

Background Report
Law and Regulation for the Reduction of Risk from Natural Disasters
In the United States of America, Federal Jurisdiction
A National Law Desk Survey
July 2012

Acknowledgements

This background report was prepared by Elizabeth Gibson, Legal Intern, IFRC, Geneva, with support from David Fisher and Mary Picard, on behalf of the Disaster Law programme, International Federation of Red Cross and Red Crescent Societies (IFRC), P.O. Box 372, CH-1211 Geneva 19, Switzerland, Tel: +41 22 730 4222, email disaster.law@ifrc.org.

This report is part of the research for a global project on Law & Disaster Risk Reduction being undertaken by the IFRC and the United Nations Development Programme (UNDP). It may not be reproduced without permission.

Law and Regulation for the Reduction of Risk from Natural Disasters in the United States of America: A Desk Survey

Executive Summary

The United States has made substantial strides in Disaster Risk Reduction (DRR) in recent years, particularly following criticism in the wake of Hurricane Katrina in 2005. The United States has long had a comprehensive disaster law popularly called the Stafford Act, which has been amended several times, and there also are dozens of additional laws that factor into various elements of DRR. These laws, as is typical in the United States, tend to be fairly broad, leaving much of the regulation and policy making to the Federal Emergency Management Agency (FEMA) under the executive branch's Homeland Security Department. This paper analyzes the text of these laws, regulations, and administrative documents, but does not address their implementation. The paper consists primarily of a chart of federal law categorized by its function in relation to different types of disasters and different elements of disaster risk reduction. This is then followed by a bibliography and copies of the relevant laws.

This paper focuses on the federal laws of the United States concerning disaster prevention, response, and mitigation. However, it should be kept in mind that a great deal of the power to regulate in this area belongs to the state and local governments in the United States. As a result, the federal government often acts more as advisor than regulator and relies on competitive grants and other incentives to encourage local compliance with its disaster policies. When state resources are overwhelmed by a disaster, it is up to the state governor to call upon the president to provide federal assistance.

The United States has been tracking its DRR efforts through reports on compliance with the Hyogo Framework for Action, an international 10-year plan for risk reduction. However, there is no law formally assigning the task and the reports largely reference the United State's own benchmarking guidelines. These reports have acknowledged the limits of federalism as well as financing, but have generally noted positive progress in DRR laws.

The United States uses an interesting system for determining liability for acts and omissions by the government as related to disaster prevention and response. The government has limited sovereign immunity, whereby the government cannot be sued for discretionary acts. If the government fails to comply with its own mandatory regulations, the government can be liable. If the law only says the government "should" or "may" take action, the government is generally immune from suit. There is still some uncertainty as to how different courts might apply this test. However, victims of flooding

following Hurricane Katrina in 2005 won a victory in 2012 in a federal appeals court finding that the U.S. Army Corps of Engineers was liable for failing to maintain levees.

Another area of active litigation has been the application DRR to colonias, informal settlements along the U.S.-Mexican border. This region is susceptible to hurricanes and flash flooding and the communities often lack building codes and infrastructure. Residents of some of these settlements have sued FEMA alleging that the agency does not provide them with sufficient assistance as a result of discretionary policies. Many federal grants are open to colonias, although only a handful of laws explicitly target the issue.

As for climate change and disasters, a number of federal agencies have begun analyzing the effects of climate change on their roles in disaster risk reduction at the administrative level as per an executive order requiring climate change analysis in general. However, there is relatively little legislation directly on point, perhaps because climate change is such a divisive topic in the U.S. political sphere.

There also have been recent efforts to modernize early warning systems and better integrate them with local early warning systems. Additional funding has been directed to detection systems, particularly for tsunamis, in reaction to high-profile disasters, but the federal government is still working to expand its communications system beyond broadcasting to technologies such as text messaging.

Legislation also makes limited and vague mention of outreach to at-risk groups, but in 2011 FEMA published a guidance document on the “Whole Community Approach to Emergency Management.” The guidance document goes into a fair amount of detail on how to engage people from all sectors of the community in emergency management. The document recognizes that it will take time to shift the national mindset to a community-centric approach for disaster prevention and response, but it appears to be a formal step in that direction. Also, since much of the authority on the subject of disasters rests with the states, decisions made by local elected officials will naturally be localized to some extent.

Given the challenges of the federal system, DRR legislation in the United States at times seems fragmented, but it is relatively comprehensive when supplemented with regulations, policy, and state and local law. In practice, there may be some redundancy, conflict, and omission with so many different agencies and advisory bodies handling different aspects of the law, but duties generally seem to be divided logically amongst specialized federal agencies with a strong emphasis on coordination by FEMA.

This paper is one of several country surveys being compiled on DRR laws and regulations around the world. In addition to serving as a resource on U.S. law, this report in conjunction with the others will hopefully help identify global best practices and challenges in DRR law.

List of abbreviations

C.F.R.	Code of Federal Regulations
DHS	Department of Homeland Security
DRR	Disaster Risk Reduction
EPA	Environmental Protection Agency
FDRC	Federal Disaster Recovery Coordinator
FEMA	Federal Emergency Management Agency
HUD	Department of Housing and Urban Development
LDRM	Local Disaster Recovery Managers
NRF	National Response Framework
NDRF	National Disaster Recovery Framework
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
RSFs	Recovery Support Functions
SDR	Subcommittee on Disaster Reduction
SDRC/TDRC	State or Tribal Disaster Recovery Coordinators
U.S.C.	United States Code
USDA	Department of Agriculture

(1) Introduction

This study is part of a series of National Desk Surveys that examine laws and regulations pertinent to disaster risk reduction (DRR) in individual countries. This sampling is intended to provide a cross section of laws from a diverse set of countries, including the focus of this report, the United States.

The United Nations Office for Disaster Risk Reduction defines DRR as:

The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

2009 UNISDR Terminology on Disaster Risk Reduction

Each report in this series looks at DRR through the lens of a standard set of questions that examine the general government and legal framework for disaster management in the country. It then looks at to what extent these laws address DRR. However, this survey is not limited to laws that deliberately target disaster management. Many general laws from agricultural regulations to building codes can have as much of an impact on disaster risk reduction as early warning systems and community education and outreach.

The questions are in part based on priorities listed in the Hyogo Framework for Action as well as Resolution 7 of the 31st International Conference of the Red Cross and Red Crescent in 2011. They focus on Priorities 1-4 of the Hyogo Framework.

1. Ensure that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation, including through “policy, legislative and institutional frameworks”

2. Identify, assess and monitor disaster risks and enhance early warning
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels
4. Reduce the underlying risk factors

In addition, the Hyogo Framework identifies four cross-cutting issues that need to be applied:

- taking a multi-hazard approach
- considering the gender perspective and cultural diversity
- community and volunteers participation
- capacity building & technology transfer

These questions have been answered strictly using the published text of federal laws, regulations, and administrative documents. As a desk survey, this study looks at the law as written and does not delve into the actual implementation and enforcement of these laws, other than a few discussions of case law in areas where the courts have played a role in defining the meaning of legislation.

(2) Summary of Main Natural Hazards and Risks in the United States

With 3.5 million square miles (914.8 million hectares) spread between two oceans, there is a great deal of variation in the types of natural hazards faced by the United States. As the southeast faces hurricanes and flooding, the western states are likely to be rationing water in the face of drought and fire. As California braces for the next big earthquake and Hawaii balances atop a chain of volcanoes, the Midwest worries about flooding and tornadoes.

In 2011, hazardous weather caused 1,096 deaths and 8,830 injuries along with 23.9 billion USD in damage, according to the National Oceanic and Atmospheric Agency. Tornadoes caused the greatest number of fatalities in 2011 with 553 deaths, followed by heat and then flooding. However, over the previous 10 years, on average heat killed 119 people a year, hurricanes killed 114, tornadoes killed 108, and floods killed 93.

There were 99 major disasters declared in the United States in 2011 in addition to 29 emergency declarations and 114 fire management assistance declarations, according to the Federal Emergency Management Agency. California and Texas, both major population hubs with lengthy coastlines, have the most major disasters while sparsely populated and landlocked Wyoming has had just nine declared in the last 50 years.

- The Southeastern states, which border the Gulf of Mexico and the Atlantic Ocean, have a subtropical climate and are the most susceptible to hurricanes and tropical storms.
- The Northeastern states also border the Atlantic Ocean and have a humid continental climate. They are prone to severe storms, flooding, and snow hazards.
- The Midwestern states cope with tornadoes, severe storms, and flooding among other disasters. They also have a humid continental climate.
- The Western states tend to be more arid and mountainous, although the coastline is a bit more humid. These states often face drought and wildfires. The western coast along the Pacific Ocean also is home to major fault lines that can cause severe earthquakes.
- Hawaii and island territories are susceptible to tropical storms, volcanoes, fires, seismic activity, and tsunamis.
- Alaska has a polar climate and is frequented by severe winter storms as well as flooding, fires, and landslides.

However, given the different terrain and climates even within these regions, there is potential for a variety of natural disasters in any of them.

(3) Governmental & Law-making structure

As a federalist nation, legislative powers in the United States are largely divided between the federal government and the state and local governments. Powers not delegated to the federal government nor prohibited to the fifty states under the U.S. Constitution are left to the states by the Tenth Amendment of the Constitution.

States are further divided into counties, municipalities, and sometimes additional subdivisions. Rural areas tend to be more reliant upon state and county law, whereas urban centers will often have a great deal of legislative independence. In addition to the states, the United States maintains a handful of semi-autonomous territories as well as a separate body of law for Native American lands.

Health and safety are among those powers reserved for state and local government, which limits the federal government's ability to regulate emergency prevention and response. As a result, the federal government acts as a financial and technical resource for the states, but it ultimately is up to state governors to call upon the president to declare a National Emergency and to ask for federal assistance when state resources are insufficient.

The federal government is divided into an executive led by the president, a judiciary, and a legislature split into the Senate and the House of Representatives. State residents elect senators and representative, and the president is selected through a national election.

In accordance with the Constitution, a law only goes into effect after it has been approved by both the Senate and House of Representatives and then signed by the president. The president may veto legislation, but the legislature can overrule him with a two-thirds majority in each house.

Federal laws tend to be very broad, delegating the determination of detailed regulations to specialized departments led by appointees within the executive. For example, the Federal Emergency Management Agency within the Department of Homeland Security is the lead agency for national emergency resources and regulations. There also exist independent regulatory agencies, such as the Environmental Protection Agency, over which the executive has less power.

Since the regulation of health and safety is a state power, the federal government focuses largely on providing guidance and facilitating coordination in regards to disasters. The federal government also relies greatly upon competitive grant programs, which allows the federal government to direct money toward specific priorities and to use conditional funding to encourage states to adopt federal guidelines. Federal laws are codified in the U.S. Code, and agency-created rules can be found in the Code of Federal Regulations.

(4) Detailed Table of DRR Legislation Based on the Research Questions

1. Background information 14

2. Institutional frameworks, resourcing and community participation in DRR: 17

 Part One. Disaster Management Law & Institutions..... 17

 A. Disaster Management Institutions 17

 B. Hyogo Framework for Action & Climate Change Institutions..... 31

 C. DRR priority and resource allocation in government 34

 Part Two. Responsibility, accountability and liability for natural disaster risk reduction 35

 A. Constitutional Rights & Guarantees for the Population 36

 B. Liability & Insurance..... 51

3. Early warning and reduction of underlying risk factors through regulation 57

 Part One. Rapid-onset disasters, sectoral and specific regulation based on identified risks and community participation 57

 A. Cyclones, tornadoes, or storms? 57

 B. Earthquake/Tsunami? 61

 C. Fire?..... 64

 D. Floods? 67

 E. Heat/cold waves?..... 71

 F. Insect Infestations? 73

 G. Landslides and avalanches? 76

 H. Volcanoes? 78

Part Two. Slow-onset disasters, sectoral and specific regulation based on risks and community participation	81
I. Drought and related famine?.....	81
J. Other food security risks?	84
Part Three. Early Warning, Hazard Mapping and Risk Information.....	86
A. Early Warning	86
B. Risk identification, assessment and monitoring	90
Part Four. Regulation of the Built Environment	91
A. Building Codes.....	92
B. Land Use Planning Laws	98
C. Land tenure	101
D. Informal and precarious settlements.....	102
E. Urban Water and Flood Management.....	108
Part Five. Regulation of the Natural & Rural Environment.....	110
A. Human Risks in Environmental Change	110
B. Forests.....	113
C. Rivers and watercourses	115
D. Drought and food security	117
4. Information management and exchange, community level DRR education & awareness	120

1. Background information

Using secondary and legal sources, identify and describe briefly in the table below the governmental structure of the subject country to assist readers understand how the different levels of law and regulation relate to each other.

1. BACKGROUND INFORMATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
Identify laws that indicate the structure of government, including the number of levels of government and the extent of decentralisation of governmental functions, such as: constitutional framework for different levels of government (e.g. national/provincial/local), and specific laws on decentralisation.			
1. How many levels of government are there, and what are they called? How many administrative areas are there (e.g. provinces, local government areas)?	<p>U.S. Const. art. IV (1788). Addresses the creation of states and requires them each to maintain a republican form of government</p> <p>U.S. Const. amend. X (1791). Defines the rights of states</p> <p>48 U.S.C. Territories and Insular Possessions</p> <p>25 U.S.C. Indians</p> <p>See state constitutions for county and municipal divisions.</p>		<p>“The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States, respectively, or to the people.” U.S. Const. amend. X</p> <p>Federal: The federal government is broken down into the judiciary (U.S. Const. art. III), the legislature (U.S. Const. art. I), and the executive (U.S. Const. art. II).</p> <p>States, Commonwealths, Territories, and the District of Columbia: <i>States and Commonwealths</i> – The 50 states each have their own constitution and laws. They typically have power over matters including health, safety, and education. <i>Unincorporated territories</i> – Territories are areas that are not states but to which the U.S. Constitution partially applies. <i>Tribal Territories</i> – Native American reservations have their own sovereignty distinct from that granted states. <i>The District of Columbia</i> – This is the seat of the federal government and is essentially governed by federal law and local city code. It is not part of any state.</p> <p>County (or equivalent): All states are subdivided into counties, although some states use a</p>

1. BACKGROUND INFORMATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>different term.</p> <p>Municipal (see state constitutions and code, which varies drastically):</p> <p>This typically includes a combination of cities, villages, boroughs, towns, and/or townships. However, the definitions, duties, and powers of these bodies vary greatly by state, and most states have a combination of only a few of these subdivisions.</p> <p><i>Townships</i> – Some states further divide counties into townships. In some states a township can overlap with the territory of a city, but in other areas, a township is only unincorporated land. Townships often have independent police and fire departments as well as other services.</p> <p><i>Cities</i> – This is a form of local government typically covering a relatively large population center. A city usually has a great deal of independence from its county/counties, and in some cases a city can become completely independent from a county. Cities usually have broad legislative powers and can sometimes make laws in subject areas off-limits to counties.</p> <p><i>Villages, Towns, and Boroughs</i> – These entities typically are smaller than cities and often have very narrow legislative powers as compared to cities, relying heavily on state law. (Alaska uses “borough” to mean county.)</p> <p>Other :</p> <p><i>School Districts</i> – A school district can in some cases be a separate legal entity not directly attached to a municipality. They can assess taxes and receive federal funding, including from disaster safety</p>

1. BACKGROUND INFORMATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>programs.</p> <p><i>Special Districts</i> – Districts can be created for various purposes and can even cross state borders through interstate agreements. They typically impose a tax to carry out a specific service, such as provision of utilities, hospitals, police and fire, and parks.</p>
2. Is there a separate law on decentralisation of government functions? How does it decentralise? For example, does it establish new institutions or delegate powers to provincial/local government?			The U.S. has a federal system under its constitution.
3. Looking at the Constitution and/or decentralisation law, is there any mention of allocation of responsibility at the different levels for reducing risks related to natural disasters?	U.S. Const. amend. X (1791). United States v. Lopez, 514 U.S. 549, 567 (1995).		<p>Case law has defined the “police power” as one of the rights left to the states derived from the Tenth Amendment of the U.S. Constitution. See <i>United States v. Lopez</i>. This includes the ability to create laws in regards to health and safety.</p> <p>The federal government can to some degree control what the states do in this area by conditioning fiscal grants upon meeting certain standards.</p> <p>The federal government also can provide support at the request of state governors.</p>
4. Is this country a member of any regional organisation(s) that make(s) regulations or agreements or issues guidelines for member states that could impact on disaster management or risk reduction? Is so, please name the organisation(s).			The United states is a member of the United Nations, the Organization of American States, the International Association of Emergency Managers, and several other general treaty bodies that address risk reduction. However, the United States acts with a great deal of independence and is often hesitant to commit itself to binding regulations.

1. Institutional frameworks, resourcing and community participation in DRR:

The aim is to identify laws that establish the governmental institutions and structures relevant to DRR, and which set out their mandates, and resource allocation mechanisms, including the extent of involvement of communities and civil society. These may include specialist disaster management institutions, bodies established to implement the Hyogo Framework for Action, or authorities charged with planning for adaptation to climate change, as well as government bodies responsible for planning and oversight, public administration at all levels, land use planning, building controls, environmental management, and telecommunications. However, to avoid repetition, the sectoral institutions are not included in this question but are part of the data requested in the section on reducing underlying risks.

