



Weld County Department of Planning Services  
1402 N. 17<sup>th</sup> Avenue  
PO Box 758  
Greeley, CO 80632

In this guide:  
Page 2 – Flood Zone Descriptions  
Page 3 – Rules for Flood Zones  
Page 4 – Floodplain Permits

---

## FLOOD WHAT?

---

### *Guide to owning property in the floodplain in Weld County*

You've been told your property is partially or entirely located in a floodplain and that you need to follow extra rules.

#### **What does this mean?**

Your property is in an area that is at high risk for flood damage called a “**Special Flood Hazard Area**” by the Federal Emergency Management Agency (FEMA) and often referred to simply as a “FEMA flood zone” or “a FEMA floodplain.” Each zone reflects the severity or type of flooding in the area.

*~ A flood is any relatively high streamflow overtopping the natural or artificial banks in any reach of a stream. ~*

#### **Why does it matter so much?**

Weld County is a member of the National Flood Insurance Program (NFIP). If Weld County regulates these flood zones in accordance with FEMA policy, then FEMA will provide aid when a damaging flood occurs, like the 2013 flood. Flood insurance is available to property owners and renters in NFIP member communities. Federally-backed loans on property in high-risk zones have mandatory flood insurance purchase requirements.

If a jurisdiction does not regulate in accordance with FEMA policy, the federal government has the right to refuse aid. Flooding results in health and safety hazards, loss of life and property, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare of the residents of the county. Flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities and by the occupancy of special flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.



#### **But my property didn't flood in 2013!**

Being located in a floodplain with high risk (100-year) means that every year you have a 1% chance of getting flooded. It's like rolling dice. Flood zones are determined through scientific modeling that shows how flood waters are likely to move. In a flooding event, location of heaviest rainfall and debris can change course of flood waters, making the damage less in some places and more in others, sometimes even changing the watercourse permanently. And, believe it or not, the 2013 flood was not a 100-year event in all places!

## Flood Zones found in Weld County

### High Risk

**A** - Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.

**AE** - Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations (BFEs) are provided. Some of these areas have a designated **floodway**, where the strictest rules apply (see below).

**AH** - Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet.

**AO** - River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.

### Moderate or Undetermined Risk

**X (shaded)** - Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. Flood insurance is available to all property owners and renters, but not required.

**D** - Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

### Low Risk

**X (unshaded)** - Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.

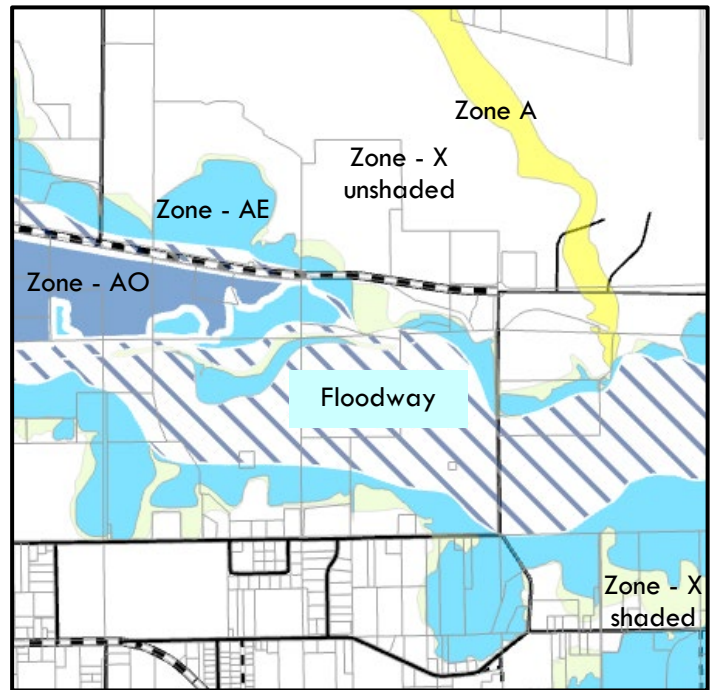
### What do those stripes mean?

A “**Regulatory Floodway**” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Communities must regulate development in these floodways to ensure that there are no increases in upstream flood elevations. For streams and other watercourses where FEMA has provided Base Flood Elevations (BFEs), but no floodway has been designated, the community must review floodplain development on a case-by-case basis to ensure that increases in water surface elevations do not occur or identify the need to adopt a floodway if adequate information is available.

Floodway means NO  
No encroachment  
No outdoor storage  
No piles of material  
No grading

### Rules for Floodway

Encroachments within the regulatory floodway are **prohibited**, including fill, new construction, substantial improvements and other development, unless it has been demonstrated through hydrologic and hydraulic analyses performed by a licensed professional engineer that the proposed encroachment would not result in any increase, as shown by a **no-rise certification**, in flood levels within the County during the occurrence of the base flood discharge.



