquake Preparedness and Natural Disasters.

California also had the benefit of its Seismic Safety Commission, which was created by the legislature in 1974 to systematically evaluate earthquake safety and advise the governor and legislature on earthquake policy. This commission replaced a Joint Committee on Seismic Safety that was established in 1969. The state's resolve to confront earthquake issues was strengthened with the passage of the California Earthquake Hazards Reduction Act of 1986 directing the Seismic Safety Commission to develop and implement activities to reduce the earthquake threat. As part of its activities, the commission maintained an annually updated five-year plan. (Instead of insisting on the preparation of a state hazard mitigation plan after the Loma Prieta earthquake, the federal government accepted the Seismic Safety Commission's 1989 five-year plan in its place.)

Because of the state's extensive institutional capacity in earthquake mitigation, California policymakers were able to swing into action immediately after the Loma Prieta earthquake. A special session of the legislature was called and met one month after the event. Over 100 bills were introduced (approximately half being companion bills) and 35 were chaptered, including a temporary increase in the state's sales tax to rebuild damaged public structures. The speedy response and the large number of bills were due primarily to the preparatory work of the Seismic Safety Commission, which was able to draw on its vast knowledge in advising legislative bill sponsors.

During the 1990 legislative session, the flow of earthquake safety-related bills did not slow. The Seismic Safety Commission tracked over 300 bills introduced in the session, of which approximately 100 were chaptered. In the year following the Loma Prieta earthquake, the state chaptered more earthquake safety bills than it had in all its previous history.

Although it is not the purpose of this paper to analyze California's response to the Loma Prieta earthquake, it should be noted that, in its haste to provide legislation to aid the state's recovery, the legislature was not able to fully scrutinize all bills and some were enacted with flaws. One example was the creation of a statewide earthquake insurance program that was repealed in 1992. (See Mittler, 1991a and 1991b, for a detailed analysis of this policy.)

California's legislative experience after the Loma Prieta earthquake indicates clearly that much can be accomplished after a major natural disaster when an extensive institutional capacity exists. At the same time, it warns that the legislature can be overwhelmed by

proposals to alter policies if it is relatively easy to enact legislation and if there is no organized opposition to restrict the progress of bills in the legislative process.

The most sophisticated institutional capacity exists in Washington, D.C. What occurred in California is typically impossible in Washington because the institutional capacity of Congress contains several groups and procedures that allow opposition to form and be heard, thus slowing the legislative process. Three of these deserve mention. First, standing committees are supported by both majority and minority staffs. When one party introduces a bill, the other has paid staff to analyze it and then oppose it or suggest amendments. Second, party caucuses develop policy positions on critical issues and can supply outside experts and funds to oppose unwanted legislation. Third, after bills are introduced, they become committee bills. Authors and co-sponsors may follow their bills; however, hearings and mark up are controlled by committee (and subcommittee) chairs, who may not share the author's enthusiasm.

What was learned in California can be implemented in South Carolina. If the city of Charleston or the state wishes to determine what its long-term natural hazards public policy should be, each could commit itself by establishing a standing committee or commission dedicated to that issue. At this particular time, the state has the opportunity to make such a commitment now that Senator McConnell has reintroduced a bill (S. 93) to mandate a statewide building code. The question of local versus state control over natural disaster mitigation can be decided once and for all if members of the General Assembly choose to do so.

EPILOGUE

On January 17, 1993, the *Columbia State* newspaper ran two articles about the state's response to Hurricane Hugo that were inspired by an early draft of this report that was leaked to the press by a peer reviewer. In one of the articles, Governor Campbell was quoted as not being in agreement with the analysis of his handling of post-Hugo hazard mitigation contained in Section IV of this report. On the following day, January 18, the governor held a news conference and issued a five page critique, denouncing the report's conclusions and the logic that supported them.

While it has never been the purpose of this report to get into a "shouting match" with the governor, his arguments are interesting and deserve some mention. Overall, his criticisms can be divided into two categories, factual and interpretive. On the factual side, the governor claimed that the report understated the state's Hugo-related expenditures. The governor mentioned that the state's "unreimbursed expenditures" totaled \$31.35 million, consisting of \$8.25 million for public assistance and the remainder for individual and family grants, beach renourishment, and capital expenditures. These costs are and were mentioned in the report; however, to clarify the issue, they are mentioned again. Even with these figures, the conclusion still holds that it is poor public policy for the federal government to bail out state governments when states that help themselves are more likely to develop mitigation procedures to reduce their future financial exposure.

The remaining arguments of the governor are all mainly interpretive. They center around accusations that the governor acted politically in his management of the state response to Hugo. That he or any political figure operated this way should not surprise anyone. However, the governor was obviously upset when it was pointed out. He claimed that his motives were pure. An independent research study (Rubin and Popkin, 1990) mentioned the political aspects of the recovery on the part of the governor several times.

After the *Columbia State's* articles were published, many South Carolina colleagues and sources told this author that the governor's virulent remarks were nothing but damage control. If this is true, then it does not dignify this report to prolong an argument over "spin." Other independent observers can investigate the differing opinions of the report and the governor and reach their own conclusions. (Copies of the reports written under the auspices of the Office of the Governor listed in the reference section at the end of this working paper may be obtained by writing the Office of the Governor, Columbia SC 29211.) They should be encouraged to do so, but not be so distracted as to miss the real issue—determining whether South Carolina is significantly better prepared to withstand the next major natural disaster.

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