

HURRICANE SANDY AND HER LASTING ENVIRONMENTAL IMPACTS

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I. INTRODUCTION

More than three years have passed since Hurricane Sandy; estimated to be nearly 900 to 1,000 miles wide, made landfall along the U.S. Mid-Atlantic and Northeast Coasts on October 29, 2012.¹ With it came large storm surge, which destroyed buildings and bridges, filling even subway stations in New York City with saltwater.² In New York City and New Jersey alone, the storm damaged or destroyed more than 375,000 housing units.³ Strong winds knocked over trees and roughly 4.5 million people were left without power in New York City and New Jersey alone.⁴ The total damage was estimated to be around \$65 billion, which makes it the second costliest storm to hit the United States.⁵

Killing nearly 117 people in the United States alone, Hurricane Sandy was the deadliest of the 2012 Atlantic hurricane season.⁶ To aid in response and recovery of Hurricane Sandy's aftermath, the Obama Administration requested \$60.4 billion.⁷ "Roughly \$3 billion of the

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¹Matt Daniel, *This Date in Science: Hurricane Sandy hits U.S. Northeast*, EARTHSKY (Oct. 29, 2013), <http://earthsky.org/earth/this-date-in-science-hurricane-sandy-hits-u-s-northeast>.

² *Id.*

³ John Manuel, *The Long Road to Recovery: Environmental Health Impacts of Hurricane Sandy*, ENVIRONMENTAL HEALTH PERSPECTIVES (May 1, 2013), <http://ehp.niehs.nih.gov/121-a152/>.

⁴ Daniel, *supra* note 1.

⁵ *Id.*

⁶ Josh Siegel, *Home is Where the Heartache Is: Hurricane Sandy Victims Still Not Recovered*, THE DAILY SIGNAL (April 20, 2015), <http://dailysignal.com/2015/04/20/home-is-where-the-heartache-is-hurricane-sandy-victims-still-not-recovered/>.

⁷ Matt A. Mayer, *Hurricane Sandy: Disaster Aid Request too Big*, THE HERITAGE FOUNDATION (Dec. 13, 2012),

\$60.4 billion was requested so that federal departments and agencies could repair or replace federal assets.”⁸ Despite the infusion of federal, state and private sector funding, Hurricane Sandy continues to affect the lives of tens of thousands of New Jersey and New York City residents, who are still dealing with unfinished repairs, disputed claims, and recurrent mold more than three years later.⁹

This Comment addresses the exacerbated environmental and public health effects of Hurricane Sandy, which resulted from flaws in disaster relief funding. Part II will examine the process for disaster funding, including major disasters such as flooding and hurricanes. Part III will examine federal, state and local disaster relief efforts. Part IV will address environmental and public health effects, which have increased over time. Part V will examine the inquiry of lingering unmet needs despite obvious environmental and public health threats and available funding. Finally, Part VI will conclude with a recommendation for revamping funding processes for disaster relief by preserving the Disaster Relief Fund to minimize response and recovery during major disasters.

II. OVERVIEW OF THE DISASTER FUNDING PROCESS AND INTERGOVERNMENTAL RESPONSIBILITIES

When a major disaster strikes, such as Hurricane Sandy, local government’s emergency services are initially responsible for responding.¹⁰ In addition to natural catastrophes, fires and floods are also considered major disasters.¹¹ Initial response efforts are generally

http://www.heritage.org/research/reports/2012/12/hurricane-sandy-disaster-aid-request-too-big#_ftn1.

⁸ *Id.*

⁹ Julie Cartwright, *Hurricane Sandy Still Taking a Toll Nearly 3 Years Later*, FUTURITY (July 31, 2015), <http://www.futurity.org/hurricane-sandy-mental-health-973262/>.

¹⁰ *The Disaster Process & Disaster Aid Programs*, F.E.M.A., available at <https://www.fema.gov/disaster-process-disaster-aid-programs> (last updated Oct. 3, 2015) [hereinafter *Disaster Process*].

¹¹ 42 U.S.C.A. § 5122 (“Major disaster” means any natural catastrophe (including any hurricane, tornado, storm, high water, winddriven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this chapter to supplement the

supplemented by neighboring municipalities, state and volunteer agencies.¹² If local government becomes overwhelmed despite such efforts, assistance is then sought from the state.¹³ In response, the state offers its own resources, such as the National Guard and state agencies.¹⁴

The next step in the disaster funding process calls for a damage assessment, which is conducted by local state representatives, federal representatives, such as Federal Emergency Management Agency (FEMA), and volunteer organizations to determine losses and disaster recovery needs.¹⁵ Based upon the damage assessment results, the governor can then make a major disaster declaration request for federal resources that are mobilized through the U.S. Department of Homeland Security's FEMA.¹⁶ Such resources include, but are not limited to, search and rescue, electrical power, food, water, shelter and other basic human needs.¹⁷

Major disaster declaration requests entail many requirements, beginning with the Stafford Act requirement that: "All requests for a declaration by the President that a major disaster exists shall be made by the Governor of the affected State."¹⁸ As part of the request, the governor must not only inform as to the nature of damages, but also provide specific information on present and future resource plans to alleviate the aftermath of the major disaster on both local and state levels.¹⁹ This includes, estimates on the amount and severity of damage caused, as well as the private and public sector impact felt across the board.²⁰ In order to further comply with the major disaster declaration request requirements, the governor must provide the type and amount of assistance needed under the Stafford Act.²¹ Lastly, a certification from the governor regarding the current disaster is required, which must

efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby).

¹² *Disaster Process*, *supra* note 10.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *The Declaration Process*, F.E.M.A., available at <https://www.fema.gov/declaration-process> (last updated Sept. 21, 2015) [hereinafter *Declaration Process*]. See also *infra* Section IIIA.

¹⁹ *Declaration Process*, *supra* note 18.

²⁰ *Id.*

²¹ *Id.*

indicate an intention to comply with all applicable cost-sharing requirements.²² Moreover, the governor must certify compliance with applicable state laws and emergency state plans.²³ Although a major disaster declaration could lead to significant federal funding response, as

²² *Id.*

²³ Federal Disaster Assistance, 44 C.F.R. § 206.36(c)(1) (2009). ((a) When a catastrophe occurs in a State, the Governor of a State, or the Acting Governor in his/her absence, may request a major disaster declaration. The Governor should submit the request to the President through the appropriate Regional Administrator to ensure prompt acknowledgment and processing. The request must be submitted within 30 days of the occurrence of the incident in order to be considered. The 30-day period may be extended by the Assistant Administrator for the Disaster Assistance Directorate, provided that a written request for an extension is submitted by the Governor, or Acting Governor, during this 30-day period. The extension request will stipulate reasons for the delay. (b) The basis for the request shall be a finding that:

(1) The situation is of such severity and magnitude that effective response is beyond the capabilities of the State and affected local governments; and (2) Federal assistance under the Act is necessary to supplement the efforts and available resources of the State, local governments, disaster relief organizations, and compensation by insurance for disaster-related losses. (c) In addition to the above findings, the complete request shall include:

(1) Confirmation that the Governor has taken appropriate action under State law and directed the execution of the State emergency plan; (2) An estimate of the amount and severity of damages and losses stating the impact of the disaster on the public and private sector; (3) Information describing the nature and amount of State and local resources which have been or will be committed to alleviate the results of the disaster; (4) Preliminary estimates of the types and amount of supplementary Federal disaster assistance needed under the Stafford Act; and

(5) Certification by the Governor that State and local government obligations and expenditures for the current disaster will comply with all applicable cost sharing requirements of the Stafford Act. (d) For those catastrophes of unusual severity and magnitude when field damage assessments are not necessary to determine the requirement for supplemental Federal assistance, the Governor or Acting Governor may send an abbreviated written request through the Regional Administrator for a declaration of a major disaster. This may be transmitted in the most expeditious manner available. In the event the FEMA Regional Office is severely impacted by the catastrophe, the request may be addressed to the Administrator of FEMA. The request must indicate a finding in accordance with § 206.36(b), and must include as a minimum the information requested by § 206.36 (c)(1), (c)(3), and (c)(5). Upon receipt of the request, FEMA shall expedite the processing of reports and recommendations to the President. Notification to the Governor of the Presidential declaration shall be in accordance with 44 CFR 206.39. The Assistant Administrator for the Disaster Assistance Directorate shall assure that documentation of the declaration is later assembled to comply fully with these regulations).

indicated above, the governor cannot escape contribution when a major disaster strikes.²⁴

Once a major disaster declaration has been requested, it is then up to the President to make the determination regarding the disbursement of supplemental federal aid.²⁵ Depending upon the severity and circumstances surrounding the disaster, the process can take anywhere from a couple of hours to several weeks.²⁶ If denied, FEMA has the responsibility of informing the governor.²⁷ However, if the President determines the major disaster warrants federal aid, FEMA then evaluates and recommends the request to the White House for action.²⁸ FEMA's evaluation and recommendation is based upon the disaster's location, and the state's ability to bounce back from the disaster.²⁹

Alternatively, if the governor's proposed disaster fails to qualify as a "major disaster," the governor may request the President declare an emergency instead.³⁰ An emergency refers to an event that requires supplemental federal aid to save lives, protect public health, safety and property, or avert the threat of a catastrophe.³¹ The requirements for requesting an emergency declaration are very similar, with only slight differences required in the governor's basis and findings for the request.³² For example, the governor shall include in an emergency

²⁴ *Disaster Process*, *supra* note 10.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ Requests for Emergency Declarations, 44 C.F.R. § 206.35(a) (2009). *See infra* note 32.

³¹ Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5121 (2013), available at <http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Emergency-Authority-and-Immunity-Toolkit/Robert-T—Stafford-Disaster-Relief-and-Emergency-Assistance-Act-Fact-Sheet/> (last visited Jan. 1, 2016) [hereinafter *Stafford Disaster Relief*].

³² 44 C.F.R. § 206.35. (Pursuant to the Act: (a) When an incident occurs or threatens to occur in a State, which would not qualify under the definition of a major disaster, the Governor of a State, or the Acting Governor in his/her absence, may request that the President declare an emergency. The Governor should submit the request to the President through the appropriate Regional Administrator to ensure prompt acknowledgment and processing. The request must be submitted within 5 days after the need for assistance under title V becomes apparent, but no longer than 30 days after the occurrence of the incident, in order to be considered. The period may be extended by the Assistant Administrator for the Disaster Assistance Directorate provided that a written request for such extension is made by the Governor, or Acting

declaration request only the identification of the type and extent of supplemental federal aid required.³³ However, in a major disaster declaration request, preliminary estimates of the type and extent of supplemental federal aid must be provided in accordance with the Stafford Act.³⁴

A Presidential major disaster declaration receives supplemental federal aid from the President's Disaster Relief Fund, which is also known as the Disaster Relief Fund (DRF), as well as long-term recovery programs.³⁵ While most long-term recovery programs are strictly federal programs, some programs require that states match federal funds. Regardless of the source or its structure, the main goal amongst all

Governor, during the 30-day period immediately following the incident. The extension request must stipulate the reason for the delay. (b) The basis for the Governor's request must be the finding that the situation: (1) Is of such severity and magnitude that effective response is beyond the capability of the State and the affected local government(s); and (2) Requires supplementary Federal emergency assistance to save lives and to protect property, public health and safety, or to lessen or avert the threat of a disaster. (c) In addition to the above findings, the complete request shall include: (1) Confirmation that the Governor has taken appropriate action under State law and directed the execution of the State emergency plan; (2) Information describing the State and local efforts and resources which have been or will be used to alleviate the emergency; (3) Information describing other Federal agency efforts and resources which have been or will be used in responding to this incident; and (4) Identification of the type and extent of additional Federal aid required. (d) Modified declaration for Federal emergencies. The requirement for a Governor's request under paragraph (a) of this section can be waived when an emergency exists for which the primary responsibility rests in the Federal government because the emergency involves a subject area for which, under the Constitution or laws of the United States, the Federal government exercises exclusive or preeminent responsibility and authority. Any party may bring the existence of such a situation to the attention of the FEMA Regional Administrator. Any recommendation for a Presidential declaration of emergency in the absence of a Governor's request must be initiated by the Regional Administrator or transmitted through the Regional Administrator by another Federal agency. In determining that such an emergency exists, the Assistant Administrator for the Disaster Assistance Directorate or Regional Administrator shall consult the Governor of the affected State, if practicable. (e) Other authorities. It is not intended for an emergency declaration to preempt other Federal agency authorities and/or established plans and response mechanisms in place prior to the enactment of the Stafford Act).

³³ 44 C.F.R. § 206.35(c)(4), *supra* note 32.

³⁴ 44 C.F.R. § 206.36(c)(5), *supra* note 23.

³⁵ *Disaster Process*, *supra* note 10.

recovery programs is to assist those affected by disaster, including businesses and public entities.³⁶

III. DISASTER RELIEF

Disaster relief refers to “monies or services made available to individuals and communities that have experienced losses due to disasters such as hurricanes, floods, drought, tornados, earthquakes, and riots.”³⁷ Before 1950, the federal response to disasters was criticized for being delayed, insufficient, and inconsistent.³⁸ Over time, the federal government took on a larger role in disaster relief assistance, which ultimately led to the creation of FEMA in 1979.³⁹

Not only is FEMA responsible for managing the President’s Disaster Relief Fund, but FEMA is also responsible for coordinating all government-wide relief efforts.⁴⁰ However, since becoming part of the US Department of Homeland Security in 2002, FEMA no longer makes decisions independently.⁴¹ Rather, FEMA must report to the Secretary of the US Department of Homeland Security.⁴² Congress intended to encourage proper planning and harmonious relationships between states and local government; therefore, FEMA’s role became to oversee and promote an orderly system for state and local government that provides citizens with federal disaster assistance.⁴³

A. ROBERT T. STAFFORD DISASTER RELIEF AND EMERGENCY ASSISTANCE ACT OF 1988 (STAFFORD ACT)

The federal government’s legal authority to provide assistance to states during major disaster and emergency declarations comes from the Robert T. Stafford Disaster Relief and Emergency Assistance Act of

³⁶ *Id.*

³⁷ West’s Encyclopedia of American Law (2d ed. 2008).