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
Part One. Disaster Management Law & Institutions			
The key question in relation to DM laws is whether they exist and, if so, the extent to which they incorporate longer term disaster risk reduction, as well as prevention. Issues for investigation include: progress in the development of comprehensive DM legislation (at national level, provincial and local levels), what, if any, elements of existing DM laws and regulations relate to risk reduction and prevention for natural disasters; and whether there is a specified DM role for communities, civil society and the National Red Cross or Red Crescent Society (especially in recognition of its auxiliary status in humanitarian response).			
A. Disaster Management Institutions			

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>6. Is there also a national disaster management policy? Is this established by a law? Provide details.</p>	<p>6 U.S.C. ch. 2.</p>	<p>§ 771</p>	<p>This law provides for the creation of a national disaster response policy.</p> <p>National Disaster Framework of 2006 (NDF): http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf</p> <p>This has been supplemented by the National Disaster Recovery Framework of 2011 (NDRF). The current version is 116 pages long and pays particular attention to roles, responsibilities, and planning. The document lists its core principles as:</p> <ul style="list-style-type: none"> • Individual and Family Empowerment. • Leadership and Local Primacy. • Pre-Disaster Recovery Planning. • Partnerships and Inclusiveness. • Public Information. • Unity of Effort. • Timeliness and Flexibility. • Resilience and Sustainability. • Psychological and Emotional Recovery. <p>NDRF: http://www.fema.gov/recoveryframework/index.shtm</p>
<p>7. Is the DM law a national law applicable throughout the territory of the subject country? If so, does it establish an integrated national system with elements at provincial, local and/or community level?</p>	<p>42 U.S.C.</p>	<p>§ 5170</p>	<p>Titles 6 and 42 are applicable throughout the territory. However, disaster recovery is left to the individual states until the state governor requests federal assistance:</p> <p>” All requests for a declaration by the President that a major disaster exists shall be made by the Governor of the affected State.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			Such a request shall be based on a finding that the disaster is 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. As part of such request, and as a prerequisite to major disaster assistance under this chapter, the Governor shall take appropriate response action under State law and direct execution of the State's emergency plan. “
8. Are there separate provincial or local DM laws? Are these connected with the national DM law in any way? e.g., is there a hierarchy of laws between them, or a common institutional structure?	See state constitutions and 42 U.S.C. § 5170. 42 U.S.C. 6 U.S.C.	§ 5170 § 5131 § 321a	Each state has its own DM laws, and often counties and municipalities have their own laws, policies, and plans. Local policy may trump state policy in some cases when a municipality has “home rule” status, which gives it greater legislative independence. The process for becoming a home rule municipality is usually outlined in state law. Federal disaster assistance must be upon the request of the state governor (see question 7) or through grants and technical advice. States also may have mutual aid agreements with each other. States can apply to the executive for federal grants. This gives the federal government some power over local systems. “(d) Grants for improvement, maintenance, and updating of State plans The President is authorized to make grants not to exceed 50 per centum of the cost of improving, maintaining and updating State disaster assistance plans, including evaluations of natural hazards

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>and development of the programs and actions required to mitigate such hazards; except that no such grant shall exceed \$50,000 per annum to any State.”</p> <p>For more information on recent grant programs for local governments see: http://www.fema.gov/government/grant/factsheets.shtm</p> <p>The federal government also issues grants for evacuation plans and exercises.</p>
<p>9. Does the DM or other law establish one or more specialist DM institutions? What are they (i.e. what are their names and what type of body are they) and what are their mandates?</p>	<p>National Emergency Management, 6 U.S.C. ch. 1(V).</p> <p>Executive Order 13228 on October 29, 2001.</p>	<p>§ 313 et seq.</p>	<p>The Federal Emergency Management Agency (FEMA) under the Department of Homeland Security (DHS) is an executive agency that coordinates disaster planning and response.</p> <p>6 U.S.C. ch. 1(V) establishes and outlines the duties of:</p> <ul style="list-style-type: none"> • FEMA under DHS (§ 313) • The National Advisory Council, which is made up of federal and local representatives who advise the administrator of FEMA (§ 318) • Ten regional FEMA offices (§ 317) • The National Integration Center (§ 319) <p>This law created the Homeland Security Council as an advisory body within the executive.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
10. Does the DM policy use the same or different implementing institutions from the DM law? Describe.	NDRF , p. 5		The NDRF uses the same structure and builds upon it with the following positions to help coordinate the response of different levels of government: <ul style="list-style-type: none"> • Federal Disaster Recovery Coordinator (FDRC) • State or Tribal Disaster Recovery Coordinators (SDRC or TDRC) • Local Disaster Recovery Managers (LDRM) • Recovery Support Functions (RSFs) – six inter-agency coordination clusters: Community Planning and Capacity Building, Economic, Health and Social Services, Housing, Infrastructure Systems, and Natural and Cultural Resources.
11. Does the DM law or other law deal with: <ul style="list-style-type: none"> a. Disaster response¹? b. Disaster preparedness²? c. Disaster mitigation³ and prevention⁴? d. Disaster risk reduction⁵ (DRR)? 	42 U.S.C. 44 C.F.R. § 201.2, as amended as of 2009 Disaster Mitigation Act of 2000 (Public Law 106-390), codified under 42 U.S.C. §§		Yes, the law deals with these issues. However, the listed distinctions (a-e) are not really made in U.S. law. Divisions b, c, and d are essentially lumped together. 44 C.F.R. § 201.2 states, “Hazard mitigation means any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.”

¹ “The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.”

² “The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.”

³ “The lessening or limitation of the adverse impacts of hazards and related disasters.”

⁴ “The outright avoidance of adverse impacts of hazards and related disasters.”

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
e. If it includes DRR, how is it defined? (include definition)	5133, 5165 Other sections of code also include related provisions, i.e. 7 U.S.C. § 7334 Flood Risk Reduction.		<p>There does not appear to be a specific definition for DRR in the Stafford Act, but DRR could be summed up as “hazard mitigation measures to reduce losses from disasters, including development of land use and construction regulations.” 42 U.S.C. § 5121. It also is described as “hazard mitigation measures which the President has determined are cost-effective and which substantially reduce the risk of future damage, hardship, loss, or suffering in any area affected by a major disaster. Such measures shall be identified following the evaluation of natural hazards under section 5165 of this title and shall be subject to approval by the President.” 42 U.S.C. § 5170c.</p> <p>Various grant programs have been implemented to support community assessments and improvements to mitigate future damage caused by any disasters. Some non-emergency disaster assistance funding is conditioned upon having a hazard mitigation plan, as a way to encourage planning and to ensure money is used effectively. 42 U.S.C. § 5165 (a).</p> <ul style="list-style-type: none"> • Stafford Act Grant Programs <ul style="list-style-type: none"> ○ Hazard Mitigation Grant Program (HMGP) ○ Pre-Disaster Mitigation (PDM) Program

⁵ “The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.”

Note: These definitions are taken from the 2009 UNISDR Terminology on Disaster Risk Reduction, obtained here: <http://www.unisdr.org/we/inform/terminology>.

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<ul style="list-style-type: none"> ○ Public Assistance (PA) Grant Program ○ Fire Management Assistance Grants (FMAG) Program <ul style="list-style-type: none"> • National Flood Insurance Act Grant Programs <ul style="list-style-type: none"> ○ Flood Mitigation Assistance (FMA) Program ○ Repetitive Flood Claims (RFC) Program ○ Severe Repetitive Loss (SRL) Program <p>FEMA offers guidance on pre-disaster mitigation planning to local governments: http://www.fema.gov/plan/mitplanning/resources.shtm</p> <p>For a longer list of laws, regulations, policies, and guidance on DRR, see http://www.fema.gov/plan/mitplanning/guidance.shtm</p>
<p>12. Does the DM law (or any other law) or policy allocate DRR responsibilities in one or more government ministries? If so, which ministries? Describe their allocated roles.</p>	<p>42 U.S.C. § 5197 and 42 U.S.C. generally</p> <p>44 C.F.R. § 201.3, as amended as of 2009</p>		<p>The U.S.C. leaves disaster risk reduction to the executive, which has delegated the power to FEMA. 42 U.S.C. § 5197 also grants FEMA’s administrator the power to create rules as necessary to carry out the Stafford Act.</p> <p>Title 44 C.F.R. § 201.3 details the responsibilities of federal, state, and local governments in regards to the Stafford Act.</p> <p>The federal role, through FEMA, is to:</p> <p>“(1) Oversee all FEMA related pre- and post-disaster hazard mitigation programs and activities;</p> <p>(2) Provide technical assistance and training to State, local, and Indian tribal governments regarding the mitigation planning</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>process;</p> <p>(3) Review and approve all Standard and Enhanced State Mitigation Plans;</p> <p>(4) Review and approve all local mitigation plans, unless that authority has been delegated to the State in accordance with §201.6(d);</p> <p>(5) Conduct reviews, at least once every three years, of State mitigation activities, plans, and programs to ensure that mitigation commitments are fulfilled, and when necessary, take action, including recovery of funds or denial of future funds, if mitigation commitments are not fulfilled.”</p>
<p>13. Does the DM law or policy prescribe a role in DM institutions for civil society? If so, how defined and what is the role? At what levels?</p> <p>a. National?</p> <p>b. Provincial/state?</p> <p>c. Municipal/local?</p>	<p>42 U.S.C. § 5152, on use and coordination of relief organizations</p>		<p>a.</p> <p>42 U.S.C.A. § 5152</p> <p>“(a) In providing relief and assistance under this chapter, the President may utilize, with their consent, the personnel and facilities of the American National Red Cross, the Salvation Army, the Mennonite Disaster Service, and other relief or disaster assistance organizations, in the distribution of medicine, food, supplies, or other items, and in the restoration, rehabilitation, or reconstruction of community services housing and essential facilities, whenever the President finds that such utilization is necessary.</p> <p>“(b) The President is authorized to enter into agreements with the American National Red Cross, the Salvation Army, the Mennonite Disaster Service, and other relief or disaster assistance organizations under which the disaster relief activities of such organizations may be coordinated by the Federal coordinating officer whenever such organizations are engaged in providing relief</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>during and after a major disaster or emergency. Any such agreement shall include provisions assuring that use of Federal facilities, supplies, and services will be in compliance with regulations prohibiting duplication of benefits and guaranteeing nondiscrimination promulgated by the President under this chapter, and such other regulation as the President may require.”</p> <p>42 U.S.C. § 5170b (2) Medicine, food, and other consumables – This section mentions civil society organizations, including the American Red Cross, as distributors.</p> <p>42 U.S.C.A. § 5134 Interagency task force – This provision establishes a federal task force for coordinating hazard mitigation programs. The American Red Cross is listed as a member along with federal and local agencies.</p> <p>42 U.S.C. § 5143 (b) (3) – This section lists coordinating relief between agencies and organizations, including the American Red Cross, as one of the responsibilities of a “Federal coordinating officer.”</p> <p>b. As a result of federalism, federal law only addresses federal relations with civil society.</p> <p>c. See b.</p>
14. Does the DM law or policy prescribe a role in DM institutions for the National Red Cross or Red Crescent	36 U.S.C. § 3001 (Patriotic and National Observances Codification of 1998, as	§ 3001 p. 70.	<p>a. See Question 13.</p> <p>The special status of the American Red Cross, including its</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>Society? If so, how defined and what is the role? At what levels?</p> <p>a. National?</p> <p>b. Provincial/state?</p> <p>c. Municipal/local?</p>	<p>modified by the American National Red Cross Governance Modernization Act of 2007).</p> <p>NRF: Emergency Support Function Annex #6 – Mass Care, Emergency Assistance, Housing, and Human Services, p. 70.</p>		<p>peacetime relief efforts, is recognized more generally in 36 U.S.C. § 3001.</p> <p>This annex of the NRF details the roles of agencies involved in Mass Care, Emergency Assistance, Housing, and Human Services, including the American Red Cross. The role of the American Red Cross as described in this document includes providing support staff to regional FEMA offices, supplying subject matter expertise, and helping develop disaster prevention and response plans.</p> <p>http://www.fema.gov/pdf/emergency/nrf/nrf-annexes-all.pdf</p> <p>b. Federalism limits the influence of federal law here, but the policy does encourage the American Red Cross to advise the appropriate state authorities in their planning.</p> <p>c. See b.</p>
<p>15. Is there any provision in the DM law or policy to ensure that women have a role and a voice in the DM institutions? If so, how is this regulated or encouraged by law? At what levels does the law provide for women’s participation in DM institutions?</p> <p>a. National?</p> <p>b. Provincial/state?</p>	<p>NDRF p. 82</p> <p>Civil Rights Acts of 1964 and 1991.</p> <p>Const. amend. XIV.</p>		<p>The NDRF specifically mentions the inclusion of women and other underserved groups in the decision making process.</p> <p>The Stafford Act does not specifically mention female involvement, but this would be addressed to some extent by other laws on discrimination. Civil Rights Acts of 1964 and 1991.</p> <p>b. There is some debate in regards to whether the “equal protection clause” of the Fourteenth Amendment may or may not bar discrimination against women at the state and local level.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
c. Municipal/local?			<p>However, federal and local laws normally address gender discrimination, anyway.</p> <p>c. See b.</p>
<p>16. Does the DM law or policy prescribe a role in DM institutions for communities? If so, how defined and what is the role? Does it specify any mechanisms to ensure a voice for all elements of the community in DRR, e.g.</p> <p>a. Women?</p> <p>b. Different cultural or ethnic groups?</p> <p>c. Vulnerable groups, including children, older persons, persons with disabilities?</p> <p>d. Socially isolated groups and the very poorest people?</p>	<p>A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action</p> <p><i>FDOC 104-008-1 / December 2011</i></p> <p>NDRF</p>	<p>§ 318</p>	<p>FEMA has instituted a “Whole Community” policy, which was published in 2011. The document includes a list of recommendations on how to best engage all sectors of the community. It recognizes that implementation of this policy may take some time.</p> <p>P. 3 defines “Whole Community,” although it does not specifically address the subgroups listed in the question.</p> <p>“There are many different kinds of communities, including communities of place, interest, belief, and circumstance, which can exist both geographically and virtually (e.g., online forums). A Whole Community approach attempts to engage the full capacity of the private and nonprofit sectors, including businesses, faith-based and disability organizations, and the general public, in conjunction with the participation of local, tribal, state, territorial, and Federal governmental partners. This engagement means different things to different groups.”</p> <p>http://www.fema.gov/about/wholecommunity.shtm</p> <p>(See NDRF p. 82 below for identification of subgroups).</p> <p>P. 10</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>“PARTNERSHIPS AND INCLUSIVENESS.</p> <p>Partnerships and collaboration across groups, sectors and governments promote a successful recovery process. Partnerships and inclusiveness are vital for ensuring that all voices are heard from all parties involved in disaster recovery and that all available resources are brought to the table. This is especially critical at the community level where nongovernmental partners in the private and nonprofit sectors play a critical role in meeting local needs. Inclusiveness in the recovery process includes individuals with disabilities and others with access and functional needs, advocates of children, seniors and members of underserved populations. Sensitivity and respect for social and cultural diversity must be maintained at all times. Compliance with equal opportunity and civil rights laws must also be upheld.”</p> <p>P. 82</p> <p>“Underserved Populations/Communities – Groups that have limited or no access to resources or that are otherwise disenfranchised. These groups may include [d] people who are socioeconomically disadvantaged; people with limited English proficiency; geographically isolated or educationally disenfranchised people; [b] people of color as well as those of ethnic and national origin minorities; [a&c] women and children; individuals with disabilities and others with access and functional needs; and seniors.”</p> <p>P. 104</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>42 U.S.C. § 5165d</p> <p>42 U.S.C. § 5197h</p> <p>The Local Mitigation Plan Review Guide of 2011</p> <p>6 U.S.C. § 318</p>		<p>“Encourage local governments to establish an accessible and inclusive process for addressing recovery challenges pre and post-disaster.”</p> <p>42 U.S.C. § 5165d provides for a “small state and rural advocate” tasked with making sure disaster funds are distributed fairly to all parts of the country.</p> <p>The minority emergency preparedness demonstration program provides funding for research, education, and culturally appropriate information materials on disaster preparedness.</p> <p>The Local Mitigation Plan Review Guide defines the criteria for assessing local mitigation plans as authorized under the Stafford Act and 44 C.F.R. § 201.6.1.</p> <p>Section 2(a)(A) of the criteria ask whether planning was “Reflective of an open and inclusive public involvement process.”</p> <p>This provision provides for a National Advisory Council made up of federal and local representatives who advise the administrator of FEMA.</p>
<p>17. Describe the main differences in the scope of the DM law and the DM policy concerning prevention and disaster risk reduction.</p>			<p>The Stafford Act and related legislation cover most of the major aspects of disaster prevention and response, although they leave most of the details to be sorted out by FEMA and can only go so far because of federalism. As policy documents, the NRF and NDRF focus more on organizational structure and values, respectively. Both legislation and policy documents emphasize that the federal government’s role is to provide assistance at the request of the</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>states, and the policy particularly embraces the role of providing guidance and acting as a resource for best practices.</p> <p>DRR: The law again provides a framework to be expanded upon by agencies and at the local level – establishing a requirement for a plan and a process for funding improvements. The policy addresses the values to be taken account in formulating DRR plans.</p>
18. Does the DM law or policy, or other legislation, provide for oversight mechanisms on DRR implementation, including reporting and/ or parliamentary oversight?	42 U.S.C. 42 U.S.C. 44 C.F.R.	§ 5197c § 5157	<p>“The Administrator shall annually submit a written report to the President and Congress covering expenditures, contributions, work, and accomplishments of the Federal Emergency Management Agency pursuant to this subchapter, accompanied by such recommendations as the Administrator considers appropriate.”</p> <p>This section establishes penalties for fraud or misuse of funds and requires evidence to be directed to the U.S Attorney General.</p> <p>Internal oversight mechanisms are defined in regulatory documents. For example: § 6.70 Requires reporting any changes in the regulations through the Federal Register. § 12.8 Requires advisory meetings to be open to the public. § 13.40 Requires grantees to monitor and report their progress. § 13.41 Requires grantees to submit financial records documenting the use of funds.</p>
B. Hyogo Framework for Action & Climate Change Institutions			

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>19. Does legislation establish any institutions (including committees), or allocate to an existing body, implementation of the Hyogo Framework for Action? What institutions? What are their designated roles in DRR?</p>	<p>Executive Order 12881, 23 November 1993, created the National Science and Technology Council. The U.S. State Department’s Assistant Secretary for International Organizations asked SDR to monitor Hyogo.</p>		<p>The interagency Subcommittee on Disaster Reduction (SDR) has been tasked with tracking the progress of the Hyogo Framework for Action in the United States, but not through legislation. The SDR is an executive advisory body that was created in 1988 by the National Science and Technology Council’s Committee on Environment, Natural Resources, and Sustainability. The agency promotes interagency disaster planning, risk assessment, and risk reduction and provides recommendations to the president and U.S. Congress.</p> <p>http://www.sdr.gov/</p> <p>The SDR published its most recent status report on the implementation of the Hyogo Framework for Action in 2010.</p> <p>http://www.preventionweb.net/english/hyogo/progress/reports/v.php?id=15624&pid:223</p> <p>The report largely refers to SDR’s “Grand Challenges for Risk Reduction,” a list of goals for disaster risk reduction, particularly as related to technology.</p> <p>http://www.sdr.gov/grandchallenges.html</p>
<p>20. Does legislation establish any institutions (including committees), or allocate to an existing body, planning and implementation for adaptation to climate change? What institutions? What are their designated roles in DRR?</p>	<p>Executive Order 13514 of October 2009, <i>Federal Leadership in Environmental and Energy Performance</i> (codified under 42 U.S.C. § 4321)</p>	<p>Sec. 16</p>	<p>This executive order created the Climate Change Adaptation Task Force, which is an interagency advisory body that studies how communities and federal agencies should cope with climate change.</p> <p>http://www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Administrative documents.		<p>“Sec. 16. Agency Roles in Support of Federal Adaptation Strategy In addition to other roles and responsibilities of agencies with respect to environmental leadership as specified in this order, the agencies shall participate actively in the interagency Climate Change Adaptation Task Force, which is already engaged in developing the domestic and international dimensions of a U.S. strategy for adaptation to climate change, and shall develop approaches through which the policies and practices of the agencies can be made compatible with and reinforce that strategy. Within 1 year of the date of this order the CEQ Chair shall provide to the President, following consultation with the agencies and the Climate Change Adaptation Task Force, as appropriate, a progress report on agency actions in support of the national adaptation strategy and recommendations for any further such measures as the CEQ Chair may deem necessary.”</p> <p>See the report. Dealing with climate change has largely been left to administrative agencies as opposed to legislation, largely because it is politically controversial.</p> <p>FEMA created the Strategic Foresight Institute in order to monitor and make recommendations related to climate change.</p> <p>In January 2012, the Strategic Foresight Institute published “Crisis Response and Disaster Resilience 2030: Forging Strategic Action in an Age of Uncertainty.” http://www.fema.gov/library/viewRecord.do?id=4995</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	42 U.S.C. ch. 134(VII).		<p>The National Oceanic and Atmospheric Administration also has helped identify ways in which building standards need to adapt to climate change and monitors climate data. http://www.noaa.gov/climate.html</p> <p>Other departments such as the Department of Housing and Urban Development, the Environmental Protection Agency, and the Department of Transportation also have engaged in research and reforms related to climate change in their areas of expertise.</p> <p>Climate adaption is mentioned in bits and pieces, but there is no comprehensive law on DRR and climate change. Most of the law focuses on energy policy. See 42 U.S.C. ch. 134: Energy Policy, Subchapter VII: Global Climate Change.</p>
21. Do the implementation mechanisms for the Hyogo Framework, climate change adaptation and DM institutions intersect? If so, how? Are their mandates complementary or do they overlap? Describe.			They interact in that FEMA, the EPA, and other key agencies are represented within the working groups that have been tasked with handling these issues. Given that their mandates are rather vague, there is some overlap. However, their primary roles are to study and advise on best practices as opposed to serving specific regulatory functions related to climate change and disaster risk reduction.
C. DRR priority and resource allocation in government			
22. Does the budgetary process provide for any dedicated budget line items for DRR and/or minimum percentages for DRR expenditure by government institutions? If so, is	Fiscal year 2013 budget estimates		<p>Legislation does not provide for a line item per se. FEMA recommends a budget and then the legislature tweaks and approves it.</p> <p>See the following page for the 2013 budget estimates:</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>there a budget allocated to DRR at national level? How is this prescribed?</p>			<p>http://www.fema.gov/pdf/about/budget/fema_fy2013_bib.pdf</p> <p>FEMA has proposed eliminating the budget for the National Pre-disaster Mitigation Fund in fiscal year 2013 because of redundancy with other grant programs. See p. 154 of the budget.</p>
<p>23. Is there a budget allocated to DRR at provincial/state level (if relevant)? How is this prescribed?</p>	<p>See budget in question 22</p>		<p>Municipalities can apply for federal funding through the grant programs in question 11. FEMA projects a budget of \$2.9 billion for state and local programs in 2013.</p> <p>As previously mentioned, the law provides for a “small and rural advocate” who is supposed to ensure that all communities have a fair shot at the funding based on need. 42 U.S.C.A. § 5165d.</p>
<p>24. Is there a budget allocated to DRR at municipal or local level? How is this prescribed?</p>	<p>42 U.S.C.</p>	<p>§ 5165 (a)</p>	<p>Since the grant programs require matching funds, local governments must budget at least some money for DRR if they want federal assistance.</p> <p>Some non-emergency disaster assistance funding is conditioned upon having a hazard mitigation plan, as a way to encourage planning and to ensure money is used effectively. 42 U.S.C. § 5165 (a).</p> <p>Ultimately, though, local governments can allocate their own funds as they choose.</p>