## Rules for all Special Flood Hazard Areas outside of Floodway

- **Outside storage is not allowed** of floatable materials associated with nonagricultural uses. Materials that are not floatable can be stored outside, provided that an FHDP permit is obtained.
- Structures shall be designed and adequately anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- Structures shall be constructed by methods and practices that minimize flood damage with flood resistant materials.
- Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- All electrical shall be elevated a minimum of one (1) foot above the BFE unless it meets the exception in ASCE 24.
- Water supply systems and septic systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the septic system into flood waters.
- Fill material shall be certified by an engineer, designed to withstand erosional forces associated with the base flood.
- Oil and gas production facilities, including tanks, shall be anchored to resist flotation, collapse or lateral movement and elevated, floodproofed, or flood-vented as necessary.
- Some small structures without habitable space, including **fences**, may be allowed below the BFE with flood-venting.
- Construction or development shall not create a rise in the BFE of more than 0.3 feet.

**Floatable materials:**  
lumber, vehicles,  
boats, equipment,  
cargo containers,  
tanks, drums or  
other containers or  
any other pieces of  
material that are  
likely to float.

## New or Substantially Improved Habitable Structures

- Three (3) **Elevation Certificates** are required before, during, and after construction, verified during building inspection.
- The top of the bottom floor, including the basement, shall be **one (1) foot above the base flood elevation (BFE)**, or two (2) feet above the BFE for critical facilities
- Manufactured homes must be elevated and anchored to resist wind forces and prevent flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

## Venting for Structures without Habitable Space

According to FEMA Floodplain Management Bulletin P-2140 issued July 2020, agricultural and larger accessory structures shall be elevated above the BFE, unless the property owner has received a variance. Venting of existing structures located below the BFE that are not being substantially improved is still acceptable. Contact staff for venting requirements.



FEMA.gov Flood Resilience for Homeowners, Renters & Business Owners

<https://www.fema.gov/flood-maps/products-tools/know-your-risk/homeowners-renters>



## Permits Required

A floodplain permit is **required** before construction or **development** begins within any Special Flood Hazard Area (SFHA). This is both a federal and state rule found in the Code of Federal Regulations ([44 CFR § 60.3](#)) and the Colorado Revised Statutes ([C.R.S. 29-20-104](#)) and ([C.R.S 30-28-11](#))

**Development** means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. ([44 CFR § 59.1](#))

This includes things that do not normally require permits in Weld County, such as fences, small sheds, lean-tos, temporary items and outdoor storage of personal items.

**Non-conforming structures** were in place **before** the floodplain was mapped or were outside of the floodplain when they were built, and the map changed to include them. Non-conforming structures are only required to come into compliance if they are **substantially improved**, when the repairs or remodel are worth more than 50% of the value of the structure; or **substantially damaged**, when the damage is estimated to be at least 50% of the value of the structure. Bringing a property into compliance may be as simple as adding flood vents or as drastic as raising the entire structure. Non-conforming structures that are substantially damaged and located in a regulatory floodway cannot be replaced.

### Floodplain Permit for minor work in a structure (FP) - FREE

Replace furnace, water heater or A/C unit.

Remodel that is less than 50% of the value of the structure.

Replacing a well pump for an agriculturally exempt irrigation system.

FP permits can be filled out and signed by the property owner and in some cases require the notarized signature of the contractor.

### Flood Hazard Development Permit (FHDP) - \$180 and 45 days to process

Anything else that falls under the definition of development or construction.

FHDP permits in Zone A require a professional engineer to establish a base flood elevation (BFE).

FHDP permits require the stamp of a professional architect, surveyor, or engineer.

The following uses do not require a permit **only if** they do not require structures, do not require alteration of the floodplain such as fill, excavation or permanent storage of materials or equipment and will not cause flood losses on other land or to the public:

1. Agricultural uses such as tilling, farming, irrigation, harvesting, grazing, etc.
2. Private and public recreational uses that do not include overnight vehicle parking or camping
3. Irrigation and livestock water supply wells, provided they meet the standards for wells in a floodplain
4. Emergency flood damage prevention measures such as sandbagging.

### Floodplain Management Ordinance

The Floodplain Management Ordinance ([Chapter 23 Article XI of the Weld County Code](#)) contains the rules and regulations for the floodplain. Those listed in this flyer are not a complete list and may be updated at any time. This flyer does not include requirements for critical facilities, subdivisions, mining, levees, relocating a watercourse or development that would require a Letter of Map Revision (LOMR). See the online ordinance for up-to-date and accurate regulation information at [www.weld.gov](http://www.weld.gov) or call the Weld County Planning Department at 970-400-6100 and ask for a floodplain manager.

#### ***Development includes, but is not limited to:***

*Building anything new*  
*Remodeling an existing structure*  
*Adding fill dirt*  
*Storing items outside, such as wood or tires*  
*Building a fence*  
*Digging a hole*  
*Putting on a new roof*  
*Agricultural exempt items*  
*Placing a temporary structure*  
*Burying pipelines or electrical lines*  
*Septic systems*