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Disaster Process*, *supra* note 10.

⁴¹ MITCHELL L. MOSS AND CHARLES SHELHAMER, CENTER FOR CATASTROPHE PREPAREDNESS AND RESPONSE, *THE STAFFORD ACT: PRIORITIES FOR REFORM (2006)*, *available at* http://www.nyu.edu/ccpr/pubs/Report_StaffordActReform_MitchellMoss_10.03.07.pdf (last visited on Dec. 28, 2015).

⁴² *Id.*

⁴³ *About the Agency*, F.E.M.A., *available at* <http://www.fema.gov/about-agency> (last updated Jan. 31, 2015).

1988 (Stafford Act).⁴⁴ Under the Stafford Act, there are three types of aid available: (1) individual; (2) hazard mitigation; and (3) public assistance.⁴⁵ Individual assistance provides immediate temporary housing and financial assistance for uninsured emergency personal needs, and other disaster related needs, such as emergency food supplies and crisis counseling.⁴⁶ Moreover, if deemed to be in the public's best interest, some private property debris removal also falls under this category of aid under the Stafford Act.⁴⁷ Hazard mitigation assistance, which is only available for major disaster declarations, provides financial assistance towards long-term hazard mitigation in the affected geographic areas designated by the declaration.⁴⁸ Lastly, public assistance allows for repair, reconstruction and/or replacement of structures such as schools, hospitals, custodial care facilities, and other public buildings.⁴⁹

As the controlling federal statute for disasters, the Stafford Act greatly affects the total disaster declarations that are administered.⁵⁰ The financial threshold for storm-related damage under the Stafford Act is relatively low with many states at less than one million dollars.⁵¹ As long as FEMA has issued a disaster declaration, the federal government will pay 75% to 100% of the costs in response to the disaster.⁵² In 2015 alone, a total of 79 disaster declarations were made, including assistance for managing fires.⁵³ Of those, 43 were major disaster declarations, two were emergency declarations, and 34 were fire management assistance

⁴⁴ Stafford Disaster Relief, *supra* note 31.

⁴⁵ *Id.*

⁴⁶ STAFFORD ACT FAQ'S, PRIMA CENTRAL, <http://www.primacentral.org/resources/Stafford%20Act%20FAQs%20Epdf> (last visited Jan. 1, 2016).

⁴⁷ *Id.*

⁴⁸ Stafford Disaster Relief, *supra* note 31.

⁴⁹ *Id.*

⁵⁰ Steven P. Bucci, David Inserra, Jonathan Lesser, Matt A. Mayer, Brian Slattery, Jack Spencer & Katie Tubb, *After Hurricane Sandy: Time to Learn and Implement the Lessons in Preparedness, Response, and Resilience*, THE HERITAGE FOUNDATION (Oct. 24, 2013), *available at* <http://www.heritage.org/research/reports/2013/10/after-hurricane-sandy-time-to-learn-and-implement-the-lessons>.

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Disaster Declarations for 2015*, F.E.M.A., *available at* <https://www.fema.gov/disasters/grid/year/2015>.

declarations.⁵⁴ This trend is further evidenced by the 13 disaster declarations that have already been made for 2016.⁵⁵

B. DISASTER RELIEF FUND

For major disasters and emergencies that overwhelm state resources pursuant to the Stafford Act, the Disaster Relief Fund (DRF) is the main appropriation used during disaster recovery.⁵⁶ The DRF is funded annually, with FEMA and the Office of Management and Budget (OMB) initially requesting the amount.⁵⁷ Congress initially receives an administration request from the President, which does not have to be the amount suggested by FEMA and the Office of Management and Budget.⁵⁸ However, the Stafford Act does not explicitly spell out the DRF as the source to be used.⁵⁹ Instead, the DRF can be traced back to legislative and federal policies following World War II.⁶⁰

A presidential declaration pursuant to the Stafford Act triggers disbursement of funds from the DRF.⁶¹ However, if a major disaster costs more than \$500 million, it is not funded by the DRF but with emergency supplemental appropriations instead.⁶² Managed by FEMA, the DRF can be used from any one, or any combination, of the three types of aid previously mentioned under the Stafford Act.⁶³ The DRF also funds fire management assistance grants for large forest or grassland wildfires that qualify for aid.⁶⁴ If a catastrophic event depletes the DRF, emergency appropriations can be requested by the President to supplement it.⁶⁵

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Disaster Relief Fund: Monthly Report*, F.E.M.A., available at <http://www.fema.gov/media-library/assets/documents/31789> (last updated Oct. 9, 2015).

⁵⁷ CONGRESSIONAL RESEARCH SERVICE, *DISASTER RELIEF FUNDING AND EMERGENCY SUPPLEMENTAL APPROPRIATIONS* (2011), available at <http://fas.org/sgp/crs/misc/R40708.pdf> [hereinafter CRS Report].

⁵⁸ *Id.* at 5.

⁵⁹ *Id.* at 2.

⁶⁰ *Id.*

⁶¹ *Id.* at 1.

⁶² *Id.* at 8.

⁶³ *Id.* at 1.

⁶⁴ *Disaster Relief Fund: Monthly Report*, *supra* note 56.

⁶⁵ CRS Report, *supra* note 57.

As of December 7, 2015, FEMA had disbursed \$1.4 billion in individual assistance, \$13.3 billion in public assistance, and \$802.2 million for hazard mitigation in New York and New Jersey combined.⁶⁶

C. NATIONAL FLOOD INSURANCE PROGRAM

Flood insurance became available for the first time in 1968 with the National Flood Insurance Act creating the Federal Insurance Administration.⁶⁷ Created to provide property owners with flood insurance protection, Congress required a commitment to related flood disaster mitigation efforts and floodplain management from local government in response.⁶⁸ Subsequently, the Hurricane Sandy Relief Bill amended the National Flood Insurance Act of 1968 to increase the total amount of federal borrowing authority from \$20.725 billion to \$30.425 billion.⁶⁹ With the President's approval, FEMA may issue National Flood Insurance Program funds.⁷⁰

To date, approximately \$4 billion has been paid on flood insurance policyholder's claims in New York.⁷¹ Additionally, approximately \$3.5 billion has been paid on flood insurance policyholders claims in New Jersey.⁷² However, it was discovered in 2015 that payments did not include tax calculations, hence aid recipients saw at least a 7% reduction in their awarded amounts.⁷³ In response, the National Flood Insurance Program required affected recipients to go through an appeal hurdle,

⁶⁶ *Sandy Recovery Three Years Later: By the Numbers*, F.E.M.A., <https://www.fema.gov/sandy-recovery-office> (last updated Dec. 7, 2015).

⁶⁷ *National Flood Insurance Act of 1968*, F.E.M.A., available at <https://www.fema.gov/media-library/assets/documents/7277> (last update May 1, 2014).

⁶⁸ *Introduction to NFIP Direct Servicing Agent*, available at <https://www.nfipservices.com> (last visited on Dec. 28, 2015).

