

# **Floodplain Mapping - Some Useful Definitions**

## **1-Percent-Annual-Chance Flood**

This is the flood having a 1-percent chance of being equaled or exceeded in any given year; also referred to as the base, or 100-year, flood.

## **0.2-Percent-Annual Chance Flood**

This is the flood having a 0.2-percent chance of being equaled or exceeded in any given year; also referred to as the 500-year flood.

## **Approximate Study**

This is a flood hazard study that results in the delineation of floodplain boundaries for the 1-percent-annual-chance flood, but does not include the determination of Base Flood Elevations or base flood depths.

## **Base Flood Elevation**

This is the elevation of a flood having a 1-percent chance of being equaled or exceeded in any given year.

## **Base Map**

This is the map of the community that depicts cultural features (e.g., roads, railroad, bridges, dams, culverts), drainage features, and corporate limits.

## **Coastal High Hazard Area**

This is an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high-velocity wave actions from storms or seismic sources.

## **Digital Flood Insurance Rate Map**

This is a Flood Map that has been prepared as a digital product, which may involve converting an existing manually produced Flood Map to digital format, or creating a product from new digital data sources using a Geographic Information System environment. The Digital Flood Insurance Rate Map product allows for the creation of interactive, multi-hazard digital maps. Linkages are built into an associated database to allow users options to access the engineering backup material used to develop the Digital Flood Insurance Rate Map, such as hydrologic and hydraulic models, Flood Profiles, data tables, Digital Elevation Models, and structure-specific data, such as digital elevation certificates and digital photographs of bridges and culverts.

## **Effective Date**

This is the date on which the Flood Map for a community becomes effective and all sanctions of the National Flood Insurance Program apply.

## **Effective Map**

This is the Flood Map issued by FEMA that is in effect as of the date shown in the title block of the map as "Effective Date," "Revised," or "Map Revised."

## **Flood**

This is a general and temporary condition of partial or complete inundation of normally dry land areas from (1) the overflow of inland or tidal waters or (2) the unusual and rapid accumulation or runoff of surface waters from any source.

## **Flood Hazard Area**

This is the land area subject to inundation by water from any flooding source.

## **Flood Insurance Rate Map**

This is the insurance and floodplain management map produced by FEMA that identifies, based on detailed or approximate analyses, the areas subject to flooding during a 1-percent-annual-chance (100-year) flood event in a community. Flood insurance risk zones, which are used to compute actuarial flood insurance rates, also are shown. In areas studied by detailed analyses, this map shows Base Flood Elevations to reflect the elevations of the 1-percent-annual-chance flood. For many communities, when detailed analyses are performed, this map also may show areas inundated by 0.2-percent-annual-chance (500-year) flood and

regulatory floodway areas. These maps are also referred to as “FIRMs” by people who work with them frequently; however, for the purposes of this *Guide*, they are referred to simply as Flood Maps.

### **Flood Insurance Study**

This is an engineering study performed by FEMA to identify flood hazard areas, flood insurance risk zones, and other flood data in a community.

### **Floodplain**

This is any land area that is susceptible to being inundated by water from any source.

### **Floodplain Management**

This is the operation of a 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.

### **Floodplain Management Regulations**

These are the zoning ordinances, subdivision regulations, building codes, health regulations, special-purpose ordinances, and other applications of enforcement used by a community to manage development in its floodplain areas.

### **Flood Profile**

A graph showing the relationship of water-surface elevation to location, with the latter generally expressed as distance above the mouth for a stream of water flowing in an open channel.

### **Floodway**

See Regulatory Floodway.

### **Hazard**

This is an event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, damage to the environment, interruption of business, and other types of loss or harm.

### **Hydraulic Analysis**

This is an engineering analysis of a flooding source carried out to provide estimates of the elevations of floods of selected recurrence intervals.

### **Hydrologic Analysis**

This is an engineering analysis of a flooding source carried out to establish peak flood discharges and their frequencies of occurrence.

### **Mitigation**

This is a sustained action taken to reduce or eliminate long-term risk to people and property from flood hazards and their effects. Mitigation distinguishes actions that have a long-term impact from those more closely associated with preparedness for, immediate response to, and short-term recovery from specific events.

### **National Flood Insurance Program**

This is a Federal program to identify floodprone areas nationwide and make flood insurance available to the owners and lessees of property in the communities that voluntarily participate in the program. The communities participate by adopting and enforcing floodplain management standards that are consistent with Federal regulations.

### **National Geodetic Vertical Datum of 1929 and North American Vertical Datum of 1988**

These are standard reference planes established by the Federal Government from which elevations are measured.

### **Regulatory Floodway**

This is a floodplain management tool that is the regulatory area defined as the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the base flood discharge can be conveyed without increasing the Base Flood Elevations more than a specified amount. The regulatory floodway is not an insurance rating factor.

### **Riverine Flooding**

This is the overbank flooding of rivers and streams.

### **Shallow Flooding**

These are unconfined flows over broad, relatively low relief areas, such as alluvial plains; intermittent flows in arid regions that have not developed a system of well-defined channels; overbank flows that remain unconfined, such as on delta formations; overland flow in urban areas; and flows collecting in depressions to form ponding areas. For National Flood Insurance Program purposes, shallow flooding conditions are defined as flooding that is limited to 3.0 feet or less in depth where no defined channel exists.

### **Sheet Runoff**

This is the broad, relatively unconfined downslope movement of water across sloping terrain that results from many sources, including intense rainfall and/or snowmelt, overflow from a channel that crosses a drainage divide, and overflow from a perched channel onto deltas or plains of lower elevation. Sheet runoff is typical in areas of low topographic relief and poorly established drainage systems.

### **Special Flood Hazard Area**

This is the area delineated on a National Flood Insurance Program Flood Map as being subject to inundation by the 1-percent-annual-chance flood. SFHAs are determined using statistical analyses of records of riverflow, storm tides, and rainfall; information obtained through consultation with a community; floodplain topographic surveys; and hydrologic and hydraulic analyses.