

Virtual Meeting Participation

GoToMeeting Attendee Control Panel

There will be polls during this presentation. Your participation is appreciated!

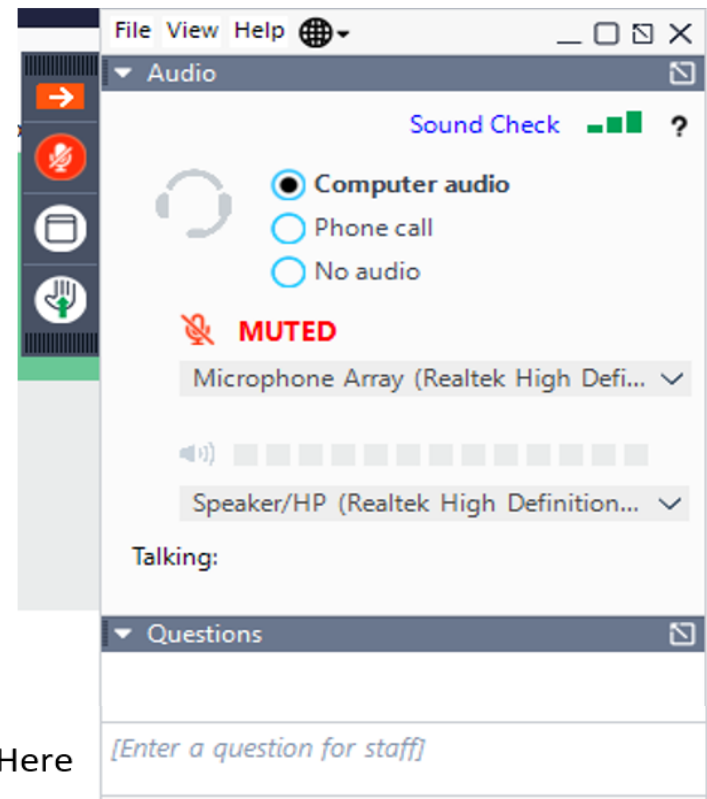
Handouts are also available for download through the meeting control panel!

Hide/Show the Control Panel

Mute/Unmute

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Raise/Lower Your Hand



Ask a Question Here



2018 Arapahoe County Physical Map Revision (PMR) Big Dry Creek & Tributaries

Open Houses for the City Of Centennial

Tuesday, August 18 from 10:00-11:00 AM
Wednesday, August 19 from 6:00-7:00 PM
Wednesday, September 2 from 6:00-7:00 PM



FEMA



MHFD
MILE HIGH FLOOD DISTRICT

CITY OF Englewood



ARAPAHOE COUNTY
COLORADO'S FIRST

Littleton

Centennial

Southeast Metro
Stormwater
Authority



What Can You Learn Today?

- ▶ **How to make your home and community safer and more resilient**
- ▶ **How to view the preliminary maps to see how your property or structure will be affected by the new maps**
- ▶ **Why flood insurance is important**
- ▶ **What to do if you think your property or structure is incorrectly mapped on the new maps**
- ▶ **Development and building improvement requirements for properties and structures in high-risk flood zones**



Meeting Overview

Agenda:

- Flood Hazards & NFIP Overview
- Project Background
- Insurance and Appeals

Handouts:

- LOMR versus Appeal
- Flood Insurance Questions
- Need to Know Map Changes
- Agents Guide to Grandfather Rule
- Terms & Definitions

Terms and Definitions

| | |
|---|--|
| Base Flood | The flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100 year flood." |
| Base Flood Elevation (BFE) | The ground elevation in which the floodwater anticipated to rise during the base flooding event. |
| Consultation Coordination Officer (CCO) Meeting | Meeting held by FEMA and its partners to present the preliminary FIRMs and FIS reports to community officials. |
| Chief Executive Officer (CEO) | The community official who is charged with the authority to implement and administer laws, ordinances, and regulations for that community. |
| Community Rating System (CRS) | The Community Rating System (CRS) is a voluntary program for NFIP-participating communities. The goals of the CRS are to reduce flood damages to insurance property, strengthen and support the insurance aspects of the NFIP and encourage a comprehensive approach to floodplain management. |
| Flood Hazard Area Delineation Study (FHAD) | A Flood Hazard Area Delineation (FHAD) study is used to identify and update flood risk boundaries due to both natural and development related changes that occur over time. |
| Flood Insurance Rate Map (FIRM) | The map created by the NFIP for the community. |


