

Appendix A

Glossary

The following is a list of terms and phrases that are typically used within the DFO. Some of these terms are used throughout this document, while others are terms that a sustainability planner should become familiar with in order to effectively communicate with DFO staff.

"100-Year" Floodplain	The area of a floodplain that historically and statistically has a 1 percent chance of significant inundation in any given year or the area of inundation by the "100-year" flood (also known as the "Base Flood").
Administrative Plan	See Hazard Mitigation State Administrative Plan.
Americans with Disabilities Act (ADA)	The ADA guarantees equal opportunity for individuals with disabilities in employment, public accommodations, transportation, state and local government services, and telecommunications.
Annual Flood	The annual flood is considered the most significant flood event in a one-year cycle of a floodplain.
Applicant	The applicant is a state agency, local government, and any political subdivision of the state, including Native American Indian tribes and Alaskan native villages that apply for FEMA post-disaster assistance. Applicants may also be private non-profit organizations such as medical, emergency (fire and rescue), utility, educational, custodial care, zoos, community centers, libraries, homeless shelters, and senior citizens' centers.
Automated Deployment Database (ADD)	The ADD is a system that provides a means of deploying disaster workers to locations for disaster operations. All FEMA employees, both DAEs and PFTs, are part of the ADD. The ADD system uses specific job titles and descriptions, and is accessible through FEMA's Wide Area Network (WAN).
Base Flood	The Base Flood is defined by FEMA as the flood having a 1 percent probability of being equaled or exceeded in any given year; also referred to as the "100-year" flood.
Base Flood Elevation (BFE)	The BFE is defined by FEMA as the height of the base ("100-year") flood in relation to a specified datum, usually the National Geodetic Vertical Datum of 1929 or North American Vertical Datum of 1988. Generally speaking, this is the elevation of the 100-year flood waters relative to "mean sea level."

**Building Performance
Assessment Team (BPAT)**

The BPAT is deployed by FEMA in response to disasters to conduct on-site field investigations. BPATs include representatives of public and private sector entities who are experts in specific technical fields, such as structural and civil engineering, building design and construction, and building code development and enforcement. Activities include inspecting disaster-induced damage to residential and commercial buildings and other manmade structures; evaluating local design practices, construction methods and materials, building codes, and building inspection and code enforcement processes; and making recommendations regarding design, construction, and code issues.

**Catastrophic Disaster
Response Group (CDRG)**

The CDRG is a national-level group with representatives from the Federal departments and agencies under the FRP; serves as the centralized coordinating group supporting on-scene Federal response and recovery efforts.

Charrette

A charrette is an intensive planning and/or design workshop involving people working together under compressed deadlines. Charrettes provide an interactive forum in which planners, designers, community representatives, and other interested and appropriate parties participate in proposing alternative visions that can help the group understand, evaluate and determine future plans and options.

**Coastal Barrier Resources
Act (CoBRA)**

CoBRA is Federal legislation identifying particular coastal areas that are environmentally sensitive and are subject to rules prohibiting certain Federal expenditures within them.

Coastal Zone

The coastal zone is defined as the area along the shore where the ocean meets the land as the surface of the land rises above the ocean. This land/water interface includes barrier islands, estuaries, beaches, coastal wetlands, and land areas having direct drainage to the ocean.

**Coastal Zone Management
Act (CZMA)**

In recognition of the increasing pressures of over-development upon the nation's coastal resources, Congress enacted the CZMA in 1972. The CZMA encourages states to preserve, protect, develop, and, where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats. A unique feature of the CZMA is that participation by states is voluntary. To encourage states to participate, the Act makes Federal financial assistance available to any coastal state or territory, including those on the Great Lakes, that is willing to develop and implement a comprehensive coastal management program.

**Community Assistance
Program - State Support
Services Element
(CAP-SSSE)**

The CAP-SSSE provides funding to meet negotiated objectives for reducing flood hazards in NFIP communities. The Program requires that participating communities identify, prevent, and resolve floodplain management issues before the issues require compliance action by FEMA. Available CAP funding is provided on a 75 percent Federal maximum and 25 percent minimum state cost sharing basis through the annual FEMA EMPG.

**Community Assistance Visit
(CAV)**

FEMA arranges for periodic CAVs with local officials to provide technical assistance regarding compliance with NFIP floodplain management requirements.

Community Development Block Grants (CDBG)	Administered by the Department of Housing and Urban Development (HUD); the objective of the CDBGs is to develop viable urban communities by providing decent housing and a suitable living environment and by expanding economic opportunities, principally for low to moderate-income people. Disaster-related assistance can be eligible under this program depending on state priorities; mitigation activities have been funded under this program.
Community Rating System (CRS)	The CRS is an NFIP program that provides incentives for NFIP communities to complete activities that reduce flood hazard risk. When the community completes specified activities, the insurance premiums of these communities are reduced.
Community Relations (CR)	CR is a FEMA support function within the DFO that provides disaster information to victims of a disaster especially in remote areas and to low income, welfare recipients, elderly, or handicapped victims. CR ensures assistance opportunities are made available to all affected on an equal basis and provides the ERT management with information on ethnic and cultural diversity within the affected populations.
Congressional Liaison	The Congressional Liaison is a FEMA official within the Office of Congressional and Legislative Affairs who answers questions and concerns from Members of Congress and other elected officials during a disaster.
Cooperative Agreement (CA)	The CA is a mechanism whereby FEMA can reimburse states to utilize state resources to expedite the completion of a specific task associated with damage occurring from a disaster.
Damage Survey Report (DSR)	The DSR (currently referred to as Project Worksheet, PW) is the public assistance inspector's report that is reviewed by FEMA and is the basis for approving Public Assistance.
Deputy Federal Coordinating Officer for Mitigation (DFCO-M)	As part of the FCO's command staff, the DFCO-M manages and directs the mitigation component of either the regional ERT or ERT-N. The DFCO-M advises the FCO, manages the mitigation operation, and provides Federal leadership by forging partnerships to integrate effective planning and program implementation activities in the disaster operation.
Disaster Assistance Employee (DAE)	DAEs are trained temporary employees that augment permanent FEMA personnel in disaster operations in the field.
Disaster Declaration	A disaster declaration is a Presidential determination that a jurisdiction of the United States may receive Federal aid as a result of damages from a major disaster or emergency.
Disaster Field Office (DFO)	The DFO is established in or near a designated disaster site to support Federal and state response and recovery operations. It is the operating site for the ERT.
Disaster Housing	Disaster Housing (formerly called Temporary Housing) is temporary housing supplied by emergency management officials to disaster victims whose homes are no longer inhabitable due to damages sustained in a declared disaster.
Disaster Information Systems Clearinghouse (DISC)	The DISC provides centralized control, deployment, and accountability of disaster information systems. It is located at FEMA's Mount Weather Emergency Assistance Center in Bluemont, VA.

Disaster Recovery Center (DRC)	The DRC is a location within or near the disaster site at which disaster assistance clients can obtain information about assistance programs and check on the status of their teleregistration for assistance.
Disaster Recovery Manager (DRM)	The DRM is the FEMA official (normally the FCO) who has the delegated authority from the Regional Director to manage authorities under the Stafford Act, including incurring financial obligations.
Early Implementation Strategy	The Strategy is a report that is jointly developed by FEMA, state, and local governments immediately after the initial disaster response to address immediate recovery needs and their potential implications for supporting long-term mitigation and redevelopment goals. FEMA's long-term goal is to implement mitigation as the foundation for establishing disaster-resistant and sustainable communities. The Strategy provides a framework for activities to be undertaken during the weeks immediately following the event, and serves as a starting point for in-depth consideration through the IHMT and/or state mitigation planning process.
Earthquake	An earthquake is a sudden motion or trembling of the earth caused by the abrupt release of slowly accumulated strain upon tectonic plates. Synonym: Seismic Event.
Economic Development Administration (EDA)	The EDA, part of the Department of Commerce, is the Federal agency that assists communities with grants and technical assistance for economic development.
Emergency	As defined in Title V of Public Law 93-288, Section 1.02(l), an emergency is "any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement state and local efforts and capabilities to save lives and protect property and public health and safety."
Emergency Management Performance Grant (EMPG)	An EMPG is the mechanism by which FEMA provides funding to states to develop and maintain emergency management programs. States develop a "self-assessment" of their emergency management needs, including mitigation, and a 5-year plan to meet those needs. Based on the plan, FEMA provides various levels of funding through a FEMA/State Cooperative Agreement (CA).
Emergency Response Team (ERT)	The ERT is an interagency team consisting of the lead representative from each Federal department or agency assigned primary responsibility for an ESF, and members of the FCO's staff mobilized to carry out the FCO's duties.
Emergency Response Team - Advanced (ERT-A)	The ERT-A is the portion of the ERT deployed first to the field to respond to a disaster incident.
Emergency Response Team - Mitigation (ERT-M)	The ERT-M is the portion of the ERT responsible for field mitigation operations that support sustained actions that will eliminate or reduce long-term risk to people and property from hazards and their effects.
Emergency Response Team -National (ERT-N)	The ERT-N is a national-level field response team.
Emergency Support Function (ESF)	ESF is the term used to indicate a functional area of response activity established to facilitate the delivery of Federal assistance required during the immediate response phase of a disaster to save lives and protect property and public health.

Emergency Support Team (EST)	The EST is an interagency group operating from FEMA headquarters in Washington, DC to oversee the national level response effort and coordinate activities with the ESF primary and support agencies in supporting the Federal response requirements in the field. The EST consists of the lead representatives from each Federal department or agency assigned a primary ESF responsibility and members of the EST Director's staff.
ESF-5 - Information and Planning Section	ESF-5 is the section of the ERT responsible for collecting, processing, analyzing, and disseminating information about disaster operations in order to support planning and decision making at both the field operations and Headquarters levels. The ESF-5 also coordinates short- and long-term planning at the field operations level.
Executive Order 11988 (Floodplain Management)	E.O. 11988 requires that no Federally assisted activities be conducted in or have the potential to affect identified Special Flood Hazard Areas, unless there is no practicable alternative.
Executive Order 11990 (Protection of Wetlands)	The companion to E.O. 11988, it requires that no Federally assisted activities be conducted in or have the potential to affect identified wetlands, unless there is no practicable alternative.
Executive Orders 12699 and 12941 (Seismic Safety)	E.O. 12699 requires 29 Federal agencies to issue regulations or procedures, and adopt minimum design and construction standards for seismic safety. E.O. 12941 requires seismic rehabilitation of Federally owned or leased buildings.
Executive Order 12898 (Environmental Justice)	E.O. 12898 requires Federal agencies to make environmental justice part of their mission by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.
Fault	A fault is a fracture or fracture zone in the earth's surface, along which there has been displacement or the junction of two tectonic plates.
Federal Coordinating Officer (FCO)	The FCO is the responsible official who initiates action immediately to ensure Federal disaster assistance is provided in accordance with the declaration, applicable laws, regulations, and the FEMA-State Agreement; appointed by the President, FEMA Director, or FEMA Associate Director for Response and Recovery.
Federal Emergency Management Agency (FEMA)	FEMA is an executive agency whose mission is to reduce loss of life and property and protect our nation's critical infrastructure from all types of hazards through a comprehensive, risk-based, emergency management program of mitigation, preparedness, response, and recovery.
Federal Insurance Administration (FIA)	The FIA is the branch of FEMA that administers the National Flood Insurance Program (NFIP), providing flood insurance to individuals and communities that would otherwise not be protected.
Federal Response Plan (FRP)	The Federal Response Plan facilitates the Federal response to disasters in the United States, territories, and other jurisdictions. The Plan outlines the planning assumptions, policies, and concepts of operations, organizational structures, and specifies responsibility assignments of Federal departments and agencies prior to and during disasters.