⁶⁹ Summaries of Hurricane Sandy Relief Bill, Congressional Research Service (January 6, 2013), <https://www.govtrack.us/congress/bills/113/hr41/summary>.

⁷⁰ *Id.*

⁷¹ *FEMA aid reaches \$16.9 billion for New York's Hurricane Sandy Recovery*, F.E.M.A., available at <https://www.fema.gov/news-release/2015/10/21/fema-aid-reaches-169-billion-new-yorks-hurricane-sandy-recovery> (last visited Dec. 28, 2015).

⁷² *Three Years after Sandy: Recovery by the Numbers*, F.E.M.A., available at <https://www.fema.gov/news-release/2015/10/29/three-years-after-sandy-recovery-numbers> (last visited Dec. 28, 2015).

⁷³ Telephone Interview with Meghan E. Wren, Chairman, Cumberland County Long Term Recovery (Oct. 16, 2015).

which most were likely unable to complete.⁷⁴ In addition to the standard paperwork requirements, policyholders must provide very detailed information about the claim.⁷⁵ Many attorneys have even described the appeal process for flood claims as being impossible absent a legal background.⁷⁶

D. COMMUNITY DEVELOPMENT BLOCK GRANT

Additional funding that falls outside of the Stafford Act requirements may also be available for those affected by major disasters.⁷⁷ For example, programs such as the Community Development Block Grant (CDBG) provided by the Department of Housing and Urban Development (HUD).⁷⁸ Working to ensure affordable housing, as well as creating jobs, the CDBG began in 1974 and continues to be one of HUD's longest running programs.⁷⁹

The CDBG is a program that provides communities with resources, which HUD determines by using a formula based upon the needs of the community.⁸⁰ The CDBG program provides annual grants, which are allocated between states and local government.⁸¹

Additionally, Congress may appropriate CDBG funding specifically for disaster recovery purposes (CDBG-DR) in extraordinary circumstances.⁸² Extraordinary circumstances are those resulting in

⁷⁴ *Id.*

⁷⁵ *Appealing Your Flood Insurance Claim—F.E.M.A Fact Sheet*, F.E.M.A., available at [http://www.fema.gov/media-library-data/1445375610216-677b966ca615fbc30ce3d88be32611d9/FactSheet_FIMA_Appeals_RID_SC_101415_v4\(2\)accessible.pdf](http://www.fema.gov/media-library-data/1445375610216-677b966ca615fbc30ce3d88be32611d9/FactSheet_FIMA_Appeals_RID_SC_101415_v4(2)accessible.pdf).

⁷⁶ Scott Gurian, *With Insurance Settlements Still in Limbo, Sandy Victims Turn to Legal Remedies*, N.J. SPOTLIGHT (Sept. 24, 2013), <http://www.njspotlight.com/stories/13/09/23/with-insurance-settlements-still-in-limbo-sandy-victims-turn-to-legal-remedies/?p=all#>.

⁷⁷ Moss & Shelhamer, *supra* note 41.

⁷⁸ *Id.*

⁷⁹ *Community Development Block Grant Program – CDBG*, U.S. DEPARTMENT OF HOUSING & URBAN DEVELOPMENT, http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs.

⁸⁰ *Community Development Block Grant Program – CDBG Frequently Asked Questions*, U.S. DEPARTMENT OF HOUSING & URBAN DEVELOPMENT, http://portal.hud.gov/hudportal/documents/huddoc?id=cdbg_dr_faq.pdf (last visited Dec. 20, 2015) [hereinafter CDBG].

⁸¹ *Id.*

⁸² *Id.*

unmet needs for long-term recovery, and they must be of some significance.⁸³ Such funds, however, do not replace other federal aid, but merely supplement it.⁸⁴

This process commences once HUD receives major disaster damage estimates from FEMA and the Small Business Administration (SBA).⁸⁵ Taking into account other contributions such as, insurance, grants and loans, HUD estimates any remaining unmet needs.⁸⁶ Grantees of the CDBG-DR funds may then use them for homeowner assistance, rental housing, economic revitalization, and even infrastructure.⁸⁷ Additionally, CDBG-DR funds may be used for damage mitigation such as a home being elevated during rebuilding to prevent future flood damage.⁸⁸

Once CDBG-DR funds have been awarded, 80% must be spent in the most impacted counties, which are determined by HUD.⁸⁹ HUD makes this determination based upon the estimation of unmet severe housing and business needs.⁹⁰ Specifically, counties having more than \$10 million in unmet needs, meet this requirement for assistance.⁹¹ Additionally, HUD specifies how much a state is to spend in each county, and local government must adhere to spending within its jurisdiction.⁹²

Less than four months after Hurricane Sandy made landfall in New Jersey, HUD announced that New Jersey would receive \$1.85 billion in CDBG-DR funds.⁹³ Upon New Jersey submitting their action plan in accordance with CDBG-DR requirements, HUD approved the first round of funding on April 29, 2013.⁹⁴ Subsequently, HUD announced \$1.46 billion for New Jersey's second round of CDBG-DR funding,

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *CDBG, supra* note 80.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Recovery Initiatives*, STATE OF NEW JERSEY: GOVERNOR'S OFFICE OF RECOVERY AND REBUILDING, available at <http://www.state.nj.us/gorr/plan/index.html> (last visited Dec. 28, 2015).

⁹⁴ *Id.*

which was approved by HUD on May 30, 2014.⁹⁵ HUD determined that the following counties of New Jersey were the most impacted: Atlantic, Bergen, Cape, May, Essex, Hudson, Middlesex, Monmouth, Ocean, and Union.⁹⁶ In New York, HUD approved the first round of CDBG-DR funding in the amount of \$1.7 billion on April 25, 2013, and then the second round in the amount of \$2.1 billion on November 25, 2013.⁹⁷

E. NEW YORK RISING COMMUNITY RECONSTRUCTION PROGRAM (NYRCR)

The New York Rising Community Reconstruction Program (NYRCR) is a recovery and resiliency program that is funded through the CDBG.⁹⁸ Designed to provide assistance to severely damaged communities from Hurricane Sandy, Hurricane Irene, and Tropical Storm Lee, NYRCR helps plan and implement community-developed projects.⁹⁹ These projects, also known as “plans,” received federal funds in excess of \$700 million from the Governor’s Office of Storm Recovery (GOSR).¹⁰⁰

In response to identified community needs, assessment committees develop recovery and resiliency strategies for each locally driven plan.¹⁰¹ Implementation of these strategic plans is possible due to the \$3 million to \$25 million CDBG-DR allotted to each one.¹⁰² However, such award payments are staggered.¹⁰³ Recipients initially receive fifty percent for home repairs, twenty-five percent after work is

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ *Action Plans and Amendments*, STATE OF NEW YORK: GOVERNOR’S OFFICE OF STORM RECOVERY, <http://stormrecovery.ny.gov/funding/action-plans-amendments> (last visited Dec. 28, 2015).

⁹⁸ *Frequently Asked Questions*, STATE OF NEW YORK: GOVERNOR’S OFFICE OF STORM RECOVERY, available at <http://stormrecovery.ny.gov/communities/faqs> (last visited Oct 17, 2015).

