

Flood Terms

100-year Flood, or Base Flood

These terms are used interchangeably to mean a flood having a 1-percent probability of being equaled or exceeded in any given year.

500-Year Flood

A flood having a 2-percent or greater annual probability of occurring.

Base Flood Elevation (BFE)

The elevation of floodwater during a Base 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 floodwaters relative to "mean sea level".

Cubic feet per second (cfs)

The rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge

The volume of water that passes a given point within a given period of time.

Elevation Certificate (EC)

An elevation certificate is a form created by FEMA (FEMA Form 81-31) that serves as an important administrative tool of the National Flood Insurance Program (NFIP). Elevation certificates provide the necessary information to ensure the structure is elevated in accordance with flood hazard regulations, and must be completed by a registered professional engineer or land surveyor licensed in the state of Washington. ECs for finished structures must be submitted to the Planning Department prior to finalizing a flood hazard permit and issuing a certificate of occupancy. ECs may also be used to determine the proper flood insurance premium rate; document elevation information necessary to ensure compliance with community floodplain management regulations; and support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).

Flood Insurance Rate Map (FIRM)

An official map of a community, on which the Federal Insurance and Mitigation Administration has delineated both the Special Flood Hazard Areas and the risk premium zones applicable to the community.

Flood Statement

A National Weather Service term; Flood Statements are issued once a flood has occurred. They are updated every six hours, providing the current status of flood conditions.

Flood Warning

National Weather Service term; Flood Warnings are issued on specific rivers and indicate that flooding is imminent in the next 12 hours.

Flood Watch

National Weather Service term; Flood Watches are issued when flooding is possible in a specific area within 12-36 hours, but its occurrence, location and/or timing is uncertain. Flood watches are issued by the county, not for specific rivers.

Flood Zone

Geographic areas FEMA has defined according to varying levels of risk.

Floodplain

Any land area adjoining a river, stream, watercourse, ocean, bay, or lake which is likely to be flooded. The extent of the floodplain may vary with the frequency of flooding being considered. The floodplain consists of the floodway and the floodway fringe. (SCC 30.44.620)

Floodway

The regular channel of a river, stream, or other watercourse, plus the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. (Snohomish County Code 30.44.625)

Floodway Fringe

That portion of a floodplain which is inundated by floodwaters but is not within a defined floodway. Floodway fringes serve as temporary storage areas for floodwaters. (Snohomish County Code 30.44.630)

Freeboard

A margin of safety added to the base flood elevation to account for waves, debris, miscalculations, or lack of data.

National Flood Insurance Program (NFIP)

The program of flood insurance coverage and floodplain management administered under the National Flood Insurance Act and applicable Federal regulations (Title 44 of the Code of Federal Regulations, Subchapter B).

National Geodetic Vertical Datum (NGVD) of 1929

National standard reference datum for measuring elevations; formerly referred to as Mean Sea Level (MSL) of 1929. NGVD 1929 may be used as the reference datum on some FIRMs.

North American Vertical Datum (NAVD) of 1988

The vertical control datum established for vertical control surveying in the United States of America based upon the General Adjustment of the North American Datum of 1988. It replaces the National Geodetic Vertical Datum of 1929.

Panel

Panel number is numerical designation used to identify the FIRM Map associated with a given area. The first six digits of the Panel number is the community number; Snohomish County's is 535534.

Panel Date

This is the date recorded in the FEMA database, which is associated with the given Panel Number.

Peak Flood Level, Flow or Velocity

The maximum flood level, flow or velocity occurring during a flood event.

Ponding Hazard

A flood hazard that occurs in flat areas when there are depressions in the ground that collect "ponds" of water. Ponding is represented by the zone designation AH on the Flood Insurance Risk Map.

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.

Special Flood Hazard Area (SFHA)

An area having special flood, mudflow, or flood-related erosion hazards, and shown on a Flood Insurance Rate Map as Zone A, AE, AO, AH, A99, AR, V, or VE.

Streamflow

The discharge that occurs in a natural channel.

Substantial Damage

Damage of any origin sustained by a structure whereby the cost of restoring the structure to its "before-damage" condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. All structures that are determined to be substantially damaged are automatically considered to be substantial improvements, regardless of the actual repair work performed. If the cost necessary to fully repair the structure to its "before-damage" condition is equal to or greater than 50% of the structure's market value before damages, then the structure must be elevated (or floodproofed, if it is non-residential) to or above the Base Flood Elevation (BFE), and meet other applicable NFIP requirements. (FEMA definition)

Substantial Improvement

Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

- Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
- Any alterations of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure." (FEMA definition)

Velocity

The speed at which the floodwaters are moving. Typically, modeled velocities in a river or creek are quoted as the depth and width averaged velocity, i.e. the average velocity across the whole river or creek section.

Zone

A geographical area shown on a Flood Hazard Boundary Map or a Flood Insurance Rate Map that reflects the severity or type of flooding in the area.