FEMA-State Agreement	A FEMA-State Agreement is a binding statement of the understandings, commitments, assurances, and conditions for assistance under which FEMA disaster assistance shall be provided to states. This Agreement imposes binding obligations on FEMA, states, and their local governments in the form of conditions for assistance, which are legally enforceable.
Fire Potential Index (FPI)	The FPI was developed by USGS and USFS to assess and map fire hazard potential over broad areas. Based on such geographic information, national policy makers and on-the-ground fire managers establish priorities for prevention activities in the defined area to reduce the risk of managed and wildfire ignition and spread. Prediction of fire hazard shortens the time between fire ignition and initial attack by enabling fire managers to pre-allocate and stage suppression forces to high fire risk areas.
Flash Flood	A flash flood is a flood event occurring with little or no warning where water levels rise at an extremely fast rate.
Flood Insurance Rate Map (FIRM)	A FIRM is the official FEMA-prepared map of a community that shows base flood elevations along with special flood hazard areas and the flood insurance risk premium zones.
Flood Mitigation Assistance (FMA) Program	The FMA Program provides annual funding for states and local governments that are planning or taking action to reduce or eliminate long-term risk of flood damage to buildings, manufactured homes, and other insured structures. Grants may be awarded for planning assistance, implementation of mitigation strategies, and technical assistance.
Floodplain	Floodplains are low-lying areas adjacent to rivers and streams that naturally experience periodic inundation due to rainfall, snowmelt, or dam or levee failure.
Fujita Scale of Tornado Intensity	The Fujita Scale rates tornadoes with numeric values from F0 to F6 based on tornado severity and damage sustained. An F0 indicates minimal damage such as a broken tree limbs or signs, while an F6 indicates severe damage sustained.
Gap Legislation	Gap legislation authorizes the U.S. Army Corps of Engineers to assist communities with limited emergency work, providing 100 percent funding for up to 10 days after a disaster. The legislation was developed to provide a "fast-track" disaster assistance "revenue stream" for those instances where it might otherwise take 10-14 days for FEMA and the President to determine whether or not FEMA assistance is warranted.
Geographic Information System (GIS)	Computer software that links geographic information (where things are) with descriptive information (what things are like).
Hazard Identification and Risk Assessment (HIRA)	The HIRA attempts to identify all the hazards that potentially threaten a community and provide an analysis of each hazard to determine the degree of threat posed by each. HIRA activities include identifying and mapping flood hazard areas; characterizing the impact of hurricanes using storm surge and wind decay models, mapping earthquake hazards, and using this hazard data to identify where damages may occur within a community.
Hazard Mitigation	Hazard mitigation is a sustained action taken to reduce or eliminate long-term risk to people and property from hazards and their effects.

Hazard Mitigation Grant Program (HMGP)	Authorized under Section 404 of the Stafford Act, this Program provides funding for cost-effective hazard mitigation projects in conformance with the post-disaster mitigation plan required under Section 409 of the Stafford Act. Section 404 authorizes the President to contribute up to 75 percent of the cost of mitigation measures that are determined to be cost effective and substantially reduce the risk of future damage or loss in states affected by a major disaster. The remaining 25 percent of the cost may be a combination of state, local, and other non-Federal contributions.
Hazard Mitigation State Administrative Plan	The Hazard Mitigation State Administrative Plan is required to be developed to describe the state procedures for administering the HMGP
Hazard Mitigation Technical Assistance Program (HMTAP)	HMTAP is a nationwide contract to support FEMA, states, territories, and local governments with technical assistance to enhance the effectiveness of their natural hazard mitigation program efforts. HMTAP may be used to support post-disaster program needs in cases of large, unusual, or complex projects; situations where resources are not available; or where technical assistance is needed.
Hazards United States (HAZUS)	HAZUS is a PC-based GIS software that implements a standardized, nationally applicable earthquake loss estimation methodology (computer model). Flood and hurricane loss estimation models are currently under development.
HOME Investment Partnerships Program	This Program is sponsored by HUD and provides permanent housing for low-income homeowners or renters in large cities and urban counties. Funds can be used for acquisition, new construction, and rehabilitation.
Human Services (HS) (Formerly Individual Assistance, IA)	HS, formerly known as IA, provides supplementary Federal assistance (under the Stafford Act (408)) to individuals and families adversely affected by a major disaster or emergency.
Hurricane	Hurricanes are part of a family of weather systems known as "tropical cyclones." Depending on the strength of the winds extending in a counter-clockwise formation from the eye of the hurricane, it can be classified as a Category 1, to Category 5 hurricane, with 5 being the most severe.
Hurricane Program (HP)	HP is a FEMA program that provides funds to states at risk from hurricanes for the following: <ul style="list-style-type: none"> · activities that establish, enhance, and maintain basic levels of preparedness and mitigation capabilities; · activities that promote effective mitigation measures to reduce damage to public and private property; · HIRA and evacuation studies; · post-storm analyses to evaluate the effectiveness of mitigation measures; · training and exercises; and · activities that promote public awareness and education.
Increased Cost of Compliance (ICC)	ICC is a component of the standard flood insurance policy which provides up to \$15,000 coverage for complying with the cost of meeting substantial damage requirements or towards eliminating flood damage to a structure that has had repetitive flood insurance claims paid.
Individual and Family Grant Program (IFG)	IFG is a FEMA program that provides monetary aid to individuals and families to meet disaster-related expenses for necessary items or for serious needs.

Individual Assistance (IA)	See Human Services (HS).
Information and Planning Section	See ESF-5 - Information and Planning Section.
Infrastructure	Infrastructure is a term that refers to the public services of a community that have a direct impact on the quality of life. Infrastructure refers to communication technology such as phone lines or Internet access, vital services such as public water supplies and sewer treatment facilities, and includes an area's transportation system, regional dams or bridges, etc.
Infrastructure Support (IS)	IS (also known as Public Assistance, PA) is Federal financial assistance provided by FEMA under the Stafford Act (Section 406) to state and local governments or to eligible private non-profit organizations for disaster-related requirements.
Intensity	Intensity is a measure of the effects of an earthquake at a particular place. Intensity depends not only on the earthquake magnitude, but also on the distance from the earthquake epicenter and on the local geology.
Interagency Hazard Mitigation Team (IHMT)	IHMT is the mitigation team usually activated following major disasters, pursuant to the Office of Management and Budget directive and subsequent Federal Interagency Agreement. Shortly following a Presidential declared disaster, the IHMT, composed of Federal, state, and local officials, develops a report identifying post-disaster mitigation opportunities and common post-disaster recovery policies.
Landslide	A landslide refers to the processes and landforms involving the downslope movement, under gravity, of masses of soil and rock material.
Magnitude	Magnitude is a measure of the strength of an earthquake or the strain of energy released, as determined by seismic observations.
Major Disaster	As defined under Public Law 93-288, a major disaster is any natural catastrophe (including any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or any fire, flood, or explosion in any part of the United States, which in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under the Stafford Act.
Mission Assignment	Mission Assignments are mechanisms whereby FEMA can task another Federal entity to provide specified resources beyond their usual authorities and resources. Mission Assignments are appropriate in situations where the required resource or expertise is of a critical nature, unique, time sensitive, and where the nature of the requirement can be best met by an OFA.
Mitigation	Mitigation refers to sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects.
Mobile Emergency Response Support (MERS)	MERS is a rapidly deployable resource operated by FEMA that provides immediate communications, logistics, and life support capabilities at a disaster site.

Mobile Mitigation Assistance Vehicle (MMAV)

An MMAV is a recreational vehicle (RV) equipped with educational tools and assigned trained mitigation counselors. The MMAV is used to implement a mobile community-based mitigation outreach program; it allows FEMA staff to provide damage prevention guidance and information to disaster-affected individuals in scattered locations and provides ancillary support to disseminate information about the Disaster Assistance Tele-registration process.

National Earthquake Hazards Reduction Program (NEHRP)

Created by Congress in 1977 to mitigate earthquake losses by providing technical and educational assistance to communities threatened by earthquakes, NEHRP is intended to mitigate earthquake losses through development and implementation of seismic design and construction standards and techniques; technical assistance materials; education and risk reduction programs; centers addressing specific aspects of the earthquake problem; and dissemination of earthquake information.

National Emergency Management Information Systems (NEMIS)

NEMIS is a computer-based data management and communications network that links FEMA and states. The network provides necessary databases, e-mail, and software applications to enable on-line case management and request processing. It also serves to simplify program management responsibilities.

National Environmental Policy Act (NEPA)

Passed by Congress in 1970, this Act established a national policy for the protection and maintenance of the environment by mandating a planning process that all Federal agencies must follow. NEPA requires that FEMA carry out its responsibilities in a manner that ensures that all practical means and measures are used to protect, restore, and enhance the quality of the environment or to avoid or minimize adverse environmental consequences (44 CFR Part 10).

National Flood Insurance Program (NFIP)

NFIP makes flood insurance available to property owners in exchange for the local adoption and enforcement of a minimum floodplain management ordinance that regulates new and substantially damaged or improved development in designated flood hazard areas.

National Historic Preservation Act (NHPA)

Consideration of cultural resources by Federal agencies is mandated under Section 106 of the NHPA, as implemented under 36 CFR Part 800. Requirements include identifying significant historic properties that may be impacted by a proposed project.

National Interagency Emergency Operations Center (NIEOC)

NIEOC is the focal point for national-level coordination and response activities; it receives and disseminates information on natural and man-made disasters, prepares daily reports on emergency activities, and houses and provides direct support to the EST in operations and exercises.

National Mitigation Strategy

Introduced in 1995 by FEMA to focus national attention on mitigation, the Strategy encourages all levels of government and the private sector to identify potential hazards and take steps to reduce the risks.

National Weather Service(NWS)

The NWS prepares and issues flood, severe weather, and coastal storm warnings and can provide technical assistance to Federal and state entities in preparing weather and flood warning plans.

Nor'easter	Nor'easters are low-pressure systems that move along the eastern seaboard, picking up moisture from the gulf stream as they move from the central states to the northeast. There, the storm drops the accumulated moisture in the form of heavy rain or snow. Severe flooding and erosion can be associated with the rains, winds, and waves that are part of this type of storm system.
Operations Section	The Operations Section of the ERT coordinates the delivery of Federal assistance and manages the activities of various emergency teams.
Preliminary Damage Assessment (PDA)	The PDA is the basis for a state's request for Presidential disaster declaration. It is a joint FEMA/State verification of actual damages and an estimate of additional resources that will be needed because of a disaster.
Preparedness	Preparedness refers to steps taken to decide what to do if essential services break down, developing a plan for contingencies, and practicing the plan. Preparedness ensures that people are ready for a disaster and will respond to it effectively.
Probability	Probability is the numeric likelihood of an event. Theoretically, the probability of the occurrence of an event is between zero (indicating that the event never occurs) and one (indicating that the event always occurs).
Project Impact	Project Impact is a FEMA initiative to demonstrate the economic, social, and environmental benefits of pre-disaster mitigation to states, local communities, businesses, and individuals. This nationwide initiative emphasizes long-term mitigation at the local level through partnering with businesses, industry, residents, and NGOs.
Project Worksheet (PW)	The PW (formerly known as the Damage Survey Report, DSR) is the public assistance inspector's report that is reviewed by FEMA and is the basis for approving public assistance.
Public Assistance (PA)	PA is the supplementary Federal assistance provided by FEMA, under the Stafford Act, to state and local governments or certain private, non-profit organizations (other than assistance for the direct benefit of individuals and families). PA deals with repair, restoration, and replacement of damaged public infrastructure and facilities and damaged private non-profit facilities.
Rapid Needs Assessment Team (RNA Team)	The RNA Team is a small, self-sufficient, regionally based interagency team designed to deploy to the disaster location within 12 hours of activation. The Team focuses on conducting a rapid assessment to determine potential requirements for immediate resources needed for basic human needs and protection of property.
Reconstruction Information Center (RIC)	RICs are centralized facilities established by FEMA to provide individuals affected by a disaster with mitigation information on reconstruction and rebuilding techniques. A RIC may be set up at a fixed or mobile location.
Recovery	Recovery activities include rebuilding homes, businesses, and public facilities; permanent repair of roads and bridges; and restoring water, sewer, and other essential services. These activities may receive Federal supplemental disaster recovery assistance under a Presidential disaster declaration.
Regional Operations Center (ROC)	The ROC is the operations facility for the coordination of Federal response and recovery activities and is often located at the FEMA regional office. The ROC staff manages Federal field response until the DFO becomes operational.