⁹⁹ *Community Reconstruction Program*, STATE OF NEW YORK: GOVERNOR’S OFFICE OF STORM RECOVERY, available at <http://stormrecovery.ny.gov/community-reconstruction-program> (last visited Oct. 16, 2015).

¹⁰⁰ *Id.*

¹⁰¹ *NY Rising Community Reconstruction Plans*, STATE OF NEW YORK: GOVERNOR’S OFFICE OF STORM RECOVERY, available at <http://stormrecovery.ny.gov/nyrcr/final-plans> (last visited Oct. 16, 2015).

¹⁰² *Id.*

¹⁰³ Siegel, *supra* note 6.

“substantially” completed and then finally, twenty-five percent upon completion.¹⁰⁴

F. REHAB, RECONSTRUCTION, ELEVATION AND MITIGATION PROGRAM
(RREM)

Providing up to \$150,000 to eligible homeowner’s primary residences, the Reconstruction, Rehabilitation, Elevation & Mitigation program (RREM) is New Jersey’s largest grant program.¹⁰⁵ RREM is organized by the state but federally funded through CDBG-DR funds to assist with repairs of homes damaged by Hurricane Sandy.¹⁰⁶ Additionally, this program may reimburse eligible homeowners with previously incurred repair expenses.¹⁰⁷

As of December 23, 2015, of the 7,922 award letters sent to eligible homeowners, New Jersey has completed grant signings for 7,711 of the RREM program applicants.¹⁰⁸ Accordingly, New Jersey has obligated \$1,136,901,922 in grant assistance under this program.¹⁰⁹ However, of those Hurricane Sandy victims actively participating in the RREM program, only about 900 had completed the reconstruction and moved back into their homes as of April 29, 2015.¹¹⁰

IV. ENVIRONMENTAL AND PUBLIC HEALTH EFFECTS

A. MOLD

Only days after Hurricane Sandy made landfall, the mayor of New York estimated that close to 80,000 homes had water damage resulting

¹⁰⁴ *Id.*

¹⁰⁵ *Superstorm Sandy CDBG-DR Dashboard*, N.J. DEPT. OF COMM. AFFAIRS, available at <https://www.newjerseyrebuild.org/ProgramInfo.aspx#> (last updated Dec. 23, 2015).

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ Scott Gurian, *Two-and-a-Half Years After Hurricane Sandy, Storm Victims Still Struggle*, N.J. SPOTLIGHT (April 29, 2015), <http://www.njspotlight.com/stories/15/04/28/two-and-a-half-years-after-hurricane-sandy-storm-victims-continue-to-struggle/>.

from Hurricane Sandy.¹¹¹ The health and safety of thousands could be threatened if these homes were not completely dried out within 48 hours of coming into contact with water due to the likelihood of mold infestation.¹¹² Additionally, if the homes were remediated following the storm, but done so improperly, mold could still be a potential hazard to the health and safety of the public.¹¹³

Mold concerns are “issues that can affect workers, residents that are living in homes and tenants, and also volunteers who are graciously donating their time and their energy to clean up their communities,” said Judith Enck, regional administrator for the federal Environmental Protection Agency (EPA).¹¹⁴ “In addition to visible or hidden mold, damp spaces likely harbor broken down mold products, dust mites, bacteria, and chemicals, gasses, and particulate matter released from the materials where mold grows.”¹¹⁵

According to the Center for Disease Control (CDC), exposure to mold can cause symptoms such as nasal stuffiness, eye irritation, wheezing, or skin irritation.¹¹⁶ Some people, such as those with serious allergies to mold, may have more severe reactions.¹¹⁷ Severe reactions may include fever and shortness of breath.¹¹⁸ People with weakened immune systems and with chronic lung diseases, such as asthma or chronic obstructive pulmonary disease, may develop mold infections in their lungs.¹¹⁹ Exposure to mold, via skin contact, ingestion, or

¹¹¹ ALIGN, Community Voices Heard, et al., *Sandy’s Mold Legacy: The Unmet Needs Six Months After the Storm* (May 2013), <http://www.rebuildajustny.org/wp-content/uploads/2013/05/Sandys-Mold-Legacy-Final-Report.pdf>.

¹¹² *Id.* at 5.

¹¹³ *Id.*

¹¹⁴ Mary Ann Spoto, *Officials Warn Hurricane Sandy Victims of Mold, Asbestos, Lead Paint*, N.J. ADVANCE MEDIA (Dec. 18, 2012), http://www.nj.com/politics/index.ssf/2012/12/officals_warn_hurricane_sandy.html.

¹¹⁵ Rose Ann Gould Soloway, *Mold 101: Effects on Human Health*, <http://www.poison.org/articles/2011-oct/mold-101-effects-on-human-health> (last visited Oct. 17, 2015).

¹¹⁶ *Frequently Asked Questions*, CENTERS FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/mold/faqs.htm#affect> (last visited Dec. 29, 2015).

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ *Mold After a Disaster*, CENTERS FOR DISEASE CONTROL AND PREVENTION, available at <http://emergency.cdc.gov/disasters/mold/index.asp>.

inhalation, can even result in toxic (poisonous) effects, resulting in neurological damage and even death.¹²⁰

According to the Sandy Child and Family Health Study, both asthma and mental health disorders are directly linked to mold exposure.¹²¹ After Hurricane Sandy made landfall, there was a sixty nine percent increase in requested mental health assistance, but those needs were unable to be met.¹²² As stated by Chief Operating Officer of Services for the UnderServed, a non-profit organization, “It was always a strained system, but it was functioning. Now, it’s breaking.”¹²³ In New Jersey, twenty-seven percent of the 100,000 residents whose primary residence suffered significant structural damage were still experiencing moderate to severe mental health issues.¹²⁴ Additionally, fourteen percent reported suffering from PTSD two and half years after Hurricane Sandy.¹²⁵

Nearly six months after Hurricane Sandy made landfall in New York City, the need for mold remediation was still present.¹²⁶ Moreover, this acute need disproportionately impacted low-income and immigrant communities, which resulted in displacement from homes, illness, and a lingering crisis to communities affected by Hurricane Sandy.¹²⁷

In response to increasing reports of mold contamination, New York City administrators created the Neighborhood Revitalization NYC program (“NRNYC” or “the program”) in January of 2013.¹²⁸ This privately funded program was implemented to remediate mold in 2,000 homes directly affected by Hurricane Sandy related water damage.¹²⁹ The NRNYC program coordinates the mold remediation efforts, while environmental consultants, contractors, and volunteers actually do the work.¹³⁰ The NRNYC program relies on either trained staff for not-for-

¹²⁰ *The Truth About Toxic Mold*, <http://www.ehagroup.com/mold-iaq-services/toxic-mold/> (last visited Oct. 17, 2015).

¹²¹ Cartwright, *supra* note 9.

¹²² Manuel, *supra* note 3.

¹²³ *Id.*

¹²⁴ Cartwright, *supra* note 9.

¹²⁵ *Id.*

¹²⁶ ALIGN et al., *supra* note 111, at 1.

