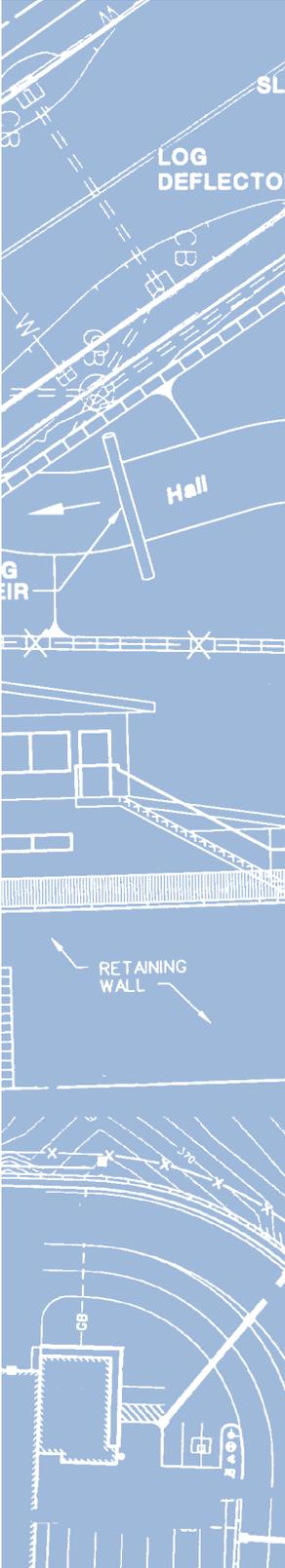




Flood Hazard Areas



This bulletin explains the effect of the Federal Emergency Management Agency (FEMA) on the Snohomish County Planning & Development Services (PDS) permitting process. It also answers some common questions about the impact of the National Flood Insurance Program (NFIP) on development projects. It does not take into account other types of development restrictions, such as shoreline environment designations, sensitive area setback areas, wetlands, stream corridor buffer zones, or other setback requirements. For information on these topics, see other appropriate PDS bulletins.

Q: What are Flood Hazard Areas?

A: Flood Hazard Areas (FHAs), or “100-year floodplains” as they also are called, are portions of a river, lake or stream channel and adjacent lands that are subject to floods with a one-percent chance of being exceeded in any given year. Such events also are called “100-year floods.”

Q: What is a “floodplain?”

A: FEMA defines floodplain as the total area subject to inundation by a 100-year flood.

Q: Is there more than one type of floodplain?

A: Yes. FEMA divides floodplains into “floodways,” “floodway fringes” (areas bordering floodways) and “flood-free areas” (areas that are not affected by deep or fast-flowing water during flooding).

- Floodways are the channels of the streams or rivers and those portions of the adjoining floodplain necessary to discharge the 100-year-flood flow without increasing the 100-year flood elevation more than one foot.
- Floodway fringes do not receive the depth and/or velocity of floodwater that floodways receive.
- Flood-free areas receive no floodwater.
- Density Fringe Areas (DFAs)—see SCC 30.65.240.

Q: Are there any development restrictions in Flood Hazard Areas?

A: It depends on which type of area it is.

- Floodways: Floodways are most severely hit by flooding and, therefore, very limited development is allowed in these areas.
- Floodway fringes: Development is allowed in the flood fringe with some restrictions (see next question).

- Flood-free areas: No development restrictions apply in these areas.
- DFAs: Development limited to that which is primarily agricultural.

Q: What restrictions apply to development in flood fringe areas?

A: New residential and non-residential construction, as well as substantial improvement to existing buildings, is subject to the following restrictions within the flood fringe:

- For residential structures (including mobile homes), the lowest floor, including the basement, must be elevated to one foot above the base flood elevation. The space beneath the structure must be kept open with hydrostatic openings so that floodwater can pass through. Elevation may be accomplished through a number of means such as posts, piers, piles, columns or stem walls.
- For all new and reconstructed residential and non-residential buildings, all utilities must be flood-proofed and elevated above the base flood elevation, as described above.

According to FEMA's criteria, both residential and non-residential construction projects may include either new construction or "substantial improvements" to an existing building.

Q: What are "substantial improvements?"

A: They include repair, reconstruction or improvement of an existing building at a cost that is 50-percent or greater of the market value before the project began.

Substantial improvement occurs when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The total value of all improvements to an individual structure undertaken subsequent to March 14, 1984, shall be used in calculating the value of the improvements pursuant to this section. If at any time the cumulative value of all improvements to the same structure exceeds the 50 percent limit, a substantial improvements exists. Substantial improvements do not include:

- Actions taken for health, sanitary, or safety code specifications which are the minimum to assure safe living conditions.

- Actions taken to comply with existing state or local codes and ordinances.
- Alterations to a building listed on the National Register of Historical Places or a state inventory of historic places.

Q: How does FEMA determine what are Flood Hazard Areas?

A: FEMA conducts studies using statistical analyses of river flow, storm tides, and rainfall; long-term historical data of flooding in these areas; information obtained from public meetings; floodplain topographic surveys; and hydrologic and hydraulic analyses.