Regional Response Plan (RRP)	The RRP applies the emergency management components of the FRP to the geographic and demographic characteristics of each of the ten Federal Regions.
Response	Response activities address the immediate and short-term effects of an emergency or disaster. Response activities include immediate actions to save lives, protect property, meet basic human needs, and restore water, sewer, and other essential services.
Richter Scale	The Richter Scale is a numerical scale of earthquake magnitude devised by seismologist C.F. Richter in 1935. Small or microearthquakes can have negative magnitude values. In theory there is no limit to the upper scale an earthquake can reach, but because of rock strength there is an actual upper limit of slightly less than 9.
Section 404 of the Stafford Act (Hazard Mitigation)	Section 404 of the Stafford Act authorizes the Hazard Mitigation Grant Program (HMGP), which provides funding for cost-effective, environmentally sound hazard mitigation measures.
Section 406 of the Stafford Act	See Infrastructure Support (IS).
Section 408 of the Stafford Act	See Human Services (HS).
Section 409 of the Stafford Act (State Hazard Mitigation Plan)	Section 409 requires states to prepare a Mitigation Plan prior to receiving any FEMA assistance under the Act. The Plan must identify and evaluate the hazards in the areas where Federal disaster relief proceeds are provided, and set forth a plan of action to mitigate those hazards.
Seismicity	The likelihood of an area being subject to earthquakes.
Situation Report (SitRep)	Daily or weekly summaries of the disaster situation, status of operations, and identification of future priorities for response and recovery operations are known as SitReps.
Small Business Administration (SBA)	In a Presidential or SBA-declared disaster, SBA can provide additional low-interest loans for mitigation measures up to 20 percent above what an eligible applicant would otherwise qualify for.
Special Flood Hazard Areas (SFHAs)	SFHAs are areas designated on Flood Insurance Rate Maps (FIRM) in which specific NFIP requirements apply.
Stafford Act	The Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100- 107 was signed into law November 23, 1988 and amended the Disaster Relief Act of 1974, PL 93-288. The Stafford Act is the statutory authority for most Federal disaster response activities, especially as they pertain to FEMA and its programs.
State Coordinating Officer (SCO)	The SCO is appointed by the Governor to act in cooperation with the FCO.

State Hazard Mitigation Officer (SHMO)	The SHMO is the representative of state government who is the primary point of contact with FEMA, other state and Federal agencies, and local units of government in the planning and implementation of pre- and post-disaster mitigation activities.
State Hazard Mitigation Team (SHMT)	The SHMT is composed of key state agency representatives, local units of government, and other public or private sector bodies or agencies. The purpose of the SHMT is to evaluate hazards, identify strategies, coordinate resources, and implement measures that will reduce the vulnerability of people and property to damage from hazards.
State Mitigation Plan	The State Mitigation Plan is a systematic evaluation of the nature and extent of vulnerability to the effects of natural hazards typically present in the state and includes a description of actions needed to minimize future vulnerability to hazards.
Strike-Slip Fault	A fault that strikes or slips parallel with the strike of the adjacent strata involved.
Sustainability Desk	The Sustainability Desk disseminates information promoting the integration of the principles and practices of sustainable development in the post-disaster recovery process. This information is developed by FEMA, in partnership with the state and through coordination with other agencies and organizations (Federal or non-Federal). There may or may not be an actual desk in the DFO or the DRCs at which an individual works or distributes publications.
Sustainability/Sustainable Development	Sustainable development maintains or enhances economic opportunity and community well being while respecting, protecting and restoring the natural environment upon which people and economies depend. Disaster resistance should be considered an important element of sustainability.
Sustainable Re-development	Sustainable re-development incorporates the concepts and practices of sustainable development into the disaster recovery process.
Tectonic Plate	Tectonic plates are torsionally rigid, thin segments of the earth's lithosphere that may be assumed to move horizontally and adjoin other plates. It is the friction between plate boundaries that causes seismic activity.
Teleregistration	Teleregistration refers to telephone applications for individual assistance by disaster victims. Individuals may also register for assistance in person, but Teleregistration is FEMA's preferred approach.
Temporary Housing	See Disaster Housing.
Thrust Fault	A thrust fault has a dip of 45° or less over much of its extent. Horizontal compression rather than vertical displacement is its characteristic feature.
Tornado	A tornado is a violently rotating column of air, pendant from a cumulonimbus cloud, and nearly always observable as a "funnel cloud." Tornadoes are measured in intensity by the Fujita Scale (see Fujita Scale of Tornado Intensity).

Tsunami	A tsunami is a long-period (usually 15-60 minutes) wave caused by a large-scale movement of the sea floor (from a volcanic eruption, submarine earthquake, or landslide). Although usually barely noticeable at sea, its velocity may be as high as 400 knots so that it travels great distances and in shoal water may reach heights of up to 15 meters.
Volunteer Agency (VOLAG)	A VOLAG is any chartered or otherwise duly recognized tax-exempt local, state, or national organization or group that provides needed services to the states, local government, or individuals in coping with a disaster.
Wide Area Network (WAN)	A WAN interconnects computer users in a geographic area larger than those serviced by local area networks.

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Appendix B

Acronyms

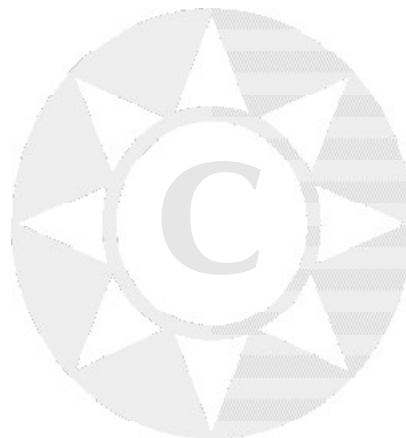
Many of the following acronyms are used within this guidance document. However, other commonly used acronyms are included because they are used within the DFO and throughout the recovery process.

ADD	Automated Deployment Database
AIA	American Institute of Architects
APA	American Planning Association
ASCE	American Society of Civil Engineers
ASFPM	Association of State Floodplain Managers
ASLA	American Society of Landscape Architects
BCA	Benefit-cost analysis
BFE	Base flood elevation
BMP	Best Management Practices
BPAT	Building Performance Assessment Team
CA	Cooperative Agreement
CAP-SSSE	Community Assistance Program – State Support Services Element
CAR	Capability Assessment for Readiness
CAV	Community Assistance Visit
CBRS	Coastal Barrier Resources System
CDBG	Community Development Block Grant
CDRG	Catastrophic Disaster Response Group
CEQ	Council on Environmental Quality
CERT	Community Emergency Response Team
CHER-CAP	Comprehensive HAZMAT Emergency Response/Capability Assessment Program

CR	Community Relations
CRS	Community Rating System
CZMA	Coastal Zone Management Act
DAE	Disaster Assistance Employee
DEM	Digital Elevation Model
DFCO-M	Deputy Federal Coordinating Officer for Mitigation
DFO	Disaster Field Office
DOE	U.S. Department of Energy
DISC	Disaster Information Systems Clearinghouse
DPIG	Disaster Preparedness Improvement Grant Program
DRC	Disaster Recovery Center
DRM	Disaster Recovery Manager
DSR	Damage Survey Report
DTE	Disaster Temporary Employee
EDA	Economic Development Administration
EJPA	Environmental Joint Powers Agreement
EMI	Emergency Management Institute
EMPG	Emergency Management Performance Grant
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ER	Emergency Response
EREN	Energy Efficiency and Renewable Energy Network
ERT	Emergency Response Team
ERT-N	National Emergency Response Team
ESA	Endangered Species Act
ESF	Emergency Support Function
EST-M	Emergency Support Team - Mitigation
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FIA	Federal Insurance Administration
FIRM	Flood Insurance Rate Map
FMA	Flood Mitigation Assistance Program
FPI	Fire Potential Index
FRP	Federal Response Plan

GAR	Governor's Authorized Representative
GIS	Geographic Information System
HAZMAT	Hazardous Materials
HAZUS	Hazards United States
HIRA	Hazard Identification and Risk Assessment
HMGP	Hazard Mitigation Grant Program
HMTAP	Hazard Mitigation Technical Assistance Program
HP	Hurricane Program
HS	Human Services
HUD	U.S. Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
IA	Individual Assistance
IBC	International Building Code
ICC	Increased Cost of Compliance
IFG	Individual and Family Grant Program
IHMT	Interagency Hazard Mitigation Team
IS	Infrastructure Support
MDZ	Minimum Density Zoning
MEMA	Massachusetts Emergency Management Agency
MERS	Mobile Emergency Response Support
MMAV	Mobile Mitigation Assistance Vehicle
MMI	Modified Mercalli Intensity
MOA	Memorandum of Agreement
NDSP	National Dam Safety Program
NEHRP	National Earthquake Hazards Reduction Program
NEMIS	National Emergency Management Information System
NEPA	National Environmental Policy Act
NFDRS	National Fire Danger Rating System
NFIP	National Flood Insurance Program
NGO	Nongovernmental Organization
NHCEM	New Hanover County Emergency Management
NHPA	National Historic Preservation Act
NIBS	National Institute of Building Standards
NIEOC	National Interagency Emergency Operations Center

NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resource Conservation Agency
NWS	National Weather Service
OFA	Other Federal Agency
OSEC	Office of Sustainable Ecosystems and Communities
PA	Public Assistance
PAS	Planning Advisory Service
PCSD	President's Council on Sustainable Development
PDA	Preliminary Damage Assessment
PI	Project Impact
PIO	Public Information Officer
PVB	Polyvinyl Butyrol
PW	Project worksheet
RIC	Reconstruction Information Center
RNA-Team	Rapid Needs Assessment Team
ROC	Regional Operations Center
RRP	Regional Response Plan
SBA	Small Business Administration
SCO	State Coordinating Officer
SFHA	Special Flood Hazard Area
SHMO	State Hazard Mitigation Officer
SHMT	State Hazard Mitigation Team
SHPO	State Historic Preservation Office
SitRep	Situation Report
SOP	Standard Operating Procedures
UMWB	Upper Mystic Watershed Basin
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOLAG	Volunteer agency
WAN	Wide Area Network
WWTP	Wastewater treatment plant



Appendix C

Websites

Extensive information is available over the Internet regarding programs, references, case studies and resources that can support the advancement of sustainable development. The following is not an exhaustive listing, but does include governmental, non-profit, academic, and international sites that can provide links to more specific information.

Advisory Council on Historic Preservation

<http://www.achp.gov>

The Advisory Council on Historic Preservation is an independent Federal agency that provides a forum for influencing Federal activities, programs, and policies as they affect historic resources. Its mission is to promote the protection and enhancement of those resources. The goal of the National Historic Preservation Act (NHPA), which established the Council in 1966, is to have Federal agencies as responsible stewards of our nation's resources when their actions affect historic properties. The Council is the only entity with the legal responsibility to balance historic preservation concerns with Federal project requirements.

The American Planning Association

<http://www.planning.org>

The American Planning Association is organized to advance the art and science of planning and to foster the activity of planning—physical, economic, and social—at the local, regional, state, and national levels. The objective of the Association is to encourage planning that will contribute to public well-being by developing communities and environments that meet the needs of people and society more effectively. APA works in conjunction with FEMA to integrate disaster mitigation into comprehensive planning throughout the nation.

Association of State Floodplain Managers

<http://www.floods.org/>

The Association of State Floodplain Managers (ASFPM) supports comprehensive nonstructural and structural management of the nation's floodplains and related water

resources. The ASFPM believes that, through coordinated, well-informed efforts, the public and private sectors can:

1. Reduce loss of human life and property damage resulting from flooding,
2. Preserve the natural and cultural values of floodplains, and
3. Avoid actions that exacerbate flooding.

