

**Village of Winnetka
Flood Plain
Frequently Asked Questions**

1. Q: What is the 100-year flood plain?

A: The 100-year flood plain, also known as the Special Flood Hazard Area (SFHA), is an area of land that has been determined by the Federal Emergency Management Agency (FEMA) as having a 1% chance of flooding in any given year. The flood plain is composed of a flood way and a flood fringe. The flood way is typically determined to be the channel of a river or stream and the overbank areas adjacent to the channel. The flood fringe is the area to either side of the flood way that is subject to flooding, but conveys little or no flow.

2. Q: What regulations must be followed for construction within and adjacent to the flood plain?

A: The Village of Winnetka's Flood Hazard Protection Ordinance is Chapter 15.68 in the Municipal Code. In addition, the Metropolitan Water Reclamation District (MWRD) Watershed Management Ordinance (WMO) contains flood plain regulations that all municipalities within Cook County are required comply.

3. Q: What is the Base Flood Elevation (BFE)?

A: The Base Flood Elevation (BFE) is the elevation below which areas are at risk of flooding for the 100-year flood event. The current BFE for the 100-year flood event, throughout most of Winnetka (between Hill Road and the northern Village Limits), is at an elevation of 625.3. Any grade that is equal to or below this elevation is considered in the flood plain, when tributary to that flood plain. This elevation is referenced from the North American Vertical Datum (NAVD) of 1988.

4. Q: What is the Flood Protection Elevation (FPE)?

A: The Flood Protection Elevation (FPE) is the elevation to which any structures within the flood plain are required to be protected. In compliance with the MWRD WMO, the Flood Protection Elevation is two feet above the BFE. Within the Village of Winnetka, the FPE is 627.3 NAVD 1988.

5. Q: When is my house considered in the flood plain?

A: If any grade adjacent to the foundation of the house is at or below the BFE, the entire house is determined to be in the flood plain, and must comply with the Village's Flood Hazard Protection Ordinance.

In addition, the MWRD's WMO stipulates that if a home is within 100' of the mapped BFE, any permit applicant who is wanting to construct a new home or make substantial improvements to an existing home must prove, by means of a topographic survey, that all grades adjacent to the home are above the BFE (by at least 0.1 feet) to be considered outside of the flood plain.

6. Q: My property was never in the flood plain before, why is it in the flood plain now?

A: Recently, FEMA completed two remappings of Winnetka's flood plains, one in November, 2000 and one in August, 2008. Due to increased rainfall intensities and various other topographic changes, the BFE rose approximately 9", as part of the 2000 remapping. In addition, the 2008 remapping and modernization more accurately reflects the flood plain limits north of Willow Road.

7. Q: When do I need to buy flood insurance?

A: Anyone in Winnetka can purchase flood insurance, even if the property (a building and/or its contents) is not located within the flood plain. However, if your property is located within the 100-year flood plain, and you have a federally backed loan or mortgage on the property, you are required by law to purchase flood insurance.

8. Q: Can I build in the flood plain?

A: Yes, construction is permitted in the flood plain in accordance with the Village of Winnetka's Flood Hazard Protection Ordinance. Improvements to existing homes are permitted as long as the total cost of the improvements are less than 50% of the current market value of the structure, excluding the land. By law, the cost of the improvements is calculated cumulatively over the remaining life of the structure, beginning May 2014.

Construction of a new home with a basement may be permitted in the flood plain, if a Letter of Map Revision – Fill (LOMR-F) is first obtained from FEMA. The LOMR-F can be obtained if engineered fill has been placed and compacted on the site to create a clay building pad for the home. All work must be done in accordance with the Village's Flood Hazard Protection Ordinance. A LOMR-F, removes that portion of the property that was filled from the flood plain, thereby allowing a home to be constructed with an engineered basement. Otherwise, if site constraints do not allow for a LOMR-F, a home with a floodable crawlspace (no basement) may be constructed.

Compensatory storage must be provided to offset any fill that is placed in the flood plain, under any circumstance. Compensatory storage must equal a minimum of 1.1 x Fill volume.

9. Q: Are there any restrictions for construction for homes adjacent to the 100-year flood plain?

A: The MWRD's WMO requires that new home construction and/or substantial improvements to existing homes need to prove, by means of a topographic survey, that the existing/new home and/or improvements are above the BFE by at least 0.10 feet.

Regardless, if you are considering constructing a new home that is within 100' of the BFE, the following design criteria must be met:

- The top of foundation (and any opening in those foundations) must be at or above the FPE.
- It must also be demonstrated that the building and foundation below the BFE are reasonably safe from flooding, per design standard requirements in FEMA Technical Bulletin 10-01.

