HMGP GLOSSARY

322 Plan: (See Hazard Mitigation Planning or Sub-grantee Multi-Hazard Mitigation Plan)

5% Initiative Projects: These projects provide an opportunity to fund mitigation actions that are consistent with the goals and objectives of the State and local Hazard Mitigation Plans and meet all HMGP program requirements, but for which it may be difficult to conduct a standard BCA to prove cost effectiveness.

Acquisition of property and Structure Demolition: The acquisition of an existing at-risk structure and, typically, the underlying land, and conversion of the land to open space through the demolition of the structure. The property must be deed-restricted in perpetuity to open space uses to restore and/or conserve the natural floodplain functions.

Base Flood: A flood having a 1-percent chance of being equaled or exceeded in any given year.

Base Flood Elevation (BFE): The elevation shown on the FIRM for Zones AE, AH, A1-A30, AR, AR/A, AR/AE AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a 1-percent chance of equaling or exceeding that level in any given year. This number is the height above the average sea level that waters from a 1% flood will reach at a given point along a creek or bayou. These elevations are determined using hydrology and hydraulic computer models and then these elevations are mapped on the topographic data for the area to produce the 1% floodplain. They are calibrated by creating a model which uses actual data from real events such as Tropical Storm Allison to make sure that they are accurately predicting the level of flood risk. BFE's are found on Flood Insurance Rate Maps (FIRMs) by locating the waterway nearest the structure and correlating the closest Base Flood Elevation Line with the structure. This is usually an approximation using the BFE line closest to the Cross Section Line. These lines are noted in the legend on each map

Benefit Cost Analysis (BCA): A quantitative procedure that assesses the the cost effectiveness of a hazard mitigation measure by taking a long-term future view of avoided future damages as compared to the present cost of a project. The outcome of the analysis is a benefit-cost ratio, which demonstrates whether the net present value of benefits exceeds the net present value of costs.

Benefit Cost Ratio (BCR): A numerical expression of the cost effectiveness of a project calculated as the net present value of total project benefits divided by the net present value of total project cost.

Building: A structure with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site; a manufactured home or a travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws. "Building" does not mean a gas or liquid storage tank or a recreational vehicle, park trailer, or other similar vehicle.

Clean-site certification: A certification from the appropriate government agency indicating that a site which was subject to a remedial, removal, response or corrective action under Federal or State law is clean from hazardous materials.

Community Rating System (CRS): A program developed by FEMA to provide incentives for those communities in the NFIP that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

Conditional Letter of Map Revision (CLOMR): This letter from FEMA provides comments on a proposed project and its resulting affect on revising a FIRM if the project is constructed. It indicates whether the project meets NFIP criteria. Documentation justifying the proposed projects impact on the floodplain within the District's jurisdiction must be reviewed and approved by the District's Floodplain Management Staff prior to being submitted to FEMA for a CLOMR. The Floodplain Management Staff also prepare CLOMR studies for proposed District Project's within FEMA jurisdiction. The studies consist of a number of elements including a pre-project hydraulic model that is capable of matching the existing FEMA hydraulic model (Duplicate Effective Model) and a post project hydraulic model representing the changes the project will generate.

Costs: Direct: Costs incurred by a Grantee will include; damages to structures and infrastructure in the project area as a result of the hazard.

Indirect: Includes the cost to the local government to respond to the victims of the hazard in the project area, should also include costs associated with interruption to local businesses, and losses of public services.

Indirect Cost Rate: Percentage established by a Federal department or agency for a Grantee to use in computing the dollar amount it charges to the grant to reimburse itself for indirect costs incurred in doing the work of the grant activity.

Cost share: The portion of the costs of a federally assisted project or program not borne by the Federal Government.

Cost Effectiveness: Determined by a systematic quantitative method for comparing the costs of alternative means of achieving the same stream of benefits or a given objective. The benefits in the context of hazard mitigation are the avoided future damages and losses. Cost effectiveness is determined by performing a BCA.

Confluence: Confluence is at the joining of two rivers, creeks, etc.

Construction Date: Date the home was constructed. Use the date the original structure was built. Date additions/out buildings separately.

Datum: All ground surface elevations are measured from a certain point called a datum.

