Floodplain Management
A brief overview

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Floodplain Management

What is the National Flood Insurance Program (NFIP)?
The NFIP is a Federal program created by Congress to mitigate future flood losses nationwide through sound, community-enforced building and zoning ordinances and to provide access to affordable, federally backed flood insurance protection for property owners.

The NFIP is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.
**Floodplain Management**

**Are jurisdictions required to participate in the NFIP?**
No, participation in the NFIP is voluntary.

**Why do jurisdictions participate in the NFIP?**
The Federal Government that states that if a community will adopt and enforce a floodplain management ordinance to reduce future flood risks to new construction in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community as a financial protection against flood losses.
Potential Damaged Parcels

- Green: Potential Damaged Parcels in Unincorporated Weld
  - 3,278 Parcels, 1,705 with Structures, $290,453,050 Imps Value

- Orange: Potential Damaged Parcels in City Limits
  - 3,844 Parcels, 2,464 with Structures, $705,292,384 Imps Value
Potential Damaged Parcels in Unincorporated Weld  3,278 Parcels, 1,705 with Structures, $290,453,050
Potential Damaged Parcels in City Limits  3,844 Parcels, 2,464 with Structures, $705,292,384
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If a jurisdiction is a member of the National Flood Insurance Program (NFIP) FEMA requires that any development in the floodplain received a floodplain permit to show that the development is not adversely affecting neighbors up and down stream and that new construction is reasonably safe from flooding.

September 2013 - the South Platte rips through US HWY 34 just west of Kersey

The floodplain permits also contain information that the insurance agencies use to calculate risk and determine the cost of flood insurance.
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A floodplain permit is required for “development” in the floodplain. What does “Development” mean?

According to FEMA, **Development** is 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.

**How can I get my property out of the floodplain?**

If you are eligible you may apply for a **Letter of Map Revision (LOMR)** or a **Letter of Map Amendment (LOMA)**.
Floodplain Management
What is actually managed?

FEMA sets the rules and the local jurisdiction enforces the rules by reviewing and issuing floodplain permits.

In Weld County houses have to have the finished floor built 1 foot above the BFE to receive a floodplain permit. (State Rules)

Barns and out buildings need to have flood vent openings if it is built below the BFE.
100 year Flood Zone

What is a Base Flood or a 100 year Flood?
A flood having a 1% chance of being equaled or exceeded in any given year.

What is a Base Flood Elevation?
The computed elevation to which floodwater is anticipated to rise during the base flood. The BFE is the regulatory requirement for the elevation or floodproofing of structures.

The relationship between the BFE and a structure's elevation determines the flood insurance premium.
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From the movie: *Batman v Superman*
From the movie: *Batman vs Superman*

“We men of Kansas live on a pancake, so we come to the mountains. All downhill from here, down to the floodplain. Farm at the bottom of the world. I remember one season the water came bad. I couldn’t have been 12. Dad had out the shovels and we went at it all night. We worked ‘til I think I fainted. But we managed to stop the water. We saved the farm. Your grandma baked me a cake. Said I was a hero. Later that day we found out we blocked the water all right. We sent it upstream. The whole Lang farm washed away. While I ate my hero cake, their horses were drowning. I used to hear them wailing in my sleep.”
**Definitions**

**Definition:**
Flood zones are geographic areas that FEMA has defined according to varying levels of flood risk and type of flooding. These zones are depicted on the published **Flood Insurance Rate Map (FIRM)** or **Flood Hazard Boundary Map (FHBM)**.

**Special Flood Hazard Area (Floodplain area):** Is the land in the floodplain subject to a one percent or greater chance of flooding in any given year (aka. 100 year floodplain). The areas are designated as one of the following (specific to Weld County):

- Zone A
- Zone AE
- Zone AH; or
- Zone AO

*Special Flood Hazard Areas are periodically amended by FEMA via a Letter of Map Change (Letter of Map Amendment or Letter of Map Revision).*
Rivers that enter Weld County and exit via the South Platte

- Cache la Poudre
- Big and Little Thompsons
- St Vrain
- Boulder Creek
- Boulder
- Greeley
Flood Zone
Floodplains in Weld County

Greeley
Flood Zone
These are the panel numbers for Weld County. Each panel is a separate FIRM map.
FIRM maps

The FIRM (Flood Insurance Rate Maps) maps are available on www.FEMA.gov in the MSC (Map Service Center)

Example FIRM map

The FIRM maps for Weld County have an effective date of January 20, 2016
FIRM maps

Zone A (Approximate Floodplain): A Special Flood Hazard Area where Base Flood Elevations and Flood hazard factors have not been determined by FEMA.
Zone AO: The AO is a Special Flood Hazard Area where shallow flooding occurs and flood depths are between one (1) and three (3) feet with the average depth of FLOODING shown but no flood hazard factors have been determined by FEMA.

Zones not typical to Colorado are: AH, AR, V, and VE. V Zones are coastal floodplains.
FIRM maps

Zone AE: Divided into the floodway and flood fringe. The AE Zone is a Special Flood Hazard Area where Base Flood Elevations and Flood Hazard factors have been determined by FEMA.
FIRM maps

Example of the Base Flood Elevation (BFE) and other floodplain information available on the Weld County mapping program: https://www.co.weld.co.us/maps/propertyportal/
FIRM maps

Electronic sources

- Weld County Property Information Portal
  https://www.co.weld.co.us/maps/propertyportal/

- FEMA National Flood Hazard Layer
  https://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30

Same area showing the difference in graphics between the Weld County mapping program and the FEMA mapping program
FIRM maps

FEMAs National Flood Hazard Layer showing Tamasag.

You are here.
Thank you.
Questions?

My view on 8/21/17 in Oregon