FEMA Region VIII Current Mapping Process for UDFCD

- 1 UDFCD WORKS WITH LOCAL GOVERNMENTS TO PREPARE A FLOOD HAZARD AREA DELINEATION (FHAD) includes hydraulic model, floodplain mapping and report
- 2 UDFCD BOARD OF DIRECTORS PASSES RESOLUTION ACCEPTING THE FHAD

Flood Insurance Rate Maps' (FIRMs) Impact on Flood Insurance

Flood risks change over time. To ensure the public knows their flood risk and that flood insurance policies are priced accurately, FEMA works with local and tribal communities, State agencies, and Federal partners to develop up-to-date flood hazard maps, known as Flood Insurance Rate Maps (FIRMs), and other flood hazard information.

Due to both natural and development related changes that occur over time, FIRMs must be updated to reflect changes in risk and areas affected by the 1-percent annual chance flood. The Urban Drainage and Flood Control District (UDFCD) is working



**FLOOD HAZARDS
&
NATIONAL FLOOD INSURANCE
PROGRAM (NFIP) OVERVIEW**

Flood Insurance Rate Maps (FIRMs) Identify Flood Hazard Risk Zones

Flooding is actually one of the most common and costly disasters.

If you have a 30-year mortgage and live in a high-risk flood zone, you have a **26-percent chance of being flooded during the duration of the loan.**

As storms get bigger and more frequent, many people experience flooding in areas that are typically not affected. In 2013, a major flood hit Colorado's Front Range and **more than 30 percent of insurance claims were outside of the high-risk flood zone.**

Everyone lives in an area with some flood risk – **it's just a question of whether you live in a low-, moderate-, or high-risk area**

The FIRMs do not identify areas of “No Risk”.



NFIP OVERVIEW

- **Voluntary Federal Program**
 - Overseen by FEMA
 - Managed by Communities
 - Enforced by Lenders
- **Requires participating NFIP communities to regulate development in the floodplain**
- **Provides homeowners/renters with option to purchase insurance based on flood zones**
- **Provides federal assistance for mitigating risks**



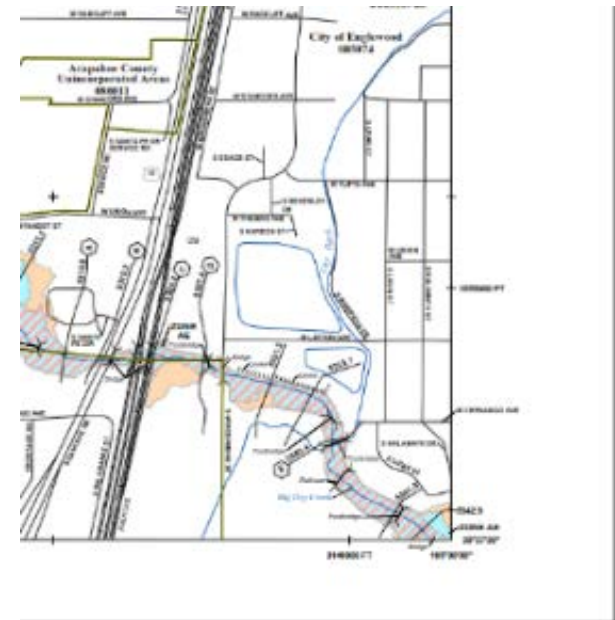
Evolving Flood Risk

- The National Flood Insurance Program (NFIP) requires communities to update flood risk information—risk is not static.
- The Mile High Flood District and local communities partner to **identify and communicate revised flood risk information**
- Updating flood risk information **promotes resiliency within your community** with the ultimate goal to keep people, properties, and infrastructure safe from flooding disasters.



Why is this Meeting Important to You?