National Geodetic Vertical Datum of 1929 (NGVD29) & North American Vertical Datum of 1988 (NAVD88)

There are two vertical control datums for the North American Continent. The Datums are referenced to mean sea level. NGVD29 was based on sea level measurements and leveling networks along the coast, NAVD88 was based on gravity measurements and uses the Great Lakes to determine sea level. They are completely different datums, based on slightly different ellipsoid models of the earth. The difference between models produces slightly different elevations at any given point on the surface of the earth. It is very important to understand which vertical datum your survey information is based on. The elevation difference between the datums is generally less than 2.5 feet in Riverside County. Many engineers have had to make costly changes to their design during construction because they hadn't noticed that a plan set they had based a design on was on a different vertical datum than the rest of the project.

North American Datum (NAD)

The horizontal control datum for the North American Continent. It was first established in 1927 (NAD27) by geodetic surveying methods, using Meades Ranch in Kansas as its base position. A new datum was established in 1983, based on a more accurate geodetic model of the earth's surface (NAD83). NAD83 coordinate points cannot be directly interchanged with NAD27 coordinate points. Both datums refer to the x coordinate as an "Easting" and the y coordinate as a "Northing". Coordinates increase as you head east and north.

Detailed Specifications: A detailed, exact statement of particulars, prescribing materials and methods, quality and payment for specific items of work for the project. The detailed specifications cover items such as mobilization, water control, traffic control, clearing work, earthwork, trench safety systems, concrete construction, precast reinforced concrete pipe, cast in-place concrete pipe, fences and gates, miscellaneous construction items, dust abatement and NPDES requirements for District Projects. This is where you would find information on strength, testing and placement of materials. See the "concrete construction specifications" for a more detailed example of the information provided in the Detailed Specifications.

Digital Flood Insurance Rate Maps (DFIRMs): Paper to digital- Beginning on or after October 1, 2009, FEMA will provide a single paper flood map and Flood Insurance Study (FIS) to each mapped community. FEMA will convert all other distribution of maps and FIS reports for digital delivery. FEMA will continue to provide free digital map products and data to Federal, State, Tribal, and local NFIP stakeholders.

Dry Floodproofing: Techniques applied to keep structures dry by sealing the structure to keep floodwaters out**.**

Dwelling: A building designed for use as a residence for no more than four families or a single-family unit in building under a condominium form of ownership.

Easement: A non-possessing interest held by the District in the land of another whereby the District is accorded partial use of such land for a specific purpose. An easement restricts but does not abridge the rights of the fee owner to the use and enjoyment of the land. Easements may be given for surface rights, subsurface rights or overhead rights. For example, the District may use an easement to obtain rights to construct a storm drain through someone's property. The easement would give the District the right to perform maintenance of the facility and would restrict the property owner from placing structures over the facility. The easement would allow the owner to continue to plant grass or otherwise use the property, while saving the District the costs of having to outright purchase the property.

Elevation: The distance that any point on the ground is above a certain point called a datum.

Elevated Building: A building that has no basement and a lowest floor that is elevated to or above the BFE by foundation walls, shear walls, posts, piers, pilings, or columns. Solid perimeter foundations walls are not an acceptable means of elevating buildings in Zones V and VE.

Elevation of a structure: Physically raising an existing structure to an elevation at or above the Base Flood Elevation (BFE) or higher if required by FEMA or local ordinance. Structure elevation may be achieved through a variety of methods, foundation walls, elevating on open foundations, such as piles, piers, posts, or columns; and elevating on fill. Foundations must be designed to properly address all loads, be appropriately connected to the floor structure above, and utilities must be properly elevated as well.

Elevation Certificate: An elevation certificate is a certificate issued by a Certified Surveyor, Engineer or Architect to certify that the elevation of the bottom floor of a structure on a given property is above the BFE despite the property being shown in the 1% floodplain on the FIRM. Elevation projects must include an elevation certificate for each elevated building.

Environmental Planning and Historic Preservation (EHP): Integrates the protection and enhancement of environmental, historic, and cultural resources into FEMA's mission, programs, and activities; ensures that FEMA's activities and programs related to disaster response and recovery, hazard mitigation, and emergency preparedness comply with Federal environmental and historic preservation laws and executive orders; and provides environmental and historic preservation technical assistance to FEMA staff, local, State, and Federal partners, and Grantees and sub-grantees.

Equipment: Tangible, nonexpendable, personal property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit. A Grantee may use its own definition of equipment provided such definition would at least include all equipment defined above.

Flood: Any time two or more normally dry residential or commercial lots are inundated by water.