Part Two. Responsibility, accountability and liability for natural disaster risk reduction

The aim is to identify relevant constitutional or other guarantees that may underpin government responsibility, liability and affected persons’ rights to

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>compensation. These may include rights to: safety /life; not to be discriminated against; protection of livelihoods; health; compensation; and to information relevant to DRR. One specific issue on the question of liability, is whether governments are liable for failure to prevent natural disasters affecting the population, including for failure to warn, or for making an erroneous warning. A second, related, issue is whether private individuals are liable for damage caused to others from their property during natural disasters, or for faulty advice/warnings given. A third element is whether there is any system of compulsory insurance against the effects of natural disasters.</p>			
<p>A. Constitutional Rights & Guarantees for the Population</p>			
<p>25. Are there any guarantees in the constitution or another law relating to individual or collective rights that may underpin government responsibility or liability, and affected persons' rights to compensation for damage from natural disasters? If so, do these relate to:</p> <ul style="list-style-type: none"> a. DRR in general? b. Safety /Life c. Right to Food? d. Right to adequate shelter or housing? e. Non-discrimination, (and other relevant civil and political rights)? f. Livelihoods, Health (and other economic, social and cultural rights)? g. Compensation for losses due to 	<p>42 U.S.C. § 5148.</p> <p><i>In re</i> FEMA Trailer Formaldehyde Products Liability Litigation, 583 F.Supp.2d 758 (E.D. La 2008).</p>		<p><u>“Subchapter III. Major Disaster and Emergency Assistance Administration</u> § 5148. Nonliability of Federal Government The Federal Government shall not be liable for any claim based upon the exercise or performance of or the failure to exercise or perform a discretionary function or duty on the part of a Federal agency or an employee of the Federal Government in carrying out the provisions of this chapter.”</p> <p>What counts as discretionary and is therefore immune from liability has varied by jurisdiction. FEMA has been held not liable under the Stafford Act and Federal Tort Claims Act for using emergency shelter units that exceeded safe formaldehyde content levels. This and similar cases have demonstrated broad application of the “discretionary function” immunity clause, but other courts have disagreed.</p> <p>The American Law Review has a fairly thorough article on liability issues and the Stafford Act. <i>See</i> 14 A.L.R. Fed. 2d 173 (Originally published in 2006). The article mentions a two-prong test from a federal circuit case “for determining whether an act is discretionary: (1) whether the act involves an element of judgment</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>natural disasters? h. Information?</p>	<p>42 U.S.C.</p>	<p>§ 5170a</p>	<p>or choice, as opposed to being dictated specifically by statute or regulation; and (2) if so, whether that judgment is of the kind that the discretionary function exception was designed to shield, such as those based on considerations of public policy.”</p> <p>Also, many of the following rights are contingent upon funding and/or state action. Much of the language is worded in terms of government authority and not citizen rights.</p> <p>“In any major disaster, the President may--</p> <p>(1) direct any Federal agency, with or without reimbursement, to utilize its authorities and the resources granted to it under Federal law (including personnel, equipment, supplies, facilities, and managerial, technical, and advisory services) in support of State and local assistance response or recovery efforts, including precautionary evacuations;</p> <p>(2) coordinate all disaster relief assistance (including voluntary assistance) provided by Federal agencies, private organizations, and State and local governments, including precautionary evacuations and recovery;</p> <p>(3) provide technical and advisory assistance to affected State and local governments for--</p> <p>(A) the performance of essential community services;</p> <p>(B) issuance of warnings of risks and hazards;</p> <p>(C) public health and safety information, including dissemination of such information;</p> <p>(D) provision of health and safety measures;</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	42 U.S.C.	§ 5170b	<p>(E) management, control, and reduction of immediate threats to public health and safety; and</p> <p>(F) recovery activities, including disaster impact assessments and planning;</p> <p>(4) assist State and local governments in the distribution of medicine, food, and other consumable supplies, and emergency assistance; and</p> <p>(5) provide accelerated federal assistance and Federal support where necessary to save lives, prevent human suffering, or mitigate severe damage, which may be provided in the absence of a specific request and in which case the President--</p> <p>(A) shall, to the fullest extent practicable, promptly notify and coordinate with officials in a State in which such assistance or support is provided; and</p> <p>(B) shall not, in notifying and coordinating with a State under subparagraph (A), delay or impede the rapid deployment, use, and distribution of critical resources to victims of a major disaster.”</p> <p>“(a) In general Federal agencies may on the direction of the President, provide assistance essential to meeting immediate threats to life and property resulting from a major disaster, as follows:</p> <p>(1) Federal resources, generally Utilizing, lending, or donating to State and local governments Federal equipment, supplies, facilities, personnel, and other resources, other than the extension of credit, for use or</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>distribution by such governments in accordance with the purposes of this chapter.</p> <p>(2) Medicine, food, and other consumables Distributing or rendering through State and local governments, the American National Red Cross, the Salvation Army, the Mennonite Disaster Service, and other relief and disaster assistance organizations medicine durable medical equipment, food, and other consumable supplies, and other services and assistance to disaster victims.</p> <p>(3) Work and services to save lives and protect property Performing on public or private lands or waters any work or services essential to saving lives and protecting and preserving property or public health and safety, including--</p> <p>(A) debris removal;</p> <p>(B) search and rescue, emergency medical care, emergency mass care, emergency shelter, and provision of food, water, medicine durable medical equipment, and other essential needs, including movement of supplies or persons;</p> <p>(C) clearance of roads and construction of temporary bridges necessary to the performance of emergency tasks and essential community services;</p> <p>(D) provision of temporary facilities for schools and other essential community services;</p> <p>(E) demolition of unsafe structures which endanger the public;</p> <p>(F) warning of further risks and hazards;</p> <p>(G) dissemination of public information and assistance regarding health and safety measures;</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>42 U.S.C.</p> <p>42 U.S.C. § 5196</p> <p>42 U.S.C. § 5170a</p>	<p>§ 5196</p> <p>§ 5196</p>	<p>(H) provision of technical advice to State and local governments on disaster management and control;</p> <p>(I) reduction of immediate threats to life, property, and public health and safety; and</p> <p>(J) provision of rescue, care, shelter, and essential needs--</p> <p>(i) to individuals with household pets and service animals; and</p> <p>(ii) to such pets and animals.”</p> <p>a. DRR in general? “(e) Emergency preparedness measures The Administrator may study and develop emergency preparedness measures designed to afford adequate protection of life and property . . .”</p> <p>b. Safety/life 42 U.S.C. § 5196 “(e) Emergency preparedness measures The Administrator may study and develop emergency preparedness measures designed to afford adequate protection of life and property . . .” (emphasis added).</p> <p>42 U.S.C. § 5170a “In any major disaster, the President may-- . . .</p> <p>(5) provide accelerated federal assistance and Federal support where necessary to save lives, prevent human suffering, or mitigate severe damage, which may be provided in the absence of</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p><i>See also</i> 42 U.S.C. § 5170b</p> <p>42 U.S.C. § 5180</p> <p>42 U.S.C. § 5170a (4)</p>		<p>a specific request and in which case the President— (A) shall, to the fullest extent practicable, promptly notify and coordinate with officials in a State in which such assistance or support is provided; and (B) shall not, in notifying and coordinating with a State under subparagraph (A), delay or impede the rapid deployment, use, and distribution of critical resources to victims of a major disaster.”</p> <p>c. Right to food? 42 U.S.C. § 5180 : “(a) Emergency mass feeding The President is authorized and directed to assure that adequate stocks of food will be ready and conveniently available for emergency mass feeding or distribution in any area of the United States which suffers a major disaster or emergency.</p> <p>(b) Funds for purchase of food commodities The Secretary of Agriculture shall utilize funds appropriated under section 612c of Title 7, to purchase food commodities necessary to provide adequate supplies for use in any area of the United States in the event of a major disaster or emergency in such area.”</p> <p>42 U.S.C. § 5170a (4): “(4) assist State and local governments in the distribution of medicine, food, and other consumable supplies, and emergency assistance;”</p> <p>7 C.F.R. § 280.1 under the authority of 7 U.S.C. § 2011</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>7 C.F.R. § 280.1 7 U.S.C. § 2011 (Food Stamp Act of 1977)</p> <p>McWaters v. Federal Emergency Management Agency, 436 F. Supp. 2d 802 (E.D. La. 2006)</p>		<p>“The Secretary [of Agriculture] shall, after consultation with the official empowered to exercise the authority provided for by section 302(a) of the Disaster Relief Act of 1974, establish temporary emergency standards of eligibility for the duration of the emergency for households who are victims of a disaster which disrupts commercial channels of food distribution, if such households are in need of temporary food assistance and if commercial channels of food distribution have again become available to meet the temporary food needs of such households. . . . the Secretary shall provide for emergency allotments to eligible households to replace food destroyed in a disaster. Such emergency allotments would be equal to the value of the food actually lost in such disaster but not greater than the applicable maximum monthly allotment for the household size. The Secretary may also approve alternate methods for issuing food stamp benefits during a disaster when reliance on Electronic Benefits Transfer (EBT) systems is impracticable.”</p> <p>d. Right to adequate shelter or housing? Some courts have held that the Stafford Act creates a right to housing assistance that is constitutionally protected under the due process clause while others have disagreed. In <i>McWaters v. Federal Emergency Management Agency</i>, a group of plaintiffs whose homes were destroyed won a lawsuit accusing FEMA of failing to provide disaster-related housing assistance. The court held provision of housing was not a discretionary function.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	42 U.S.C. § 5153		<p>“§ 5153. Priority to certain applications for public facility and public housing assistance</p> <p>(a) Priority In the processing of applications for assistance, priority and immediate consideration shall be given by the head of the appropriate Federal agency, during such period as the President shall prescribe, to applications from public bodies situated in areas affected by major disasters under the following Acts:</p> <p>(1) The United States Housing Act of 1937 [42 U.S.C.A. § 1437 et seq.] for the provision of low-income housing.</p> <p>(2) Sections 3502 to 3505 of Title 40 for assistance in public works planning.</p> <p>(3) The Community Development Block Grant Program under title I of the Housing and Community Development Act of 1974 [42 U.S.C.A. § 5301 et seq.].</p> <p>(4) Section 1926 of Title 7.</p> <p>(5) The Public Works and Economic Development Act of 1965 [42 U.S.C.A. § 3121 et seq.].</p> <p>(6) The Appalachian Regional Development Act of 1965.</p> <p>(7) The Federal Water Pollution Control Act [33 U.S.C.A. § 1251 et seq.]”</p> <p>42 U.S.C. § 5174 “The President may provide financial or other assistance under this section to individuals and households to respond to the disaster-related housing needs of individuals and households who are</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>42 U.S.C. § 5174</p> <p>42 U.S.C.</p> <p>U.S. Const. amend. XIV, §1.</p> <p>42 U.S.C.</p>	<p>§ 5151</p>	<p>displaced from their predisaster primary residences or whose predisaster primary residences are rendered uninhabitable, or with respect to individuals with disabilities, rendered inaccessible or uninhabitable, as a result of damage caused by a major disaster.”</p> <p>“(e) Emergency preparedness measures The Administrator may study and develop emergency preparedness measures designed to afford adequate protection of life and property, including-- . . . (2) developing shelter designs and materials for protective covering or construction;”</p> <p>e. Non-discrimination (and other relevant civil and political rights)?</p> <p>The U.S. Constitution guarantees equal protection under both federal and state law. Civil and political rights are generally addressed in the constitutional amendments, particularly Amendment XIV.</p> <p>“(a) Regulations for equitable and impartial relief operations The President shall issue, and may alter and amend, such regulations as may be necessary for the guidance of personnel carrying out Federal assistance functions at the site of a major disaster or emergency. Such regulations shall include provisions for insuring that the distribution of supplies, the processing of applications, and other relief and assistance activities shall be</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>42 U.S.C. ch. 20 and 21</p> <p>International Covenant on Civil and Political Rights, art. 4 (1).</p> <p>International Covenant on</p>		<p>accomplished in an equitable and impartial manner, without discrimination on the grounds of race, colour, religion, nationality, sex, age, disability, English proficiency, or economic status.”</p> <p>Dozens of pieces of legislation, including the Civil Rights Act of 1964, address discrimination based on race, color, religion, sex, national origin, age or handicap in general. Some states have a broader definition of discrimination, including categories such as discrimination based on sexual orientation.</p> <p>The United States has signed and ratified the ICCPR, although it included an understanding on the derogation of rights in national emergencies. The statement interprets the treaty as allowing unintended disparate effects but not deliberate discrimination during emergencies.</p> <p>“The United States further understands the prohibition in paragraph 1 of article 4 upon discrimination, in time of public emergency, based `solely' on the status of race, colour, sex, language, religion or social origin, not to bar distinctions that may have a disproportionate effect upon persons of a particular status.”</p> <p>f. Livelihoods, Health (and other economic, social and cultural rights)?</p> <p>The United States has signed but not ratified the International Covenant on Economic, Social and Cultural Rights. These types of rights have been less popular in the United States as opposed to in many European countries.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>Economic, Social and Cultural Rights</p> <p>42 U.S.C.</p>		<p>It should be noted that in the United States “social security” primarily refers to a specific program for the elderly and disabled. The social safety net that other countries broadly refer to as “social security” is generally called “welfare” or “TANF” (Temporary Assistance for Needy Families) in the United States.</p> <p>The U.S. has several general laws that are not specific to disasters, including:</p> <p>42 U.S.C. Ch. 7, Social Security (this is a partial list of relevant subchapters)</p> <ul style="list-style-type: none"> Subchapter I: Grants to States for Old-Age Assistance Subchapter II: Federal Old-Age, Survivors, and Disability Insurance Benefits Subchapter III: Grants to States for Unemployment Compensation Administration Subchapter IV: Grants to States for Aid and Services to Needy Families with Children and for Child-Welfare Services Subchapter V: Maternal and Child Health Services Block Grant Subchapter IX: Employment Security Administrative Financing Subchapter X: Grants to States for Aid to the Blind Subchapter XII: Advances to States for Unemployment Funds Subchapter XIV: Grants to States for Aid to the Permanently and Totally Disabled Subchapter XVIII: Health Insurance for the Aged and Disabled Subchapter XIX: Grants to States for Medical Assistance Programs <p>42 U.S.C. Ch. 7A, Temporary Unemployment Compensation</p> <p>42 U.S.C. Ch. 8, Low Income Housing</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>42 U.S.C. § 1396d 4</p> <p>2 U.S.C. § 5174</p>		<p>Based on these laws and the Stafford Act, there are some special provisions for disasters:</p> <p>42 U.S.C. § 1320b-5: Allows the waiver of some of the qualification requirements for social services during national emergencies, particularly as related to health care.</p> <p>42 U.S.C. § 622 (16): Requires states to have plans for how children supported by welfare will be looked after in the event of a disaster.</p> <p>42 U.S.C. § 5177 “The President is authorized to provide to any individual unemployed as a result of a major disaster such benefit assistance as he deems appropriate while such individual is unemployed for the weeks of such unemployment with respect to which the individual is not entitled to any other unemployment compensation (as that term is defined in section 85(b) of Title 26) or waiting period credit.”</p> <p>This law ensures that disaster aid is not taken into account when calculating qualification for other medical benefits.</p> <p>g. compensation for losses due to natural disasters? “(1) Medical, dental, and funeral expenses The President, in consultation with the Governor of a State, may provide financial assistance under this section to an individual or household in the State who is adversely affected by a major disaster to meet disaster-related medical, dental, and funeral expenses.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>42 U.S.C. § 5182</p> <p>42 U.S.C. § 5177a</p> <p>15 U.S.C. § 636 (b)</p>		<p>(2) Personal property, transportation, and other expenses The President, in consultation with the Governor of a State, may provide financial assistance under this section to an individual or household described in paragraph (1) to address personal property, transportation, and other necessary expenses or serious needs resulting from the major disaster.”</p> <p>legal services “Whenever the President determines that low-income individuals are unable to secure legal services adequate to meet their needs as a consequence of a major disaster, consistent with the goals of the programs authorized by this chapter, the President shall assure that such programs are conducted with the advice and assistance of appropriate Federal agencies and State and local bar associations.”</p> <p>migrant and seasonal farm workers “The Secretary of Agriculture may make grants to public agencies or private organizations with tax exempt status under section 501(c)(3) of Title 26, that have experience in providing emergency services to low-income migrant and seasonal farmworkers where the Secretary determines that a local, State or national emergency or disaster has caused low-income migrant or seasonal farmworkers to lose income, to be unable to work, or to stay home or return home in anticipation of work shortages.”</p> <p>This law provides for small business loans following disasters.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>26 U.S.C. § 198A</p> <p>42 U.S.C. § 5132</p>		<p>This law allows for tax deductions based on disaster expenses.</p> <p>h. information?</p> <p>42 U.S.C. § 5132</p> <p>“(a) Readiness of Federal agencies to issue warnings to State and local officials</p> <p>The President shall insure that all appropriate Federal agencies are prepared to issue warnings of disasters to State and local officials.</p> <p>(b) Technical assistance to State and local governments for effective warnings</p> <p>The President shall direct appropriate Federal agencies to provide technical assistance to State and local governments to insure that timely and effective disaster warning is provided.</p> <p>(c) Warnings to governmental authorities and public endangered by disaster</p> <p>The President is authorized to utilize or to make available to Federal, State, and local agencies the facilities of the civil defense communications system established and maintained pursuant to section 5196(c) of this title, or any other Federal communications system for the purpose of providing warning to governmental authorities and the civilian population in areas endangered by disasters.</p> <p>(d) Agreements with commercial communications systems for use of facilities</p> <p>The President is authorized to enter into agreements with the officers or agents of any private or commercial communications systems who volunteer the use of their systems on a reimbursable</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			or no reimbursable basis for the purpose of providing warning to governmental authorities and the civilian population endangered by disasters.”
<p>26. Do the above constitutional or other guarantees give residents any personal right of action against the state if the government breaches these rights? E.g. access to a constitutional court, or a claim in a human rights court or tribunal? If so, explain how the law enables this to occur, and who has the right to make such claims. E.g.</p> <p>a. Is it an individual or a collective right?</p> <p>b. Can claimants represent themselves?</p> <p>c. Are there costs that mean the poorest people cannot access the remedy?</p> <p>d. Are there financial limitations on any such claims (minimums or maximums)?</p>	<p>5 C.F.R. 177</p> <p><i>Berkovitz v. United States</i>, 486 U.S. 531, 108 S. Ct. 1954, 100 L. Ed. 2d 531 (1988)</p> <p><i>In re Katrina Canal Breaches Litig.</i>, 673 F.3d 381 (5th Cir. 2012).</p>		<p>In some cases some of these provisions have been held by courts to constitute an individual right, even a constitutional right. However, this does not mean all jurisdictions will agree.</p> <p>How to file claims against local government varies by jurisdiction.</p> <p>Tort claims against the federal government would have to be filed under the Federal Tort Claims Act. The act provides limited sovereign immunity, which, as expressly stated in the Stafford Act, bars claims regarding “discretionary” action taken by the government.</p> <p>Federal claims must first be filed as an “administrative claim” with the federal agency the claim is against under 5 C.F.R. 177. Although other formats are permitted, the claim can be made by filling out the government’s “Standard Form 95.” The claim must be filed within two years of the incident. The agency has six months to admit or reject the claim. Once rejected, the claimant has six months to file a claim in federal district court.</p> <p>a. A city, individual, business, or class of individuals may bring suit following normal rules of U.S. federal civil procedure.</p> <p>b. Claimants could represent themselves, but it would probably be unwise to do so given the complexity of the legal system. Claimants would probably be best served by seeking pro bono legal</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>services through their state, local bar association, or 42 U.S.C. § 5182.</p> <p>c. Poverty can be a barrier to access to the legal system, but courts often have mechanisms to assist indigent claimants. Again, 42 U.S.C. § 5182 provides for legal assistance. Still, there often are other barriers for indigent plaintiffs such as getting time off work, transportation, and child care.</p> <p>d. There is no federal minimum or maximum dollar amount for a claim, although there are maximums on how much the agencies can settle for out of court without special approval.</p>
B. Liability & Insurance			
27. Does legislation (including case law, where applicable) make government agencies liable for failure to prevent natural disasters affecting the population?	<p>Federal Tort Claims Act, 28 U.S.C. § §§ 1346(b), 2671-2680 (1948).</p> <p>Robinson v. United States (In re Katrina Canal Breaches</p>		<p>The U.S. might be liable for common law negligence under the Federal Tort Claims Act, but likely only if the government deviated from concrete statutory or regulatory requirements in a way that contributed to the disaster or damage. In academic debates, disaster prevention liability has been analogized to <i>Berkovitz v. United States</i>. In <i>Berkovitz</i>, the U.S. government was found liable when a licensed drug caused paralysis because a license should not have been issued under statutory and regulatory law. The U.S. Supreme Court held that the federal government does not have discretion to violate its own laws and procedures, so the discretionary exception cannot apply. This issue caused some concern following the BP oil spill in 2010 because of government regulation of the oil platform.</p> <p><i>Robinson v. United States</i></p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Litig.), 673 F.3d 381 (5th Cir. La. 2012)		<p>In May 2012, the Fifth Circuit found the U.S. Army Corps of Engineers grossly negligent for failing to maintain levees, which consequentially resulted in flooding during Hurricane Katrina.</p> <p>Some courts also might not hold the U.S. liable if the disaster, as an “act of God,” was not something that should have been anticipated, a hurricane in Montana or an ice storm in Florida, for example.</p>
<p>28. Are government agencies liable for failure to warn or for making an erroneous warning of natural disaster? If so, what kind of liability? – civil, criminal or both? If so, what are the legal mechanisms for injured parties to seek redress? Are these individual or collective actions, or both?</p>			<p>Failure to warn and negligence are torts, although the precise elements vary by state depending on court rulings and local law.</p> <p>Individual claims or class action is permissible so long as the case conforms to the federal rules of civil procedure.</p> <p>See question 26 for a description of how to file a federal administrative claim.</p>
<p>29. Do government agencies that fail to warn or make an erroneous warning have legal immunity? If governments have immunity from liability, how extensive is this and/or how and where in law is it defined? Does it apply to all levels of government?</p>	Benzman v. Whitman, 523 F.3d 119 (2d Cir. N.Y. 2008)		<p>This again is a matter of immunity for discretionary actions under the Federal Tort Claims Act and the Stafford Act.</p> <p>There are “right-to-know” provisions in U.S. law, but some courts have determined that these provisions are discretionary as opposed to obligatory, meaning the government cannot be sued. In <i>Benzman v. Whitman</i>, New York City residents alleged that the EPA did not warn them that the air was unsafe to breathe following the collapse of the World Trade Center. The court determined the government could not be held liable because the following EPA regulation was discretionary because it went on to</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>list actions that “should” or “may” be done.</p> <p>40 C.F.R. 300.155 “When an incident occurs, it is imperative to give the public prompt, accurate information on the nature of the incident and the actions underway to mitigate the damage.”</p>
<p>30. Are private persons (individual or corporate) liable for faulty disaster-related advice or warnings given? Does this apply to volunteers? If so, what kind of liability? – civil, criminal or both? If so, what are the legal mechanisms for injured parties to seek redress? Are these individual or collective actions, or both?</p>	<p>18 U.S.C. § 2074</p>		<p>Certain false weather reports are a crime under 18 U.S.C. § 2074: “Whoever knowingly issues or publishes any counterfeit weather forecast or warning of weather conditions falsely representing such forecast or warning to have been issued or published by the Weather Bureau, United States Signal Service, or other branch of the Government service, shall be fined under this title or imprisoned not more than ninety days, or both.”</p> <p>Private persons would not enjoy immunity and therefore also would be liable for torts. Again, the elements of negligence or failure to warn claim vary by state, and claims could be filed by individuals or as a class action.</p> <p>A civil lawsuit would be filed in the appropriate state or federal jurisdiction.</p> <p>Some states have criminalized inciting panic and anxiety, although this is usually just a misdemeanor. A criminal lawsuit would be filed in the appropriate state or federal jurisdiction.</p>
	<p>42 U.S.C. § 14503 (The Volunteer Protection</p>		<p>“Except as provided in subsections (b) and (d) of this section, no volunteer of a nonprofit organization or governmental entity shall</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Act of 1997)		<p>be liable for harm caused by an act or omission of the volunteer on behalf of the organization or entity if--</p> <p>(1) the volunteer was acting within the scope of the volunteer's responsibilities in the nonprofit organization or governmental entity at the time of the act or omission;</p> <p>(2) if appropriate or required, the volunteer was properly licensed, certified, or authorized by the appropriate authorities for the activities or practice in the State in which the harm occurred, where the activities were or practice was undertaken within the scope of the volunteer's responsibilities in the nonprofit organization or governmental entity;</p> <p>(3) the harm was not caused by willful or criminal misconduct, gross negligence, reckless misconduct, or a conscious, flagrant indifference to the rights or safety of the individual harmed by the volunteer; and</p> <p>(4) the harm was not caused by the volunteer operating a motor vehicle, vessel, aircraft, or other vehicle for which the State requires the operator or the owner of the vehicle, craft, or vessel to--</p> <p>(A) possess an operator's license; or</p> <p>(B) maintain insurance.”</p>
31. Are private persons (individual or corporate) liable for damage caused to others from their property during natural disasters? If so, what kind of liability? – civil, criminal or both? If so, what are the legal mechanisms			<p>Private persons can be liable for negligence, product defects, etc., under state tort case law and statutes. However, some courts consider unforeseeable “acts of God” a mitigating factor.</p> <p>This would generally be a civil court action seeking damages file in the appropriate state or federal court.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
for injured parties to seek redress? Are these individual or collective actions, or both?			
32. Is there any system of compulsory insurance against the effects of natural disasters? If so, how is this established by law and what are the main elements of the scheme?	42 U.S.C. Ch. 50		<p>42 U.S.C. Ch. 50 addresses the National Flood Insurance Program, which identifies flood zones and tries to keep private insurance affordable.</p> <p>Homeowners in Special Flood Hazard Areas cannot get a home loan unless they buy flood insurance. See 42 U.S.C. § 4106.</p> <p>“(a) Prohibition against Federal approval of financial assistance No Federal officer or agency shall approve any financial assistance for acquisition or construction purposes on and after July 1, 1975, for use in any area that has been identified by the Director as an area having special flood hazards unless the community in which such area is situated is then participating in the national flood insurance program.”</p> <p>Some funding for reconstruction is contingent upon the purchase of insurance for future disasters. See 42 U.S.C. § 5154.</p>

