

A Brief History of the Evolution of United States' Natural Disaster Policy

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Throughout the years, various presidential administrations have responded to the needs of American citizens in distress after the devastation caused by natural and technological disasters. This paper traces the history of natural disaster policy as it has developed, mostly in reaction to natural disasters or public outcry from a failure of government officials to address local, regional or national distress, in a series of three historical stages. Understanding the phases and principles guiding each stage in the evolution of disaster management is important so that policies are not reestablished that create similar situations as those that have occurred in the past. Specifically, attention is devoted to the historical development of current policy and federal responses during times of disaster, and current policy's implications on future disaster policy.

The United States' 2005 hurricane season remains the most devastating to date and the response of the government during the season raises questions about the efficiency of the nation's disaster public policy. In the wake of Hurricane Katrina, scores of citizens, civic leaders, and displaced persons were dissatisfied with the lack of an immediate federal relief response. Such dissatisfaction is not new, but rather it remains a recurring theme in the United States, spanning the twentieth century. The frustration with the federal government stems from the formation and implementation of current and past disaster related public policies, which lack hegemony, efficiency, and standardization. Reasons for inefficiency vary, but one significant contribution to the government's seemingly ill-prepared response systems is its tendency to react to catastrophes as opposed to asserting proactive measures.

The specific reactionary relationship of the government can be observed in three evolutionary policy stages from the mid-nineteenth century to the present. During stage one, there is a loose government initiative in respect to implementation and coordination of policies at all levels of government, with little attention given to future events. In stage two, the government takes on a more assertive role, however the state and local government units are predominantly responsible for mitigation and relief efforts. Entering into stage three, disaster policy begins to stray from the prior two stages in that the federal government attempts to meld national security and disaster policy together.

Stage One: Initial Interests in Disaster Policy

During stage one, which is characterized by an initial-official government involvement, little attention is given to mitigation practices beyond land-usage. Most policy attention is given to relief of disasters after the event had taken place. The focus of disaster policy during this stage is to rebuild and restore the local or regional economy. Relief is contingent on prior disasters and the lessons learned from them, as opposed to future planning and mitigation strategies for more severe disasters. Further, limited resources for the replacement of destroyed property and land impair reconstruction and the possibility of mitigation at the local levels.

Implementation of disaster relief policies began in the mid-nineteenth century, but they focused on recovery *after* flooding incidents. The Swamp Land Acts of 1849 and 1950 were enacted to transfer the control over swamp land and overflow land from the federal jurisdiction to most state governments along the lower Mississippi River. The transfer allowed states to use internal revenues to construct levees and drainage channels in an attempt to decrease flood destruction (The American Institutes for Research *et al.* 2004, 2). It is important to observe that during the early stages of disaster policy development, the local governing bodies were responsible for the development of disaster relief and its implementation.

The first organized aid did not come from local governing bodies, but rather from the founder of the American Red Cross (ARC) after a disaster in 1881 when the organization distributed food and relief supplies to those in need. During the later part of the nineteenth century, the ARC was the most significant agent in disaster relief; in 1900, Congress granted ARC a charter authorizing the organization to be responsible for national and international peacetime efforts to bring people relief from the suffering of pestilence, famine, fires, floods, and other national disasters (U.S. Congress 1995; Comerio 1998, 198).

According to May and Williams (1986), Congress's enactment of disaster relief legislation – a manifestation of Congress' ability to deal with disasters that they had already experienced, as opposed to disasters that had never occurred – was largely based on flooding experiences. For this reason, little attention was given to preparing for larger or varying disasters during this stage in the evolution of disaster policy.

The role of the government during the first historical stage of disaster policy was to address the problems of natural disasters as they occur and attempt to decrease the possibility of the same scenario occurring again under the same conditions.

Stage Two: Reaction, Prevention, and Control

Stage two is characterized through a more active interest on the behalf of the government in an attempt to prevent wide spread destruction in the event of a natural disaster. The policies created and implemented in this stage are similar to those in stage one in that they are reactionary in nature. However, the difference in stage two is the fact that attention is given to the social problems associated with natural disasters, such as destruction and replacement of private property, reestablishing communities, and rebuilding the local economic infrastructure and public property. This stage of disaster management continues to function based on the philosophical premise that local governments hold the primary responsibility for relief and mitigation; however, this premises begins to change in the final state of disaster management when the government views relief and mitigation as a matter of national security.

