

Boulder County Flood Hazard Mapping

Community Meeting December 13, 2023

unincorporated Boulder County only



Using Zoom

In Zoom

Type questions in the Q&A



• Raise hand



Mute



On the phone

• *9 to raise / lower hand

• *6 to mute / unmute



Introductions

- Kelly Watson, Sarah Heller, Ron Flax, Dale Case Boulder County
- Kevin Doyle Michael Baker Intl.
- Christine Gaynes Federal Emergency Management Agency (FEMA)
- Terri Fead, Marta Blanco-Castano, Doug Mahan Colorado Water Conservation Board (CWCB)
- KC Robinson AECOM



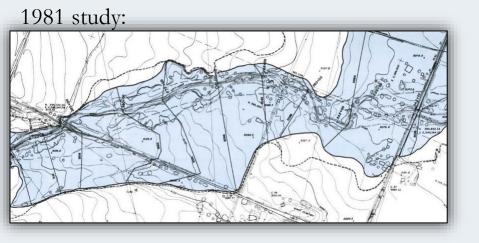


Meeting Goals

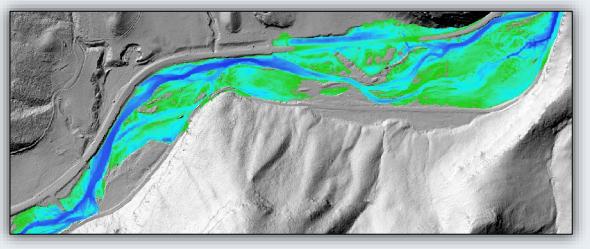
- Inform residents, landowners, community members (you!) of the remapping process
- Provide opportunity for public comment before Planning Commission and Board of County Commissioners hearings
 - FloodplainAdmin@bouldercounty.gov
- Have a fair & open dialogue



Introduction



CHAMP:



- Flood hazards are a risk to life, health, safety and property
- The National Flood Insurance Program (NFIP) requires communities to update flood risk information—risk is not static
- Colorado Water Conservation Board (CWCB) and local communities partner to identify and communicate new risk information
- Updating flood risk information promotes community resiliency



National Flood Insurance Program (NFIP) Overview

- Voluntary Federal Program
 - Overseen by FEMA
 - Managed by Communities
 - Enforced by Lenders
- Requires participating communities to regulate development
- Provides homeowners/renters with option to purchase insurance
- Provides federal assistance for mitigating risks
- Local engineers determine flood risk after extensive analysis









Colorado Hazard Mapping Program (CHAMP)

- Why was this study conducted?
 - Hazards change
 - Floodplain delineations are often outdated
 - Maps regularly updated across the country by FEMA, States, Communities
 - The State of CO initiated CHAMP after the 2013 Flood
 - Changes to flooding characteristics
 - Changes to understanding of rainfall
- Why does it impact you?
 - Know your flood hazard risk
 - Flood Insurance Rate Maps (FIRMs) will change
 - Regulation of development based on flood zone / floodway







CHAMP Roles

Ongoing Partnership

FEMA



- Provides funding for new flood risk studies
- Oversees NFIP

State (CWCB)



- Respond to community requests for updated risk information
- Initiate flood risk identification projects
- Support community
- FEMA partner

Community Officials



- Administer NFIP
- Communicate risk
- Manage development
- Flood risk mitigation
- Enforce regulations
- Identify new risk

Private Stakeholders



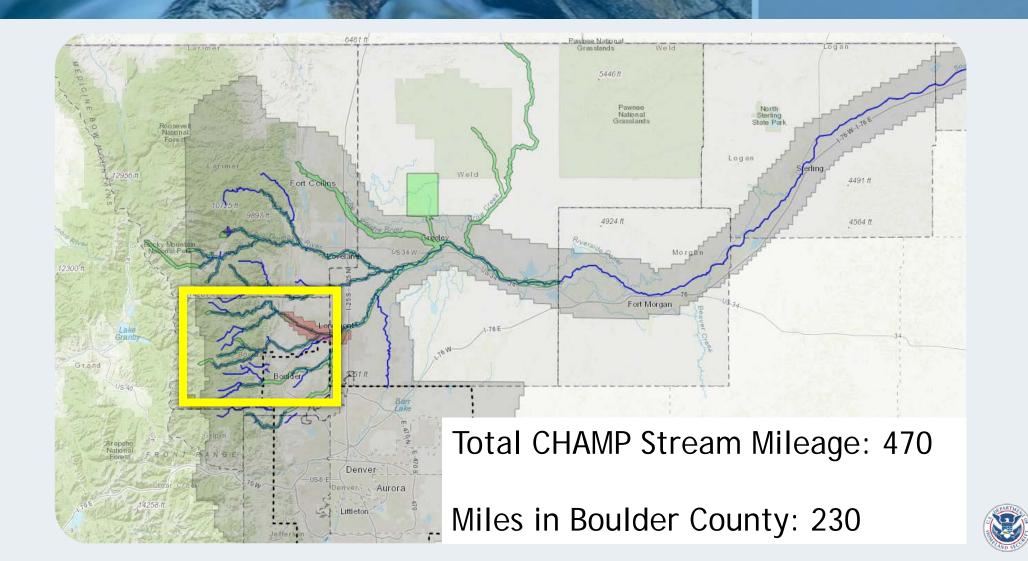
- Residents, landowners, community members
- Local engineers partner with government to update flood risk information