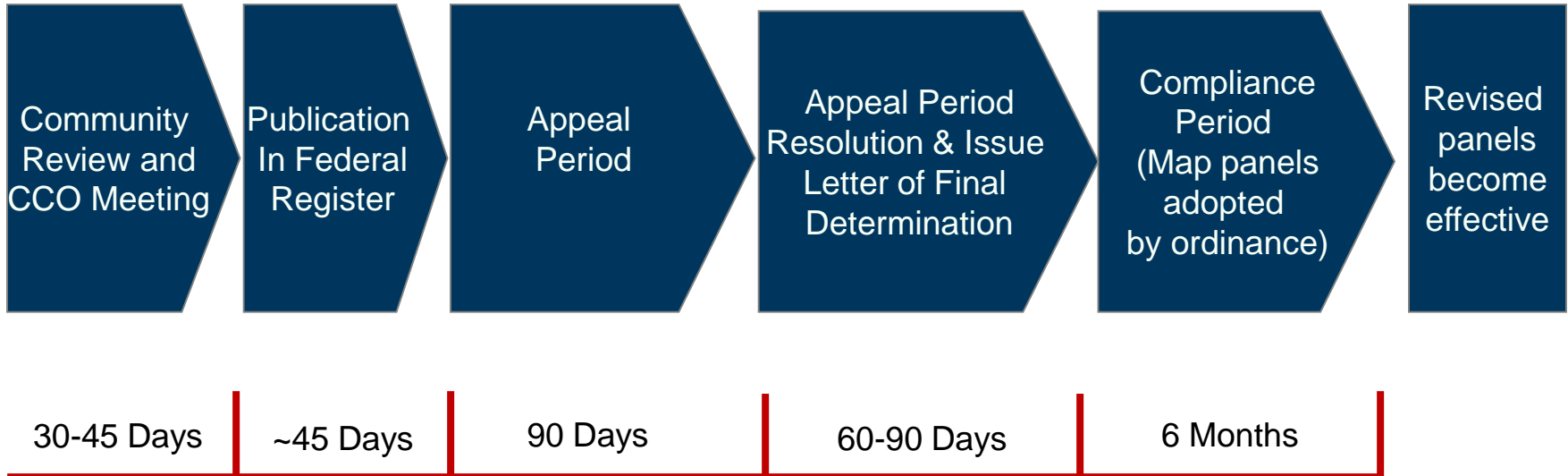
- **Your flood designation may have changed**, according to the preliminary Flood Insurance Rate Maps (FIRMs).
- Updated FIRMs will provide you with the latest proposed flood risks, so you can identify and mitigate them.



PROJECT BACKGROUND

Post-Preliminary Process

Post-Preliminary Processing



2018 Arapahoe County Physical Map Revision Big Dry Creek and Tributaries

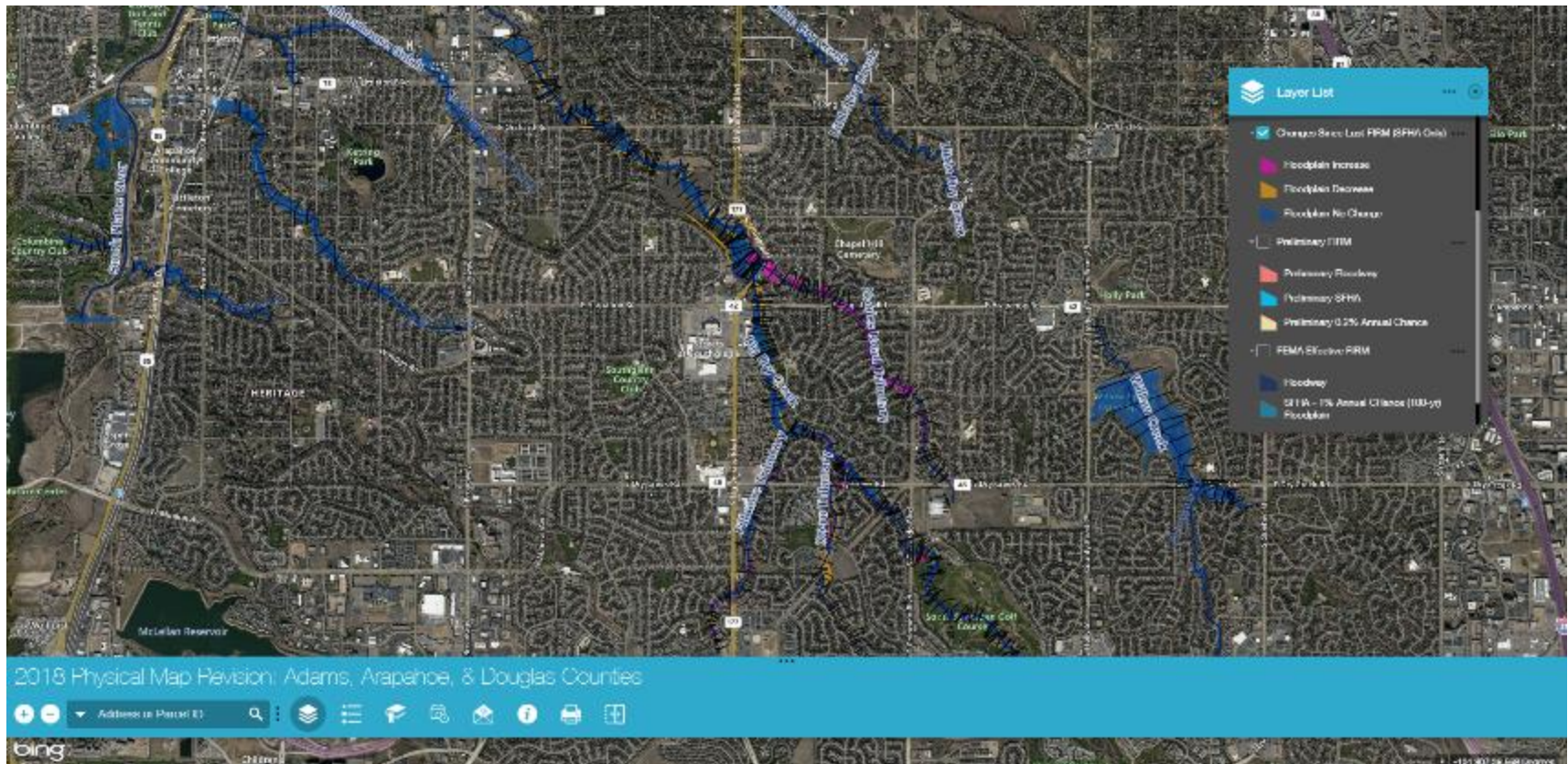
| Structure Count | Big Dry Creek | Fillmore Tributary | Otero Tributary | Nobles Tributary |
|--|---------------|--------------------|-----------------|------------------|
| Structures in Revised High Risk Area | 18 | 2 | 4 | 34 |
| Structures in Effective High Risk Area | 42 | 2 | 0 | Not Mapped |
| Number Added * | 2 | 1 | 4** | 34 |
| Number Removed | 26 | 1 | 0 | 0 |