In 1913, an Ohio River Valley flood killed several hundred people and caused hundreds of millions of dollars in damages. Extensive damage served as a catalyst for change by drawing public attention to flood control issues and leading to the creation of the U.S. House of Representatives' Committee on Flood Control in 1916. A year after the creation of the committee, the Flood Control Act (PL 64-367), which appropriated forty-five million dollars for a flood control program in the lower Mississippi and Sacramento Rivers, acknowledged that Congress would accept federal responsibility for flood control (The American Institutes for Research *et. al.* 2004, 2-3). Moreover, the previously mentioned Flood Control Act of 1917 required local governments to contribute financially to flood-control legislations as well as authorized the Corps of Engineers to undertake surveys for flood-control improvement. Although the 1917 Flood Control Act initiated the first federal spending and continued federal attention, the effort was narrow in scope; the laws only addressed flooding disasters (Comerio 1998). A federal response was deemed necessary only when the scale of the disaster exceeded the capacity of the ARC.

Since flooding was the most chronic disaster issue of the early 20th century, most disaster policies focused on flood prevention and control (May and Williams 1986; Comerio 1998, 198). Flooding issues regularly went beyond the scope of control articulated in the 1917 legislation. For example, the Mississippi River Flood of 1927 caused between 246 and 500 deaths, left more that 700,000 people homeless, created 325,000 refugees, and caused \$236 million in property damage¹ (The American Institutes for Research *et. al.* 2004, 3). Due to the wide-scale damage caused in the 1927 flood, President Coolidge signed a new Flood Control Act in 1928 (PL 70-391), which ended the use of "levees only" policy²; moreover, the Flood Control Act of 1928 placed the responsibility of the Mississippi River in the hands of the federal government, which "even in the narrowest sense...set a precedent of direct, comprehensive, and vastly expanded federal involvement in local affairs" (Barry 1997, 407).

Flood control was a significant step in the development of disaster relief programming; however, more general disaster relief was needed. With the occurrence of a major earthquake in California in 1933, more general relief legislation was passed to aid victims of disasters other than flooding, namely earthquake victims. The Reconstruction Finance Corporation, created in response to this earthquake, provided assistance to private citizens suffering from disaster damages in which some assistance for rebuilding was provided to home owners (Mittler 1992, 1996; Comerio 1998, 198).

By 1950, Congress asserted a more active federal role in disaster relief by supplementing state and private disaster relief efforts in instances when state and local areas were deemed by the president to be unable to effectively deal with the disaster at hand (Comerio 1998, 199). The Disaster Relief Act of 1950 (PL 81-875) created the first bureaucratic process accompanying the relief. Under this act, state governments were responsible for formally requesting the president to designate their areas as federal disaster areas; however, these petitions for assistance did not guarantee the president's automatic acquiescence to the state's request. Also, the federal government would simply

¹ The Mississippi River Flood of 1927 lasted for two months and covered an area of 27,000 square miles.

² "Levees only" policy was adopted by the Mississippi River Commission in 1885. The theory behind the policy was that by containing the river with levees, the force of the high water would scour out the bottom of the river, deepening the channel to carry any flood water straight out to sea.

supplement state and local efforts for disaster relief, as opposed to totally assuming the responsibility of the effort (The American Institutes for Research *et. al.* 2004, 4).

The Civil Defense Act of 1950 clearly specifies that the states and local governmental units are primarily responsible for disaster preparedness. The combination of the Disaster Relief Act and Civil Defense Act of 1950 significantly contributed to the federal government's efforts in relation to the replacement and repair of local infrastructure, and not to private victims (Comerio 1998, 199).

Actions taken by Congress in 1950 were not publicized or fully endorsed by the government until 1951 when President Harry Truman promoted the Disaster Relief Act of 1950 during a disastrous tri-state flood in Oklahoma, Kansas, and Missouri (Comerio, 1998, 199). The flood caused damages of more than \$870 million dollars, a significant number of losses being private homes, farms, and businesses (The American Institutes for Research *et. al.* 2004, 5). In addition to supplementing the local and state initiatives, the federal government also provided funds for the temporary housing of victims, thus implementing a precedent formulated by President Eisenhower through the creation of the Small Business Administration in 1953, which administered disaster relief loans to home and business owners (Mittler 1996; Comerio 1998, 199).

For the remainder of the 1950's, each Presidential administration added specific agencies and programs in order to address disaster situations as they occurred. Congress's response to pass *ad hoc* legislation provided increased disaster assistance funds to the specifically affected areas.³ However, significant legislation⁴ was not passed until the 1960's when immensely devastating events such as the Ash Wednesday Storm⁵ of 1962, an earthquake measuring 9.2 on the Richter scale in Prince William Sound,⁶ Alaska, in 1964, Hurricane Betsy⁷ in 1965, and Hurricane Camille⁸ in 1969 inflicted massive amounts of damage across the entire nation (Haddow and Bullock 2003, 4).