CHAMP Study Area



DNR DNR

Flood Study Details





Virtual land surface created from Light Detection And Ranging (LiDAR)

Survey



Surface information not in topographic data (Culverts, bridges, submerged channel, etc.)





Flood Study Details





Survey

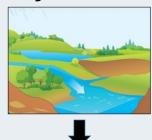






- Historic flood information used along with historic
- rainfall, stream gage data, and land usage information included
- Discharges both increased and decreased

Hydraulics



- Determines how water moves through a system
- Calculate Water Surface Elevations (WSEL)







Flood Study Details



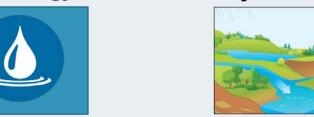


Survey





Hydrology

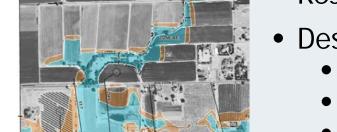


Hydraulics



Floodplains





- Results are mapped for ease of use
- Description of results:
 - Zone A & AE
 - Cross Sections
 - Base Flood Elevation (BFE)
 - Floodway







Are the Results Accurate?

- Every flood is different
 - Dam failures, Bridge/culvert clogging, Debris, Fires
- Models are a snapshot in time
 - Post-flood topographic and survey data
 - Best available data at the time
- Floodplain maps do not re-create a specific event
- Quality Control
 - Multiple engineers review data and results at various checkpoints
 - Community officials and members reviewed and provided input
 - FEMA contractors support quality control







CHAMP Timeline

2015

- CHAMP initiated
- Survey

2016

Phase I study, draft mapping

2017

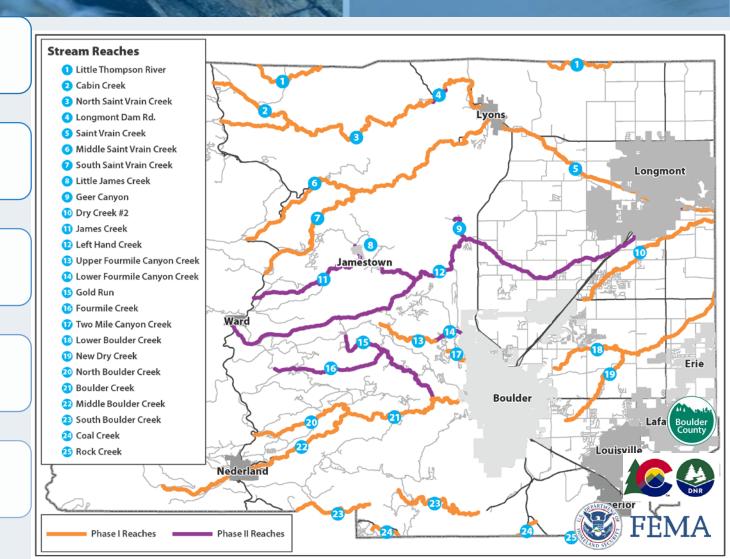
- Phase I outreach meetings, local adoption in May
- Phase I sent to FEMA for review
- Phase II study, draft mapping

2018

- Phase II outreach meetings, location adoption in July
- Phase II sent to FEMA for review

2019

- FEMA review
- Preliminary Flood Insurance Rate Maps (FIRMs) released



CHAMP Timeline

 Preliminary FIRM local adoption and outreach meetings in January

2020

Appeal Period #1

2021

Appeal Period #2

2022

Scientific Resolution Panel for Lefthand Creek

Public Meetings (WE ARE HERE)