The ASFPM is an organization of professionals involved in flood hazard mitigation, floodplain management, flood preparedness, warning and recovery as well as the National Flood Insurance Program. This website offers access to information on the many conferences and workshops the association holds throughout the year, often in cooperation with FEMA or local agencies. There is a link to the Honduras Project, where ASFPM is working with the Pan American Development Foundation and Honduran floodplain professionals to speed that country's recovery from Hurricane Mitch. The Association offers a Certified Floodplain Manager Program, as well as awards and graduate fellowships.

The Building Seismic Safety Council **<http://www.bssconline.org>**

The Building Seismic Safety Council (BSSC) was established in 1979 under the auspices of the National Institute of Building Sciences as an entirely new type of instrument for dealing with the complex regulatory, technical, social, and economic issues involved in developing and promulgating building earthquake risk mitigation regulatory provisions that are national in scope. By bringing together in the BSSC all of the needed expertise and all relevant public and private interests, it was believed that issues related to the seismic safety of the built environment could be resolved and jurisdictional problems overcome through authoritative guidance and assistance backed by a broad consensus.

The BSSC is an independent, voluntary membership body representing a wide variety of building community interests. Its fundamental purpose is to enhance public safety by providing a national forum that fosters improved seismic safety provisions for use by the building community in the planning, design, construction, regulation, and utilization of buildings.

BSSC has a variety of publications including *The (HAZUS) Natural Hazard Estimation* and *The Construction Criteria Base (CCB)*.

Center for Livable Communities **<http://www.lgc.org/clc>**

The Center for Livable Communities is a national initiative of the *Local Government Commission (LGC)*. A nonprofit, nonpartisan membership organization of elected officials, city and county staff, and other interested individuals throughout California and other states, the LGC helps local governments identify and implement solutions to today's problems.

The Center for Livable Communities helps local governments and community leaders be proactive in their land use and transportation planning, and adopt programs and policies that lead to more livable and resource-efficient land use patterns. Center programs can help jurisdictions expand transportation alternatives, reduce infrastructure costs, create more affordable housing, improve air quality, preserve

natural resources, conserve agricultural land and open space, and restore local economic and social vitality.

Center for Renewable Energy and Sustainable Technology

<http://solstice.crest.org/index.shtml>

The Center for Renewable Energy and Sustainable Technology (REPP-CREST) and the Renewable Energy Policy Project Internet information service (Solstice) provides information on sustainable energy initiatives. This site contains information and links on renewable energy including bioenergy, geothermal, hydrogen, solar and wind energy. There are also links about energy efficiency in buildings, appliances, and other infrastructure, as well as information and guides to sustainable living.

City of Austin: Green Building Program

<http://www.ci.austin.tx.us/greenbuilder/>

Part of the Austin City Connection page in Austin, Texas, this site provides useful information on resources related to sustainable building practices, products, and techniques. The site profiles publications such as The Sustainable Building Sourcebook, developed for the Austin Green Builder Program. In-depth reviews of sustainable building products and methods and information on where to access unbiased information are available at Environmental Building New Beta Site. The **Green Building Program** encourages construction professionals and consumers to incorporate sustainable building practices, systems, and materials into residential and commercial construction.

The Coastal Society

<http://www.thecoastalsociety.org>

The Coastal Society is an organization of private sector, academic, and government professionals and students dedicated to actively addressing emerging coastal issues by fostering dialogue, forging partnerships, and promoting communication and education.

Empowerment Zones and Enterprise Communities (EZ/EC)

<http://www.ezec.gov/>

This site details the EZ/EC Program, a Presidential Initiative implemented to revitalize distressed communities across the U.S. by rebuilding a sense of community and restoring economic opportunities for all citizens. It provides maps and lists of the EZ/EC communities as well as links to community home pages. It includes resources such as U.S. codes, successful economic development practices, and publications.

Energy Efficiency and Renewable Energy Network

<http://www.eren.doe.gov/>

This site is the home page of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EREN). The site provides links to information on the whole spectrum of energy-efficiency and renewable energy topics, as well as a list of key contacts and a list of hot topics (the federal budget, for example). EREN offers access to DOE's national laboratory databases on a host of topics, such as solar access and wind regimes.

The EPA's Green Communities Assistance Kit

http://www.epa.gov/region03/greenkit/q5_disas.htm

The Green Communities Assistance Kit is designed as a comprehensive reference guide for identifying and resolving needs, interests, and problems for a range of communities - urban, suburban, and rural. Included in its topical tools is the Tools for Natural Disasters page offering a lengthy list of Internet resources divided into Policy and Planning Tools, Regulatory Tools, Technical Tools, and Financial Tools. Find everything from hurricane preparedness training and guidelines to disaster response and recovery programs.

The Farm Service Agency (FSA)'s Natural Disaster Assistance

<http://www.fsa.usda.gov/pas/disaster/assistance1.htm>

This site deals with hazards that affect America's farmers and ranchers. The information covers earthquakes, tornadoes, hurricanes, or other natural events that can severely damage agricultural operations.

Farming or ranching operations that suffer a loss due to a natural disaster may be eligible for assistance under one or more of the following FSA programs:

- The Emergency Conservation Program (ECP)
- The Noninsured Crop Disaster Assistance Program (NAP)
- Emergency Loan (EM) Assistance
- Emergency Haying and Grazing Assistance

This link provides information on what kind of help is available, who may be eligible for it, and how to go about applying for FSA emergency assistance.

Federal Emergency Management Agency

<http://www.fema.gov/MIT/fldmitast.htm>

This site provides information for Flood Mitigation Assistance, Mitigation Assistance Program, Sustainability and Sustainable Re-development, and Community Assistance Program.

Firewise

<http://www.firewise.org>

The Firewise website was created for people who live or vacation in fire-prone areas of North America. The site will acquaint people with the challenges of living in areas susceptible to wildfire. It provides information that may lessen the risk of wildfire loss and includes a list of offline wildfire protection information as well as links to off-site fire resources.

A Guide to Internet Resources in Sustainable Development

<http://www.caf.wvu.edu/gdsouzawww/guide.html>

Partial list of Internet servers or World Wide Web sites (governmental, university, private, or other) relating to sustainable development. A brief description of the contents of each site is also provided. In most cases, these sites provide information on and links to a host of topics in addition to sustainability. A specific document is

often located several levels away from the main menu or initial link to the site, and therefore searching the menu or file hierarchy may be necessary.

The material in this Guide is organized into five sections: I.) Web sources of information on sustainability; II.) Gopher or Telnet Sources; III.) Organizations that provide sustainability-related information on the Internet; IV.) Newsgroups that include information on sustainability; and V.) List Servers or Discussion Groups.

HUD Community Planning and Development

<http://www.hud.gov/cpd/cpdhome.html>

This site provides access to many U.S. Department of Housing and Urban Development (HUD) programs that can serve as resources for sustainability efforts. Topics include community development, affordable housing, and energy/environment.

Institute for Business and Home Safety

<http://www.ibhs.org>

The Institute for Business & Home Safety (IBHS) is an initiative of the insurance industry to reduce deaths, injuries, property damage, economic losses and human suffering caused by natural disasters. Its mission is to make natural disaster safety a core public value and to make disaster resistance an important consideration in the home and work environments.

Joint Center for Sustainable Communities

<http://www.usmayors.org/USCM/sustainable>

The ***Joint Center for Sustainable Communities*** represents an important collaboration between the **U.S. Conference of Mayors (USCM)** and the **National Association of Counties (NACo)** on behalf of our nation's communities. Its primary mission is to provide a forum for cities and counties to work together to develop long-term policies and programs that will lead to job growth, environmental stewardship and social equity—the three pillars of sustainable communities. The Joint Center is helping local elected officials build sustainable communities by promoting community leadership initiatives, providing technical assistance and training, and conducting community policy and educational forums. The overall goal of the Joint Center is to provide local elected officials with assistance in using the policies and tools necessary for creating sustainable communities.

Mitigation Success Stories (FEMA)

http://www.fema.gov/mit/sstory/sstory_q1.cfm

FEMA has a new web page for **collecting Mitigation Success Stories** or for searching for success stories in communities. The reader may search by a variety of categories, including state or community name, hazard type, project type. Through the sharing of mitigation success stories, communities can share their experience about the steps required to reduce risks associated with disasters. This web page allows the reader to view other projects, see how they were accomplished, and what benefits were derived, or to tell others about the projects your community has successfully supported. If a community shares its story, that information may be made available on this web

page for visitors to this site and thereby communities can encourage each other by good example.

National Association of Development Organizations Sustainable Development Links

<http://www.nado.org/links/index.html#SD>

The National Association of Development Organizations (NADO) provides training, information, and representation for regional development organizations in small metropolitan and rural America. The Association, a public interest group founded in 1967, is the largest and leading advocate for a regional approach to community, economic and rural development and provides a network for its members to share ideas and innovations.

National Council on Sustainable Development

<http://www.ncsdnetwork.org/>

The goal of the National Council for Sustainable Development (NCSD) is to: 1) promote sustainable development at the national level, 2) assist governments in decision-making and policy formulation, and 3) follow-up the implementation of international processes related to sustainable development. The NCSD is a mechanism for implementing sustainability as expressed in Agenda 21, the plan of action agreed to by national governments at the Earth Summit held in Rio in 1992. The NCSD concept legitimizes the role of civil society as a partner with government in making policy for implementing the sustainable development agenda and to move it from agenda to action. It brings together different major groups within society to get a balanced agreement on policies and activities for sustainability.

National Institute for Building Standards

<http://www.nibs.org/nibshome.htm>

The National Institute of Building Sciences (NIBS) was authorized by the U.S. Congress in recognition of the need for an organization that could serve as an interface between government and the private sector. The Institute's public interest mission is to: improve the building regulatory environment, facilitate the introduction of new and existing products and technology into the building process, and disseminate nationally recognized technical and regulatory information. Through NIBS, Congress established a public/private partnership to enable findings on technical, building-related matters to be used effectively to improve government, commerce, and industry. NIBS is a non-profit, non-governmental organization bringing together representatives of government, the professions, industry, labor and consumer interests to focus on the identification and resolution of problems and potential problems that hamper the construction of safe, affordable structures for housing, commerce and industry throughout the U.S.

The Natural Hazards Center at the University of Colorado

<http://www.colorado.edu/hazards/index.html>

The Natural Hazards Research and Applications Information Center is an international clearinghouse of information on natural hazards and human adjustments

to these risks. The Center's prime goal is to increase communication among hazard/disaster researchers and those individuals, organizations and agencies that are actively working to reduce disaster damage and suffering. The Center carries out its mission in four principal areas: information dissemination, research, library services, and an annual workshop.

Available at the site are Quick Response Reports resulting from timely analysis of damages from various natural disasters. The library provides access to HazLit, an online bibliographic database of the University of Colorado's extensive collection of social science literature regarding the effects natural disasters have on society. The library also has a fee-based custom search service to help with more specific needs.

NOAA Coastal Services Center

<http://www.csc.noaa.gov>

The NOAA Coastal Services Center works with various branches of NOAA and other federal agencies to bring information, services, and technology to the nation's coastal resource managers. The Center is a partner in over 100 ongoing projects geared to resolve site specific coastal issues.

Operation Fresh Start

<http://www.sustainable.doe.gov/freshstart/>

Operation Fresh Start is an initiative designed to help individuals and communities incorporate sustainable principles and technologies into their plans when they recover from a flood, earthquake, or other disaster. Sponsored by the Department of Energy's Office of Energy Efficiency and Renewable Energy, Operation Fresh Start is a gateway to information from a variety of federal agencies that deal with disaster recovery.