³ According to Haddow and Bullock (2003, 3), there were few natural disasters during the 1950's that inflicted massive damages. Of those disasters that did occur during the 1950's that were significantly damaging were Hurricane Hazel (1954), Hurricane Diane (1955), and Hurricane Audrey (1957), but federal response followed a pattern similar to past federal experiences.

⁴ Examples of legislation passed in this period were the 1964 Amendments to the Alaska Omnibus Act (PL 88-451), the Water Resources Planning Act of 1965 (PL 89-90), the Southeast Hurricane Disaster Relief Act (PL 89-339), and Executive Order No. 11296 (*Evaluation of flood Hazard in Locating Federally Owned or Financed Buildings, Roads, and Other Facilities*) under President Lyndon Johnson.

⁵ The Ash Wednesday Storm of 1962 affected about 620 miles of the east coast between Connecticut and North Carolina, caused about \$200 million in damages, destroyed 1,793 buildings, caused 1,252 injuries, and 30 deaths according to a historical report provided by www.weather.com.

⁶ According to the Earthquake Hazards Program, the Prince William Sound Earthquake of 1964 registered as having a magnitude of 9.2 causing a tsunami as an after effect. The earthquake directly killed 5 people however the tsunami killed 125. Combined, the earthquake and the tsunami that followed it caused about \$311 million in property losses which included damages in Alaska, Hawaii, parts of Canada, and the West Coast of the United States.

⁷ According to Williams (2003) of *USA Today.com*, Hurricane Betsy caused major damage to the Bahamas and Southern Florida killing 75 people and causing \$1 billion worth of damage.

⁸ Hurricane Camille hit the Gulf Coast in 1969 causing massive damage to housing units and other structures. In all, damages totaled around \$4.2 billion in United States' currency of 1969 and caused about 255 deaths; making it the most destructive hurricane in United States history until Hurricane Andrew in 1992 (Grammatico 2003).

Comerio (1998) contends that the legislation additions of 1966 and 1969⁹ that provided provisions for refinancing federal home loans, food, and unemployment assistance were done so in response to the destruction caused by the natural disasters of the 1960's. Although these expansions to the legislation aided in the reestablishment of individual victims and local communities, they were not without their problems. After the implementation of a loan system, the number of disaster grants and loans increased dramatically, prompting Congress to look at an alternative to disaster management. Congress decided that it would attempt to resolve the problem by creating a national flood insurance program and set mandates for state and local hazard-mitigation plans.¹⁰

With the creation of local and state mitigation plans, Congress was faced with the problem of getting the states, localities, and individuals to cooperate, which was not always forthcoming (Comerio 1998, 200). Moreover, with the occurrence of still more devastating natural disasters such as the San Fernando earthquake of 1971 and Hurricane Annes, the federal government recognized the fact that more structured relief policies were needed to ensure state and local preparedness and mitigation compliance. Consequently, Congress passed the Disaster Relief Act Amendments in 1974 (PL 93-288) authorizing the president to make direct financial contributions to state and local governments to help repair, restore, reconstruct, or replace public facilities damaged or destroyed by a major disaster.¹¹ The direct economic assistance to local and state governments reflected the federal government's policy shift to mitigation policies with a greater emphasis on the economic and social restoration.

Stage Three: Natural Disaster as National Security-Militarization Approach

In stage three, public policy continues to be characterized by mitigation policy alongside with military preparedness. During this historical stage of disaster policy evolution, a greater emphasis is given to the policies that focus on the destruction and reconstruction of private and public property and the creation of a specific system of federal response procedure in reference to disaster relief. Furthermore, a greater stress is placed on the scientific preparedness and risk assessment models of mitigation policies; however, the implementation of mitigation strategies remains the primary responsibility of local governmental units. With the advent of the possible militarization and centralization of disaster relief and mitigation, a new stage of disaster management may emerge that will deemphasize the role of the local governmental units so that the federal government may have more direct control over the "public wellbeing."

Although the Disaster Relief Act of 1974 theoretically aided in the effectiveness of disaster relief and mitigation, the number of federal agencies involved in the process

⁹ One example of policy that was created occurred after Hurricane Camille, which was the National Environmental Policy Act (PL 91-190) and the Housing and Urban Development Act of 1969 (PL 91-152) (U.S. Congress 1995).