¹²⁷ *Id.* at 5.

¹²⁸ *Id.* at 1.

¹²⁹ *Hurricane Sandy Relief*, LISC NEW YORK CITY, http://programs.lisc.org/nyc/programs/affordable_housing/mold_treatment.php (last accessed April 12, 2016).

¹³⁰ *Id.*

profit organizations or experienced private contractors to assist selected high-need families for mold remediation.¹³¹

Aside from privately funded programs, there surprisingly is limited assistance available to people experiencing, or at risk of developing moldy homes.¹³² Even after homes appear to be repaired, mold issues have caused many people to remain displaced from their homes.¹³³ FEMA provides money for mold treatment, but only for visible mold that is present during an inspection for damage.¹³⁴ Obviously, because mold grows over time, it may not be visible at the time of inspection, but surfaces after inspectors have left.¹³⁵

B. WATER POLLUTION

Water pollution can also affect public health and safety following a major disaster like Hurricane Sandy.¹³⁶ After Hurricane Sandy made landfall, hazardous chemical containers from homes and businesses were swept away, and they later ended up in nearby marshland.¹³⁷ Additionally, in New York City, raw sewage spilled into homes and businesses after a sewage plant flooded.¹³⁸ Ultimately, an estimated 2.75 billion gallons of untreated waste ended up flowing into the nearby bay.¹³⁹

After the storm, the EPA warned the public of the risks of being exposed to raw sewage and encouraged the public to stay away from

¹³¹ *Request for Qualifications for Mold Remediation Contractors Mold Treatment Program*, NEIGHBORHOOD REVITALIZATION NYC (Feb. 8, 2013), http://www.lisc.org/media/filer_public/f9/78/f9785dfa-9943-44a9-973b-dd08d98a1634/mold_remediation_contractor.pdf.

¹³² See Sarah Maslin Nir, *Questions Emerge About the Mold That Hurricane Sandy Left Behind*, N.Y. TIMES (March 1, 2013), http://www.nytimes.com/2013/03/02/nyregion/response-to-post-hurricane-sandy-mold-is-questioned.html?_r=1.

¹³³ Telephone Interview with Jessica Limbacher, Staff Counsel, Volunteer Lawyers for Justice (Oct. 8, 2015).

¹³⁴ See Nir, *supra* note 132.

¹³⁵ See *Id.*

¹³⁶ See Manuel, *supra* note 3.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.*

floodwaters.¹⁴⁰ Children, the elderly, and pregnant women were among those that were the most vulnerable to illnesses caused by sewage overflows.¹⁴¹

According to Vince Radke, a sanitarian at the Centers for Disease Control and Prevention, if raw sewage is not properly remediated and it remains in walls and between floorboards, diseases like salmonella, hepatitis A and giardia may result.¹⁴²

Beyond the immediate consequences of floating waste, such overflows can not only seriously impact public health, but the ecosystems in the nearby waterways as well.¹⁴³ The EPA reported that sewage overflow could greatly elevate waterborne illness risks in several ways.¹⁴⁴ If someone comes into contact with contaminated water, they are at risk of contracting a waterborne disease.¹⁴⁵ Additionally, pathogens from sewage overflows can be carried by all types of fish after being exposed to contaminated waterways.¹⁴⁶ Moreover, public drinking water can be affected by sewage overflows.¹⁴⁷

Nearby waterway ecosystems can also be impacted by sewage overflows when an imbalance of nutrients occurs due to the depletion of available oxygen for living organisms.¹⁴⁸ Additionally, because sewage contains high levels of phosphorous and nitrogen, plant growth and algae increases.¹⁴⁹ Algae, which collects on the surface of the water, can ultimately deter aquatic life from remaining in the contaminated areas.¹⁵⁰

¹⁴⁰ Alyson Kenward, Daniel Yawitz, & Urooj Raja, *Sewage Overflows from Hurricane Sandy*, CLIMATE CENTRAL (April 2013), <http://www.climatecentral.org/pdfs/Sewage.pdf>.

¹⁴¹ *Id.* at 19.

¹⁴² Michael Schwartz, *Sewage Flows After Storm Exposes Flaws in System*, N.Y. TIMES (Nov. 29, 2012), <http://www.nytimes.com/2012/11/30/nyregion/sewage-flows-after-hurricane-sandy-exposing-flaws-in-system.html>.

¹⁴³ Kenward, Yawitz, & Raja, *supra* note 140, at 19.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ *Id.* at 26.

¹⁵⁰ *Id.* at 19.

C. PEST EXPOSURE

Following a major disaster like Hurricane Sandy, damaged areas are generally exposed to more contact with pests than normal.¹⁵¹ This increased exposure to rats, bed bugs, termites and even flies can be the direct result of increased moisture.¹⁵² Additionally, pests that were not killed during the storm can often be displaced.¹⁵³ Accordingly, pests immediately begin seeking food and shelter, thereby increasing human contact.¹⁵⁴ “It’s not just about the high winds and rain. A rat disturbance is something we should be concerned about,” according to Rick Ostfeld of the Cary Institute of Ecosystem Studies in Milbrook, N.Y.¹⁵⁵

Another factor leading to an increase in human contact with pests is due to the delay in garbage and debris pickup.¹⁵⁶ Not only does this delay increase food sources for displaced pests, but also construction debris can be a source of temporary shelter.¹⁵⁷ Because this abundance of food and potential shelter may sit for extended periods of time, pest infestations are likely to occur.¹⁵⁸ According to the Center for Disease Control, rodents can directly and indirectly several dozens of diseases, such as Lyme Disease, West Nile Virus, Plague, and Rat-bite Fever, just to name a few.¹⁵⁹ Such pest-related environmental and public health concerns can have lasting effects even months after a storm.¹⁶⁰

¹⁵¹ NPMA Staff, *Hurricane Sandy Predicted to Have Long-term Effects on Pest Population* (November 14, 2012), <http://www.pestworld.org/news-and-views/press-releases/press-releases/hurricane-sandy-predicted-to-have-long-term-effects-on-pest-populations/>. (I cannot seem to find the authors for this particular citation. To me, it looks like a webpage and not an institutional author. Consider finding the primary source.)

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ Lynne Peeples, *Hurricane Sandy Could Displace Rats, Spread Infectious Disease*, THE HUFFINGTON POST (Nov. 1, 2012), http://www.huffingtonpost.com/2012/10/29/hurricane-sandy-flood-rats-disease-new-york_n_2041474.html.

¹⁵⁶ NPMA, *supra* note 150.

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ CENTERS FOR DISEASE CONTROL AND PREVENTION, *DISEASES DIRECTLY TRANSMITTED BY RODENTS* (2011), *available at* <http://www.cdc.gov/rodents/diseases/direct.html> (last updated June 7, 2011).

¹⁶⁰ *See* NPMA, *supra* note 150.