Flood Insurance Rate Map (FIRM): A FIRM is a FEMA map that shows areas that have the highest probability for flooding and show designated Flood Zones and special Flood Hazard Areas. These maps are used to determine if flood insurance is required and what its cost will be to the buyer Flood risk information presented on FIRMs is based on historic, meteorological, hydrologic, and hydraulic data, as well as open-space conditions, flood control works, and development. To prepare FIRMs that illustrate the extent of flood hazard in a flood prone community, FEMA conducts engineering studies referred to as Flood Insurance Studies (FISs). Using information gathered in these studies, FEMA engineers and cartographers delineate Special Flood Hazard Areas (SFHAs) on FIRMs. SFHAs are those areas subject to inundation by a flood that has a 1-percent or greater chance of being equaled or exceeded during any given year. This type of flood is referred to as a base flood. A base flood has a 26-percent chance of occurring during a 30-year period ... the length of many mortgages. The base flood is a regulatory standard used by Federal agencies, and most states, to administer floodplain management programs, and is also used by the National Flood Insurance Program as the basis for insurance requirements nationwide. More detailed information about FIRMs can be found at www.fema.gov/hazard/map/firm.shtm or order maps at 1-877-FEMA MAP.

Floodplain: Any land area that FEMA has determined has at least a 1-percent chance in any given year of being inundated by floodwaters from any source.

Floodplain Administrator (FPA): Local community officials charged with enforcing NFIP regulations that regulate development in the floodplain.

Floodplain Management: In order for a community to offer flood insurance through the NFIP, the community is required to enforce certain minimum regulations on development in the floodplain. This management of the floodplain is done to ensure that flooding problems do not increase and to work towards the reduction in the risk of flooding. This work is performed by the local communities' Floodplain Administrator. The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to, emergency preparedness plans, flood control works, and floodplain management regulations.

Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Communities regulate development in these floodways to ensure that there are no increases in upstream flood elevations. These lands have the strictest regulations on it because it must be reserved in order to pass the 100-year flood without cumulatively increasing the water surface elevation more than one foot, because it is the area that is needed to move the 1% flood downstream and out of the homes or businesses that it may have flooded. The floodway also includes all land necessary to convey a ten-year flood without structural improvements. private development may not encroach into floodway limits without construction of a FEMA approved flood control facility that is to be maintained by a public agency and without first obtaining a CLOMR.

Flood Insurance Studies (FIS): A study done by engineers to determine the level of risk citizens in a certain area have with respect to the dangers of flooding. The end result of a FIS is flood insurance rate maps that are used to determine the cost and requirements for the purchase of flood insurance. Flood hazard areas are determined using statistical analyses of records of river-flow, storm tides, and rainfall; information obtained through consultation with the community; floodplain topographic surveys; and hydrologic and hydraulic analyses. The FIS covers those areas subject to flooding from rivers and streams, along coastal areas and lake shores, or shallow flooding areas. Actual copies of FISs can be ordered from FEMA's Map Services Center. The results of the Flood Insurance Study that define flood risk areas for each community are available in a technical document that provides information used for floodplain management. This is known as the Flood Insurance Study Report. Regulatory floodways and other floodplain management information may be shown on a separate flood map known as a Flood Boundary and Floodway Map (FBFM). If the FBFM for the FIS is available, it is distributed with the Flood Insurance Study report. Floodplain: The relatively flat area of low lands adjoining, and including, the channel of a river, stream, watercourse, bay, or other body of water which is subject to inundation by the flood waters of the 100-year frequency floods

Freeboard: Generally defined as the difference in elevation from the top edge of a flood control facility (channel, dam, basin) to the design WSE. Freeboard provides a factor of safety and protects against unknown factors such as wave action. Freeboard varies based on the type of project and velocities of flows, but is generally between 1-3 feet. Also an additional amount of height above the BFE used as a factor in determining the level at which a structure's lowest floor must be elevated or flood-proofed to be in accordance with State or community floodplain management regulations.

Geographic Information System (GIS): A computer program used to store different types of information and link that information to a specific location. Some examples of this information would be streets, bayous and channels, HCAD parcel data, contours, floodplains and all the data that supports this information such as names, location and much more.

Global Positioning System (GPS): GPS is a system that uses satellites to accurately determine the location of any point on earth, and it helps to create the most accurate floodplain maps possible and are dependent on satellite availability/visibility. . There are two types of GPS surveys – Standalone navigational mode surveys – which provide an accuracy of +/-2 to 10 meters (similar to retail hand held units); and differential or relative positioning surveys which yields centimeter accuracies. In differential surveys, two GPS units are required. One unit is placed on a known control point, or benchmark, the other is placed on points where coordinating information is required. The District uses various types of differential units, including RTK, data logging and kinematic GPS units, to determine the coordinates of unknown points quickly and accurately. Points can often be located with differential units in a matter of seconds.