¹⁰ The Southeast Hurricane Disaster Relief Act (PL 89-339), which was in response to the damages inflicted by Hurricane Betsy mandated the Secretary of the Department of Housing and Urban Development to find alternatives to federal disaster insurance for victims suffering from property losses caused by floods and other natural disasters (The American Institutes for Research *et. al.* 2004, 9). Then the National Flood Insurance Act of 1968 (Title XII of the Housing and Urban Development Act of 1968 [PL 90-488]) was created to provide flood insurance to communities that voluntarily adopted and enforces flood plain management ordinances (The American Institutes for Research *et. al.* 2004, 12, see also Comerio 1998, 200).

¹¹ See also, The American Institutes for Research *et. al.* (2004).

made relief in times of emergency inefficient and complicated. According to Haddow and Bullock (2003, 5):

“Parallel organizations and programs added to confusion and turf wars, especially during disaster response efforts. The states and the governors grew increasingly frustrated over this fragmentation. In the absence of one clear federal lead agency in emergency management, a group of State Civil Defense Directors led by Lacy Suiter of Tennessee and Erie Jones of Illinois launched an effort through the National Governor’s Association (NGA) to consolidate federal emergency activities in one agency.”

On March 31, 1979, President Carter signed Executive Order 12127, creating the Federal Emergency Management Agency (FEMA) in response to criticisms of the federal government’s lack of preparedness and relief of natural disasters and a renewed emphasis on nuclear disaster preparedness (Comerio 1998, 200). FEMA was created with the intention of consolidating emergency management preparedness, mitigation, and response activities into one federal organization (Haddow and Bullock 2003, 6).

When Congress passed the Robert T. Stafford Disaster Relief and Emergency Assistance Amendments (the Stafford Act) in 1988, emergency management was reorganized, which resulted in the power to authorize assistance in all four phases of disaster relief to be granted to the President of the United States.¹² The Stafford Act gave assistance for mitigation independent of disastrous events; however, funding of other activities required an official declaration of disaster. The process by which FEMA ascertains whether or not a disaster warrants a presidential declaration has its limitations – the federal disaster declaration process was, and still is, unpredictable because it relied on available data and real-time media coverage to decide whether or not an event was a major disaster in addition to whether or not state and local governments were capable of recovering on their own (Sylves 1996, 31). Since 1988, the Stafford Act was amended to address more issues as they arise¹³ - most of which pertained to financial burden and mitigation plans. Although the Stafford Act established a concrete structure for disaster relief policy, it ran into problems on the state and local levels of implementation.

During the close of the 1980’s and the beginning 1990’s, FEMA’s response procedures were tested by Hurricanes Hugo (1989), Andrew (1992), and Iniki (1992). Hurricane Hugo caused \$15 billion in damages and FEMA’s slow response – due to its adherence to theoretical procedure (i.e. waiting for the governors of affected states to decide what to do) – generated negative media attention and criticism by some senators. Again, in 1992 with Hurricane Andrew, FEMA’s “failure to respond was witnessed by Americans all across the country as major news organizations followed the crisis. The efficacy of FEMA as the national emergency response agency was in doubt.” (Haddow and Bullock 2003, 9). FEMA’s slow response in both situations prompted criticism from the media, citizens, and locally elected officials.

¹² According to Clary (1985), there are four stages of disaster relief: Pre-disaster mitigation/prevention, Pre-disaster preparedness, Disaster response, and Post-disaster recovery.

¹³ An example of this is seen in the Disaster Mitigation Act of 2000 (PL 106-390) in which direct federal spending is lowered and mitigation practices are emphasized on the behalf of the states and other local units.

In the aftermath of Andrew and Iniki, rumors of abolishing FEMA, or at the very least enacting major reforms, engulfed the agency. At the beginning of the first Clinton Administration, James Lee Witt was nominated to be the new Director of FEMA, and under his guidance, sweeping reforms were instituted in the agency, as well as entities outside of FEMA. Inside the agency, he implemented customer service training, and reorganized the agency to decrease the occurrence of bottlenecks in the bureaucracy. He also supported the use of new technology to be used in the delivery of disaster services and shifted the focus from the response of disasters to the mitigation of disasters. Outside the agency he strengthened the relationships between FEMA and the state and local emergency managers in addition to building new relationships with Congress and the media (Haddow and Bullock 2003, 10). Moreover, in developing a better working relationship with the states during the Clinton Administration, FEMA put in place the practice of routinely dispatching a representative to the staff of any governor whose state faced imminent disaster. These practices attempted to smooth FEMA-state relations at the earliest possible time so that coordination and cooperation could be more efficient during times of disaster (Waugh and Sylves 1996, 52).