Q: How does FEMA show these flood areas?

A: FHAs are indicated on Flood Insurance Rate Maps (FIRMS), which are prepared by FEMA and used by private lenders to determine flood insurance requirements and premium rates. PDS has copies of these maps, to which the public can refer.

Q: How can I tell if my property is in an FHA?

A: If you are applying for a building or development permit, you may need to know if your property lies within a floodplain. When you come to PDS to inquire about a permit, bring a legal description of your property so that its location on the FIRM can be determined. If you have an Assessor's map of your property, bring it also. Once you have located your property on the map and have determined the 100-year-flood elevation, you may want to have your property surveyed to determine its elevation and to be sure whether any portion of it lies within a floodplain.

Q: What should I do if I disagree with the FIRM designation of my property?

A: There are two procedures for requesting a change or correction of a flood map: a Letter of Map Amendment (LOMA) and a Letter of Map Revision (LOMR). Requests for multiple-lot or multiple-building determinations that do not involve changes to base flood elevations or floodways should be addressed to:

Federal Emergency Management Agency
Federal Insurance Administration
Office of Risk Assessment
Technical Operations Division
Washington, D.C. 20472

All other requests should be sent to the local FEMA regional office at:

Federal Emergency Management Agency
130 - 228th Street SW, Bothell, WA 98011
Phone: (425) 487-4678

Q: What is a LOMA?

A: A LOMA is used to make changes in individual property designations if a piece of property has been inadvertently included in a floodplain. A LOMA is the result of an administrative procedure in which the Federal Insurance Administrator reviews scientific or technical data submitted by the owner or lessee of the property to support his or her request for a map amendment. It is up to the petitioner to establish that the property is not located in a floodplain.

If FEMA issues a LOMA, it amends the currently effective FEMA map and establishes that the property is not located in an FHA. After a LOMA is issued, your permit application will be processed according to normal PDS procedures. However, you should be aware that your lending institution still might require flood insurance as a condition of granting a loan or mortgage.

Q: What is a LOMR?

A: A LOMR is an official amendment to the existing FEMA map. It is used to change flood zones, flood delineations and flood elevations, among other things. These changes to the FHA may be the result of structural modification to the floodplain, errors in the original study or new methods of analysis. A LOMR is usually followed by a revision of the official FEMA maps. Since this process can be lengthy and involved, the LOMA is more widely used by individuals than the LOMR process.

Q: What is the National Flood Insurance Program?

A: The National Flood Insurance Program (NFIP) was established by Congress with the passage of the National Flood Insurance Act (NFIA) in 1968. The Federal Insurance Administration, a division of FEMA, administers the program. The State Department of Ecology administers the NFIP in Olympia, Washington. The NFIP has a threefold objective:

- To provide federally subsidized flood insurance for property owners;
- To reduce flood damage to new construction; and
- To minimize future flood damage to existing structures.

Q: Does the Flood Insurance Program place restrictions on my property?

A: Possibly, depending on whether or not your property contains FHAs. Although restrictions on developing private property often are unpopular with landowners, Snohomish County's NFIP participation does offer some benefits for its citizens.

Before the adoption of the NFIA, the public could not buy flood insurance from insurance companies due to the high cost of reimbursing flood victims, and because of the frequency of flooding in this area. In passing the act, the Federal Government agreed to subsidize flood insurance in exchange for local communities' agreements to reduce the likelihood of flood damage by restricting development in flood hazard areas. In order to qualify for participation in the NFIP, a community must meet federal criteria for development restrictions in FHAs. Unincorporated Snohomish County is such a community.

Q: What happens to structures that existed before the NFIP?

A: The floodplain management measures affect such buildings only when they are substantially improved, as defined above.

Acronyms used in this bulletin:

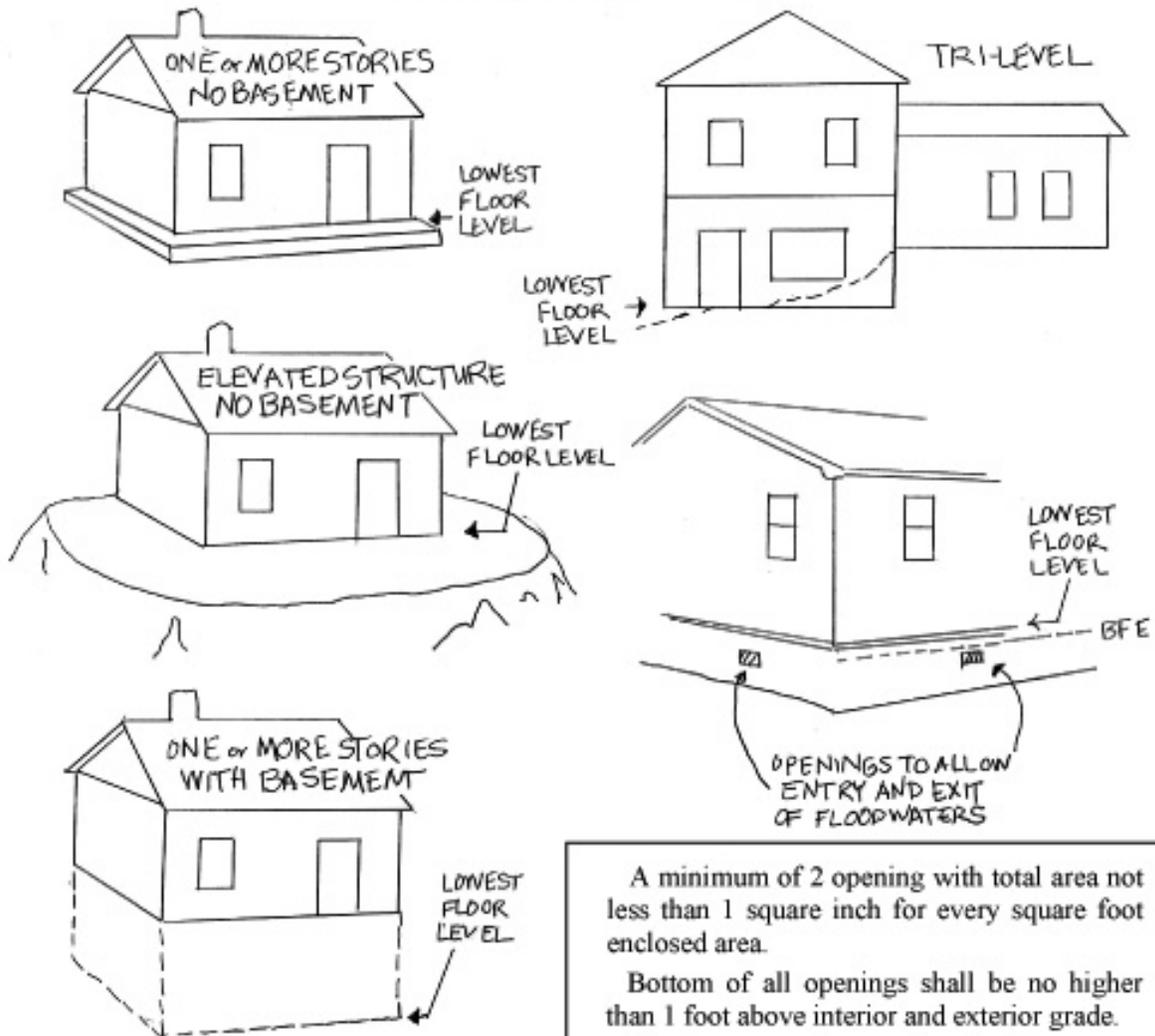
DFA—Density Fringe Area
FEMA—Federal Emergency Management Agency
FHA—Flood Hazard Area
FIRM—Flood Insurance Rate Map

LOMA—Letter of Map Amendment
LOMR—Letter of Map Revision
NFIA—National Flood Insurance Act
NFIP—National Flood Insurance Program

FLOOD HAZARD REQUIREMENTS

Determining Lowest Floor Level

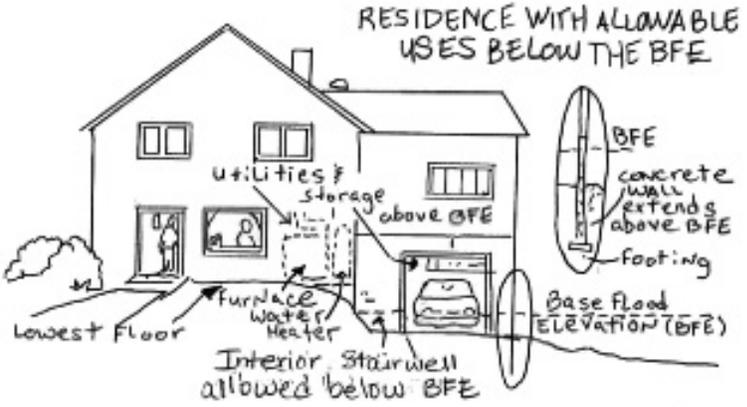
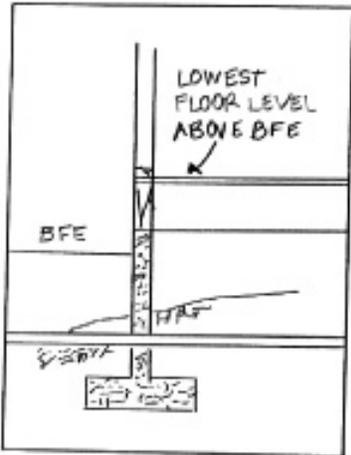
(Residential Structures)



A minimum of 2 opening with total area not less than 1 square inch for every square foot enclosed area.

Bottom of all openings shall be no higher than 1 foot above interior and exterior grade.

Openings may be equipped with screens provided they permit entry and exit of floodwater.



This bulletin is intended only as an information guide. The information may not be complete and is subject to change. For complete legal information, refer to the Snohomish County Code.