Hazard Mitigation Planning: A process used by governments to identify risks, assess vulnerabilities, and develop long-term strategies for protecting people and property from the effects of future natural hazard events.

Historic American Building Survey (HABS): Founded by National Park Service to document and achieves significant historical architectural works

HMGP Lock-In Ceiling: The level of HMGP funding available to a Grantee for a particular Presidential major disaster declaration. First lock in is 6 months after declaration date of a disaster.

Hydraulics: An engineering process used to convert a volume of water moving down a channel into a depth of water so that it can be drawn on a map of flooding areas. This process is done using a computer model called HEC-RAS.

Hydraulic Analysis: The analysis undertaken to determine the capacity of a particular drainage work. This analysis is used to determine the attributes of the flowing water such as, water level or surface profile, velocity, total energy and erosive force.

Hydrograph: A hydrograph is a graph that shows changes in discharge of a river or stream at a given point over time. The time scale may be in minutes, hours, days, months, years or decades. Hydrologic soil group = classification of a soil type on the basis of its permeability after prior wetting and swelling of the soil, and without the protective effect of vegetation.

Hydrology: Hydrology is the science dealing with the occurrence, distribution and circulation of water on the earth, including precipitation, storm-water runoff and groundwater. It is also an engineering process used to convert a rainfall amount into a volume of water moving down a channel. This volume of water is then input into a hydraulic model and turned into a map of flooding areas. This process is done using a computer model called HEC-HMS.

Increased Cost of Compliance (ICC): Coverage for expenses a property owner must incur, above and beyond the cost to repair the physical damage the structure actually sustained from a flooding event, to comply with mitigation requirements of State or local floodplain management ordinances or laws; acceptable mitigation measures are structure elevation, dry flood-proofing, structure relocation, structure demolition, or any combination thereof.

Letter Of Map Amendment (LOMA): A LOMA is a report that must be submitted to FEMA to change a FIRM in order to move a piece of property out of the 1% floodplain.

Letter of Map Revision (LOMR): Issued by FEMA with an accompanying copy of an annotated FIRM, this acknowledges changes in the base flood elevation, floodplain boundary, or floodway based on post-construction or revised conditions. LOMRs are issued upon completion of a project. Most projects obtain a CLOMR prior to construction to ensure that the proposed facility will meet FEMA criteria. Obtaining a CLOMR is a way to guarantee that unforeseen issues do not prevent the issuance of a LOMR.

Management Costs: Any indirect costs, administrative expenses, and any other expenses not directly chargeable to a specific project that are reasonably incurred by a Grantee or sub-grantee in administering and managing a grant or sub-grant award. For HMGP, management cost funding is no longer provided outside of the project. It must now be a project line item and detailed in text.

Manufactured (Mobile) Home: A structure, transportable in one or more sections, which is built on a permanent chassis and designed for use with or without a permanent foundation when attached to the required utilities.

Mitigation: Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event.

Mitigation Activity: A mitigation measure, project, plan, or action proposed to reduce risk of future damage, hardship, loss, or suffering from disasters. The term “measure” is used interchangeably with the term “project” in this program.

National Flood Insurance Program (NFIP): The NFIP makes federally backed flood insurance available to communities that agree to adopt and enforce floodplain management ordinances intended to reduce future flood damage by regulating new and substantially improved development in identified flood hazard areas. The NFIP is a program that is part of FEMA that was developed to provide information about the risks of flooding and allow citizens to purchase flood insurance to protect them from the financial risks of flooding. In 1968, Congress created the NFIP in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage due to floods. The program is designed to reduce the loss of life, damage to property and rising disaster relief costs in these high-risk areas. This voluntary program is administered by FEMA and aims to end the expensive cycle of flooding and rebuilding. National Flood Insurance is available in more than 19,000 communities across the United States and its territories. The program required that new or replacement buildings in the flood hazard areas are constructed to mitigate future flood damages. FEMA insists on assurances that local upstream flood repair measures and development within floodplains will not exacerbate flooding in adjacent areas. It guides future development away from flood prone areas and transfers the costs of flood losses from American taxpayers to floodplain property owners. The NFIP, through partnerships with communities, the insurance agencies and the lending industry, helps to reduce flooding damages by nearly $800 million a year. Further, buildings constructed in compliance with NFIP standards suffer approximately 80% less damage annual than those not built in compliance. Every $4 paid in flood insurance claims saves $1 in disaster assistance payments. THE NFIP program is made of three components: Flood Insurance, Mapping and Floodplain Management. The NFIP is managed by FEMA's Federal Insurance and Mitigation Administration and the Mitigation Directorate. The Federal Insurance and Mitigation Administration manages the insurance component of the NFIP. The Mitigation Directorate overseas the floodplain management and mapping components of the program.