2023

• Revised Preliminary FIRMs

- Planning Commission and BOCC hearings
- New Boulder County floodplain map effective

2024

- January (estimated) "Letter of Final Determination"
- July (estimated) new FIRM effective date







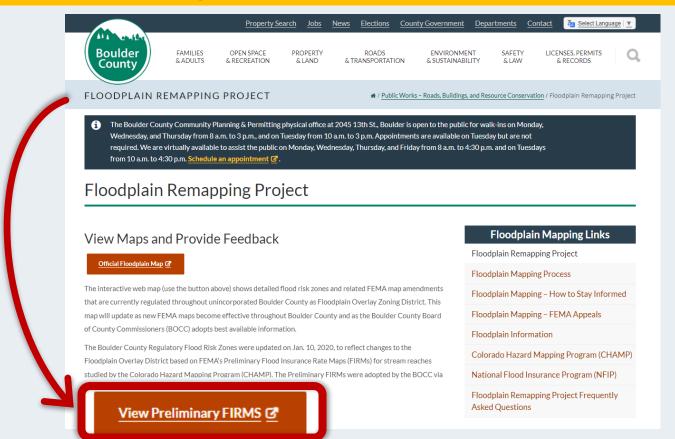
Next Steps

- Boulder County
 - Staff propose removing Boulder County Floodplain for CHAMP reaches
 - Planning Commission hearing as soon as January 2024 (Zoning docket Z-23-0001)
 - Board of County Commissioners hearing
 - Comments accepted through January 2nd FloodplainAdmin@bouldercounty.gov
- FEMA:
 - Revised Preliminary FIRMs become effective FIRMs
 - Additional Letter of Map Revision (LOMR) incorporation
- The FEMA FIRM will be the one effective map for CHAMP reaches