*Newly Mapped into High Risk Area

**May include multi-family structures

Changes Since Last FIRM

- Changes Since Last FIRM (CSLF) is a dataset that allows a simple comparison between the preliminary data and the current effective data
- Analyze how the revised mapping will impact individual insurable structures



Preliminary Product Download

- Preliminary FIRMs, FIS Report, and FIRM Database are posted to the FEMA Map Service Center website

FIS Reports

| Item ID | Item Name | Prelim Issue Date | Size | View |
|-------------|-----------------------------|-------------------|-------|------|
| 08005CV001E | FLOOD INSURANCE STUDY (FIS) | 02/28/2020 | 11.2M | |
| 08005CV002E | FLOOD INSURANCE STUDY (FIS) | 02/28/2020 | 12.4M | |
| 08005CV003E | FLOOD INSURANCE STUDY (FIS) | 02/28/2020 | 12.5M | |
| 08005CV004E | FLOOD INSURANCE STUDY (FIS) | 02/28/2020 | 11.4M | |
| 08005CV005E | FLOOD INSURANCE STUDY (FIS) | 02/28/2020 | 18.2M | |
| 08005CV006E | FLOOD INSURANCE STUDY (FIS) | 02/28/2020 | 16.3M | |

FIRM Database

| Item ID | Item Name | Prelim Issue Date | Size | Download |
|---------|---------------|-------------------|-------|----------|
| 08005C | FIRM Database | 02/28/2020 | 35.6K | |



Preliminary FEMA Map Products

Disclaimer: Preliminary data are for review and guidance purposes only. By viewing preliminary data and maps, the user acknowledges that the information provided is preliminary and subject to change. Preliminary data, including new or revised FIRMs, FIS reports, and FIRM Databases, are not final and are presented on the MSC as the best information available at this time. Additionally, preliminary data cannot be used to rate flood insurance policies or enforce the Federal mandatory purchase requirement. FEMA will remove preliminary data once effective data are available.

For more information on what these three types of data entail, visit FEMA's [Preliminary Flood Hazard Data](#) webpage.