Non-Federal Funds: Financial resources provided by sources other than the Federal Government. The term does not included funds provided to a State or local government through a Federal grant unless the authorizing statute for that grant explicitly allows the funds to be used as cost share for other Federal grants.

Non-Residential Structure: Includes, but is not limited to: small business concerns, places of worship, schools, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, hotels and motels with normal room rentals for less than 6 months' duration, and nursing homes.

Open Space: The acquired property in an acquisition project is maintained for open space purposes in perpetuity in order to restore and/or conserve the natural floodplain functions. Because Federal law requires properties acquired with FEMA funds to be maintained as open space in perpetuity and are deed restricted, Grantees and sub-grantees are responsible for oversight in ensuring and enforcing proper land use, and for coordinating with FEMA on any future land use or property disposition issues.

Open Space Maintenance Agreement Certification: Local government certifies in a signed agreement that it accepts responsibility for all future maintenance of the deed restricted open space and will maintain the acquired property as open space and that the local government will report the property status every three years to PEMA as required by Federal law.

Overland Flow (Sheet Flow) Flooding: Flooding that occurs when intense local rainfall exceeds storm sewer or roadside ditch capacity, the water can "pond" in the streets deep enough to flood residences that are not even near a creek. The water will seek a path to the channel by flowing overland (Sheet Flow). When residences and other structures are in that path, flooding occurs and this type of flooding is not identified on the Flood Insurance Rate Maps.

Period of Performance (POP): The period of time during which the Grantee is expected to complete the grant activities and to incur and expend approved funds.

Post-Disaster Code Enforcement: Projects designed to support the post-disaster rebuilding effort by ensuring that sufficient expertise is on hand to ensure appropriate codes and standards, including NFIP local ordinance requirements, are utilized and enforced.

Post-FIRM Building: A building for which construction or substantial improvement occurred after December 31, 1974, or on or after the effective date of an initial FIRM, whichever is later.

Pre-Firm Building: A building for which construction or substantial improvement occurred on or before December 31,

1974, or before the effective date of an initial FIRM.

Pre-Flood Market Value: Based on the value of the structure the day before the flood. Appraisal to be done by a state certified appraiser.

Presidential Major Disaster: Any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under the Stafford Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

Project: Any mitigation measure or action proposed to reduce risk of future damage, hardship, loss, or suffering from disasters.

Repetitive Loss Structure: An NFIP-insured structure that has had at least two paid flood losses of more than $1,000 each in any 10-year period since 1978.

Retrofitting of Existing Buildings: Modifications to the structural elements of a building to reduce or eliminate the risk of future damage and to protect inhabitants. The structural elements of a building that are essential to protect in order to prevent damage include foundations, load-bearing walls, beams, columns, structural floors and roofs, and the connections between these elements.

Riverine Flooding: Flooding that is the result of creeks and bayous leaving their banks as a result of a heavy rainfall. This is the flooding that is mapped on the Flood Insurance Rate Maps.

Runoff: Run off is the surface water from rainfall not absorbed by the ground that flows in to the local drainage system, and ultimately, streams. The amount of runoff generated is generally a function of the amount of rainfall, the permeability of the soils, ground cover and the amount of land development. Many other factors can also influence the amount of runoff including the size of the watershed, the sequence of storms within the watershed (are soils already saturated from previous rainfall?), evapo-transpiration, and terrain type.

Special Flood Hazard Area (SFHA): A darkly shaded area on a FIRM or Flood Hazard Boundary Map, FHBM, the SFHA is defined as the land in the floodplain within a community subject to a 1-percent or greater chance of flooding in any given year. An area having special flood, mudflow, or flood-related erosion hazards, and shown on a Flood Hazard Boundary Map or a FIRM as Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1-A30, V1-V30, VE, or V.

Specifications and Contract Document: This document is prepared by the Project Engineer in the Design Engineering Section. The Document is a complete description of the project to be constructed, including contractual obligations of the District and Contractor as well as the estimated time, costs, and methods and materials of construction to be used. It contains the general provisions, the special provisions, the detailed specifications and the drawings (plans) that detail the project to be constructed. This document is used by contractors interested in bidding on the project to determine their probable cost of construction, it is used by the inspectors to police and control the project construction and it is used by the surveyors to place the survey control necessary to align and construct the project. Stage = The river stage is the height of the water in the river, measured relative to an arbitrary fixed point.