These requirements include:

- Providing integrally cast window wells with the foundation wall;
- Maintaining the top of foundation at a minimum elevation of the FPE;
- The foundation must be constructed of poured concrete without seams/joints;
- All attendant utilities, including the air conditioning units must be set to at least the FPE; and
- The foundation elements must be designed and certified to withstand any applied hydrostatic pressures.

10. Q: What are the criteria for being able to construct a new home with a basement in the 100-year flood plain?

A: There are two main criteria:

First, there is the **Minimum Average Lot Grade** Requirement:

Per the Village's flood hazard protection ordinance, the Average Lot Grade must be greater than the Minimum Average Lot Grade. That means that if you took the average lot grade, which is the average of the existing elevations taken at the intersection of the setback lines, it must be a greater value than the Minimum Average Lot Grade. The Minimum Average Lot Grade Equations is as follows:

Minimum Average Lot Grade: $(627.3-2) - [(total\ required\ side\ yard\ permitted\ by\ Zoning - 12') \times 0.0833]$

It is recommended that the prospective builder consult with a Professional Civil Engineer to investigate the logistics of constructing a new home with a basement on a lot.

Second, there are clay pad construction restrictions which may directly affect the size of the home, and are as follows:

- The lowest finished grade for the top of the clay pad must be at least to the FPE, and extend at least 10' beyond the exterior face of the home's foundation wall, around the entire perimeter of the home, before dropping to the BFE;
- The BFE must extend at least 20' beyond the exterior face of the home's foundation wall, around the entire perimeter of the home, before dropping below the BFE;
- The basement floor elevation can be no deeper than 5' below the BFE;
- The elevation of the lowest opening in the basement wall (i.e. window wells, access ways...) must be at or above the FPE. This means that all window wells/access ways and the like, must be integrally constructed with the foundation wall, with no joints or seams;

There are additional criteria that must be met, but they are more material related.

11. Q: Can I make improvements to my existing home in the flood plain?

A. Yes, as long as the Flood Hazard Protection Ordinance criteria are met. These requirements are summarized, as follows:

FOR ANY IMPROVEMENTS TO THE HOME (INCLUDING AN ATTACHED GARAGE), the total cost of improvements must be less than 50% of the **current market value of the structure**, excluding the land, and must be calculated cumulatively over the remaining life of the structure. To determine the current market value, you can either use the Cook County's Assessor's information, or get a certified appraisal, using the depreciated value of the structure. The Village cannot take the replacement value of the structure, as it does not accurately reflect the market value.

Cook County's Assessor's website is as follows: www.cookcountyassessor.com. Go to PROPERTY SEARCH and fill in the numerical address, the street name, and Winnetka, for the city. To obtain the adjusted assessed value for the structure, take the assessed value for the structure and multiply by 10. Then, to determine the substantial improvement value threshold, divide that number by 2.

The Village of Winnetka is required to keep track of the value of improvements, **beginning in May, 2014 and continuing over the remaining life of the structure**, and ensure that the cumulative value of improvements are less than 50% of the **CURRENT** market value of the structure. However, any permits that were obtained prior to May, 2014, are not counted against this total. Once the 50% threshold is met or exceeded, the entire home and attendant utilities need to be elevated such that the lowest floor is at or above the Flood Protection Elevation (BFE + 2'). This would most likely mean that you would need to fill in the basement and potentially jack up the rest of the home. You will need to provide the Village with a copy of the executed contract that outlines the entire scope of work, and any sub contracts that may be necessary.

12. Q: What is compensatory storage?

A: Compensatory storage is an artificially excavated, storage volume within the 100-year flood plain that is required to offset the loss of natural storage capacity caused by the placement of fill, structures, or other materials above the existing natural grade. Compensatory storage must meet the following requirements:

- Equal at least 1.1 the volume of flood storage lost below the BFE;
- Be operational prior to the placement of any fill;
- Must be able to drain without the use of a pump or other mechanical means;
- Must be freely flowing into and out of the storage facility (no underground compensatory storage unless at least one end of the pipe/system is exposed to the invert of the pipe/system).

9. Q: How can I find out if my property is located within the flood plain?

A: If you call the Village of Winnetka at (847) 716-3532 and ask for Susan Chen, the Flood Plain Manager, she will be able to read the Flood Insurance Rate Maps and give an approximation on the flood zone. However, in order to make an exact determination, a topographic survey would need to be obtained by either an Illinois Licensed Land Surveyor or Professional Engineer.