Partnership for Advancing Technology in Housing

<http://www.pathnet.org>

The Partnership for Advancing Technology in Housing (PATH) is a voluntary initiative that seeks to accelerate the creation and widespread use of advanced technologies to improve radically the quality, durability, environmental performance, energy efficiency, and affordability of the Nation's housing. PATH links key agencies in the federal government with leaders from the home building, product manufacturing, insurance, financial and regulatory communities in a unique partnership focused on technological innovation in the American housing industry.

Planners Web City and Regional Planning Resources

<http://www.plannersweb.com/>

The Planners Web is a broad resource for local or regional planners designed to provide informative articles through the *Planning Commissioners Journal* publication, which are available for purchase and download. The Planners Web contains agency links and resources for planners addressing the issues of sprawl, zoning, and dealing with the public regarding hotly debated planning topics. The site also surveys both the ten most successful and detrimental planning events that helped shape American planning as it is today. Other information available from this site includes a search

engine for articles and information on the restoration and preservation of natural resources and the development of green spaces in today's planning initiatives.

Rebuild America

<http://www.eren.doe.gov/buildings/rebuild>

Rebuild America is a program of the **U.S. Department of Energy (DOE)** that focuses on energy solutions as community solutions. Rebuild America partners with small towns, large metropolitan areas, and Native American tribes, creating a large network of peers. Rebuild America supports communities with access to **DOE Regional Offices, State Energy Offices, National Laboratories**, utilities, colleges and universities, and non-profit agencies.

Rocky Mountain Institute

<http://www.rmi.org>

Rocky Mountain Institute is a nonprofit research and educational foundation with a vision across political boundaries. Its mission is to foster the efficient and sustainable use of resources as a path to global security. The Institute creates, and helps individuals and the private sector to practice new solutions to old problems—mainly by harnessing the problem-solving power of market economics and of advanced techniques for resource efficiency.

Small Business Administration, Disaster Assistance Division

<http://www.sbaonline.sba.gov/DISASTER/>

The purpose of the SBA's Disaster Loan Program is to offer financial assistance to those who are trying to rebuild their homes and businesses in the aftermath of a disaster. By offering low-interest loans, the SBA is committed to long-term recovery efforts including hazard mitigation.

Sustainable Architecture

<http://www.aloha.net/~laumana/index.html>

This is an archive of information about sustainable architecture: ecological planning, design, integrated architecture, and landscaping for tropical, sub-tropical or temperate climates.

Sustainable Business Network

<http://sbn.netforchange.com>

The Sustainable Business Network (SBN) is a project of the EnviroLink Network and has been in existence since 1996. Its mission is to promote the growth and development of environmentally and socially responsible businesses, providing the tools and information necessary to make sustainable business a prominent global economic force.

Sustainable Communities Network

<http://www.sustainable.org>

This website discusses aspects of creating a community, smart growth, growing a sustainable economy, protecting natural resources, sustainable governing and sustainable living. It also contains case studies and links to sustainable communities.

United Nations International Strategy for Disaster Reduction

<http://www.unisdr.org/>

The UN Secretary-General proposed the International Strategy for Disaster Reduction (ISDR) as a successor to the International Decade for Natural Disaster Reduction (which ended in December 1999). A key aspect of the mission of the ISDR is to influence decision-makers and help communities focus on the creation of long-term, pro-active disaster prevention strategies. Its secondary mission is to help communities reduce the risk of longer-term social and economic disruption in the face of a natural hazard. This site provides information on various ISDR initiatives such as Public Awareness, Disaster-Resistant Communities, and El Nino. Numerous events are highlighted, including conferences on specific topics or regional areas and seminars & training classes.

United Nations Sustainable Development

<http://www.un.org/esa/sustdev>

The Commission on Sustainable Development (CSD) was established as a functional commission of the Economic and Social Council. Its role is threefold:

1. To review progress at the international, regional and national levels in the implementation of recommendations and commitments contained in **Agenda 21: The Rio Declaration on Environment and Development** and the **Forest Principles**.
2. To elaborate policy guidance and options for future activities to follow up UNCED (the Rio Conference) and achieve sustainable development.
3. To promote dialogue and build partnerships for sustainable development with governments, the international community, and the major groups identified in Agenda 21 as key actors outside the central government. These groups have a major role to play in the transition towards sustainable development, and include women, youth, indigenous peoples, non-governmental organizations, local authorities, workers and trade unions, business and industry, the scientific community, and farmers.

U.S. Department of Energy's Center of Excellence for Sustainable Development

<http://www.sustainable.doe.gov>

This site offers a menu of information and services on how communities can adopt sustainable development as a strategy for well being. Increasingly cities, villages, neighborhoods, and regions are using sustainable development as a guiding principle not only for near-term projects, but also for planning purposes. Sustainable projects strengthen local economies; improve and protect the quality of the environment; and enhance the quality of life and the well being of all people in communities.

This site describes communities that have discovered the benefits of sustainable development. There are links to help the reader locate technical and financial resources to help communities plan and carry out sustainable development projects and also links to access model codes and ordinances other communities have used to implement sustainable development.

U.S. Green Building Council

<http://www.usgbc.org>

The Council's mission is to accelerate the adoption of green building practices, technologies, policies, and standards. This committee-based organization is endeavoring to move the green building industry forward with market-based solutions. Another vital function of the Council is linking industry and government. The U.S. Green Building Council has formed effective relationships and priority programs with key Federal agencies, including the U.S. DOE, EPA, NIST, and GSA.

White House Livable Communities Initiative

<http://www.livablecommunities.gov/>

The White House Task Force on Livable Communities was created by the Clinton-Gore Administration in August 1999 to coordinate livable community policies and activities across 18 agencies of the executive branch of the Federal government. The Task Force is working to expand the choices available to communities to improve their quality of life, provide increased access to Federal information and data, and foster community partnerships.

The goal of the effort is to help revitalize communities, encourage new investments, bring historic neighborhoods back to life, develop alternative transportation methods, increase regional cooperation, protect the environment, create parks, preserve open spaces, and foster smarter growth.

World Business Council for Sustainable Development

<http://www.wbcsd.ch>

The World Business Council for Sustainable Development (WBCSD) is a coalition of some 130 international companies united by a shared commitment to sustainable development, i.e. environmental protection, social equity and economic growth.

In broad terms, the WBCSD aims to develop closer co-operation between business, government, and all other organizations concerned with the environment and sustainable development. They also encourage high standards of environmental management in business itself.

More specifically, the objectives are:

Business leadership: To be the leading business advocate on issues connected with the environment and sustainable development;

Policy Development: To participate in policy development in order to create a framework that allows business to contribute effectively to sustainable development;

Best Practice: To demonstrate progress in environmental and resource management in business and to share leading-edge practices among members;

Global Outreach: To contribute through the global network to a sustainable future for developing nations and nations in transition.

World Resources Institute Sustainable Development Information Service

<http://www.wri.org/sdis/>

The **Sustainable Development Information Service (SDIS)** provides country-level data about sustainable development and the environment. SDIS helps users identify and locate the best available information and in many cases provides direct access to online resources.

SDIS was developed by the World Resources Institute, in collaboration with the World Conservation Union (IUCN), and the International Institute for Environment and Development (IIED) as part of the International Environment and Natural Resource Assessment Information Service (INTERAISE). It was funded by the Netherlands Ministry of Foreign Affairs, and the U.S. Environmental Protection Agency.

World Wide Web Virtual Library Sustainable Development

<http://www.ulb.ac.be/ceese/meta/sustvl.html>

This site has a comprehensive list of Internet sites dealing with sustainable development, including organizations, projects and activities, electronic journals, libraries, references and documents, databases, directories or meta-databases.

Keywords: sustainable development, index, environment, development, resources, internet, world wide web, sites, durable, sustainability, Virtual Library, ecological economics.

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Appendix D

Recommended Readings in Sustainable Development

Introduction

The resources used in this Guide are categorized by content and relevance. The materials cited in Section I are strongly recommended readings that contain important resources for long-term sustainable redevelopment, hazard mitigation and recovery operations. Section II contains additional references, which will assist sustainability planners and community leaders in making informed decisions about the future of disaster-prone communities. Where possible, information and links have been provided for assistance in obtaining copies of these resources.

Section I. Recommended Reading

American Planning Association. 1998. *Growing Smart Legislative Guidebook: Model Statutes for Planning and Management of Change*. Chicago: American Planning Association Publications Office.

In *Growing Smart Legislative Guidebook: Model Statutes for Planning and Management of Change*, the American Planning Association addresses the need for new planning regulations in order to accomplish smart growth and the integration of such regulations on the state and regional levels. *Guidebook* emphasizes that states and regions have vastly differing needs in the present, and in the future, according to their location, population, and resources. To facilitate these distinct planning requirements, model statutes are highlighted in the text that gives examples of state, regional, and local alternatives according to their diverse needs. Also examined are the mechanisms for changing planning policy, and shifting the community's acceptance of policy changes that affect them.

Association of State Floodplain Managers, Inc. and The Federal Interagency Floodplain Management Task Force. 1996. Addressing Your Community's Flood Problems. Madison, Wisconsin: ASFPM.

Designed specifically for elected officials, *Addressing Your Community's Flood Problems* was created by The Federal Interagency Floodplain Task Force in 1996. The booklet provides strong guidance for local administrators in understanding their role as a leader relevant to the issues of flooding. Issues include potential flood losses, avoiding damages, coping with flood recovery, and utilizing available resources both before and after a flood disaster. Also included are the stories of four local governments that successfully addressed their flood problems while simultaneously achieving multiple community goals. Copies of this document are available from ASFPM Executive Office, 4233 West Beltline Highway, Madison, Wisconsin 53711.

Burby, Raymond J. 1998. Cooperating with Nature: Confronting Natural Hazards with Land-Use Planning for Sustainable Communities. Washington: Joseph Henry Press.

Multiple experts in the fields of land use management and natural hazards contributed to Raymond Burby's 1998 text, *Cooperating with Nature: Confronting Natural Hazards with Land-Use Planning for Sustainable Communities*. This valuable reference document is one of the first to link sustainability to disaster recovery. It explores the concepts of accomplishing sustainable development through land use management and identifies the current need for, and lack of, effective sustainable planning approaches in public policy today. *Nature*, ISBN# 0-309-063262-0 is available from the Joseph Henry Press, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

Economic Development Administration and the Federal Emergency Management Agency. January 2000. Economic Impact Assessment of Hurricane Floyd for North Carolina. Washington, D.C.

The Economic Development Administration (EDA) and FEMA combined their efforts with those of several universities in North Carolina and local agencies to produce the *Economic Impact Assessment of Hurricane Floyd for North Carolina*. Hurricane Floyd struck the North Carolina coast on September 15th and 16th, 1999, leaving approximately thirty counties with damages ranging from moderate to devastating levels of severity. The purpose of the *Economic Impact Assessment* was to provide advice for speeding the business recovery process, particularly for small businesses suffering the greatest losses, and creating disaster resistant businesses and jobs through the recovery process.

Federal Emergency Management Agency. 1995. Disaster Assistance: A Guide to Recovery Programs. Washington: GPO.

The purpose of *Disaster Assistance: A Guide to Recovery Programs*, is to provide officials, businesses, and residents alike, with information concerning disaster assistance. Created in 1995 by FEMA, the text provides an extensive list of disaster-specific and disaster-applicable programs, and financial and non-financial agencies that may be of help in either planning disaster-resistant communities, or in post-

disaster operations. Aside from Agency names, the text details the type of assistance offered and explains who is eligible for assistance.

Federal Emergency Management Agency. 1993. Emergency Management Guide for Business & Industry. Washington: GPO.

The *Emergency Management Guide for Business & Industry: A Step-By-Step Approach to Emergency Planning, Response, and Recovery for Companies of All Sizes*, is a collective public and private agency effort, sponsored by FEMA in 1993. It is an effort to educate businesses about emergencies, ranging from floods, fire, earthquakes, and tornadoes, to civil disturbances and radiological accidents. Although it avoids the term disaster its purpose is to guide companies of any size through identifying possible hazards, their vulnerability, and the development process for emergency planning, and finally, implementation of the plans.