**V. DESPITE OBVIOUS ENVIRONMENTAL AND PUBLIC HEALTH THREATS
AND AVAILABLE FUNDING, WHY ARE SO MANY NEEDS STILL UNMET?**

More than two years post Hurricane Sandy, the Sandy Child and Family Health Study discovered that the lives of many New Jersey residents were still being affected.¹⁶¹ A field team of over 30 interviewers made the striking discovery that despite a clearly persistent need, many federally funded programs had ended.¹⁶² According to David Abramson, clinical associate professor and director of the Program on Population Recovery and Resiliency at New York University, this discovery was very concerning.¹⁶³

In the aftermath of Hurricane Sandy, the President promised to help victims recover by having federal resources bear the full weight.¹⁶⁴ President Barack Obama stated that:

[T]here are still millions of people without power and many whose neighborhoods have been damaged or destroyed by water, heavy winds, and falling trees. There are places like Newark, New Jersey, for example, where you've got 80, 90 percent of the people without power. We can't have a situation where that lasts for days on end. And so my instructions to the federal agency has been, do not figure out why we can't do something; I want you to figure out how we do something. I want you to cut through red tape. I want you to cut through bureaucracy. There's no excuse for inaction at this point. I want every agency to lean forward and to make sure that we are getting the resources where they need—where they're needed as quickly as possible.¹⁶⁵

The question remains, why are so many needs still unmet despite the overwhelming evidence of environmental and public health threats and the availability of funding? There are many theories, which include lack of government accountability, ambiguous requirements for disaster

¹⁶¹ Cartwright, *supra* note 9.

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ *An Ongoing Response to Hurricane Sandy*, THE WHITE HOUSE, available at <https://www.whitehouse.gov/issues/hurricane/sandy#new-jersey> (Oct. 21, 2012).

¹⁶⁵ *Id.*

declarations, grant funding confusion, and wasteful spending.¹⁶⁶ Additionally, it is suggested that there is a link between medical and emotional issues following a major disaster like Hurricane Sandy, and the inability of those affected to properly comply with grant funding and insurance requirements.¹⁶⁷ Accordingly, this may also contribute to delayed recovery following a major disaster.¹⁶⁸

Following Hurricane Sandy, residents whose homes suffered major damage and were not necessarily living in deep poverty prior to the storm, did not have enough money for rent or their mortgages, utilities, transportation, or for the food or necessities that they and their families needed.¹⁶⁹ So what happens to those actually living in deep poverty when a major disaster like Hurricane Sandy strikes?

According to Meghan E. Wren, Cumberland County's Long Term Recovery Chairman, prior to Hurricane Sandy, compounds of Cumberland County residents could be seen living in conditions that you cannot imagine are acceptable in 2015 for human beings.¹⁷⁰ As the poorest county in New Jersey, regular human issues are exacerbated by the poverty and lack of access to resources.¹⁷¹ "So, add a super storm to that and you really do have a disaster," Wren said.¹⁷² Despite being the 10th most impacted county in New Jersey, the state decided not to include Cumberland County in its designation for funding eligibility, yet blamed the federal government for its non-incorporation.¹⁷³ As a result, Cumberland County was not eligible for most of the state and federal programs, and had to rely on private sector funding.¹⁷⁴ According to Bob Campbell, Down Township's mayor, neither President Obama, Vice President Biden nor Governor Christie have visited the western shore of New Jersey where Cumberland County is located.¹⁷⁵ However, they

¹⁶⁶ See Manuel, *supra* note 3.

¹⁶⁷ Ursula Martin, *Health after disaster: A perspective of psychological/health reactions to disaster*, HEALTH PSYCHOLOGY (June 15, 2015), <http://www.tandfonline.com/doi/pdf/10.1080/23311908.2015.1053741>.

¹⁶⁸ *Id.*

¹⁶⁹ Cartwright, *supra* note 9.

¹⁷⁰ Telephone Interview with Meghan E. Wren, *supra* note 73.

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ *Id.*

¹⁷⁵ Amy Ellis Nutt, *One Year after Hurricane Sandy, New Jersey's Forgotten Western Shore Struggles to Rebuild*, THE STAR-LEDGER (Oct. 25, 2013), http://www.nj.com/news/index.ssf/2013/10/hurricane_sandy_anniversary_njs_forgotten_shore_struggles_to_rebuild.html.

have visited the eastern shore, along with Britain's Prince Harry.¹⁷⁶ "On the Atlantic coast, there's a \$40 million boardwalk, huge beach replenishment, waterways cleaned. Down here, it's a dead zone. We don't qualify for anything," said Campbell.¹⁷⁷ Ironically, President Obama can be quoted while addressing the people of New Jersey regarding the reason for American's ability to bounce back from tough times as follows: "We lookout for one another and we don't leave anybody behind. So my commitment to the people on this block, the people in this community, and the people of this state is that same spirit will carry over all the way through until our work is done."¹⁷⁸

Thankfully, Cumberland County received a little over \$500,000 from private funding sources, such as the Robin Hood Foundation, Hurricane Sandy New Jersey Relief Fund, the Rotary Foundation and many church based groups.¹⁷⁹ Additionally, Cumberland County Long Term Recovery Group coordinated volunteer efforts to assist those still in need in Cumberland County.¹⁸⁰ For example, Lord of Life Lutheran Church hosted a mission trip where teenagers and adults spent a week in Cumberland County providing carpentry work to help rebuild damaged homes.¹⁸¹ However, because of Cumberland County's exclusion from many programs, many residents will ultimately abandon their decaying homes, which only increases the effect on local budgets.¹⁸²

In addition to lack of government accountability in designating who is eligible for funding, such finger pointing is also common in hybrid funding programs.¹⁸³ Hybrid funding programs like RREM, which are organized by the state but funded by the federal government, can lead to a lot of disconnect.¹⁸⁴ As a result, when issues arise within the

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ *Helping the Survivor's of Hurricane Sandy*, THE WHITE HOUSE (Oct. 31, 2012), <https://www.whitehouse.gov/issues/hurricane/sandy#new-jersey>.

¹⁷⁹ Telephone Interview with Meghan E. Wren, *supra* note 73.

¹⁸⁰ Phillip Tomlinson, *Lutheran Mission Group Helps Sandy Victims Still Trying to Recover in Cumberland County's Bayshore Region*, SOUTH JERSEY TIMES (June 26, 2013),

http://www.nj.com/cumberland/index.ssf/2013/06/lutheran_mission_group_helps_hurricane_sandy_victims_still_trying_to_recover.html.

¹⁸¹ *Id.*

¹⁸² Cumberland County Long Term Recovery Group, PUBLIC COMMENT, http://cumberlandltrg.org/?page_id=136 (last visited Jan. 1, 2016).

¹⁸³ See Telephone Interview with Jessica Limbacher, *supra* note 133.