In the 1980's, FEMA was known as the office that prepared for "World War III," but during the 1990's that policy shifted its focus to include terrorism management plans (Haddow and Bullock 2003, 13). This new phase of emergency management occurred with the first bombing of the World Trade Center in New York in 1992 and the Oklahoma City bombing of 1995. These terrorist attacks raised the question of preparedness if similar events were to occur again – events which, under the definition of risk and consequences caused by risk, fell under the responsibility of FEMA. Although, the responsibility for preparedness in the face of a terrorist attack fell to FEMA, the agency's lack of resources and technologies meant that addressing the problem of terrorism was far beyond the capabilities and management structure of the agency (Haddow and Bullock 2003, 11-12).

In 2001, a shift in FEMA responsibility occurred. After the terrorist attacks on September 11, 2001, the Department of Homeland Security – with partners in emergency management, fire, police, and public health at the state and local levels – was placed in charge of America's emergency management system (Haddow and Bullock 2003, 13). Prior to the 2005 hurricane season, the Department of Homeland Security came out with its National Response Plan, a plan which erases the distinction between civilian and national security disasters, and simply states that preparation and response to any disasters are the responsibility of the Department of Homeland Security (Chossudovsky 2005).

Hurricanes Katrina and Rita reshaped the political landscape; never before has the shift in natural-disaster-related public policy orientation called for a holistic examination of the nation's priorities, forcing the country to view catastrophes in relation to other national policies and priorities (e.g. national energy policy and national security policy). Due to the damage inflicted during the 2005 tropical storm season, President Bush addressed the nation in a rare outdoor press conference from Jackson Square, New Orleans, Louisiana, and, with the Cathedral Basilica of St. Louis IX, King of France, serving as a background, the president issued comments supporting the militarization of an emergency response, placing the Pentagon as the lead agency in disaster relief. He commented:

"I also want to know all the facts about the government response to Hurricane Katrina. The storm involved a massive flood, a major supply and security operation, and an evacuation order affecting more than a million people. It was not a normal hurricane -- and the normal disaster relief system was not equal to it. Many of the men and women of the Coast Guard, the Federal Emergency Management Agency, the United States military, the National Guard, Homeland Security, and state and local governments performed skillfully under the worst conditions. Yet the system, at every level of government, was not well-coordinated, and was overwhelmed in the first few days. It is now clear that a challenge on this scale requires greater federal authority and a broader role for the armed forces -- the institution of our government most capable of massive logistical operations on a moment's notice" (Bush 2005).

The comments made by President Bush illustrate that the government wishes now to better control relief and mitigation practices of the nation. To this end, there will need to be a more centralized authority that has the ability to create more efficient coordination among all agencies participating in relief efforts. Moreover, the Department of Homeland Security will have to reevaluate the way it has attempted to solve the problem in the past so that it can create more efficient strategies for relieving natural disaster and other emergency situations (Bush 2005).

Conclusion and Implications

The future of disaster mitigation and management leaves a number of issues to be addressed, of which there are varying opinions as to the correct form of implementation. Waugh (1996, 351) argues that the United States' natural disaster orientation should place an increasing reliance on regional and local preparedness. He continues by explaining that the states need to establish and enforce statewide or local building codes and land-use ordinances (building codes and land-use are the most frequently mentioned problems in mitigation reports following presidential disaster declarations). The policy orientation that has been applied throughout the history of disaster management is a reliance on the state and local governments for the implementation of policies. Under this structure, federal agencies do not usurp the authority of the state and assume responsibility for relief efforts; they are, instead, supposed to stay in the background and provide general guidance (Schneider 1992, 136). Moreover, reliance on state and local governments allows for a lack of standardization across the entire nation, which has the ability to complicate issues in the event of a large-scale natural disaster (Drabek 1985). However, a current move within the federal government to restructure bureaucratic agencies and re-conceptualization disaster policy, in general to include natural and technological disasters as a component of national security, should take a more active and centralized role in the mitigation and response of disasters in order to decrease the amount of variance across the nation.

Although specific attention should be given to types of natural disasters unique to each region, planning should come from the top down as opposed to the "bottom up" (Schneider 1990; Schneider 1992, 136). It is only through centralization and federal direction that disaster policy and implementation can be ensured an equitable possibility of mitigation and response to all communities. If left to the local units, reprioritization of

environmental risks will be neglected for other more pressing local political issues having nothing to do with relief efforts.

Acknowledgements

The authors wish to thank Cindy Castelli for her assistance in the preparation of this article.

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