Federal Emergency Management Agency. 1997. Multi Hazard Identification and Risk Assessment: The Cornerstone of the National Mitigation Strategy. Washington: GPO.

In 1997, FEMA published the *Multi Hazard Identification and Risk Assessment*. This reference helps to refine our understanding of hazards and their impacts on people. For each specific natural and technological hazard, the report summarizes the state of scientific and technical knowledge on the identification of hazards, and the risks that have been or can be assigned to each hazard. Also, FEMA's risk assessment methodology, HAZUS is introduced.

Federal Emergency Management Agency. 1990. Post-Disaster Hazard Mitigation Planning Guidance for State and Local Governments. DAP-12. Washington: GPO.

This guidance, often referred to as DAP-12, should be used as a reference document by officials involved in the development of hazard mitigation plans. The primary focus of this hazard mitigation planning manual is Section 409 of the Stafford Act. The reader is provided with details of the four main components of hazard mitigation planning. These include responsibilities of Federal, state, and local officials in mitigation planning; initiating the process of developing a hazard plan; developing the hazard mitigation plan; and implementing and monitoring plans.

Federal Emergency Management Agency. 2000. Mitigation Field Operations Manual. Washington: GPO.

The *Mitigation Field Operations Manual* describes the functions to be performed by mitigation field management and staff as integral parts of the total FEMA response to catastrophic disasters. This manual was developed to provide structured and standardized operational procedures. The manual presents specific details on the operations, functions, organization, and programs instituted for the effective achievement of mitigation through national approaches. These approaches incorporate state and local communities into the disaster prevention and emergency response process. The manual is also designed to provide mitigation professionals with a comprehensive reference tool for reducing long-term hazard risks.

Federal Emergency Management Agency. 2000. The Natural and Beneficial Functions of Floodplains: Reducing Flood Losses by Protecting and Restoring the Floodplain Environment: A report for Congress by the Task Force on the Natural and Beneficial Functions of Floodplains. Washington: GPO.

The Task Force on the Natural and Beneficial Functions of Floodplains was established by Congress to help identify the natural functions and benefits of floodplains, and determine how the nation can reduce flood losses through floodplain restoration and protection. In their 2000 publication, *The Natural and Beneficial Functions of Floodplains*, the Task Force explores the valuable functions of pristine or restored floodplains and their contributions to flood reduction and prevention. The document also reveals the damages historically resulting from human development in flood hazard areas, but also explores the biological, environmental, social and economic functions and values of floodplains, along with restoration and protection initiatives.

Federal Emergency Management Agency. 1999. The President's Long-Term Recovery Action Plan: Puerto Rico, Hurricane George September 1998. Washington: GPO.

The President's Long-Term Recovery Action Plan: Puerto Rico, is an example of the type of document produced when the President's Long-Term Recovery Task Force is called into operation. This example was chosen because it is the first time that the President's Long-Term Recovery Task Force looked at the issue of sustainability, and incorporating that ideal into the recovery process. Hazard mitigation and sustainability, addressed through building codes, planning, and floodplain management, was a key element of the recovery operations. The actions of Federal entities for both the recovery and prevention of future disasters are examined in detail.

Mileti, Dennis S. 1999. Disasters by Design: a Reassessment of Natural Hazards in the United States. Washington: Joseph Henry Press.

Disasters by Design offers a way to view, study, and manage hazards in the U.S. that will help foster disaster-resistant communities, higher environmental quality, inter- and intragovernmental equity, economic sustainability, and an improved quality of life. The volume provides an overview of what is known about natural hazards, disasters, recovery, and mitigation. It reveals how findings have been translated into policies and programs, and advances a sustainable hazard mitigation research agenda. ISBN# 0-309-06360-4 is available from the Joseph Henry Press, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

Planning for Natural Hazards: Oregon Technical Resource Guide. 2000. Oregon Department of Land Conservation and Development.

This guide is part of the state's response to damaging flood and landslide events in 1996 and 1997. The guide is written for a wide audience and will be a useful tool for anyone from city clerk to planning commissioner. It provides valuable information on how to identify, plan for, and address natural hazards in a user-friendly format. It also directs local governments to additional resources and information that may be needed to solve local problems. The overall emphasis of this guide is on strengthening local comprehensive land use plans. Many aspects of the guide are specific to Oregon, but could easily be adapted for use nation wide.

The President's Council on Sustainable Development. May 1999. Towards a Sustainable America: Advancing Prosperity, Opportunity, and a Healthy Environment for the 21st Century. Washington: GPO.

The President's Council on Sustainable Development was formed in 1993. *Towards a Sustainable America* is the third publication by the Council, aimed at promoting the benefits of sustainable development for an enduring, prosperous and healthy nation. This report encompasses the reduction of greenhouse gases, strategies for environmental management into the 21st century, strengthening partnerships between agencies and communities, and the development of U.S. regulations that would benefit international sustainable development policy. To obtain a copy of this report, contact: President's Council on Sustainable Development Publications at (800) 363-3732, or at the Council's Website: <http://www.whitehouse.gov/PCSD>.

United Nations Environment Programme. 1998. Sustainable Business: Economic Development and Environmentally Sound Technologies. London: The Regency Corporation Limited.

In an effort to shepherd business and industry towards environmentally sound technologies that result in higher production and less waste, the United Nations Environment Programme created *Sustainable Business* in 1998. The report explains and encourages environmental conservation, whose success depends on the development, support, and use of environmentally sound technologies. Resources discussed include energy and water, and renewable energy resources. The movement away from heavy-polluting industry, including the costs of technology upgrades and the roles of regulatory agencies in the transition are also discussed. Copies of the report may be ordered through: Regency Corporation Limited, Gordon House, 6 Lissenden Gardens, London NW5 1LX, UK, or from <http://www.regencycorp.com>.

Urban Land Institute. 1998. Smart Growth: Economy, Community, Environment. ULI on the Future. Washington: GPO.

The Urban Land Institute in *Smart Growth: Economy, Community, Environment*, presents an instructive look at the integral concepts of Smart Growth and Sustainability. Topics in the text include the benefits of infill development and redevelopment for cities and suburbs alike, transportation alternatives, and residential density policies and planning practices. Other issues detailed are state initiatives that foster smart growth and the elements of successful metropolitan redevelopment. The text, ISBN# 0-87420-862-9 is available from the ULI at 1025 Thomas Jefferson Street, N.W., Washington, D.C. 20007-5201.

Washington State Community, Trade and Economic Development. 1998. Optional Comprehensive Plan Element for Natural Hazard Reduction. Washington State.

This guidebook was designed to provide Washington cities and counties with the necessary tools for implementing effective hazard mitigation policy into their community plans. The guidebook is targeted to Washington planners with little or minimal experience, and is based on various scenarios regarding resources and population, etc. The guidebook encompasses hazards such as landslides, fire and floods, and guides planners from defining a need for hazard mitigation, through mitigation policy, to the development and implementation of hazard mitigation plans.

Section II. Additional References

Adams, David A. Renewable Resource Policy: The Legal Institution Foundation. Raleigh, North Carolina: North Carolina State University.

Architects for Social Responsibility. No date. An Approach to Sustainable Design and Sourcebook for Sustainable Design. Swampscott, Massachusetts: St. John Russell Associates. (617) 596-1155.

Audirac, Ivonne. 1997. Rural Sustainable Development in America. New York: John Wiley & Sons.

Barnett, Dianna L. and William D. Browning. 1995. A Primer on Sustainable Building. Snowmass, Colorado: Rocky Mountain Institute.

Bauen, Rebecca and Bryan Baker, Kirk Johnson. 1996. Sustainable Community Checklist. Seattle, Washington: Northwest Policy Center.

Beatley, Timothy and Phillip R. Berke. 1998. After the Hurricane: Linking Recovery to Sustainable Development in the Caribbean. Baltimore, Maryland: Johns Hopkins University Press.

Benello, C. George. 1989. Building Sustainable Communities: Tools and Concepts for Self-Reliant Economic Change. New York, New York: Bootstrap Press. (212) 972-9878.

Bossel, Hartmut. 1998. Earth at Crossroads: Paths to a Sustainable Future. Cambridge, Massachusetts: Cambridge University Press.

Bueler, William M. 1997. An Agenda for Sustainable: Fairness in a World of Limits. Cross Cultural Publishers.

Campbell, Matthew J. & Colin S. Vissering. 2000. *Sustainable Re-development after Flood Disasters: The Case for Restoration of Open Space in Floodplains*. Proceedings of the National Association of Environmental Professionals Annual Conference. Washington, D.C.

Center for Neighborhood Technology. 1997. The Metropolitan Initiative: Learning Sustainability Region by Region. Chicago, Illinois.

City of Austin, Environmental and Conservation Services Department. Green Building Guide and Sustainability Building Sourcebook. Austin, Texas.

Environmental Design Charrette Workbook. 1996. AIA Publications.

Federal Emergency Management Agency. 1998. A Blueprint for Action. The President's Long-Term Recovery Action Plan: January 1998 Ice Storm. Maine, New Hampshire, New York, and Vermont. Washington: GPO.

Federal Emergency Management Agency. 1981. Design Guidelines for Flood Damage Reduction. Washington: GPO.

- Federal Emergency Management Agency. 1997. Reports on Cost and Benefits of Natural Hazard Mitigation. Washington: GPO.
- Federal Emergency Management Agency. 1998. The President's Long-Term Recovery Action Plan: Florida, 1997-1998 Winter Storms. Washington: GPO.
- Federal Emergency Management Agency. 1998. The President's Long-Term Recovery Action Plan for the March 1998 Georgia Floods. Washington: GPO.
- Federal Emergency Management Agency. 1998. The Project Impact: Hazard Mitigation Guidebook for Northwest Communities. Washington: GPO.
- Goldman, Benjamin A. No date. Sustainable America: New Public Policy for the 21st Century. Washington, DC: Economic Development Council.
- Johnson, Huey D. 1995. Green Plans: Greenprint for Sustainability. Lincoln, Nebraska: University of Nebraska Press.
- Kinsley, Michael J. 1997. Economic Renewal Guide: A Collaborative Process for Sustainable Community Development. Snowmass, Colorado: Rocky Mountain Press.
- Krizek, Kevin J. and Joe Power. December 1996. A Planners' Guide to Sustainable Development. Chicago, Illinois: American Planning Association Publications Office.
- Lafferty, William and Oluf Langhelle (Eds.). 1999. Towards Sustainable Development: On the Goals of Development and the Conditions of Sustainability. St. Martin's Press.
- Lachman, Beth E. 1997. Linking Sustainable Community Activities to Pollution Prevention: A Sourcebook. Washington, DC: Rand Critical Technologies Institute.
- MacSems, Michael and Sophie Stimson, Toni Ritter, Lauri Vigue. 1991. First Steps Toward a Sustainable Community: Concepts, Indicators and Policy Analysis. Olympia, Washington: City of Olympia, June 1991; vii.
- Maser, Chris. 1997. Sustainable Community Development: Principles and Concepts. Delray, Florida. St. Lucie Press.
- Meadows, Donella H. and Daniel L. Meadows, Jorgan Randers. 1993. Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future. Chelsea Green Publishing.
- Mitler, Elliot. 1997. An Assessment of Floodplain Management of Georgia's Flint River Basin. Boulder, Colorado: University of Colorado.
- Morris, Marya. 1997. Subdivision Design in Flood Hazard Areas. Chicago: American Planning and Publications Office.
- Munro, David A. 1991. Caring for the Earth: A Strategy for Sustainable Living. Gland, Switzerland: IUCN, UNEP, WWF.
- North Carolina Disaster Recovery Task Force. 1996. Executive 104.

North Carolina Division of Emergency Management. November 1998. Keeping Natural Hazards from Becoming Natural Disasters: A Workbook for Local Governments.

North Carolina Division of Emergency Management. November 1998. Local Hazard Mitigation Planning Manual (Draft).