2. Early warning and reduction of underlying risk factors through regulation

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>Parts One and Two: Are there laws or regulations relating to preparedness, prevention and/ or risk reduction against the following specific natural hazards (if relevant)? Such regulations may include some specific laws on rapid-onset disasters – Part One – such as fire regulations and fire service, as well as building codes (e.g. earthquake, fire, hurricanes/cyclones), land zoning and land use planning regulations (e.g. flood plain exclusions, unstable land) , disaster management / civil protection laws, and environmental management laws concerning rivers and forests (flood mitigation, erosion prevention against landslides and floods). There may be similar or a different range of laws concerning slow-onset disasters such as drought and other food security issues – Part Two. There may therefore be some overlap with the subsequent sections, but the main aim of Parts One and Two of this section is to identify which risks have separate regulation in the subject country, and in which laws.</p>			
<p>Part One. Rapid-onset disasters, sectoral and specific regulation based on identified risks and community participation</p>			
<p>A. Cyclones, tornadoes, or storms?</p>			
<p>33. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?</p>	<p>National Windstorm Impact Reduction Act of 2004, 42 U.S.C. § 15701 et seq.</p>	<p>§ 15701</p>	<p>The National Windstorm Impact Reduction Act of 2004 is federal in nature but it encourages cooperation with all levels of government. It assigned the following tasks to federal agencies:</p> <p>“(1) The National Institute of Standards and Technology shall support research and development to improve building codes and standards and practices for design and construction of buildings, structures, and lifelines.</p> <p>(2) The National Science Foundation shall support research in engineering and the atmospheric sciences to improve the understanding of the behavior of windstorms and their impact on buildings, structures, and lifelines.</p> <p>(3) The National Oceanic and Atmospheric Administration shall support atmospheric sciences research to improve the understanding of the behavior of windstorms and their impact on buildings, structures, and lifelines.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>(4) The Federal Emergency Management Agency shall support the development of risk assessment tools and effective mitigation techniques, windstorm-related data collection and analysis, public outreach, information dissemination, and implementation of mitigation measures consistent with the Agency's all-hazards approach.”</p> <p>The law also created a National Advisory Committee on Windstorm Impact Reduction.</p>
<p>34. Does this law specify how management of this risk is financed? If so, describe.</p>	<p>42 U.S.C.</p>	<p>§ 15706</p>	<p>The law outlines the appropriations related to this program for 2006, 2007, and 2008. The money is divided amongst FEMA (\$8.7 million the first year), the National Science Foundation (\$8.7 million the first year), the National Institute of Standards and Technology (\$3 million in the first year), and NOAA (\$2.1 million in the first year).</p>
<p>35. Does this law attribute liability for damage caused by:</p> <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			<p>This particular law does not address these issues, although they would be covered more generally under the Stafford Act and Federal Tort Claims Act. See question 25.</p>
<p>36. Does this law regulate the collection</p>	<p>42 U.S.C.</p>	<p>§ 15701</p>	<p>The law tasks NOAA with research and tasks FEMA with data</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?			collection, analysis and dissemination. This law does not specifically mention mapping, but NOAA and FEMA both have extensive map collections available to the public.
<p>37. Does this law provide for consultation and/or participation about risk mapping, Early Warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 			This is not mentioned.
38. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?	Executive Order 13407, signed June 26, 2006		<p>Warning systems are dealt with collectively in various FEMA, NOAA, and Federal Communications Commission regulations. Monitoring and detection of severe storms, tsunamis, etc. falls to NOAA's National Weather Service.</p> <p>Executive Order 13407, signed June 26, 2006 This created an Integrated Public Alert and Warning System that</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>47 C.F.R. § 11 (10–1–11 Edition)</p> <p>The Warning, Alert, and Response Network Act of 2006 (The WARN Act). Pub. L. No. 109-347, 120 Stat. 1884, 1936-43, 1936 (2006).</p> <p>15 U.S.C. Ch. 9 and 33 U.S.C. Ch. 17 on NOAA</p> <p>42 U.S.C. § 15701</p>		<p>consolidated the various alert systems for various kinds of emergencies. It is primarily managed by FEMA.</p> <p>States and local government maintain their own EWS, which are much more commonly used than the federal system.</p> <p>47 C.F.R. § 11 Federal Communications Commission regulations require communications companies to transmit emergency alerts and also coordinate with local EWS.</p> <p>The WARN Act is supposed to introduce new means of disseminating information, such as by mobile phone text message. WARN requires the FCC to create a taskforce with state, local, tribal representation, communications industry representatives, and technical experts.</p> <p>The above acts provide grants to help build alert systems in remote and underserved areas. The WARN Act § 605.</p>
<p>39. If communities are involved in Early Warning Systems (EWS), does this law provide that they:</p> <ol style="list-style-type: none"> Assist in the design of local and community EWS? Establish or maintain EWS? Provide information for the EWS? 			<ol style="list-style-type: none"> This would be determined on a local level. This would be determined on a local level. This would be determined on a local level. The laws in Question 38 provide for alerts via television, radio, phone, and text message.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			community education, mapping, and warning systems.
41. Does this law specify how management of this risk is financed? If so, describe.	42 U.S.C. § 7704(c) 33 U.S.C. § 3201 et seq		This section of the law provides for a budget process where the interagency coordinating committee consults its members and then submits an annual budget request to the Office of Management and Budget. The law authorized 135 million USD over five years for improving tsunami risk reduction.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>42. Does this law attribute liability for damage caused by:</p> <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			<p>This particular law does not address these issues, although they would be covered more generally under the Stafford Act and Federal Tort Claims Act.</p>
<p>43. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?</p>	<p>42 U.S.C. § 7704 (b)(3)(E)</p> <p>33 U.S.C. § 3201 et seq</p>		<p>This section tasks the National Earthquake Information Center under the U.S. Geological Survey with collecting and disseminating information. It also encourages an exchange of information with other countries.</p> <p>The law calls for improved risk mapping through cooperation with the United States Geological Survey and the National Science Foundation.</p>
<p>44. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p>	<p>42 U.S.C. § 7704 (b)(2)(A)</p> <p>42 U.S.C. § 7704 (b)(3)(J)</p>		<p>42 U.S.C. § (b)(2)(A)</p> <p>This section call for grants for the development of local DRR efforts and also education campaigns. It does not specifically mention soliciting public input.</p> <p>42 U.S.C. § (b)(3)(J)</p> <p>It simply says that maps are to be maintained by the U.S. Geological</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 	33 U.S.C. § 3201 et seq		<p>Survey.</p> <p>Community outreach is emphasized in the strategic plan based on this law, but specific at-risk communities are not discussed.</p>
45. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?			Please see question 38 for information on consolidated EWS.
<p>46. If communities are involved in EWS, does this law provide that they:</p> <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)? 			Please see question 39.
C. Fire?			

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>c. If so, who may be liable - or immune?</p> <p>d. Is it civil or criminal liability, or both?</p>			
<p>50. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?</p>	<p>15 U.S.C.</p>	<p>§ 2220</p>	<p>“The Administrator shall operate, directly or through contracts or grants, an integrated, comprehensive National Fire Data Center for the selection, analysis, publication, and dissemination of information related to the prevention, occurrence, control, and results of fires of all types. The program of such Data Center shall be designed to (1) provide an accurate nationwide analysis of the fire problem, (2) identify major problem areas, (3) assist in setting priorities, (4) determine possible solutions to problems, and (5) monitor the progress of programs to reduce fire losses. . . .</p> <p>(D) NATIONAL FIRE INCIDENT REPORTING SYSTEM UPDATE</p> <p><i>(1) IN GENERAL</i></p> <p>The Administrator shall update the National Fire Incident Reporting System to ensure that the information in the system is available, and can be updated, through the Internet and in real time.”</p>
<p>51. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <p>a. Women?</p>	<p>15 U.S.C.</p>	<p>§ 2205</p>	<p>The law discusses public education, but it does not go into detail on outreach. It does mention special efforts to reach “individuals who are particularly vulnerable to fire hazards, such as the young and the elderly.”</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<ul style="list-style-type: none"> b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 			
52. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?			Please see question 38 for information on consolidated EWS.
53. If communities are involved in EWS, does this law provide that they: <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)? 			Please see question 39.
D. Floods?			
54. Is there a specific law about this hazard (i.e. not the main DM law)? If			Yes. Unlike other safety issues, flooding often falls under federal control because the federal government has jurisdiction over navigable waters.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?</p>	<p>33 U.S.C. § 701 et seq.</p>		<p>Making improvements is generally the responsibility of the U.S. Army Corps of Engineers, which is primarily, although not entirely, a civilian organization despite its name. Flooding that affects farming is also dealt with by the U.S. Agricultural Department.</p> <p>33 U.S.C. ch. 15 addresses flood control.</p> <p>33 U.S.C. § 701 (b) “The words “flood control” as used in section 701a of this title, shall be construed to include channel and major drainage improvements and flood prevention improvements for protection from groundwater-induced damages, and Federal investigations and improvements of rivers and other waterways for flood control and allied purposes shall be under the jurisdiction of and shall be prosecuted by the Department of the Army under the direction of the Secretary of the Army and supervision of the Chief of Engineers, and Federal investigations of watersheds and measures for run-off and water-flow retardation and soil-erosion prevention on watersheds shall be under the jurisdiction of and shall be prosecuted by the Department of Agriculture under the direction of the Secretary of Agriculture, except as otherwise provided by Act of Congress.”</p> <p>42 U.S.C. Ch. 50 addresses the National Flood Insurance Program, which identifies flood zones and tries to keep private insurance affordable. It also provides for flood mitigation grants.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	42 U.S.C. §4101		
55. Does this law specify how management of this risk is financed? If so, describe.	33 U.S.C. § 701f 42 U.S.C. §§ 4101-07		33 U.S.C. 701f The original act in 1936 appropriated \$340 million for examinations and improvements. 42 U.S.C. § 4104D Provides for \$40 million for the National Flood Mitigation Fund for individual grants. It also makes income from various fines. Additional money is set out in FEMA's budget.
56. Does this law attribute liability for damage caused by: a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both?			These particular laws do not address these issues, although they would be covered more generally under the Stafford Act and Federal Tort Claims Act.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>57. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?</p>	<p>National Flood Insurance Act of 1968 (42 U.S.C. 4101)</p>		<p>FEMA is responsible for collecting and mapping flood data with the assistance of the Technical Mapping Advisory Council. The responsibility for carrying out 42 U.S.C. 4101 was transferred to FEMA under 6 U.S.C. 315(a)(1). 42 U.S.C. 4101 sets out detailed instructions on the program for flood mapping and data collection. Every five years FEMA is supposed to review whether it needs to reassess floodplains and flood zones under subsection (e). A compendium of changes is supposed to be published every six months under subsection (i).</p>
<p>58. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 	<p>42 U.S.C. 4104</p>		<p>42 U.S.C. 4104</p> <p>FEMA has a community appeals process in which people can contest the flood classification of their properties.</p> <p>Also, because improvements are often funded by a competitive grant process, it is up to the community applying for the grant to reach out to members of the community.</p>
<p>59. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community</p>			<p>Please see question 38 for information on consolidated EWS.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
involvement in EWS?			
<p>60. If communities are involved in EWS, does this law provide that they:</p> <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)? 			Please see question 39.
E. Heat/cold waves?			
<p>61. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?</p>			There are various laws about drought and other weather-related activity scattered throughout the law, but there does not appear to be a specific federal law on heat and cold waves.
<p>62. Does this law specify how management of this risk is financed? If so, describe.</p>			NA
<p>63. Does this law attribute liability for</p>			NA

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>damage caused by:</p> <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			
<p>64. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?</p>			NA
<p>65. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including 			NA