State: Colorado

County: Arapahoe County

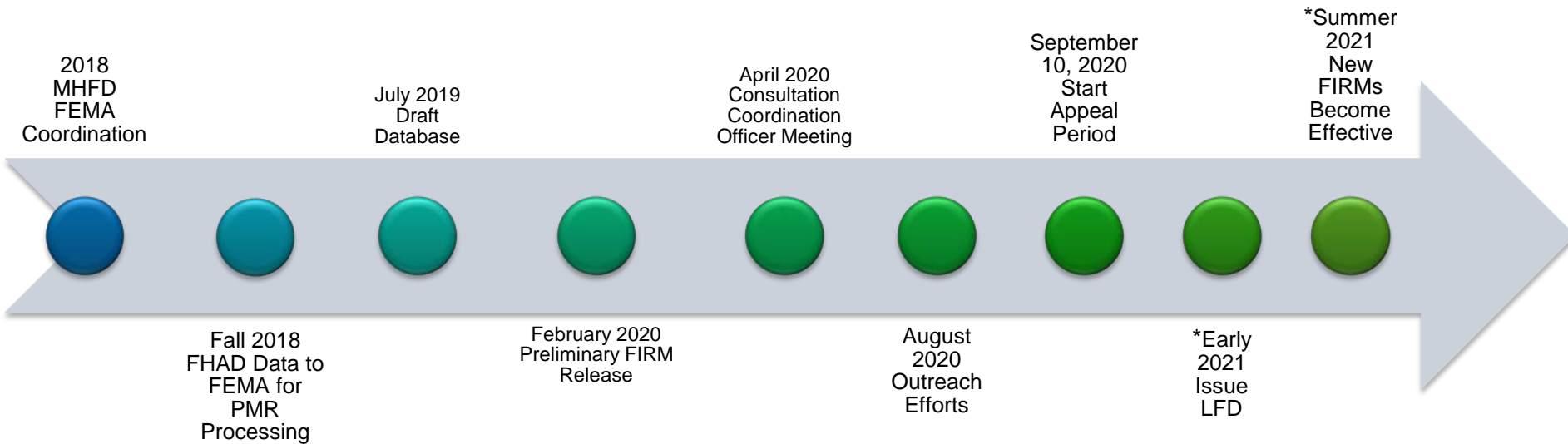
Preliminary Products issued on 02/28/2020 for Arapahoe County, Colorado

FIRM

| Item ID | Item Name | Prelim Issue Date | Size | View |
|-------------|---------------------------------|-------------------|--------|------|
| 08005C0144L | FLOOD INSURANCE RATE MAP (FIRM) | 02/28/2020 | 1.2M | |
| 08005C0163L | FLOOD INSURANCE RATE MAP (FIRM) | 02/28/2020 | 997.9K | |
| 08005C0432M | FLOOD INSURANCE RATE MAP (FIRM) | 02/28/2020 | 1.6M | |
| 08005C0451M | FLOOD INSURANCE RATE MAP (FIRM) | 02/28/2020 | 1.5M | |
| 08005C0452L | FLOOD INSURANCE RATE MAP (FIRM) | 02/28/2020 | 1.4M | |
| 08005C0454L | FLOOD INSURANCE RATE MAP (FIRM) | 02/28/2020 | 1.6M | |
| 08005C0458M | FLOOD INSURANCE RATE MAP (FIRM) | 02/28/2020 | 1.4M | |
| 08005CIND0F | FLOOD INSURANCE RATE MAP INDEX | 02/28/2020 | 833.1K | |

<https://hazards.fema.gov/femaportal/prelimdownload/>

Estimated Project Schedule



* Dates are estimated and subject to change



QUESTIONS?



INSURANCE & APPEALS

Purchasing Flood Insurance

When is flood insurance required?

- When a structure is located in a high-risk flood zone (A, AE, etc.) and there is a federally-backed loan
- Insurance rates are based on the current effective Flood Insurance Rate Map (FIRM), until the new maps become effective



Flood Insurance

Factors Affecting Rating

- **Flood Zone Designation**
- **Elevation**
- **Pre-FIRM Status**
- **Post-FIRM Status**
- **Loss History**
- **Deductible and amount of building and contents coverage**



| Coverage Limits | Residential | Non-Residential | Renters |
|-----------------|-------------|-----------------|-----------|
| Building | \$250,000 | \$500,000 | |
| Contents | \$100,000 | \$500,000 | \$100,000 |



Flood Insurance

When do flood insurance policies become effective?

There is a 30 day waiting period before any new or modified flood insurance policies go into effect.