Public Technology, Inc., U.S. Green Building Council, U.S. Department of Energy and the U.S. Environmental Protection Agency. 1996. Sustainable Building Technical Manual: Green Building Design, Construction, and Operations. Washington, DC: PT I, 1 vol.

Rogers, John J. W. and P. Geoffrey Feiss. 1998. People and the Earth: Basic Issues in the Sustainability of Resources and Environment. Cambridge, Massachusetts: Cambridge University Press.

Rozdilsky, Jack L. 1998. Disaster Recovery: An Opportunity for Sustainable Community Development. East Lansing, Michigan: Michigan State University.

Solow, Robert M. 1998. An Almost Practical Step Toward Sustainability. Resources for the Future.

Technical Mapping Advisory Council 1999 Annual Report. Activities and Accomplishments 1999. www.fema.gov/mit/tsd/TMC_992a.htm.

Urban Consortium Energy Task Force. 1992. Sustainable Energy: A Local Government Planning Guide for a Sustainable Future. Washington, DC: Public Technology, Inc.

U.S. Department of Energy. 1999. Communities for the Future: Energy Programs for Livable Communities. Washington: GPO.

U.S. Department of Interior, National Park Services. 1991. A Casebook in Managing Rivers for Multiple Uses. Washington: GPO.

U.S. Environmental Protection Agency. 1998. Clean Water Action Plan: Restoring and Protecting America's Waters. Washington: GPO.

U.S. Environmental Protection Agency. 1997. Community-Based Environmental Protection: A Resource Book for Protecting Ecosystems and Communities. Washington: GPO.

U.S. Environmental Protection Agency. 1997. People, Places, and Partnerships: A Progress Report on Community-Based Environmental Protection. Washington: GPO.

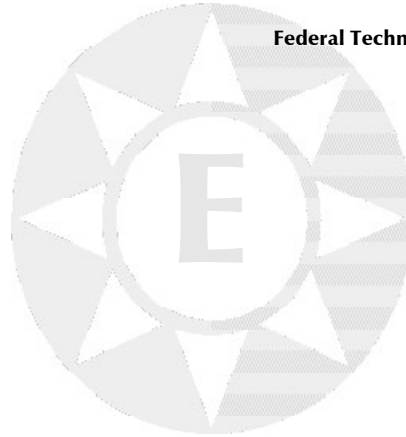
U.S. Environmental Protection Agency. 1995. Sustainability in Action: Profiles of Community Initiatives Across the United States. Washington: GPO.

Ven der Ryn, Sim and Peter Calthorpe. 1991. Sustainable Communities: A New Design Synthesis for Cities, Suburbs, and Towns. San Francisco, California: Sierra Club Books.

Walter, Bob and Lois Arkin, Richard Crenshaw (Eds.). 1992. Sustainable Cities: Concepts and Strategies for Eco-City Development. Los Angeles, California: Eco-Home Media.

World Resources Institute. 1997. Exploring Sustainable Communities: Comprehensive Coursework on the Global Environment. Dubuque, Iowa: Kendall/Hunt Publishing Co.

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Appendix E

Federal Technical Assistance and Funding

The Federal Government offers a wide range of funding and technical assistance programs to help make communities more sustainable and livable. Many of these are included in the following Federal Technical Assistance and Funding Matrix. Programs with potential effectiveness in the construction or reconstruction of housing and businesses, public infrastructure (transportation, utilities, water, and sewer), and supporting overall hazard mitigation and community planning objectives are emphasized in the matrix. Some programs are disaster-specific, activated by a presidential declaration of a major disaster or emergency under the provisions of the Stafford Act. Also included are many programs or grants that are not specifically disaster related.

Grant Name	Agency	Purpose	Sustainability and Hazard Mitigation Application	Contact	Program Eligibility
EMERGENCY MANAGEMENT AND HAZARD MITIGATION					
Emergency Management Performance Grants (EMPG)	Federal Emergency Management Agency (FEMA)	To encourage the development of comprehensive emergency management, including terrorism consequence management, at the State and local level and to improve emergency management planning, preparedness, mitigation, response, and recovery capabilities.	Funding provided to States, which can be used to educate people and protect lives and structures from natural and technological hazards.	Office of Financial Management, FEMA 500 C Street, S.W. Washington, DC 20472 Telephone: 202.646.7057 http://www.fema.gov	All States are eligible (including the District of Columbia and territories and possessions of the United States).
Flood Mitigation Assistance Program	Federal Emergency Management Agency (FEMA)	To help States and communities plan and carry out activities designed to reduce the risk of flood damage to structures insurable under the NFIP.	The program provides planning and grants for projects that include mitigation activities that are technically feasible and cost-effective.	Director, Program Support Division, Mitigation Directorate, FEMA 500 C Street, S.W. Washington, DC 20472 Telephone: 202.646.4621 http://www.fema.gov/mit/fludmitast.htm#fludmit	All States are eligible (including the District of Columbia and territories and possessions of the United States). Structures must be insured through the NFIP at the time of application. States or communities requesting consideration for a Project Grant must have a Flood Mitigation Plan approved by the FEMA Regional Director.
Hazard Mitigation Grant Program (HMG-P)	Federal Emergency Management Agency (FEMA)	To prevent future losses of lives and property due to disasters; to implement State or local hazard mitigation plans; to enable mitigation measures to be implemented during immediate recovery from a disaster; and to provide funding for previously identified mitigation measures to benefit the disaster area.	Project grants can be funded for such activities as acquisition, relocation, elevation, and improvements to facilities and properties to withstand future disasters.	Director, Program Support Division, Mitigation Directorate, FEMA 500 C Street, S.W. Washington, DC 20472 Telephone: 202.646.4621 http://www.fema.gov/mit/grant.htm	Projects must be cost-effective, must meet Federal environmental requirements, and must be consistent with the overall State Hazard Mitigation Plan.
Community Development Block Grant (CDBG)	Department of Housing and Urban Development (HUD)	To develop viable urban communities by providing decent housing and a suitable living environment. Principally to benefit low-to-moderate income individuals.	Community Development activities that meet long-term needs. These activities can include acquisition, rehabilitation, reconstruction of properties and facilities damaged by a disaster, and redevelopment of disaster affected areas.	State and Small Cities Division, Office of Block Grant Assistance, CPD, HUD 451 7th Street, S.W. Washington, DC 20410-7000 Telephone: 202.708.3587 http://www.hud.gov/bdgy2000/summary/cpd/cdbg.html	Activities must meet one of the following broad national objectives: benefit persons of low and moderate income; aid in the prevention or elimination of slums or blight; or meet other community development needs of particular urgency. HUD has statutory authority to waive certain requirements for activities designed to address damage from Presidentially declared disasters.

Grant Name	Agency	Purpose	Sustainability and Hazard Mitigation Application	Contact	Program Eligibility
HOUSING					
Economic Development and Adjustment Program, Sudden and Severe Economic Dislocation (Title IX)	Department of Commerce, Economic Development Administration (EDA)	To help States and localities to develop and/or implement strategies that address adjustment problems resulting from sudden and severe economic dislocation.	Project grants can be funded in response to natural disasters, including improvements and reconstruction of public facilities.	Disaster Recovery Coordinator, Economic Adjustment Division, EDA, DOC Herbert C. Hoover Building Washington, DC 20230 Telephone: 800.345.1222 or 202.482.6225 http://www.doc.gov/eda/html/prgtitle.htm	An applicant may be a state, city, or other political subdivision or redevelopment area recognized by EDA. The area to be assisted must either (1) have experienced, or anticipate, a change in the economic situation resulting in the loss of a significant number of permanent jobs relative to the area's employed labor force and/or other severe economic impacts; or (2) manifest at least one of three symptoms of economic deterioration (very high unemployment, low per capita income, or failure to keep pace with national economic growth trends over the last five years).
Disaster Housing Program	Federal Emergency Management Agency (FEMA)	To provide assistance to enable households to address disaster-related housing needs.	Program assistance may include 1) Short-term Lodging; 2) Home Repair Assistance to restore the home to a livable condition; 3) Rental Assistance; 4) Mortgage and Rental Assistance; 5) Small minimization grants to incorporate hazard mitigation in home repair.	Human Services Division, Response and Recovery Directorate, FEMA 500 C Street, S.W. Washington, DC 20472 Telephone: 202.646.3642 http://www.fema.gov/f-types.htm	Applicants must sign a declaration stating that they are lawfully present in the US and its Territories.
INFRASTRUCTURE					
Sustainable Development Assistance	Department of Energy (DOE), Community Services Team	The Team works with communities to help them define and implement sustainable development strategies as part of their comprehensive community planning efforts.	The Team provides technical assistance to disaster-affected communities as they plan for long-term recovery by introducing a wide array of environmental technologies and sustainable redevelopment planning practices.	DOE, Office of Energy Efficiency and Renewable Energy, Denver Regional Support Office 1617 Cole Blvd, Golden, CO 80401 Telephone: 303.275.4801 http://www.sustainable.doe.gov	Contact the Department of Energy's Community Services Team for the most current eligibility requirements.
Flood Control Works/Emergency Rehabilitation	Department of Defense, US Army Corps of Engineers (USACE)	To assist in the repair and restoration of public works damaged by flood, extraordinary wind, wave, or water action.	The Corps provides public works and engineering support to supplement State and local efforts toward the effective and immediate response to a natural disaster.	Program Manager PL 84-99 USACE, 20 Massachusetts Ave, N.W. Washington, DC 20314 Telephone: 202.761.0001 http://www.spd.usace.army.mil/hcpam.html	Applicant must meet current engineering and maintenance criteria, cost sharing (80 percent Federal and 20 percent non-Federal), and public sponsorship of non-Federal flood control projects.

Grant Name	Agency	Purpose	Sustainability and Hazard Mitigation Application	Contact	Program Eligibility
INFRASTRUCTURE (continued)					
Public Assistance Program	Federal Emergency Management Agency (FEMA)	To provide supplemental assistance to States, local governments, and certain private nonprofit organizations to alleviate suffering and hardship resulting from major disasters or emergencies declared by the President.	These grants allow State and local units of government to respond to disasters, recover from their impact and mitigate impact from future disasters.	Infrastructure Support Division, Response and Recovery Directorate, FEMA 500 C Street, S.W. Washington, DC 20472 Telephone: 202.646.3026 http://www.fema.gov/r-n-r/ pa	Eligible applicants include State and local units of government, certain private non-profits, and Native American tribes. For insurable structures (primarily buildings) located in identified special flood-hazard areas, assistance is reduced by the amount of insurance that could have been obtained under a standard NFIP policy.
Transportation: Emergency Relief Program	Department of Transportation, Federal Highway Administration (FHWA)	To provide aid for repair of Federal-aid roads.	The funds can be used to repair federal-aid roads by using new technologies that improve the quality and lifespan of the roads.	Director, Office of Engineering, FHWA, DOT 400 7th Street, S.W. Washington, DC 20590 Telephone: 202.366.4655 http://www.fhwa.dot.gov/infrastructure/progadmin/erelief.html	No State match is required for emergency repairs accomplished within 180 days of the disaster, in order to restore essential travel. Otherwise, the Federal share is based on the Federal-aid highway on which eligible damage occurred. No State match is required for repair of roads on Federal lands. The estimated cost for repairs to Federal-aid highways must exceed \$500,000 for a State to be eligible.
Water Pollution Control	Environmental Protection Agency Office of Water	To help establish and maintain adequate measures for prevention and control of surface water and groundwater pollution.	Protecting the quality of ground and surface water today will insure the safety of water sources for future generations.	Office of Water, EPA, Washington, DC 20460 Telephone: 202.260.6742 http://www.epa.gov/owm/finan.htm#sec106	All States are eligible as well as interstate water pollution control agencies, including those in US Territories, the District of Columbia, and Indian Tribes.
Water and Waste Disposal Loans and Grants	Department of Agriculture, Rural Utilities Service (RUS)	To develop, replace, or repair water and waste disposal (including storm drainag) systems in rural areas and towns with a population of 10,000 or less.	Use energy-efficient pumps and incorporate mitigation measures when restoring or replacing damaged water and sewer systems.	Assistant Administrator, Water and Waste, RUS, USDA Washington, DC 20250-3200 Telephone: 202.720.9583 http://www.usda.gov/rus/water/programs.htm	Towns or rural areas with populations of 10,000 or fewer. During an emergency, funds would be made available for loans or grants for the repair of rural water and waste disposal systems damaged by natural disasters. Funds cover any facility that did not receive assistance from other sources, so that impacted communities can continue to provide safe drinking water and wastewater treatment facilities.
National Dam Safety Program (NDSP)	Federal Emergency Management Agency (FEMA)	To provide financial assistance incentives to States so they can strengthen their dam safety program.	Funds may be used to enhance an existing dam safety program and provide training, annual maintenance and dam inspections.	Director, National Dam Safety Program, FEMA 500 C Street, S.W. Washington, DC 20472 Telephone: 202.646.2704 http://www.fema.gov	Limited to States who provide up to 50 percent of the costs to establish and maintain dam safety programs.

