

Floodplain Development Basics

Building or purchasing a home is the most important decision most people will make. Researching and assessing all possible risks – including flooding – should always be part of the process. While flooding can occur anywhere, it is much more likely in areas designated as floodplains. Knowing some basic information about floodplains and floodplain development regulations can greatly reduce a structure's risk to flooding as well as insurance costs.

What is a floodplain?

Floodplains or Special Flood Hazard Areas (SFHA) are lowland areas adjacent to lakes, wetlands and rivers that are covered by water during a 1% or 100-year flood and are designated as A (approximate study) or AE (detailed study) zones on the Flood Insurance Rate Maps (FIRMs). Wisconsin regulations recognize three flood zones: floodway, floodfringe and general floodplain. The floodway includes the river channel and areas adjacent to the channel which convey the 1% chance flood flows; the floodway experiences the deepest water and the highest flow velocities. The floodfringe includes the rest of the floodplain landward of the floodway and is primarily a floodwater storage area. The general floodplain covers all Zone A areas where the 1% flood has not been determined and is regulated as floodway until the required studies are approved to determine the floodway/floodfringe areas. Local ordinances should be checked to determine if other areas are regulated as floodplain.

Is development allowed in the floodplain?

All human activities are regulated in the floodplain including activities such as structures, roads, bridges, fill and storage. The level of regulation differs based on the flood zone. Local ordinances should be checked to determine what specific activities are allowed or prohibited and what permits are required.

How can I find out if my community participates in the NFIP or if my property is located in a floodplain?

The first step is to contact the community where the property is located and speak to either the Clerk or the Zoning Administrator. For properties located in unincorporated areas (towns), the community would be the county. Another option is download FEMA's Community Status Book at <http://www.fema.gov/fema/csb.shtm>. It is important to note that under Chapter NR 116, Wisconsin Administrative Code, all communities where adequate hydraulic and engineering data is available must adopt reasonable and effective floodplain regulations whether or not they participate in the NFIP.

To determine if your property is located with a floodplain, first look at the FIRMs for the community in which the property is located. Paper copies of the FIRMs are usually kept in either the Clerk's or the Zoning Administrator's office. Some communities have also placed the FIRMs on the community's website. FIRMs can also be viewed on FEMA's website <http://www.msc.fema.gov> and the DNR website <http://dnr.wi.gov/org/water/wm/dsfm/section/mapindex.htm>. The next step is to talk to the Zoning Administrator to clarify any questions or concerns. The Zoning Administrator can also explain any local floodplain regulations and permitting requirements.

What if it is unclear in which flood zone my property is located?

If a property's flood zone is still unclear after viewing the FIRMs and meeting with the local Zoning Administrator, a licensed engineer or surveyor should be hired to produce a certified survey establishing the location of the structure in relation to the floodplain, the lowest adjacent grade around the structure and the lowest floor of the structure. If the survey shows the structure still in the floodplain, a detailed engineering analysis to modify the floodplain boundaries is another option. Information about the

LOMA/LOMR process is available at http://www.fema.gov/plan/prevent/fhm/ot_lmreq.shtm. An elevation certificate can be downloaded from FEMA's website <http://www.fema.gov/business/nfip/elvinst.shtm>.

Can I still develop my property if it is located within the floodplain and do I need special permits?

Development is allowed in the floodplain and typically only requires a land use permit and a building permit, but restrictions may apply. In the floodway, new structures, substantially improved or damaged structures, the storage of hazardous/solid waste and wells/sewage systems are prohibited. Only development related to open space uses and with a low flood damage potential is allowed. Development in the floodway is restricted in order to maintain the flow capacity of the stream during flooding. Any development proposed in the floodway must have either an approved encroachment analysis showing no change in the base flood elevation or an approved Letter of Map Revision from FEMA.

In the floodfringe, new structures are allowed, but all new and substantially damaged or improved structures must have the first floor elevated on fill to two (2) feet above the base flood elevation and have dryland access. In areas where the floodfringe and the floodway have not been determined, an engineering analysis will be needed to delineate the floodway/floodfringe boundary.

Why is two feet of freeboard and dryland access required?

State regulations require that all new or substantially improved structures in the floodplain have the first floor elevated to two (2) feet above the base flood elevation to ensure that the structure is safe from flooding. The extra elevation ensures that the structure will not become non-conforming if flood elevations change during remapping. The extra elevation also lowers flood insurance premiums. Dryland access ensures that emergency vehicles can reach the structure and its occupants during a flood.

What is meant by substantially damaged or substantially improved?

Structures located in the floodplain are considered substantially damaged if they are damaged by 50% or more of the structure's equalized assessed value as listed before the damage occurred. The cost of repair is based on local market costs for the community and includes the cost of labor at prevailing wages. Under Wisconsin regulations, structures substantially damaged by flooding must meet the elevation standards for new construction as stated in Ch. NR 116, Wis. Admin. Code or if located within the floodway the structure must be relocated. Structures damaged by non-flood disasters must meet the NFIP elevation requirements as stated in 44 CFR 60.3.

Substantially improved structures are those structures which have had additions or been modified by 50% or more of the structure's equalized assessed value at the time the work was proposed and is cumulative over the life of the structure. A builder's estimate for the improvement is frequently used to determine the cost of the project.

Why can't I have a walkout basement?

In the floodplain, basements are defined as any enclosed area having its floor below ground level on all sides. Walk-out basements typically have at least one side at ground level and therefore are not considered basements. Structures with walk-out basements must have the lowest floor elevated to at least two (2) feet above the base flood elevation in order to be compliant with state and federal floodplain regulations.

For more information on Floodplain Management visit: <http://dnr.wi.gov/org/water/wm/dsfm/flood/communities.htm>