¹⁸⁴ *Id.*

functioning of these programs, the state government blames the federal government and vice versa.¹⁸⁵ Naturally, this can further delay response and recovery in the wake of a major disaster.¹⁸⁶

Lingering unmet needs following a major disaster can also be contributed to the easily met requirements found under the Stafford Act.¹⁸⁷ For example, the disaster must be of “such severity and magnitude that effective response is beyond the capabilities of the state and the affected local governments and that federal assistance is necessary.”¹⁸⁸ These provisions reflect ambiguity at its finest, thereby allowing almost all “disasters” to qualify for federal disaster declaration assistance.¹⁸⁹ As previously mentioned, the Stafford Act’s low threshold for damage qualifications contributes to the overwhelming amount of federal disaster declarations that FEMA has to respond to.¹⁹⁰ As a result, when catastrophic disasters occur, like Hurricane Sandy, FEMA is unprepared, as federal funding is in need of replenishing.¹⁹¹

Another possible theory behind delayed response and recovery efforts is confusion regarding the funding of grant programs.¹⁹² According to Jessica Limbacher, Staff Counsel for Volunteer Lawyers for Justice, “There was a lot of confusion when FEMA announced the new claims review process, as many of our clients had questions about whether receipt of additional fund proceeds would be considered a duplication of benefits.”¹⁹³ “There was no clear response from HUD on the matter until just a few weeks ago,” Limbacher said.¹⁹⁴ Naturally, with such questions remaining unanswered, many victims of Hurricane Sandy may have experienced delays in recovery for fear of having to repay funds later classified as a duplication of benefits.¹⁹⁵ For example, Hurricane Sandy victim, Sandy Maglio, decided not to apply for additional funds despite needing them for fear of being threatened with

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

¹⁸⁷ *See* Bucci et al., *supra* note 50.

¹⁸⁸ *Id.*

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

¹⁹² *See* Telephone Interview with Jessica Limbacher, *supra* note 133.

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ Jerry Ryan, *Flood Insurance Review Plagued with Delays*, NEWSDAY (Oct. 30, 2015), <http://www.newsday.com/business/hurricane-sandy-flood-insurance-review-plagued-with-delays-despite-pledge-of-speed-1.11023061>.

having to repay.¹⁹⁶ “If I do get the money, I’ll only have to return it. If they give it to me here, I’ll have to give it back there. So it’s not worth the paperwork,” she said.¹⁹⁷

Likely, the most controversial theory behind delayed response and recovery in the wake of a major disaster like Hurricane Sandy is wasteful spending.¹⁹⁸ Following Hurricane Sandy, much of the proposed relief was wasteful spending that would not assist those directly affected by the storm.¹⁹⁹ In fact, third party analysts have said the reality of the relief package is that the Democratic Senate has found ways to exploit budget process loopholes.²⁰⁰ As a result, so-called emergency spending is added to the relief package, but never reaches the intended recipients.²⁰¹ For example, approximately \$3 billion of the funds requested by President Obama were for the repair and/or replacement of federal assets.²⁰² Moreover, a request for the U.S. Department of Health and Human Services to receive \$200 million, which could be used at the Secretary’s discretion, provided an avenue and opportunity for further wasteful spending.²⁰³ Ron Meyer, American Majority Action spokesman, further reflects this issue in a statement:

[W]hy was this in the emergency bill for Sandy?
It doesn’t make any sense. Only \$1 out of every \$6 —
\$9 billion of the \$60 billion will be spent in 2013.
That means 85 percent doesn’t come until 2014 and
beyond. That’s not immediate relief. What this bill is
fundamentally is a pork bill. It’s disgraceful to load a
bill like this that has good motives, that has good
intentions that is going to help people, with pork. Why

¹⁹⁶ Scott Gurian, *Given the Chance to Appeal, Many Sandy Victims Give Up Instead*, WNYC NEWS (June 12, 2015), <http://www.wnyc.org/story/given-chance-appeal-many-sandy-victims-give-instead/>.

¹⁹⁷ *Id.*

¹⁹⁸ See Bucci et al., *supra* note 50.

¹⁹⁹ Owen Graham, *Hurricane Sandy Relief Bill: Wasteful Spending Not Helpful*, THE DAILY SIGNAL (January 31, 2013), <http://dailysignal.com/2013/01/31/hurricane-sandy-relief-bill-wasteful-spending-not-helpful/>.

²⁰⁰ Patrick Frye, *Hurricane Sandy Relief Bill Filled with \$60 Billion of Pork Barrel Spending*, INQUISITR (Jan. 4, 2013), <http://www.inquisitr.com/468239/hurricane-sandy-relief-bill-filled-with-60-billion-of-pork-barrel-spending/>.

²⁰¹ *Id.*

²⁰² Mayer, *supra* note 7.

²⁰³ *Id.*

are you putting your own projects in it? It's disgraceful. It's typical of Washington.²⁰⁴

VI. CONCLUSION

“By far, one of the least understood aspects of disaster management is how to make recovery from catastrophic events efficient and rapid, so that people can return to a state of normalcy as quickly as possible,” said Irwin Redlener, Director of the National Center for Disaster Preparedness at Columbia University's Earth Institute.²⁰⁵

With federal disaster declarations increasingly occurring, and with the current financial deficit of the United States, federal funding processes for major and emergency disasters are in dire need of revamping. As federal disaster declarations are continuously made, and the federal funding processes continue inefficiently, the environment and public health effects increase with every delay in response and recovery of a major or emergency disaster. The ability of the federal government to effectively tackle this dilemma will require a challenging balance between preserving federal funds and not leaving anyone behind in the process.

The federal government should amend the Stafford Act and provide for less ambiguous requirements. Specifically, the threshold for damages incurred as a result of a major or emergency disaster should be increased. This would require state and local governments to be accountable for smaller scale events, thereby reducing and/or eliminating the need for emergency appropriations. Additionally, promoting accountability would hopefully allow for communities that are on the cusp of meeting damages requirements, such as Cumberland County New Jersey, to at least receive state grant funding.

As an extension, a reduction and/or elimination of emergency appropriations would cut down on wasteful spending, including any related allegations of misuse of federal funds. Without the proposal for emergency bills, non-related requests cannot be inappropriately incorporated, as they will have to wait on the upcoming budget instead.

²⁰⁴ Frye, *supra* note 200.

²⁰⁵ *Superstorm Sandy Child and Family Health Study Finds Lingering Effects of Mental Health Distress, PTSD and Depression*, RUTGERS TODAY (July 29, 2015), http://news.rutgers.edu/research-news/superstorm-sandy-child-and-family-health-study-finds-lingering-effects-mental-health-distress-ptsd/20150729#.Vr_Vy8elzfM.

To further promote a timelier response and recovery to major and emergency disasters, hybrid-funding programs should be eliminated. Not only would this promote accountability, but it would also eliminate and/or reduce any possible confusion in the functioning of such programs. Accordingly, victims of major or emergency disaster declarations would be able to apply for and access funds more quickly without getting the runaround.

Lastly, federal funding should incorporate specific provisions for mold remediation. Because mold is so common due to flooding, and can go undetected without professional assistance, victims of major or emergency disasters often return to homes with mold infestations. The public health effects of such exposure can be overwhelming, costly and even deadly, especially since they are exacerbated over time.

With the ultimate goal of preserving our environment and promoting public health, federal funding processes should be revisited and modified to keep up with increasing disaster declarations. By modifying and clearing up ambiguities within the federal funding process, such funds should be allocated more efficiently, and wasteful spending should be reduced. As a result, response and recovery time should be quicker, thereby reducing and/or eliminating the negative effects on the environment and public health.