Grant Name	Agency	Purpose	Sustainability and Hazard Mitigation Application	Contact	Program Eligibility
HISTORIC PRESERVATION					
Repair and Restoration of Disaster-Damaged Historic Properties	Federal Emergency Management Agency (FEMA)	To evaluate the effects of repairs to, restoration of, or mitigating hazards to disaster-damaged historic structures working in concert with the requirements of the Stafford Act.	Preservation of historic structures is an important link to our past. By providing assistance in mitigating future damages, historic structures can be saved for future generations to enjoy.	Infrastructure Support Division, Response and Recovery Directorate, FEMA 500 C Street, S.W. Washington, DC 20472 Telephone: 202.646.3026 http://www.fema.gov/nwz99/fldhsthm.htm	State and local governments, and any political subdivision of a State; Indian tribes; and Alaskan villages are eligible. Also private nonprofit organizations that operate educational, utility, emergency or medical facilities, or provide custodial care or other essential services of a governmental nature to the general public. As a condition of the grant, applicants are encouraged to mitigate natural hazards.
Historic Preservation Fund Grants-in-Aid	Department of the Interior, National Park Service (NPS)	To provide matching grants to States to expand the National Register of Historic Places, the nation's listing of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture.	Grants-in-Aid are provided for the identification, evaluation, and protection of historic properties by such means as survey, planning, technical assistance, acquisition, development, and certain tax incentives available for historic properties.	Associate Director, Cultural Resources, NPS, DOI Washington, DC 20240 Telephone: 202.343.9509 http://www.cr.nps.gov/helpyou.htm#grants	Eligible applicants are the National Trust for Historic Preservation, and States and Territories defined in the National Historic Preservation Act that operate programs administered by a State historic preservation officer.
LAND MANAGEMENT					
Emergency Watershed Protection	Department of Agriculture, Natural Resource Conservation Service (NRCS)	To provide emergency technical and financial assistance to install or repair structures that reduce runoff and prevent soil erosion to safeguard life and property.	In preventing substantial run-off and erosion, the program helps prevent future property loss and preserves soil resources.	Deputy Chief for Natural Resource Programs, NRCS, USDA PO Box 2890 Washington, DC, 20013 Telephone: 202.720.3527 http://www.ftw.nrcs.usda.gov/pl566/EWP/ewp.htm	Eligible lands must be non-urban low lands, which are predominantly cropland, grazing land, hayland, or forest land, that lie adjacent to the channel of a river, stream, watercourse, lake, or ocean and have been subject to flood damage.

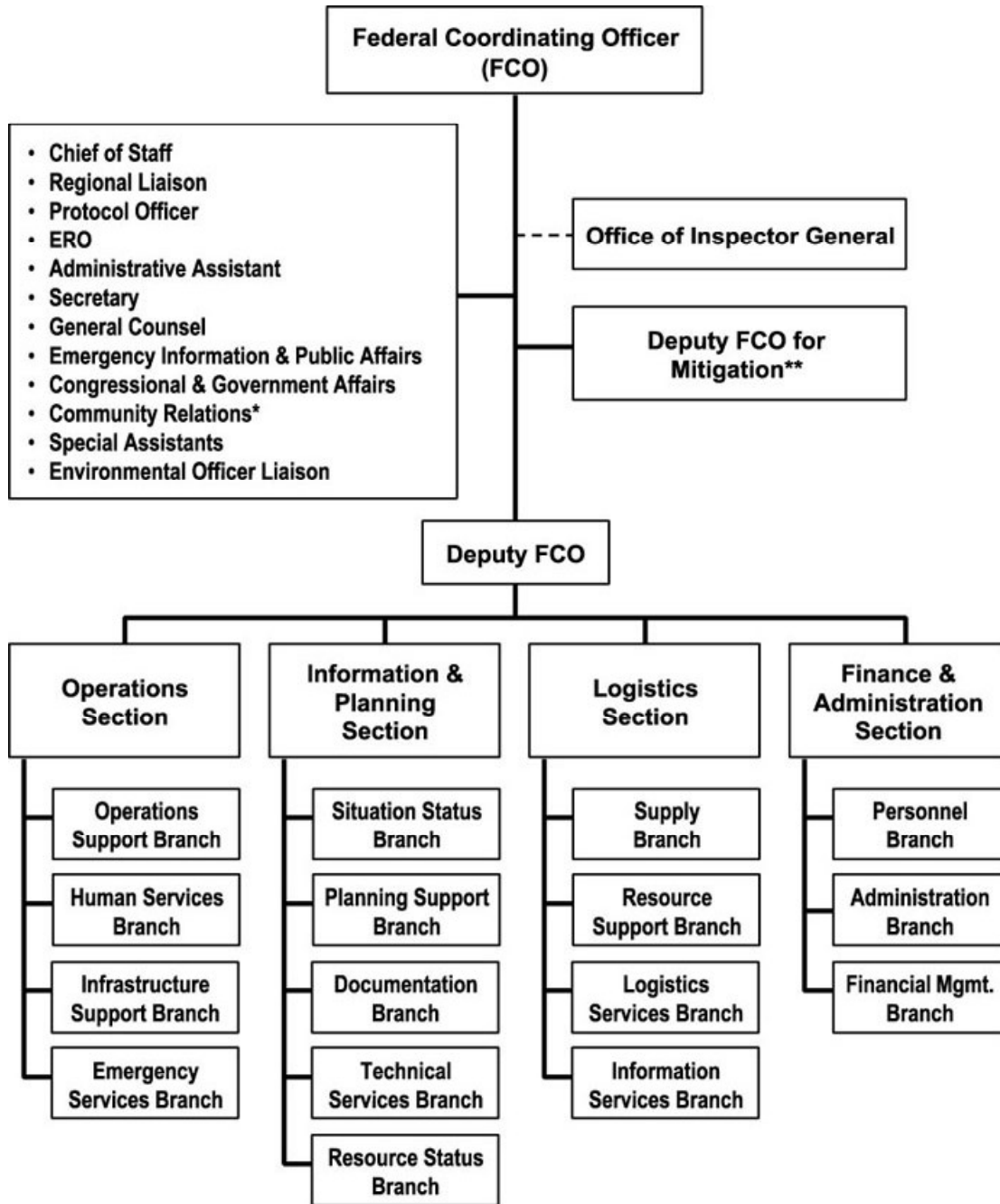
Grant Name	Agency	Purpose	Sustainability and Hazard Mitigation Application	Contact	Program Eligibility
Land Management (continued)					
Coastal Zone Management Administration Awards	Department of Commerce, National Oceanic and Atmospheric Administration (NOAA)	To assist States in implementing and enhancing coastal zone management programs that have been approved by the Secretary of Commerce	The program aids in the protection and preservation of sensitive coastal zones and provides the added benefit of reducing development in high coastal hazard areas.	Chief, Coastal Programs Division, Office of Ocean and Coastal Resource Management, National Ocean Service, NOAA, DOC 1305 East-West Highway Silver Spring, MD 20910 Telephone: 301.713.3102 http://www.ocrm.nos.noaa.gov/	To be eligible, a State or U.S. Territory must have started developing a coastal zone management program prior to application of grant funds.
Coastal Wetlands Planning, Protection, and Restoration Act	Department of the Interior, US Fish and Wildlife Service (USF&WS)	To grant funds to coastal States for restoration, enhancement, and management of coastal wetlands ecosystems.	The program aids in the protection and preservation of sensitive coastal zones.	FWS, DOI 4401 N. Fairfax Drive, Suite 140 Arlington, VA 22203 Telephone: 703.358.2156 http://www.cfda.gov/public/viewprog.asp?progid=448	Funds are available to all States bordering on the Great Lakes or the Atlantic, Gulf (except Louisiana), and Pacific coasts. Also available to Puerto Rico, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, the Trust Territories of the Pacific Islands, and American Samoa.
Land and Water Conservation Fund Grants	Department of the Interior, National Park Service (NPS)	To acquire and develop outdoor recreation areas and facilities for the general public, to meet current and future needs.	Project grants may be used for a wide range of outdoor recreation projects, such as picnic areas, campgrounds, tennis courts, boat launching ramps, bicycle trails, and support facilities.	Chief, Recreation Grants Division, NPS, DOI PO Box 37127 Washington, DC 20013-7127 Telephone: 202.565.1200 http://www.ncrc.nps.gov/lwcf/	Participation is limited to State and Territory agencies that have entered into a cooperative agreement with the Secretary of the Interior.
Park and Recreation Recovery Program	Department of the Interior, National Park Service (NPS)	To provide for the rehabilitation of recreation areas and facilities, demonstration of innovative approaches to improve park system management and recreation opportunities, and development of improved recreation planning.	The program allows jurisdictions to provide recreational facilities in areas prone to natural disasters.	Chief, Recreation Grants Division, NPS, DOI PO Box 37127 Washington, DC 20013-7127 Telephone: 202.565.1200 http://www.ncrc.nps.gov/uparr/	Urban cities and counties that meet the eligibility requirements were listed in the October 9, 1979 Federal Register. Contact headquarters to inquire which communities qualify.

Grant Name	Agency	Purpose	Sustainability and Hazard Mitigation Application	Contact	Program Eligibility
Land Management (continued)					
River Basin Program	Department of Agriculture, Natural Resource Conservation Service (NRCS)	To provide planning assistance to Federal, State, and local agencies for the development of coordinated water and related land resource programs.	Priority is given to projects designed to solve problems of upstream rural community flooding; water quality improvement that comes from agricultural nonpoint sources; wetland preservation; and drought management for agricultural and rural communities.	Deputy Chief for Natural Resource Programs, NRCS, USDA PO Box 2890 Washington, DC, 20013 Telephone: 202.690.4575	Any State or local water resource agency or other Federal agency concerned with water and related land-resource development. USDA participation is based on a cooperative effort with other agencies or Indian tribes. State and local agencies are expected to participate in the studies and to fund their own activities.
Watershed Protection and Flood Prevention	Department of Agriculture, Natural Resource Conservation Service (NRCS)	To provide technical and financial assistance in planning and executing works of improvement to protect, develop, and use land and water resources in small watersheds.	Protecting watersheds enables future generations to enjoy those watershed land resources in the future.	Deputy Chief for Natural Resource Programs, NRCS, USDA PO Box 2890 Washington, DC, 20013 Telephone: 202.720.4527 http://www.fw.nrcs.usda.gov/pl566/pl566.html	Watershed projects must address one or more of the following, including: watershed protection, flood prevention, and agricultural and nonagricultural water management. Projects must solve problems and needs that are beyond the capability of the individual landowners, and must be sponsored by entities legally organized under state law. Sponsors must also have the power of eminent domain and the authority to levy taxes or other adequate funding sources to finance their share of the project cost and all operation, maintenance, and replacement costs of works of improvement.

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Appendix F DFO Organizational Chart



* Position includes outreach

** Operational responsibility for hazard mitigation only; no line responsibility for sections