Stream Flow Data: Each area that has undergone a flood study has a **Flood Insurance Study (FIS)** booklet. This is an 8.5" by 11" brown booklet that contains the hydrologic information pertaining to the study. Near the beginning of the booklet will be a Table (usually Table #1) that will list the Flooding Source (name of the closest stream), an identifying landmark or area, the drainage area, and the PEAK DISCHARGE (cfs) for the 10 year, 50 year, 100 year, and 500 year flooding events. Find the Flooding Source and the identifying landmark closest to the target structure for each structure in the project, and fill in the 10, 50, 100, and 500 year discharges for each structure on the attached spreadsheet. (This may be just one set of numbers for the whole project)

Stucture Location Map: On a legible (a copy on which all landmarks can be easily distinguished) FIRM map, locate the structure(s) as accurately as possible.

Subgrant: An award of financial assistance under a grant by a Grantee to an eligible sub-grantee.

Sub-grantee: The entity, such as a community/local government, Tribal government, or private non-profit to which a Sub-grant is awarded and who is accountable to the Grantee for the use of the funds provided.

Sub-grantee Multi-Hazard Mitigation Plan (322 Plan): A Sub-grantee Multi-Hazard Mitigation Plan (322 Plan) is a hazard mitigation plan that meets the needs of your community and fulfills the requirements for local plans as described in 44 CFR Part 201.6. On October 30, 2000, the President signed into law the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act by, among other things, adding Section 322 - Mitigation Planning. This section places new emphasis on local mitigation planning. It requires local governments to develop and submit hazard mitigation plans as a condition of receiving mitigation project grants under the Pre-Disaster Mitigation (PDM) Program, FMA, RFC, SRL, and the post-disaster Hazard Mitigation Grant Program (HMGP). An Interim Final Rule (the Rule) for implementing Section 322 was published in the Federal Register, 44 CFR Parts 201 and 206, on February 26, 2002, and updated October 1, 2002 and October 28, 2003.

Substantial Damage: "Substantial damage" means damage of any origin (i.e. water, floating debris, fire resulting from a flood, etc.) sustained by a structure from the specific event (i.e. flooding) when the cost of restoring the building to its pre-event condition would equal or exceed 50 percent of the market value of the building (not including the value of the land) before the damage occurred. Substantial damage is determined regardless of the actual repair work performed. The "**Residential Damage Calculation Form**" is used by the **municipality** (not the homeowner) to calculate the damage. A municipal officer or qualified person contracted by the municipality should sign the "Residential Damage Calculation Form"

Topographic Data: Topographic data is detailed information about the shape of the earth including ground elevations, and the location of roads, bayous, and objects both natural and man-made.

Type of Structure: Accurate description of the major component used in the **construction** of the structure. Exterior materials may be wood (may be covered with aluminum siding but is still considered wood) or Masonry (usually brick or cement block). Other materials may also be utilized but must be accurately described. Number of Stories describes the number of **ABOVE GROUND** stories of the structure. IF the home is a one story, two story, three story, split level or tri-level home, please note the style of construction. Finally, is there a basement (Yes or No), and is the basement a finished basement (i.e. living area, game room, etc), or just a storage and utilities area.

United States Geological Survey (USGS): It is a department of the Department of the Interior and a major provider of digital map data for the United States and is a scientific agency of the United States Government. Scientists of the USGS study landscape of the U.S., it's natural resources and the natural hazards that threaten it. The organization has four major science disciplines concerning; biology, geographic, geology and water.

Watershed: (1) An area that, because of topographic slope, contributes water to a specified surface water drainage system, such as a stream or river. (2) All lands enclosed by a continuous hydrologic drainage divide and lying upslope from a specified point on a stream; a region or area bounded peripherally by a water parting and draining ultimately to a particular water course or body of water.

Wetlands: Wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (U.S. ACE 1987). Wetlands generally include (1) swamps, marshes, bogs, and similar areas; (2) lands that are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface of the land and is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following attributes: (1) at least periodically, the land predominantly supports hydrophytes (plants dependent on saturated soils or a water medium); (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

NOTE: Some glossary information has been pulled from www.tsarp.org/glossary.html , Unified Hazard Mitigation Guidance (2011) and various other mitigation sources.