Using the County's Online Map

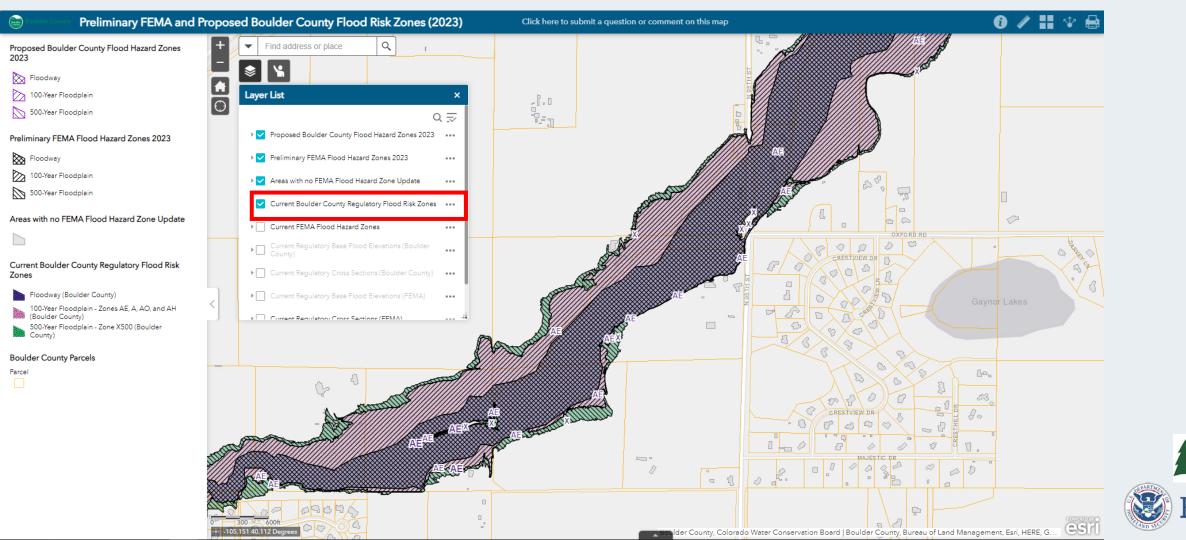
www.boco.org/FloodplainRemapping



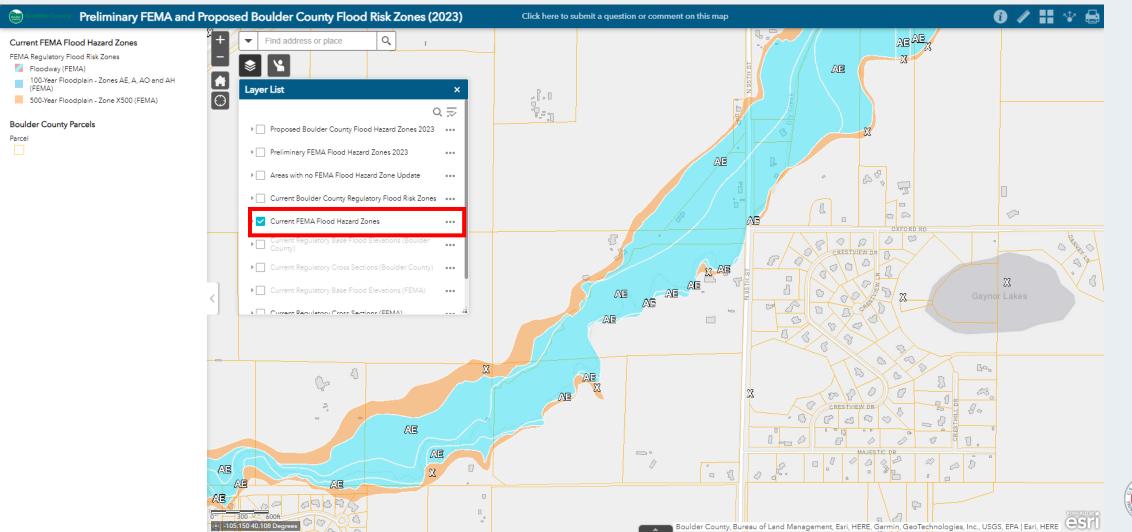




Using the County's Online Map



Using the County's Online Map









Can Results Be Changed?

- Appeal period is over no new appeals
- Letter of Map Amendment (LOMA)
 - Applies to individual structures or properties
 - Requires Survey data (Elevation Certificate)
 - Can be submitted online
 - Should be submitted 30-60 days prior to effective date
- Letter of Map Revision (LOMR)
 - e.g., for construction projects not included in Preliminary FIRMs
 - 25+ LOMRs will go effective next year





Flood Insurance

- Everyone can purchase flood insurance (homeowners and renters), even those not in a mapped floodplain
- Insurance is required for federally backed mortgages in Special Flood Hazard Areas (SFHAs)
 - Zone A, AE, AH, AO

• But... lenders can require insurance anywhere



Flood Insurance

- 1. Is flood insurance mandatory for properties in the floodplain?
- 2. There is 100-year or 500-year floodplain on my property but the structure itself is outside the floodplain? Will I be required to maintain flood insurance?
- 3. Does floodway affect flood insurance?
- 4. Will the map change affect my premiums?



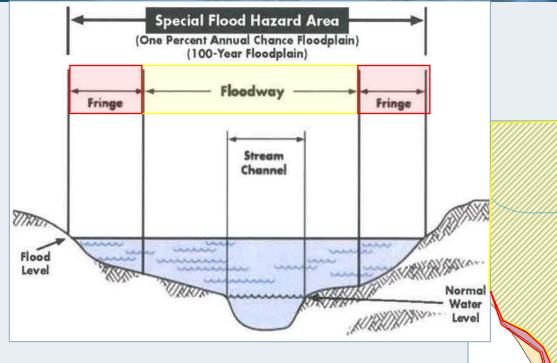
Development in Floodplains

- Requirements are found in the Boulder County Land Use Code (Article 4-400)
- Different requirements in the Floodway vs. "flood fringe"
- Questions? Contact <u>FloodplainAdmin@bouldercounty.gov</u>





Floodways Special Flood Hazard Area (One Percent Annual Chance Floodplain)





Final Thoughts

- Where it rains, it floods!
- Talk to your insurance agent and lender about insurance requirements
- Send comments on zoning docket to <u>FloodplainAdmin@bouldercounty.gov</u>
- Sign up for email updates at www.boco.org/FloodplainRemapping

Questions?







Contacts and Resources

Kelly Watson

Boulder County Floodplain Management FloodplainAdmin@bouldercounty.gov 720-564-2652

Terri Fead

CWCB Floodplain Mapping Coordinator Terri.Fead@state.co.us

Christine Gaynes

FEMA Specialist

Christine.Gaynes@fema.dhs.gov

www.boco.org/FloodplainRemapping

www.ColoradoHazardMapping.com

>Click "Flood Hazard"

>Click "Boulder"

www.floodsmart.gov





Questions?

In Zoom

Type questions in the Q&A



• Raise hand



Mute



On the phone

• *9 to raise / lower hand

• *6 to mute / unmute