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>children, older persons, persons with disabilities?</p> <p>d. Socially isolated groups and the very poorest people?</p>			
66. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?	15 U.S.C. § 313d		<p>15 U.S.C. § 313d provides for a National Integrated Drought Information System administered by NOAA.</p> <p>Please see question 38 for information on consolidated EWS.</p>
<p>67. If communities are involved in EWS, does this law provide that they:</p> <p>a. Assist in the design of local and community EWS?</p> <p>b. Establish or maintain EWS?</p> <p>c. Provide information for the EWS?</p> <p>d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)?</p>			Please see question 39.
68. Describe form of regulation, and institutional responsibility.			NA
F. Insect Infestations?			
69. Is there a specific law about this hazard (i.e. not the main DM law)? If	Plant Protection Act, 7 U.S.C §§7701-7772		These laws authorize the Animal and Plant Health Inspection Service to help people deal with pest control as related to

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?</p>	<p>Farm Security and Rural Investment Act of 2002, Public Law 107-171, Subtitle E, Animal Health Protection, Section 10401-10418 Animal Welfare Act, as amended, 7 U.S.C §§2131-2155.</p> <p>7 C.F.R. 300 et seq</p> <p>16 U.S.C. ch. 84(IV)</p>		<p>agriculture with grants and expertise. The service also has a Plant Protection and Quarantine program authorized by these laws under 7 C.F.R. 371.3 for emergencies.</p> <p>This law encourages research on how to protect trees against insect infestations.</p>
<p>70. Does this law specify how management of this risk is financed? If so, describe.</p>	<p>7 U.S.C §§7771</p>		<p>Provides for necessary appropriations for plant protection generally without specifying a sum.</p>
<p>71. Does this law attribute liability for damage caused by:</p> <ol style="list-style-type: none"> failure to warn, or false or faulty warnings of this risk? failure to take preventive action including by reducing this risk? If so, who may be liable - or immune? Is it civil or criminal liability, or both? 			<p>These particular laws do not address these issues, although they would be covered more generally under the Stafford Act and Federal Tort Claims Act.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>72. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?</p>	<p>7 U.S.C §§7701-7772</p> <p>16 U.S.C. § 6553</p>		<p>There are several provisions for various kinds of research into ways to mitigate and prevent infestations. This is overseen by the Department of Agriculture and grants can be given for independent research.</p> <p>Forest Service and United States Geological Survey monitor the effects of insects on forests.</p>
<p>73. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 	<p>7 U.S.C §§7701-7772</p>		<p>7 U.S.C §§7781 requires making information compiled under the Plant Protection Act available to the public.</p> <p>Under 7 U.S.C §§7711-12, any person can petition to add or remove plants from regulation or to transport plants under restrictions.</p> <p>The law does not specifically mention individual classes of people, it just says everyone may petition and that reports will be subject to public comment.</p>
<p>74. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>	<p>42 U.S.C. § 319</p>		<p>Improvement of information and data systems at the local level is one of the three key focuses of the Public Health Threats and Emergencies Act of 2000.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>The Centers for Disease Control and Prevention share information using a Health Alert Network.</p> <p>Please see question 38 for information on consolidated EWS.</p>
<p>75. If communities are involved in EWS, does this law provide that they:</p> <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)? 			<p>Please see question 39.</p>
G. Landslides and avalanches?			
<p>76. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?</p>			<p>No.</p> <p>Although, FEMA has provided guidance for local and state government:</p> <p>http://mitigation.eeri.org/files/fema-182.pdf</p>
<p>77. Does this law specify how</p>			<p>NA</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
management of this risk is financed? If so, describe.			
<p>78. Does this law attribute liability for damage caused by:</p> <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			NA
79. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?	43 U.S.C. § 31A-H		This section provides for the creation of a geological map database under the U.S. Geological Survey. Among the listed purposes is the prevention of landslide damage.
80. Does this law provide for consultation and/or participation about risk mapping, Early Warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:	43 U.S.C. § 31C		"There is established a national cooperative geologic mapping program between the United States Geological Survey and the State geological surveys, acting through the Association."

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 			
81. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?			Please see question 38 for information on consolidated EWS.
82. If communities are involved in Early Warning Systems (EWS), does this law provide that they: <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)? 			Please see question 39.
H. Volcanoes?			

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
83. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?			No, although a National Volcano Early Warning and Monitoring Act was introduced in the Senate for consideration in 2011.
84. Does this law specify how management of this risk is financed? If so, describe.			NA
85. Does this law attribute liability for damage caused by: <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			NA
86. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?	43 U.S.C. § 31A-H		This section provides for the creation of a geological map database under the U.S. Geological Survey. Among the listed purposes is the identification of volcanic hazards.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>87. Does this law provide for consultation and/or participation about risk mapping, Early Warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 	43 U.S.C. § 31C		<p>“There is established a national cooperative geologic mapping program between the United States Geological Survey and the State geological surveys, acting through the Association.”</p>
<p>88. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>			<p>Please see question 38 for information on consolidated EWS.</p>
<p>89. If communities are involved in Early Warning Systems (EWS), does this law provide that they:</p> <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? 			<p>Please see question 39.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)?			
Part Two. Slow-onset disasters, sectoral and specific regulation based on risks and community participation			
I. Drought and related famine?			
<p>90. Is there a specific law or institutional mandate for drought preparedness and risk reduction, especially for agriculture and related industries? In particular:</p> <p>a. Rain and river water storage, distribution and conservation measures?</p> <p>b. Development and maintenance of ground water extraction, storage and distribution?</p> <p>If so, describe the forms of regulation. At what level(s) of government is this regulated?</p>	<p>Reclamation States Emergency Drought Relief Act of 1991, as amended as of 2010, 43 U.S.C .ch. 40</p>		<p>Law related to droughts is somewhat scattered throughout U.S. code, and states have their own water banks. Famine is not a major issue in the U.S.</p> <p>43 U.S.C .ch. 40 provides funding and technical support to western states for drought relief and planning through the U.S. Bureau of Reclamation. The bureau is the largest wholesaler of water in the country and manages many dams and reservoirs. Section 2213 also provides for loans for water conservation and management activities related to drought.</p> <p>The bureau has a draft set of regulations called the Drought Directives and Standards. The draft is available here: http://www.usbr.gov/drought/</p> <p>16 U.S.C. § 2202 “The Secretary of Agriculture is authorized to make payments to agricultural producers who carry out emergency water conservation or water enhancing measures (including measures carried out to</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>assist confined livestock) during periods of severe drought as determined by the Secretary.”</p> <p>7 U.S.C. § 2204C provides funding and technical support for water management in rural areas, including drought-related issues.</p> <p>a. & b. There does not appear to be much of a distinction made between groundwater and other sources at the federal level. 16 U.S.C. § 3839aa-9 largely deals with ground and surface water conservation jointly through incentives and loans.</p>
<p>91. Is there a specific law or institutional mandate for early warning and response to drought, to mitigate the effects of drought and help prevent famine? In particular:</p> <p>a. Is an institution legally mandated to issue drought early warnings? If so, how is this regulated?</p> <p>b. Is an institution legally mandated to impose water use restrictions? If so, at what level(s) of government?</p> <p>c. Is there legal provision for diversion, piping or transporting water to drought-affected areas? If so, at what level(s) of government?</p>			<p>a. 15 U.S.C. § 313d provides for a National Integrated Drought Information System administered by NOAA. This includes an early warning system.</p> <p>b. Water use restrictions are generally done at the local level, but the Department of Agriculture can offer incentives to encourage conservation. 16 U.S.C. § 2202</p> <p>c. 43 U.S.C. § 2222 allows the federal government to participate in and encourage “cooperative drought contingency plans.” However, this is largely up to the states.</p> <p>43 U.S.C. § 2211 allows the Reclamation Bureau to facilitate the trade of water amongst willing parties to help mitigate damage from droughts.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
92. Do the above laws or mandates specify how management of drought and famine risk is financed? If so, describe.	43 U.S.C. 16 U.S.C. 7 U.S.C.	§ 2241 § 2204 § 2204C	<p>“Except as otherwise provided in section 2243 of this title (relating to temperature control devices at Shasta Dam, California), there is authorized to be appropriated not more than \$90,000,000 in total for the period of fiscal years 2006 through 2012.”</p> <p>There are authorized to be appropriated such funds as may be necessary to carry out the purposes of this chapter.</p> <p>For this law, there are “appropriated each fiscal year such sums as are necessary.”</p>
93. Do the above laws or mandates regulate the collection and distribution of information on drought and related famine risks? If so, what authority is responsible and what is their mandate?	15 U.S.C. 43 U.S.C.	§ 313d § 2223	<p>This law provides for a National Integrated Drought Information System administered by NOAA. This law does not mention famine.</p> <p>“The Secretary is authorized to work with other Federal and State agencies to improve hydrologic data collection systems and water supply forecasting techniques to provide more accurate and timely warning of potential drought conditions and drought levels that would trigger the implementation of contingency plans.”</p>
94. Do the above laws or mandates provide for consultation and/or participation about drought and famine risk, early warning or general DRR regarding drought and famine by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts	43 U.S.C.	§ 2222	<p>Most of these laws discuss cooperation with the local communities generally.</p> <p>E.g. 43 U.S.C. § 2222</p> <p>“in consultation with other appropriate Federal and State officials, Indian tribes, public, private, and local entities, is authorized to prepare or participate in the preparation of cooperative drought</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 			contingency plans.”
<p>J. Other food security risks?</p>			
<p>95. Is there a specific law or institutional mandate concerning threats to food security other than droughts? (e.g. predicted effects of climate change, such as inundation of agricultural land and/or mass migration).</p> <ul style="list-style-type: none"> a. If so, describe the form of regulation to reduce the impact of these risks (if any), and institutional responsibility b. At what level(s) of government is this regulated? 	<p>Plant Protection Act, 7 U.S.C §§7701-7772.</p> <p>Farm Security and Rural Investment Act of 2002, Public Law 107-171, Subtitle E, Animal Health Protection, Section 10401-10418.</p> <p>Animal Welfare Act, as amended, 7 U.S.C §§2131-2155.</p> <p>Biosecurity, 7 U.S.C. § 3351 et seq.</p> <p>7 U.S.C. § 6701</p>		<p>Famine is not generally a major problem in the United States. Food security is more a matter of nutrition and poverty.</p> <p>Under Title 7 of the U.S. Code there is a diverse array of programs to protect the agricultural industry. In addition to drought, infestation, and disease, the law also increasingly recognizes a potential for deliberate attacks on “biosecurity.”</p> <p>7 U.S.C. ch. 102 provides for emergency food assistance, although some assistance is contingent upon states establishing distribution plans.</p> <p>The Department of Agriculture’s Climate Change Program conducts research on the effects of climate change on agriculture and ways</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>7 U.S.C. § 7333</p> <p>Food Security Act of 1985, 7 C.F.R. Part 1410</p>		<p>to mitigate those effects.</p> <p>There are noninsured crop and livestock disaster assistance programs and various other forms of financial assistance available for emergency relief.</p> <p>The Department of Agriculture’s Farm Service Agency runs a voluntary Conservation Reserve Program where farms set aside hay and other feedstock for emergency reserves.</p>
<p>96. Does the above law or mandate specify how management of food security is financed? If so, describe.</p>	<p>See laws referenced in question 96.</p>		<p>Various provisions generally call for “such sums as are necessary.”</p>
<p>97. Does the above law or mandate regulate the collection and distribution of information on hazards and risks to food security, particularly those relating to agricultural production? If so, what authority is responsible and what is their mandate?</p>	<p>Food, Conservation, and Energy Act of 2008 (Pub. L. 110-246)</p> <p>7 U.S.C. §3101 et seq.</p>		<p>The Department of Agriculture is the lead agency for food security information. Again, there are dozens of laws on different aspects of this issue.</p> <p>7 U.S.C. ch. 64 focuses on agricultural research, extension, and teaching in general. There are four primary agricultural research institutions run by the federal government:</p> <ul style="list-style-type: none"> • Economics Research Service (ERS) (created by the Department of Agriculture in 1961) • National Agricultural Statistics Service (NASS) (1961) • National Institute of Food and Agriculture (NIFA) (Food, Conservation, and Energy Act of 2008) • Agricultural Research Service (ARS) (Organic Act of 1862)

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	7 U.S.C. § 3354		<p>The Food, Conservation, and Energy Act of 2008 authorized the creation of a series of agricultural research grants called the Agriculture and Food Research Initiative under NIFA.</p> <p>This calls for research on biosecurity.</p>
<p>98. Does the above law or mandate provide for community consultation and/or participation about risk reduction from threats to food security? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 			<p>Section 7406 of the Food, Conservation, and Energy Act of 2008</p> <p>This law requires public comment on the Agriculture and Food Research Initiative.</p>
Part Three. Early Warning, Hazard Mapping and Risk Information			
A. Early Warning			
99. In addition to the sectoral laws above, is there any general obligation to establish early warning	Executive Order 13407, signed June 26, 2006		Warning systems are dealt with collectively by FEMA and Federal Communications Commission regulations. The federal government is still working out the bugs in the new system.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>systems (EWS) in the disaster management law?</p> <p>a. If so, does this include institutional mandates on EWS?</p> <p>b. Which institution(s) are involved and what are their mandates on EWS?</p> <p>c. Is there legal provision for financing of EWS?</p>	<p>47 C.F.R. § 11 (10–1–11 Edition)</p> <p>The Warning, Alert, and Response Network Act of 2006 (The WARN Act). Pub. L. No. 109-347, 120 Stat. 1884, 1936-43, 1936 (2006).</p>		<p>Executive Order 13407, signed June 26, 2006 This created an Integrated Public Alert and Warning System that consolidated the various alert systems for various kinds of emergencies. It is primarily managed by FEMA.</p> <p>States and local government maintain their own EWS, which are much more commonly used than the federal system.</p> <p>47 C.F.R. § 11 (10–1–11 Edition) Federal Communications Commission regulations require communications companies to transmit emergency alerts and also coordinate with local EWS.</p> <p>The WARN Act is supposed to introduce new means of disseminating information, such as by mobile phone text message. WARN requires the FCC to create a taskforce with state, local, tribal representation, communications industry representatives, and technical experts.</p> <p>The above acts provide grants to help build alert systems in remote and underserved areas. The WARN Act § 605.</p> <p>a. The executive order mandates that Homeland Security and the Federal Communications Commission implement “an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people in situations of war, terrorist attack, natural disaster, or other hazards to public safety and well-being...” b. Primarily FEMA and the Federal Communications Commission.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			c. No, the law is subject to the availability of appropriations under Section 6.
100. Does EWS regulation include requirements for community consultation and participation in development of EWS? Describe.	Executive Order 13407, signed June 26, 2006		The executive order does not specify community consultation although it does mention cooperation with local governments and businesses in Section 2.
101. Does EWS regulation provide for community-based early warning data collection? Describe.			This would be determined on a local level. The system can be used by local governments to announce their own alerts.
102. Does EWS regulation provide for timely and reliable access for at-risk communities to EWS, meteorological or seismological data (as relevant)? Describe.	Executive Order 13407 Sec. 2(4)		<p>Note: This executive order is somewhat aspirational.</p> <p>“(iv) include in the public alert and warning system the capability to alert and warn all Americans, including those with disabilities and those without an understanding of the English language;”</p> <p>“(vii) ensure the conduct of public education efforts so that State, territorial, tribal, and local governments, the private sector, and the American people understand the functions of the public alert and warning system and how to access, use, and respond to information from the public alert and warning system;”</p> <p>The executive order sets out a broad mandate to reach many people across a variety of platforms. In practice, this includes radio,</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>television, landline phones, cell phones, text messaging, and e-mail.</p> <p>The executive order does not specify the types of emergencies the alert system would be used for other than to say “natural disasters.”</p> <p>http://www.fema.gov/pdf/emergency/ipaws/outreach_plan_011012.pdf</p>
<p>103. Does the law regulating telecommunications infrastructure and delivery include any DRR criteria in general, or any specific measures such as:</p> <ul style="list-style-type: none"> a. geographical coverage of telecommunications to include remote and/or at-risk areas? b. priority access to communications technology for at-risk communities and responders to disaster? c. access for vulnerable groups such as the elderly and persons with disabilities? d. Support for early warning systems? 	<p>WARN Act § 605.</p> <p>Executive Order 12472 - Assignment of National Security and Emergency Preparedness Telecommunications Functions April 3, 1984</p> <p>47 C.F.R. § 11</p>		<ul style="list-style-type: none"> a. The above acts provide grants to help build alert systems in remote and underserved areas. E.g., WARN Act § 605. b. Local responders can register with the federal government for the Government Emergency Telecommunications Service (GETS) or the Wireless Priority Service (WPS), which give members priority access to landlines and wireless networks during times of emergency. Executive Order 12472 - Assignment of National Security and Emergency Preparedness Telecommunications Functions April 3, 1984 (amended by E.O. 13286 of February 28, 2003 and changes made by E.O. 13407 June 26, 2006.c.). c. This does not appear to be addressed. d. Yes. 47 C.F.R. § 11 establishes the support procedures to make sure the warning system can operate, such as requiring commercial broadcasters to relay messages.
<p>104. Does the above law impose, or allow for the imposition, of any</p>	<p>47 C.F.R. § 11.11</p>		<ul style="list-style-type: none"> a. The law imposes the mandatory relaying of emergency alerts. What must be broadcast by whom is detailed under 47 C.F.R. § 11.11. Criteria include size and type of communications company.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>restrictions on use of certain types of telecommunications equipment</p> <p>a. Generally throughout the territory?</p> <p>b. In specified areas?</p> <p>c. Under specified circumstances?</p>			<p>147 C.F.R. § 1.18</p> <p>“(f) Non-participating National (NN) sources have elected not to participate in the National level EAS [Emergency Alert System] and hold an authorization letter to that effect. Upon activation of the national level EAS, NN sources are required to broadcast the EAS codes, Attention Signal, the sign-off announcement in the EAS Operating Handbook and then stop operating.”</p> <p>b. That would be determined by local law.</p> <p>c. Any restrictions or interference in communications could not be used to discriminate or censor based on the First Amendment protection of free speech.</p>
B. Risk identification, assessment and monitoring			
<p>105. In addition to the sectoral laws above, does the disaster management law regulate the collection and distribution of information on hazards and risks (risk mapping)? If so, what authority is responsible and what is their mandate?</p>	<p>42 U.S.C. § 5132-5133</p>		<p>The Stafford Act gives the president the power to create warning systems and to offer their use to the states, but it does not provide any details. This is where the authority for the executive order comes from.</p> <p>42 U.S.C. § 5133(k)</p> <p>“In consultation with States, local governments, and appropriate Federal agencies, the President shall develop multihazard advisory maps for areas, in not fewer than five States, that are subject to commonly recurring natural hazards (including flooding, hurricanes and severe winds, and seismic events).”</p>
<p>106. Does the disaster management</p>	<p>42 U.S.C. § 5132-5133</p>		<p>See question 106</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>law, or another law, regulate the collection and publication of seismological, meteorological and climatic data relevant to natural disasters? If so, what does it require and who is responsible for this, and under what law?</p>	<p>33 U.S.C. Ch. 17</p>		<p>33 U.S.C. Ch. 17 establishes the duties of the National Oceanic and Atmospheric Administration, which include monitoring and disseminating information on weather seismological, meteorological and climatic activity in general.</p>
<p>107. Does the disaster management law, or another law, regulate the collection and publication of baseline population data, especially in high risk areas? If so, what does it require and who is responsible for this, and under what law?</p>	<p>6 U.S.C. U.S. Const art. 1 § 2(3)</p>	<p>§ 775</p>	<p>This section requires the administrator of FEMA to create a National Emergency Family Registry and Locator System. Displaced persons can voluntarily register <i>after</i> a disaster so that family and law enforcement know where they are.</p> <p>13 U.S.C. Census, as required by U.S. Const art. 1 § 2(3) The U.S. Census Bureau has a program that keeps track of population data in connection with emergencies called OnTheMap for Emergency Management. http://onthemap.ces.census.gov/em.html</p>

Part Four. Regulation of the Built Environment

The aim is to outline the laws and regulations that set out building and construction standards, relevant approvals and enforcement processes, as well as planning and construction of roads & bridges, and land use planning and zoning, such as: urban and rural planning and zoning, including prohibitions on development of high risk sites, public open space for evacuation, access for rescue services such as fire and ambulance, and including regulation of informal settlements; regulation and responsibility for water storage, distribution and quality control for human consumption, flood mitigation construction and other water management against flooding; land tenure, including mapping and registration of tenure rights (especially participatory land mapping with communities) and any recognition of indigenous land rights and occupiers' rights; regulation of emergency and transitional shelter; and regulation or treatment of informal settlements.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
A. Building Codes			
Identify building and construction codes, including fire, flood and earthquake safety, as relevant to identified risks, including any differences in regulation, such as between large urban construction and small residences in rural villages; building regulations, including approvals, inspection and enforcement; and any regulation of emergency and transitional shelter, and informal settlements.			
108. Is there a national building and construction law? If so, what authority is responsible for its implementation?			<p>There are recommendations and guidelines, but there is no general federal building code. There are some regulations, though, that apply to federally-funded projects.</p> <p>E.g., 24 C.F.R. § 200 sets out regulations for federal housing assistance under the Department of Housing and Urban Development.</p>
109. If there is not a national building and construction law, is this issue regulated at provincial/state or local level? If sub-national regulation only, can you find an example of such a law?			<p>Building and zoning codes are primarily a state and local matter other than federal property or federally-funded construction. Typically, in large urban areas the city code governs and the county code is primarily for smaller towns and unincorporated areas. Most states use some version of the International Code Council standards.</p> <p>E.g.,</p> <p>State: California</p> <p>California Code of Regulations (CCR), Title 24, is the California Building Standards Code.</p> <p>County: Santa Clara, California</p> <p>Santa Clara County has its own regulations. Title C of the Santa Clara County Code of Ordinances deals with Construction,</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>Development and Land Use.</p> <p>City: Sunnyvale of Santa Clara County</p> <p>Title 16 of Sunnyvale Municipal Code largely incorporates California code while adding a few of its own provisions. Other cities often have a building code completely independent of the state code.</p>
<p>110. Does the building and construction law include detailed building codes, regulations or rules? Are these codes mandatory and binding? What areas do they cover (e.g. fire, earthquake, general building design and construction, health requirements, water & sanitation etc.)? List these categories of regulation.</p>	<p>Cal. Building Code Title 24</p>		<p>California state code: Yes, there is a very detailed building code. The code is binding, but not on home rule cities, those that have the power to create their own laws. Cities, like Sunnyvale, may choose to simply adopt parts of the state law or create their own.</p> <p>§ 3417: Seismic Criteria Selection for existing buildings § 701 et seq: Fire Resistance Rated Construction § 901 et seq: Fire Protection Systems Ch. 16 deals with structural design generally, including earthquakes, floods, snow, winds, etc. Appendix G Flood resistant Construction</p>
<p>111. Does this law include mechanisms for individual building approvals? If so, which institution(s) have responsibility for this?</p>	<p>Cal. Building Code Title 24</p>		<p>§ 108.4 requires a permit issued by the local authority for any construction. This typically means the local building department. In Sunnyvale, you can buy minor building permits online.</p>
<p>112. Does this law include mechanisms for building inspections? If so, which institution(s) have responsibility for this? Does it apply to:</p> <p>a. New buildings? b. Renovations / extensions of</p>	<p>Cal. Building Code Title 24</p>		<p>§ 108.4.4 states that construction is subject to inspection by local building officials. This will usually be the local building department. Some cities have dedicated code enforcement departments.</p> <p>a. & b. This applies to all construction for which a permit is issued. In Sunnyvale, you can schedule an inspection online.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>existing buildings?</p> <p>c. Existing buildings where there is no building application, such as old buildings that may no longer be safe?</p>			<p>c. § 116.1 requires that buildings be fixed or taken down when they become unsafe. It does not specify any kind of inspection schedule.</p>
<p>113. Does this law include mechanisms for enforcement of codes, including sanctions? What type of sanctions (e.g. fines, whole or partial demolition orders)? If so, which institution(s) have responsibility for this?</p>	<p>Sunnyvale Municipal Code 16.16.110</p>		<p>Code enforcement typically is conducted at a local level by building inspectors for the county or municipality.</p> <p>If someone commences building in Sunnyvale without a permit, the cost of the permit increases and fines are imposed.</p> <p>“114.1. Unlawful Acts. It is unlawful for any person to perform any grading, or to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy, or maintain any building or structure in the city, or to install or maintain any plumbing or drainage systems, or any mechanical systems, or any electrical wiring or fire safety systems in or about any building or structure in the city, or cause the same to be done, contrary to or in violation of any of the provisions of the administrative or technical code. Each such person is guilty of a separate offense for each and every day during any portion of which a violation of any provision of any codes continued, or permitted by such person and shall be punishable accordingly.”</p>
<p>114. Do the building regulations have special standards or requirements for:</p> <p>a. schools?</p>	<p>Cal. Building Code Title 24</p>		<p>Yes. Chapter 4 of the California building code addresses special requirements based on type of use and occupancy.</p> <p>a. These are regulated separately by the Division of State Architect in California as well as the building code. Section 3423 addresses</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>b. hospitals? c. fire stations? d. other public buildings that may also be required as collective centres in case of disaster (e.g. ministries, sports complexes, churches, mosques etc.)?</p>			<p>retrofitting existing schools. b. Section 422 covers ambulatory healthcare facilities. c. There does not appear to be something specific at the state level. d. Chapter 4 of the California building code requires that public buildings be accessible for the disabled. There are also additional public facilities such as libraries mentioned in Chapter 4. Private movie theaters, entertainment centers and other facilities where large crowds may gather also have special provisions.</p>
<p>115. Do the building regulations or land use planning laws (or other special laws) include regulation of large commercial buildings and developments (such as multi-storey shopping centres, office buildings and factories)? Identify & describe.</p>	<p>Cal. Building Code Title 24</p>		<p>Yes. Ex: California Building Code Section 402: Covered Mall and Open Mall Buildings 402.3 Lease plan. 402.4 Means of egress. 402.5 Mall width. 402.6 Types of construction. 402.7 Fire-resistance-rated separation. 402.8 Interior finish. 402.9 Automatic sprinkler system. 402.10 Smoke control. 402.11 Kiosks. 402.12 Children's playground structures. 402.13 Security grilles and doors. 402.14 Standby power. 402.15 Emergency voice/alarm communication system. 402.16 Plastic signs. 402.17 Fire department access to equipment.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			Section 403:High-Rise Buildings 403.2 Construction. 403.3 Automatic sprinkler system. 403.4 Emergency systems. 403.5 Means of egress and evacuation. 403.6 Elevators. 403.7 Existing high-rise buildings.
116. Do the building laws/regulations include large, multi-storey apartment buildings? Identify & describe.	Cal. Building Code Title 24		Section 403 also applies to residential high-rises. Other accessibility rules under Section 11A also would apply.
117. Do the building laws/regulations include small self-built constructions? Identify & describe.			Yes. The same laws apply.
118. Do the building laws/regulations differ as between urban and rural settings? If building laws/regulations are different in rural settings, what are the main differences compared with urban settings? E.g. a. the extent of regulation? b. the level of government at which it is regulated? c. other?			a. This would depend on the municipality. b. Rural areas are more likely to rely on state codes whereas urban areas may create their own codes to suit individual needs. c. Urban and suburban areas also tend to have a greater number of aesthetic regulations.
119. Do the building/planning laws/regulations include emergency and transitional shelter? If so, what	Cal. Building Code Title 24		Section 423 regulates but does not require storm shelters. They must be designed in compliance with the ICC 500- ICC/NSSA Standard for the Design and Construction of Storm Shelters.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>form of regulation and which institution(s) have responsibility for this?</p>			<p>Disaster policies often encourage that schools and other public facilities be built to double as shelters.</p>
<p>120. Do the building laws/regulations include:</p> <p>a. Inspections?</p> <p>b. programmes and/or incentives for making existing buildings safe (e.g. retro-fitting for earthquake resistance, addition of fire escapes, condemning unsafe buildings including demolition orders, tax or funding incentives for owners to fortify buildings)?</p> <p>If so, what form of regulation and which institution(s) have responsibility for this?</p>	<p>Cal. Building Code Title 24</p>		<p>a. Yes. See question 113.</p> <p>b. There are also standards for existing buildings in Chapter 24 of the California code, including requirements to retrofit for earthquakes. Unsafe buildings can be condemned and demolished. This is usually handled at the municipal or county level. There are a variety of home improvement grants and loans available through federal money distributed through state and local agencies. Sometimes the grants are for a specific group such as veterans or the elderly. These grants come from agencies such as the Department of Agriculture and the Department of Housing and Urban Development. For example, there is the Community Development Block Grant Program under 42 U.S.C.A. § 5301 et seq.</p>
<p>121. What if any provision is there for planning, approval and construction of public roads, bridges and related public works? – describe the authority(s) & mandate(s).</p>	<p>Federal-Aid Highway Act of 1956, 23 U.S.C. § 109.</p>		<p>The federal government regulates highways under Title 23 of U.S. Code. Various programs for grants are conditioned upon compliance with regulations.</p> <p>23 U.S.C. § 109 authorizes the Federal Highway Administration to oversee standards for federally-financed highway projects.</p> <p>California has a separate Streets and Highways Code independent from its building code. It is overseen by the California Transportation Commission and the California Department of Transportation. The California law provides detailed specifications</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			for road construction, maintenance, and traffic. Local governments are typically responsible for maintaining and regulating their local roads.
122. Are there other matters relevant to DRR that are regulated in the building and construction laws of the subject country?	Cal. Building Code Title 24		In the long run, the special environmentally-friendly building regulations in California may help prevent disasters in the future.
B. Land Use Planning Laws			
The aim is to identify whether there are national laws and statutory authorities with responsibility for land zoning and/or land use planning. If there is not a national law or authority, the issue may be regulated at provincial/state or local level and examples of these laws may not be available. However, although land use planning is frequently regulated at local government level, the underlying principles or institutional responsibilities may be included in national or provincial laws. Also, many major cities now have planning law overlays that cross local government boundaries, and may be determined under national or provincial/state laws. In other cases, special regimes have been established to manage the course of a major river that crosses many local boundaries (and these laws may also refer to bilateral treaties about cross-boundary water management - for DRR as well as water use – which may bring them under national law through the treaty powers).			
123. Are there national laws and statutory authorities with responsibility for land zoning and/or land use planning?	The Standard State Zoning Enabling Act of 1926 and the Standard City Zoning Enabling Act of 1928 Euclid v. Ambler Realty Co., 272 U.S. 365 (1926).		The Standard State Zoning Enabling Act of 1926 and the Standard City Zoning Enabling Act of 1928 are model acts on land use, some form of which have been adopted in most states. <i>Euclid v. Amber</i> is often cited as supporting the legitimacy of zoning so long as the regulations are not unreasonable or arbitrary. Federal environmental conservation efforts sometimes have the effects of zoning, though. The Endangered Species Act, for example, prevents development in areas with endangered animals.
124. Is this issue regulated at provincial/state or local level? If so,			Zoning law is determined primarily at the local and state level.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
can you find an example of such a law at each level?			E.g.: Florida: Fla. Stat § 163.2511 et seq. Broward County in Florida. Chapter 29 of the Code of Ordinances. The City of Fort Lauderdale in Broward County. Chapter 47 of the Code of Ordinances
125. Does the land use planning and/or zoning law include processes for: a. Formal release of land for new developments? b. Approval of each new urban development? c. Approval of major commercial developments?	Fort Lauderdale Code of Ordinances	§ 47-24.1	a. Land for the development would be acquired through private sales. b. and c. Under Fort Lauderdale code § 47-24.1, no person can start development without a permit.
126. Does the land use planning and/or zoning law include prohibitions on development of high risk sites (e.g. unstable land prone to subsidence, flood plains, and contaminated sites)?	Broward County Code of Ordinances		Depending on the relevant threats, communities typically do have restrictions such as landslide districts and flood plains. There also may be restrictions on high water tables or brownfields. Fort Lauderdale would not have many specific high-risk sites, although it is susceptible to hurricanes. However, Broward County does have conservation districts to restrict development because of risks to the water supply. Section 39-400.
127. Does the planning / zoning law include public open space for evacuation?	Broward County Code of Ordinances	§ 39-380	Broward County code regulates green space, but it does not mention evacuation.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
128. Does the planning / zoning law allocate or require allocation of land for emergency or transitional shelter in preparation for potential disaster?			Zoning law does not generally mention shelter. In the event of a hurricane, most people would be evacuated from the city entirely, anyway.
129. Does the planning / zoning law include provisions for infrastructure installation (water and drainage, sewers, telecommunications, energy) in new developments?			<p>This would typically be more a matter of building code or utility regulations. Development could begin, but a building would not pass the inspection necessary for occupancy until it had proper water and sewer hookups.</p> <p>Utilities generally are expected to be part of site plans, though, and cities often have right-of-ways down the edge of properties for the purpose of utilities lines among other things.</p>
130. Does the planning / zoning law include street width regulations for future traffic flow and to ensure access for emergency services such as fire and ambulance?			Again, streets are typically in their own section of code and are overseen by the local government's engineering division. Broward County uses the Florida Department of Transportation's Design Standard Manual . The law does not specifically mention future traffic and emergency access, although such issues were presumably taken into account when drafting the regulations, particularly because Florida has some of the worst traffic congestion in the United States.
131. Does the planning / zoning law differ as between urban and rural settings? If different in rural settings, what are the main differences compared with urban settings? E.g. a. the extent of regulation? b. the level of government at which it	Fla Stat. § 163.3248 (2011). Broward County Code of Ordinances § 39-260 et seq.		<p>There are special zoning laws to preserve rural land for agricultural and environmental purposes. Fla Stat. § 163.3248 (2011) addresses "rural land stewardship areas."</p> <p>Section 39-260 et seq. of Broward County code deals with rural zoning. It largely restricts use of the land to agricultural and a few other select purposes. Another difference is that urban areas, such</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
is regulated? c. other?			as Fort Lauderdale, typically have their own code independent from the county.
132. Does the planning / zoning law include any other matters relevant to disaster risk reduction?			Zoning often limits population density by limiting the height of buildings. This may in turn may improve the speed of evacuations.
C. Land tenure			
133. Is there a national system of land title registration established under law? a. If sub-national regulation, at what level of government does this occur, if at all? If sub-national, can you find an example of such a law? b. Does the legal mandate for this system require computerisation and/central record at national level? If not, how and where does it require records to be kept?	E.g., 3 O.R.C. § 317.08 (2004), as amended in 2007.		There is not a national system. a. Land registration occurs at the local level as dictated by state law. E.g., Ohio Revised Code Chapter 317 requires each county in Ohio to have a county recorder to keep official records of certain documents, including land deeds and covenants. b. State laws vary on how records are kept. It is typically some mix of print and electronic records keeping. Wealthier counties tend to have better systems, including searchable online databases.
134. Are there institutions mandated to survey land and/or register title? Does this mandate: a. require or allow community participation in land mapping or surveying for the purpose of establishing titles and/or occupancy and/or usage rights?			The Bureau of Land Management oversees federal and tribal land, but private land and local public land is surveyed and registered locally.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
recognise land tenure rights (e.g. indigenous title based on ancestral lands, or established occupation or use, or other traditional rights to use resources such as gathering or hunting or water rights)? Describe.	Native American land rights) The American Indian Probate Reform Act of 2004, 25 U.S.C. §§ 2201-2221.		trust with the U.S. government. The land in trust is owned by the U.S., while the tribe holds the right of occupancy and can rent the land to individuals. The American Indian Probate Reform Act of 2004 allowed Native Americans to create their own probate systems with some restrictions.
137. Is there any legal recognition of traditional or customary law and practice regarding land occupation or ownership, or community or collective management of land? If so, describe the relevant legislation or case law.			Public land can be owned by the local, state, or federal government for public purposes. People also can contract to own a piece of land together (tenancy in common). This varies by state statute and common law. Please see question 137 for information on Native American lands.
138. Is there legislation or case law that recognises land tenure as a result of occupation, such as: a. adverse possession (use and occupation of land over a certain period of years in the absence of the legal owner, resulting in a change of ownership)? b. 'squatters' rights' (including any rights to continue inhabiting land and/or vacant buildings or to be given notice of eviction if contested by the legal owner)?			a. Most states also allow for adverse possession of property, although the elements vary. This means that if a person occupies land for a period of time defined by state statute, they can become the new owner of that land. Such a person can request a court order for quiet title after the statutory period. b. States also usually provide squatters rights where the legal owner must seek to have the squatter evicted through formal court proceedings.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>139. If there are parallel systems for recognition of land tenure, such as customary law vs. registered freehold title, does one type of legal claim take precedence over the other?</p>			<p>The systems generally do not overlap. The exception is adverse possession, in which case the trespasser wins title after the statutory period.</p>
<p>140. Is there any law or legal mechanism that allows government authorities to compulsorily purchase or requisition land for public purposes? If so, do these purposes include:</p> <ul style="list-style-type: none"> a. risk reduction from natural disasters? b. land to be kept for evacuation or emergency or transitional shelter? 	<p>U.S. Const. amend. V Kelo v. City of New London, 545 U.S. 469 (2005).</p>		<p>Yes. The government can seize property for a public purpose through eminent domain, which requires just compensation be paid for the property. U.S. Const. amend. V.</p> <p>A series of U.S. Supreme Court cases have upheld a broad definition of public purpose, including the taking of unblighted properties for a commercial development project in <i>Kelo v. City of New London</i>.</p> <ul style="list-style-type: none"> a. Yes. Here is an example of a state policy on the use of eminent domain for flood risk reduction in Washington. b. The issue of land specifically set aside for shelter does not seem to come up often because of the use of public facilities such as schools and agreements with large event venues such as stadiums. There might be some due process concerns in an emergency eminent-domain situation, but there would probably be a reduced standard of due process. Otherwise, this would most likely qualify as a legitimate public purpose for eminent domain.
<p>141. Is there a land tribunal or other dispute resolution mechanism that</p>			<p>Land disputes are typically handled through the civil court system.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>provides for resolution of land tenure disputes? If so, is this accessible to communities? – to individuals?</p> <p>a. Can people without financial means access this system? E.g. are there fees, or requirements to engage lawyers?</p> <p>b. Are such tribunals or mechanisms available throughout the territory, including in rural areas?</p>			<p>a. Land cases can be expensive, but there are typically government and non-profit groups that help provide legal guidance or pro bono representation. This is determined on a local basis. Some communities may also offer some form of cheaper alternative dispute resolution such as mediation. Parties also may represent themselves.</p> <p>b. Even rural areas will have a court, although the claimant may have to travel a few hours to reach the court in some cases.</p>
D. Informal and precarious settlements			
<p>Informal settlements (also called slums or shanty towns) are areas of housing constructed on land to which the occupants had no prior legal claim. The housing is generally constructed by the occupants from available materials and does not comply with building and planning laws. These unplanned settlements are not served with public infrastructure such as water, sewers/drainage, roads or telecommunications, or public services such as schools and medical facilities. They are especially vulnerable to the effects of natural disaster, as they are often built on high-risk land (precarious settlements), with poor construction materials and methods, and the residents are not protected from the effects of, for example, water contamination during flooding. Informal settlements sometimes arise from mass migrations to the outskirts of large cities following disaster (including slow-onset disasters such as drought and famine). However, many of these settlements exist for many years and become established townships. Approaches taken by governments tend to follow one of three paths: (1) ignore informal settlements for the purpose of regulation, (2) relocate residents either through forced evictions and demolition, or planned resettlement schemes, or (3) regularize them. The latter approach has been taken in Brazil under its Statute of the City administered by the Ministry of Cities, which seeks to progressively regularize and integrate under local government, existing informal and precarious settlements.</p>			
<p>142. Is there a law that mandates clearing of slums / informal or precarious settlements?</p> <p>a. If so, what is the policy reason given (if any) for such clearance?</p>	<p>42 U.S.C. 8A, Slum clearance, urban renewal, and farm housing</p> <p>42 U.S.C. § 1479</p>		<p>Slums and building codes are primarily a local issue. Many states have laws that require unsafe or uninhabitable buildings to be condemned and demolished. However, the state must afford these people due process under the Fourteenth Amendments of the U.S. Constitution before taking property.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>b. Does it require or empower government authorities to evict or resettle residents? Or to demolish such settlements?</p> <p>c. If residents are to be moved, does this law require the provision of alternative housing? If so, how is this financed?</p> <p>d. If mandated, is there a process for eviction? E.g. notice periods, dispute resolution through land tribunals?</p> <p>e. Are there any other protections for the human rights and livelihoods of residents who are evicted or relocated?</p>	<p>U.S. Const. amend. V U.S. Const. amend. XIV</p>		<p>In an urban setting, a court will often put property owned by a slumlord into receivership in hopes that temporary management can improve the housing.</p> <p>Chicago recently shut down several of its major high-rise housing projects because of crime and poor conditions, forcing thousands of families into new low-income housing or the streets. The closed facilities, however, were government-owned. Other urban areas have done the same or have tried to foreclose upon blighted private properties in order to take and redevelop them.</p> <p>The federal law providing for grants under 42 U.S.C. 8A, Slum clearance, urban renewal, and farm housing, was largely terminated in 1975. Before that, billions of dollars were spent on slum clearance and urban renewal, particularly through the Housing Act of 1949. The concept of Community Development Block Grants emerged in the 1970s with a focus on revitalizing communities instead of demolishing them. These remain popular.</p> <p>This issue of colonias, informal settlements along the U.S.-Mexican border, is primarily dealt with by border states, but 42 U.S.C. § 1479 provided funding to help states improve colonias, which often have poorly built homes and lack water, sanitation, and other infrastructure. Under this law, the grants are only supposed to be available to communities that predated 1990 (it also addresses rural housing improvements in general).</p> <p>Many other grants are used to help improve these communities,</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			although they are not necessarily grants specifically targeting informal settlements.
<p>143. Is there a law that mandates recognition and/ or regularization of slums / informal settlements?</p> <p>a. If so, describe the legal regime for regularization, including the responsible institutions.</p> <p>b. Does regularization include the introduction of building codes? Are these mandatory and binding?</p> <p>c. Does regularization include the construction of public infrastructure? If so, how is this financed?</p> <p>d. Does this law authorise or mandate the provision of social services to informal settlements?</p> <p>e. Does this law include any other regulatory measures to address the vulnerability of such settlements to risk from natural disasters?</p>	<p>Census, 13 U.S.C. § 141</p> <p>Migrant and Seasonal Worker Protection Act, 29 U.S.C. § 1823</p> <p>La Union Del Pueblo Entero v. Fed. Emergency Mgmt. Agency, 608 F.3d 217 (5th Cir. Tex. 2010).</p>		<p>Incorporation/recognition is a matter of state law.</p> <p>The federal government does attempt to include colonias and other communities in the national Census. 13 U.S.C. § 141 calls for the counting of the “total population,” although it does not specifically mention slums and informal settlements.</p> <p>There also is a Federal Interagency Legal Working Group for Colonias and Migrant Farmworker Issues that provides legal aid to colonias. This is part of the Department of Housing and Urban Development’s Southwest Border Region, Colonias and Migrant/Farmworker Initiatives (SWBR).</p> <p>The authority for this comes from 29 U.S.C. § 1823, as amended in 1995. This section addresses safe housing for migrant workers. It requires state and local inspections and certification for migrant housing.</p> <p>The Environmental Protection Agency, the Department of Housing and Urban Development, the Department of the Treasury, and the Department of Agriculture all have programs and grants to attempt to improve the quality of construction of colonias through cooperation with states. In most cases, there are not specific grants for settlements, although a certain portion of the money might be earmarked for colonias. FEMA has given grants to colonias.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>There is a great deal of skepticism as to whether these programs sufficiently provide for colonias. FEMA has been sued by colonias for discretionary denial of recover assistance because houses were in bad shape even before the storm. A Texas colonia won a case called LUPE v. FEMA at the district court level in 2009 on the grounds that discretionary assistance had been discriminatory, but parts of the case have been appealed and remanded and are still pending.</p>
<p>144. Does any law require that informal settlements are included in:</p> <ul style="list-style-type: none"> a. Early Warning Systems? b. Community based DRR education and training? 	<p>42 U.S.C. § 5197h</p>		<ul style="list-style-type: none"> a. There doesn't appear to be any mention of this, although the warning systems generally are supposed to reach all people. b. The minority emergency preparedness demonstration program provides funding for research, education, and culturally appropriate information materials on disaster preparedness. 42 U.S.C. § 5197h
<p>145. Does any law provide a mechanism for recognition of tenure for residents of informal settlements?</p> <ul style="list-style-type: none"> a. If so, what types of tenure (e.g. full title, right to occupy or use, right to purchase, tenancy)? b. If so, and such settlements are on privately owned land, is there provision for compensation of those with prior legal tenure? 			<ul style="list-style-type: none"> a. See question 39 on adverse possession. b. Adverse possession generally does not involve compensation. If the settlement has not been there long enough to satisfy the statutory requirement for adverse possession, the settlement can be evicted and charged with trespassing.

E. Urban Water and Flood Management

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
146. Is there one or more national laws regulating and allocating institutional responsibility for water storage, distribution and quality control for human consumption? Is urban water management principally a national, or provincial/state or local responsibility?	42 U.S.C. § 300f et seq. Federal Safe Drinking Water Act of 1974, as amended as of 1996.		<p>Drinking water is generally managed at the state level and actual distribution of the water may be performed by a local government agency or a private company. Residents may also have their own private wells.</p> <p>However, the federal government does regulate standards for water quality and it requires distributors to report the quality of the water to customers annually. Under 42 U.S.C. § 300G-1, the Environmental Protection Agency establishes maximum contaminant levels for drinking water.</p>
147. If there is a national water authority, does its mandate include risk reduction or preparedness for safeguarding the water supply in the face of natural disasters?			There is no national water authority for drinking water.
148. Does a national law allocate responsibility for flood mitigation construction and other water management against urban flooding (if relevant to the subject country)? If so, what authority is responsible?			<p>Please see section 2(D) on flooding, starting with question 54.</p> <p>There also may be Environmental Protection Agency issues if flooding causes contamination of water sources.</p> <p>Otherwise, storm drainage systems, etc., are a local issue.</p>
149. If flood mitigation and water management against urban flooding is regulated at the sub-national level, at what level of government does this occur? Can you find an example	Miss. Code Ann. §41-26-6		<p>Water management is primarily at the state level. E.g.: Mississippi.</p> <p>Miss. Code Ann. §41-26-6 provides detailed regulations for public water systems in Mississippi. The code, for example, bars the use of cross connections in pipelines unless there are mechanisms to</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
of such a law?			prevent backflow (where the flow reverses and can cause flooding) under Rule 1.8.1. of the code.
Part Five. Regulation of the Natural & Rural Environment			
Outline the laws and regulations concerning environmental management from the perspective of human safety, preservation of livelihoods and food security, including the regulation of exploitation of natural resources, water management, and reducing risks from natural events such as floods, earthquake, drought, landslides, and wildfires, such as: forestry regulation concerning wildfires, deforestation and erosion relevant to prevention of landslides and floods; environmental impact assessments; river and water catchment management relevant to flood prevention and mitigation, and water storage and distribution for human and agricultural consumption; prevention measures relating to drought, especially protection of people, livestock and crops in the face of drought, including water reserves against the risk of drought; and other prevention and risk management mechanisms to maintain food security, including measures to prevent desertification.			
A. Human Risks in Environmental Change			
150. Is there legislation on environmental protection? If so, what institution has responsibility?	Primarily codified under Title 42 of the U.S.C. as overseen by the Environmental Protection Agency		<ul style="list-style-type: none"> • Atomic Energy Act of 1946 and Atomic Energy Act of 1954 • Clean Air Act of 1963 and Clean Water Act of 1977 • Coastal Zone Management Act 1972 • Comprehensive Environmental Response, Compensation, and Liability Act of 1980 • Emergency Planning and Community Right-to-Know Act 1986 • Endangered Species Act on 1973 • Energy Policy Act of 1992, Energy Policy Act of 2005 • Federal Food, Drug, and Cosmetic Act of 1938 • Federal Land Policy and Management Act of 1976 • Federal Insecticide, Fungicide, and Rodenticide Act on 1947 • Federal Power Act of 1920 • Fish and Wildlife Coordination Act of 1934 • Food Quality Protection Act of 1996 • Fisheries Conservation and Management Act of 1976

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<ul style="list-style-type: none"> • Lacey Act of 1900 (illegal trafficking of plants and animals) • Marine Mammal Protection Act of 1972 • Migratory Bird Treaty Act of 1918 • Mineral Leasing Act of 1920 • National Environmental Policy Act of 1970 • National Forest Management Act of 1976 • National Historic Preservation Act of 1966 • National Park Service Organic Act of 1916 • Nuclear Waste Policy Act of 1982 • Ocean Dumping Act of 1972 • Oil Pollution Act of 1990 • Resource Conservation and Recovery Act of 1976 • Rivers and Harbors Act of 1899 • Safe Drinking Water Act of 1974 • Surface Mining Control and Reclamation Act of 1977 • Toxic Substances Control Act of 1976 • Wild and Scenic Rivers Act of 1968
<p>151. Does the above mandate include environmental management from the perspective of:</p> <ol style="list-style-type: none"> a. human safety? b. preservation of livelihoods? c. food security, especially concerning protection of crops and livestock? 	<p>42 U.S.C. § 4331 (b)(3)</p>		<ol style="list-style-type: none"> a. National Environmental Policy 42 U.S.C. § 4331 (b)(3): “attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;” b. National Environmental Policy 42 U.S.C. § 4331 (b)(5): “achieve a balance between population and resource use which will

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>permit high standards of living and a wide sharing of life's amenities;"</p> <p>Individual laws also consider the effect of environmental regulation on employment. For example, the 42 U.S.C. § 7425 provides some flexibility for communities where heavy industry is crucial to the labor market.</p> <p>c.</p> <p>Under Title 7 of the U.S. Code there is a diverse array of programs to protect the agricultural industry.</p>
<p>152. Does this law provide for environmental impact assessments (EIAs) of any proposed new private and public industrial developments?</p>	<p>National Environmental Policy Act, C.E.Q. - Regulation 1502</p> <p>42 U.S.C. § 7661 et seq</p> <p>40 C.F.R. 68.65-68.87</p>		<p>Federal agencies have to prepare Environmental Impact Statements that take into account the environmental effects of their actions under 40 C.F.R. Part 1502.</p> <p>New businesses also typically have to apply for a number of environmental permits at the federal and state level. For example, air pollution permits are required under 42 U.S.C. § 7661 et seq. The application for these permits typically requires some assessment of the impact operations will have.</p> <p>It also is in the interest of a company to assess its environmental impact or else it might be out of compliance with federal regulations. Environmental Protection Agency regulations vary to some extent by the type of industry</p> <p>http://www.epa.gov/lawsregs/sectors/.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			Private companies are required to come up with a risk management plan if they handle certain chemicals. 40 C.F.R. 68 . Industrial disaster prevention is addressed under 40 C.F.R. 68.65-68.87.
153. If there are EIAs, do the criteria include: a. human risk factors from changes to the environment, including life and health as well as livelihoods and food security? b. assessment in light of the known natural hazards affecting the relevant locality, or downstream communities (where relevant)?	Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.		Environmental law in the united states is largely based on technical standards as opposed to human impact. This is changing somewhat with a move toward Environmental Justice: “Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.
154. Is there a law that makes any authority responsible for the regulation of exploitation of natural resources from the perspective of human safety during natural disasters? For example, preventing cross-contamination from industrial sites during flooding, or control of extraction methods to manage flooding and/or erosion?	40 C.F.R. 68.65-68.87 Clean Water Act of 1977		This would fall to the Environmental Protection Agency and the Federal Emergency Management Agency. Private companies are required to come up with a risk management plan if they handle certain chemicals. 40 C.F.R. 68 . Industrial disaster prevention is addressed under 40 C.F.R. 68.65-68.87. The Clean Water Act of 1977 regulates the development of wetlands and other development that affects erosion, flooding, and water pollution. 33 U.S.C. § 1251 et seq.
B. Forests			
155. Is there legislation on forest management (if relevant to the	National forests, 16 U.S.C. ch. 2		The U.S. Forest Service of the Department of Agriculture manages federally owned forests, and the Department of Agriculture also

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
subject country)? If so, what institution has responsibility?	Forests; forest service; reforestation; management, 16 U.S.C. ch. 3 Cooperative forestry assistance, 16 U.S.C. ch. 41		works with local government and private owners to manage forests under 16 U.S.C. ch. 41. Other conservation programs would fall under the Environmental Protection Agency.
<p>156. Does the above mandate include forest management from the perspective of natural disaster risk reduction, such as:</p> <p>a. prevention of wildfires?</p> <p>b. deforestation and erosion relevant to prevention of landslides and floods?</p> <p>c. other hazards, (such as encroachment by wildlife into agricultural land or villages)?</p> <p>Describe the scope.</p>	<p>Healthy Forest Restoration Act of 2003, 16 U.S.C. §§ 6501-6591</p> <p>National forests, 16 U.S.C. ch. 2</p> <p>Forests; forest service; reforestation; management, 16 U.S.C. ch. 3</p> <p>Cooperative forestry assistance, 16 U.S.C. ch. 41</p>		<p>The Healthy Forest Restoration Act of 2003 addresses all of these issues generally. In addition to maintenance of federal forests, it provides money, expertise, and research to help prevent wildfires, clear underbrush, protect the watershed, prevent infestations and diseases, and rehabilitate forests home to endangered species.</p> <p>a.</p> <p>16 U.S.C. § 551c</p> <p>(a) The Departments of Agriculture and the Interior offer annual training on how to fight wildfires for volunteer firefighters.</p> <p>(c)(2) Provides for the creation of mobilization plans for firefighting in National Parks.</p> <p>16 U.S.C. § 2106c</p> <p>This section promotes cooperation between federal and local agencies on a variety of forest fire mitigation and response initiatives.</p> <p>b.</p> <p>Various sections under these three chapters deal with deforestation</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	16 U.S.C. § 6553		<p>in different ways. 16 U.S.C. § 2106(a), for example, allows the Department of Agriculture to help private owners replace damaged trees. Other efforts help owners care for forests. The U.S. President can also set aside land as a national forest for preservation. Land Revision Act of 1891.</p> <p>c. The Forest Service and United States Geological Survey monitor the effects of insects on forests.</p>
157. Does the law recognize customary laws and practices as to the use and management of forests and their resources?	25 U.S.C. §§ 3101-3120		<p>This law addresses national Indian forest resource management and encourages cooperation with Native Americans to improve forestry for modern and traditional purposes.</p> <p>Private forests can generally be used as desired so long as there are no other issues such as endangered animals.</p>
158. Does the law provide for use, conservation or management of forests and their resources by communities?			The law's general goal is cooperation with local government and private owners.
C. Rivers and watercourses			
159. Is there legislation on river and watercourse management (if relevant to the subject country)? If so, what institution has responsibility?	33 U.S.C. Navigation and Navigable Waters		<p>Many aspects of river management are handled by the Army Corps of Engineers and the Environmental Protection Agency. The EPA can order private businesses to clean up waterways that they have damaged and can impose various regulations to protect waterways. The Army Corps of Engineers conducts public works projects that</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			improve waterways.
<p>160. Does the above mandate include river management from the perspective of natural disaster risk reduction, such as:</p> <ul style="list-style-type: none"> a. Riverbed management relevant to flood prevention and mitigation? b. Water storage and distribution for human, agricultural and industrial consumption in rural areas? <p>Describe the scope.</p>	<p>33 U.S.C. ch. 15</p> <p>33 U.S.C. § 2326b</p>		<p>a.</p> <p>See question 54 on flooding.</p> <p>Flood prevention and river management are addressed in numerous ways throughout Title 33.</p> <p>33 U.S.C. ch. 15 addresses flooding.</p> <p>33 U.S.C. § 2326b addresses sediment management as related to waterway development, including dredging, etc.</p> <p>b.</p> <p>7 U.S.C. § 2204C provides funding and technical support for water management in rural areas, including drought-related issues.</p> <p>43 U.S.C .Ch. 40 provides funding and technical support to states for drought relief and planning through the U.S. Bureau of Reclamation. The bureau is the largest wholesaler of water in the country and manages many dams and reservoirs. § 2213 also provides for loans for water conservation and management activities related to drought.</p> <p>The bureau is apparently in the middle of finalizing a set of regulations called the Drought Directives and Standards. The draft is available here: http://www.usbr.gov/drought/</p> <p>16 U.S.C. § 2202</p> <p>“The Secretary of Agriculture is authorized to make payments to agricultural producers who carry out emergency water conservation</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			or water enhancing measures (including measures carried out to assist confined livestock) during periods of severe drought as determined by the Secretary.”
161. Does the law recognize customary laws and practices as to the use and management of rivers and their resources?			<p>Water use is determined on a state level. The western states tend to use the concept of prior appropriation water rights. This means that the first person to make productive use of water has right to it. This tends to benefit mountain states like Colorado, while causing crises in arid western states</p> <p>Eastern states more commonly use riparian water rights. This gives water rights for reasonable use to any property along the water. If the amount of water is limited, it can be apportioned based on the amount of frontage each property has along the water.</p> <p>There also are many interstate agreements on water use and management.</p>
162. Does the law provide for use, conservation or management of rivers and their resources by communities?			This would be a local issue, but there are federal grants and programs to help with local projects. Please see questions 91 and 92.
D. Drought and food security			
163. Is there any legislation providing for risk reduction and prevention measures relating to drought (if relevant)? If so, does this include any institutional mandate or			There are conservation programs and public works and grants to support water management. Please see questions 91 and 92.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
responsibility to protect people, livestock or crops in the face of drought?			
164. Does the above mandate include the construction and maintenance of water reserves, including against the risk of drought?			This is largely a local issue. Please see questions 91 and 92.
165. Is there any other legislation relevant to risk management to maintain food security in the face of natural disasters, including any special measures to prevent desertification (if relevant)?	16 U.S.C. § 590a et seq.		<p>16 U.S.C. ch. 3b</p> <p>The Soil Conservation Act of 1935 was a response to the “Dust Bowl” period in which poor agricultural practices contributed to desertification.</p> <p>It calls for the secretary of agriculture to engage in research and preventative projects.</p>

3. Information management and exchange, community level DRR education & awareness

Most elements of information, education and awareness will normally be done through policy rather than law, but the legal framework may require public institutions to make DRR information available to the public and/or to carry out public and school education and awareness on reducing risk from natural disasters. For example, there could be a Ministerial directive under the Education Act requiring the inclusion of DRR in the school curriculum. [If this requires repetition of information given above, please note ‘see above’ and refer to the relevant question number.]

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>166. Is there a law that regulates the collection and publication of seismological, meteorological and climatic data relevant to natural disasters?</p> <p>a. If so, what does it require and who is responsible for this, and under what law?</p> <p>b. Does it provide for community level access to the data?</p>	<p>32 U.S.C. ch. 17</p> <p>33 U.S.C. § 892a</p>		<p>32 U.S.C. ch. 17 establishes the duties of the National Oceanic and Atmospheric Administration, which include monitoring and disseminating information on weather seismological, meteorological and climatic activity. It is not necessarily intended specifically for disasters, but it does also mention use of information for those purposes. See 33 U.S.C. § 892a. There are several data-sharing mechanisms including reports to Congress. It does not specify how, but the law states information must be readily accessible to individuals.</p> <p>NOAA provides detailed information on its website: http://www.noaawatch.gov/headlines/index.php</p>
<p>167. Is there a law that regulates the collection and publication of baseline population data, especially in high risk areas?</p> <p>a. If so, what does it require and who is responsible for this, and under what law?</p> <p>b. Does it provide for community level access to the data?</p>	<p>13 U.S.C.</p> <p>Executive Order 12656 § 401 (1988).</p> <p>Freedom of Information Act of 1966, as amended as of 2012</p>		<p>The U.S. Census Bureau collects population data relevant for emergencies but does not have a legal mandate related to disasters. 13 U.S.C.</p> <p>Executive Order 12656 requires that the U.S. Commerce Department “(7) Provide for the collection and reporting of census information on human and economic resources, and maintain a capability to conduct emergency surveys to provide information on the status of these resources as required for national security</p>

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>purposes.”</p> <p>b. The data is all public records and available online. (Note: Most federal records are required to be available to the public under the Freedom of Information Act of 1966, with narrow exceptions such as sensitive national security information.)</p>
<p>168. Does the education law or regulations require inclusion of DRR awareness in the school curriculum? Does this law or another law such as the DM law also require community DRR education?</p>	<p>42 U.S.C.</p> <p>Executive Order 12656 - Assignment of Emergency Preparedness Responsibilities (amended by E.O. 13286 of February 28, 2003)</p>		<p>The regulation of schools is largely left to the states.</p> <p>Executive Order 12656 - Assignment of Emergency Preparedness Responsibilities (amended by E.O. 13286 of February 28, 2003) “(13) Develop and conduct training and education programs that incorporate emergency preparedness and civil defense information necessary to ensure an effective national response;”</p> <p>42 U.S.C. § 5195 “The Administrator shall establish a minority emergency preparedness demonstration program to research and promote the capacity of minority communities to provide data, information, and awareness education by providing grants to or executing contracts or cooperative agreements with eligible nonprofit organizations to establish and conduct such programs.”</p> <p>42 U.S.C. § 5197h “(2) to develop and promote awareness of emergency preparedness education programs within minority communities, including development and preparation of culturally competent educational and awareness materials that can be used to</p>

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>disseminate information to minority organizations and institutions.”</p> <p>42 U.S.C. § (b)(2)(A)</p> <p>This section call for grants for the development of local DRR efforts and also education campaigns. It does not specifically mention soliciting public input.</p>
<p>169. If there is a national disaster management policy, does this require any public authorities to conduct public education and awareness on DRR?</p> <p>a. If so, which authorities and what are they required to do?</p> <p>b. In particular does it require DRR education in schools?</p>	<p>NDRF</p>		<p>Again, education is a matter left to the states.</p> <p>The National Response Framework lists public awareness and education as one of the roles of local emergency managers. P. 17. http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf</p> <p>It also notes the creation of an online resource center that includes educational tools. Pp. 77-79.</p> <p>The National Disaster Recovery Framework encourages education but does not go into specifics. It encourages non-profits, local governments, insurance companies, and other businesses to reach out to the community. http://www.fema.gov/pdf/recoveryframework/ndrf.pdf</p> <p>E.g.: Table 36, p. 97. Federal government pre-disaster checklist “Conduct education and outreach for disaster recovery programs and resources to potential recipients and other stakeholders. . . .” “Conduct education and outreach for mitigation, disaster recovery programs and resources to potential recipients and other stakeholders.”</p>

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>The framework does not specify which federal agency would be responsible, but logically FEMA and the Department of Education would participate.</p> <p>b. This would be infringing on a matter left to the states. Neither of the above documents specifically mentions DRR education in the schools.</p>
170. If the above law or the national disaster management policy requires public education, does this provide for community level DRR awareness? If so, does this make any provision for community participation in the development and delivery of public education and awareness campaigns?			The law does not get any more specific than the policies outlined in question 169 and 170.
171. Does legislation provide for any designated role for the Red Cross or Red Crescent National Society as an auxiliary to government in DRR education and awareness at community level?	NDRF , p. 91.		The National Disaster Recovery Framework lists “Educate clients on the importance of mitigation strategies” as one of the tasks for non-profits. Table 28, p. 91.
172. Does legislation provide for any designated role for Civil Society in DRR education and awareness at community level?	NDRF , p. 91.		The National Disaster Recovery Framework lists “Educate clients on the importance of mitigation strategies” as one of the tasks for non-profits. Table 28, p. 91.
173. Does any law provide for			a. States and local government maintain their own warning

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>community-level results in DRR, such as:</p> <ul style="list-style-type: none"> a. Natural disaster warnings that extend to community level? b. Implementation of incentives to carry out community based DRR, or disincentives to ignore or increase risks from natural disasters? c. Community involvement in land-use and urban planning? d. Community involvement in and education concerning building codes? 			<p>systems, which are much more commonly used than the federal system. However, the state and federal systems are generally integrated.</p> <p>b. Yes. Some non-emergency disaster assistance funding is conditioned upon having a hazard mitigation plan, as a way to encourage planning and to ensure money is used effectively. 42 U.S.C. § 5165 (a). There also is a whole multitude of competitive federal grants to help communities implement DRR programs.</p> <p>c. Land use is a local issue.</p> <p>d. Building codes are a local issue.</p>

Bibliography

A. List of Laws

a. U.S. Constitution

U.S. Const. art. I (1788).

U.S. Const. art. II (1788).

U.S. Const. art. III (1788).

U.S. Const. art. IV (1788).

U.S. Const. amend. V (1791).

U.S. Const. amend. X (1791).

U.S. Const. amend. XIV (1868).

b. Treaties

International Covenant on Civil and Political Rights, art. 4 (1), *signed but not ratified* 5 Oct. 1977, 999 U.N.T.S. 171.

International Covenant on Economic, Social and Cultural Rights, *ratified* 8 June 1992, 993 U.N.T.S. 3.

c. Federal Legislation – Search U.S. Code at <http://www.law.cornell.edu/uscode/text>.

Disaster Robert T. Stafford Disaster Relief and Emergency Assistance Act, enacted 23 November 1988, P.L. 100-707 (as amended by the Disaster Mitigation Act, enacted 30 Oct. 2000, P.L. 106-390 et al.) (codified as amended at 42 U.S.C. §§ 5121-5206).

Agricultural Credit Act, enacted 6 Jan. 1988, P.L. 95-334 (codified at U.S.C. §§ 2201-2205).

Agricultural Foreign Investment Disclosure Act of 1978, enacted 14 Oct. 1978, P.L. 95-460 (codified as amended at U.S.C. §§3501-3508).

An Act to Revise, Codify, and Enact into Law Title 13, U.S.C., enacted 31 August 1954, P.L. 83-740 as amended.

American Indian Probate Reform Act, enacted 27 Oct. 2004, P.L. 108-374 (codified at 25 U.S.C. §§ 2201-2221). See also 25 U.S.C. §§334-3416 for a compilation of Native American land rights.

Animal Welfare Act, enacted 24 Aug. 1966, P.L. 94-279 (codified as amended at 7 U.S.C §§2131-2155).

Civil Rights Act, Pub. L. 88-352 (codified as amended at 42 U.S.C. 2000d).

Clean Air Act, enacted 17 Dec. 1963, P.L. 88-206 (codified as amended at 42 U.S.C. §§ 7401-7671q).

Clean Water Act, enacted 18 Oct. 1972, P.L. 92-500 (codified as amended at 33 U.S.C. §§ 1251 et seq.).

Comprehensive Environmental Response, Compensation, and Liability Act (codified as amended at 42 U.S.C. §§ 9601-75).

Cooperative Forestry Assistance Act of 1978 (codified as amended at 16 U.S.C. §§ 2101-14).

Department of Homeland Security Appropriations Act of 2007 (Post-Katrina Emergency Management Reform Act), enacted 4 Oct. 2006, P. L. 109-295 (codified as 6 U.S.C. §§ 741-811).

Disaster Assistance Act, enacted 22 Nov. 1988, P.L. 100-387 (codified at § 2204C et al.).

Earthquake Hazards Reduction Act, enacted 7 Oct. 1977, Pub. L. 95-124 (codified as amended at 42 U.S.C. § 7701 et seq.).

Farm Security and Rural Investment Act, enacted 13 May 2002, P.L. 107-171 (codified at 7 U.S.C. § 3007).

Federal Agriculture Improvement and Reform (FAIR) Act of 1996, enacted 4 Apr. 1996, P.L. 104-127 (codified at 7 U.S.C. § 7334).

Federal Safe Drinking Water Act, enacted 16 Dec. 1974, P.L. 93-523 (codified as amended at 42 U.S.C. § 300f et seq.).

Federal Tort Claims Act (FTCA), enacted 25 June 1948, P.L. 79-601 (codified as amended at 28 U.S.C. § 1346(b), 2671-2680).

Federal Water Pollution Control Act (Clean Water Act), (codified at 33 U.S.C. §§ 1251-1387).

Federal Fire Prevention and Control Act, enacted 29 Oct. 1974, P.L. 93-498 (codified as amended as of 2008 at 15 U.S.C. §2201 et seq.).

Flood Control Act, enacted 22 June 1936, P.L. 74-738 (codified at 33 U.S.C. 701 et seq.).

Flood Control and Coastal Emergencies Act, signed 18 Aug. 1941, Pub. L. 84-99 (codified as amended at 33 U.S.C. § 701n).

Flood Disaster Protection Act, enacted 31 December 1973, P.L. 93-234 (codified at 42 U.S.C. 4012a).

Food, Conservation, and Energy Act, enacted 22 May 2008, P.L. 110-234 (codified at 7 U.S.C. § 7721 et seq.).

Food Stamp Act of 1977, enacted 29 Sept. 1977, P.L. 95-113 (codified as amended at 7 U.S.C. §§ 2011-36).

Freedom of Information Act, enacted 4 July 1966, P.L. 104-231 (codified as amended in 5 U.S.C. § 552).

Indians, 25 U.S.C. 1 et seq.

Healthy Forests Restoration Act, enacted 3 Dec. 2003, P.L. 108-148 (as codified at 16 U.S.C. §§ 6571-6578).

Homeland Security Act, enacted 25 Nov. 2002, P.L. 107-296 (codified as amended at 6 U.S.C. §§ 311-321).

Housing Act, enacted 1 July 1949, P.L. 81-171 (codified as amended at 42 U.S.C. 1441 et seq.).

Migrant and Seasonal Worker Protection Act (codified at 29 U.S.C. § 1823).

National Agricultural Research, Extension, and Teaching Policy Act, enacted 19 September 1977, P.L. 95-113 (codified as amended at 7 U.S.C. §§ 3101-3363).

National Environmental Policy Act of 1969, 1 Jan. 1970, Pub. L. 91-190 (codified as amended at 42 U.S.C. §§ 4321-4347).

National Flood Insurance Act of 1968, P.L. 90-448 (amended by the Biggert-Waters Flood Insurance Reform Act of 2012) (codified at 42 U.S.C. § 4001 et seq.).

National Geologic Mapping Act, enacted 18 May 1992, P.L.102-285 (as codified at 43 U.S.C. §§ 31A-H).

National Integrated Drought Information System Act of 2006, enacted 20 Dec. 2006, P.L. 109-340 (codified at 15 U.S.C. § 313d).

National Windstorm Impact Reduction Act, enacted 25 Oct. 2004, 108-360 (codified at 42 U.S.C. § 15701 et seq.).

Plant Protection Act, enacted 24 Dec. 1970, P.L. 91-577 (codified as amended as of 2006 at 7 U.S.C §§7701-7772).

Reclamation States Emergency Drought Relief Act, enacted 5 March 1992, P.L. 102-250 (codified as amended as of 2010 at 43 U.S.C. §§ 2201-2214).

Rehabilitation Act of 1973, Pub. L. 93-112 (codified at 29 U.S.C. 794).

Resource Conservation and Recovery Act of 1976 (RCRA) (codified at 42 U.S.C. §§ 6901-6986).

Social Security Act (codified at 42 U.S.C. § 301, et seq.).

Soil Conservation Act, enacted 26 Feb. 1935, P.L. 74-46 (codified as 16 U.S.C.590a et seq.).

Small Business Act, enacted 18 July 1958, P.L. 85-536 (codified as amended as of 2001 at 15 U.S.C. §§ 631-651e).

Tax Extenders and Alternative Minimum Tax Relief Act, 3 Oct. 2008, P.L. 110-343 (as codified at 26 U.S.C. § 198A).

Territories and Insular Possessions, 48 U.S.C. 731 et seq.

Tsunami Warning and Education Act, enacted 20 Dec. 2006, P.L. 109-479 (codified at 33 U.S.C. § 3201, et seq.).

Violent Crime Control and Law Enforcement Act, enacted 25 June 1948, Pub. L. 103-322 (codified at 18 U.S.C. § 2074).

Volunteer Protection Act, enacted 18 June 1997, P.L. 105-19 (1997) (codified at 42 U.S.C. §§ 14501-05).

Warning, Alert, and Response Network Act (The WARN Act), enacted 13 Oct. 2006, P.L. 109-347.

Water Resources Development Act 7, enacted 12 Oct.1996, P.L. 104-303 (codified as amended in 33 U.S.C. 2201 et seq.).

15 U.S.C. §§ 311-329 and 33 U.S.C. §§ 851-900, scattered laws regarding NOAA.

d. Executive Orders

Executive Order 12472, 49 Fed. Reg. 13471 (1984), Assignment of National Security and Emergency Preparedness Telecommunications Functions, as amended by Executive Order 13286, 68 Fed. Reg. 10619 (2003).

Executive Order 12656, 53 Fed. Reg. 47491 (1988), Assignment of Emergency Preparedness Responsibilities, as amended by Executive Order 13286, 68 Fed. Reg. 10619 (2003).

Executive Order 12777, 56 Fed. Reg. 54757 (1991), Implementation of Section 311 of the Federal Water Pollution Control Act of Oct. 18, 1972, as amended, and the Oil Pollution Act of 1990, as amended by Executive Order 13286, 68 Fed. Reg. 10619 (2003).

Executive Order 12898, 59 Fed. Reg. 7629 (1994), Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

Executive Order 13407, 71 Fed. Reg. 36975 (2006), Public Alert Warning System.

Executive Order 13514, 74 Fed. Reg. 52 (2009), Federal Leadership in Environmental and Energy Performance (codified under 42 U.S.C. § 4321).

e. Federal Regulations – Search the Code of Federal Regulations at: <http://www.law.cornell.edu/cfr/text>.

Administrative Claims under the Federal Tort Claims Act, 5 C.F.R. 177, as of 2000. See also Standard Form 95 for filing claims: http://www.justice.gov/civil/docs_forms/SF-95.pdf.

Chemical Accident Prevention Provisions, 40 C.F.R. 1502, as of 1999.

Emergency Alert Systems, 47 C.F.R. 11, as of 1994.

Emergency Management Assistance, Title 44 of the Code of Federal Regulations, as amended as of 2009.

Environmental Impact Statement, 40 C.F.R. 1502, as of 1978.

Plant Protection and Quarantine, 7 C.F.R. 371.3, as amended in 2005.

Public Information and Community Relations, 40 C.F.R. 300.155, as of 2011.

f. Federal Administrative Documents

i. DHS

National Response Framework, dated Jan. 2008: <http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>.

ii. FEMA

National Disaster Recovery Framework, dated Sept. 2011: <http://www.fema.gov/recoveryframework/index.shtm>.

FEMA Grant Fact Sheets: <http://www.fema.gov/government/grant/factsheets.shtm> .

Crisis Response and Disaster Resilience 2030: Forging Strategic Action in an Age of Uncertainty, dated Jan. 2012 by FEMA's Strategic Foresight Institute: <http://www.fema.gov/library/viewRecord.do?id=4995> .

FEMA's 2013 Budget: http://www.fema.gov/pdf/about/budget/fema_fy2013_bib.pdf.

Guidance on Landslides, dated 1989: <http://mitigation.eeri.org/files/fema-182.pdf>.

iii. Other

Climate Change Adaption Task Force Report: http://www.whitehouse.gov/sites/default/files/microsites/ceq/2011_adaptation_progress_report.pdf.

Draft Drought Directives and Standards from the Bureau of Reclamation, dated April 2002: <http://www.usbr.gov/drought/>.

Environmental Protection Agency Regulations by Sector, as viewed 17 July 2012: <http://www.epa.gov/lawsregs/sectors/>.

National Tsunami Hazard Mitigation Program 2009-2013 Strategic Plan, dated 2009: <http://nthmp.tsunami.gov/documents/NTHMPStrategicPlanvf-081309.doc>.

Subcommittee on Disaster Reduction's "Grand Challenges for Disaster Reduction": <http://www.sdr.gov/grandchallenges.html>.

g. Local legislation – Except as noted, find code at: <http://library.municode.com>.

Cal. Bldg. Standards Code Title 24, as of 17 July 2012. <http://publicecodes.citation.com/st/ca/st/index.htm>.

Santa Clara County, Cal., Code of Ord. Title C, as of 17 July 2012.

Sunnyvale, Cal., Mun. Code Title 17, as of 17 July 2012. <http://qcode.us/codes/sunnyvale/view.php?topic=16&frames=off>.

Fla. Stat § 163.2511 et seq., as of 17 July 2012.

Broward County, Fla., Code of Ord. ch. 29, as of 17 July 2012.

Fort Lauderdale, Fla., Code of Ord. ch. 47, as of 17 July 2012.

Ohio Rev. Code Ann. §§317.01-317.99, as of 17 July 2012. <http://codes.ohio.gov/orc/317>.

Mississippi Safe Drinking Water Act of 1997, Miss. Code Ann. §41-26-6, as of 17 July 2012.
http://www.msdh.state.ms.us/msdhsite/_static/resources/3275.pdf.

Washington Policy on Flood Risk Reduction, dated May 2008: <http://your.kingcounty.gov/dnrp/wlr/flood/flood-control-zone-district/advisory-committee-docs/pdf/052808-06-DraftAcquisitionPolicy.pdf>.

h. Case law

Benzman v. Whitman, 523 F.3d 119 (2d Cir. N.Y. 2008).

Berkovitz v. United States, 486 U.S. 531, 108 S. Ct. 1954, 100 L. Ed. 2d 531 (1988).

Euclid v. Ambler Realty Co., 272 U.S. 365 (1926).

In re Katrina Canal Breaches Litig., 673 F.3d 381 (5th Cir. 2012).

Kelo v. City of New London, 545 U.S. 469 (2005).

La Union Del Pueblo Entero v. Fed. Emergency Mgmt. Agency, 608 F.3d 217 (5th Cir. Tex. 2010).

McWaters v. Federal Emergency Management Agency, 436 F. Supp. 2d 802 (E.D. La. 2006).

Robinson v. United States (In re Katrina Canal Breaches Litig.), 673 F.3d 381 (5th Cir. La. 2012).

United States v. Lopez, 514 U.S. 549, 567 (1995).

B. List of Secondary Sources

14 A.L.R. Fed. 2d 173 (Originally published in 2006) on Stafford Act liability.

FEMA, The City of Rio Bravo Focuses on Mitigation, FEMA press release, viewed 17 July 2012: <http://www.fema.gov/mitigationbp/brief.do?mitsId=7771>.

C. Websites

Census Bureau's emergency management map: <http://onthemap.ces.census.gov/em.html>.

Declared Disasters by Year or State: http://www.fema.gov/news/disaster_totals_annual.fema.

NOAA Website: <http://www.noaa.gov/climate.html> .

NWS Weather Fatality, Injury, and Damage Statistics: www.nws.noaa.gov/om/hazstats.shtml.