Exceptions are provided for:

- Insurance in connection with a loan transaction.
- Insurance purchased within 12 months of a map revision (1 day wait).
- Post-Wildfire designate areas.



**For detailed information,
please see the
General Rules section of the Flood
Insurance Manual**

Flood Insurance

Rating Options

- Preferred Risk
- Newly Mapped
- Grandfather Rule

Flood Insurance

- **If a community participates in the NFIP, anyone can purchase flood insurance (homeowners and renters), even those not in a mapped floodplain**
- **New Zones go into effect with effective FIRMs, not before**
- **Banks can require insurance anywhere**
- **Property Owners should contact insurance agent TODAY**



Insurance Rating

A home can be rated three ways:

- 1.** With an **Elevation Certificate (EC)** done by a licensed surveyor, engineer or architect
- 2. Preferred Risk (X Zone)**
- 3. Newly Mapped** rates which increase 15-25% annually until an EC is provided to agent
- 4. Grandfather Rule:**
 - Loyal Customer Grandfather Rule: Purchased before or within 12 months following a map revision and never letting it lapse
 - Built in Compliance: Purchased with an EC and/or prior map showing the home was built in compliance at the time it was built or letter from local floodplain administrator.

Policies may be transferred to a new home owner from the prior owner to maintain any of these types of rating

Flood Insurance

1. Newly Mapped into a High-Risk Area

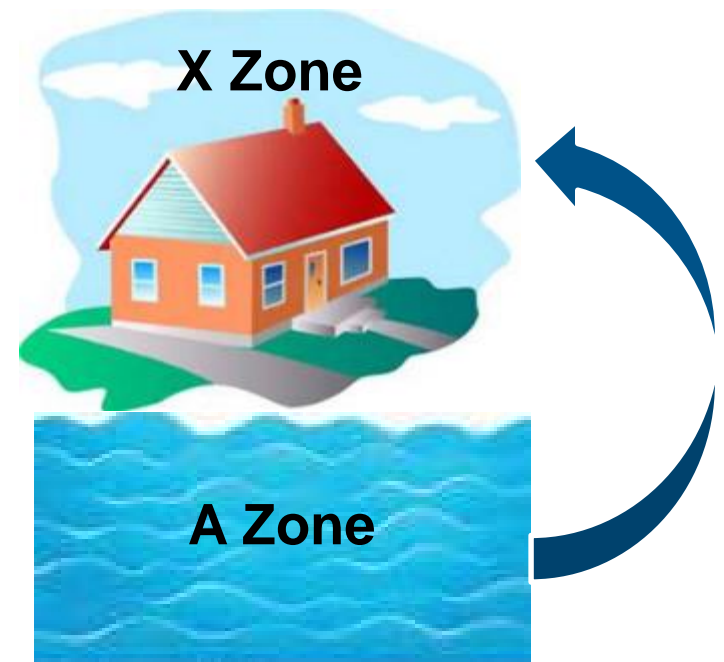
- ▶ Flood zone X to A
- ▶ Increased flood risk
- ▶ Mandatory purchase applies
- ▶ Preferred Risk
- ▶ Newly Mapped Procedure



Flood Insurance

2. Removed from the High-Risk Area

- ▶ Flood zone A to X
- ▶ Low-risk does not mean no risk
- ▶ Flood insurance optional, but recommended
- ▶ Convert to the Preferred Risk Policy



Flood Insurance

3. Change in Base Flood Elevation

- ▶ Flood zone remains the same
- ▶ Increased/decreased flood risk
- ▶ Mandatory purchase applies
- ▶ Continuous Coverage



Flood Insurance

4. No Change

- ▶ **Flood zone remains the same**
- ▶ **No change in flood risk**
- ▶ **Review Coverage**
- ▶ **Talk to Your Insurance Agent**



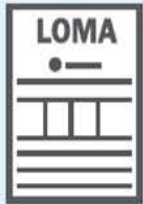


QUESTIONS?

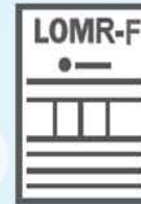
What is an Appeal

- Communities and residents within Arapahoe County will have a **90-day appeal period**:
 - Appeals must be based on mathematical or measurement errors, natural changed physical conditions, or technically incorrect data or methodology
 - Appeals must be supported by technical or scientific data and submitted within the 90-day appeal period
 - Appeals are limited to areas with new or modified Special Flood Hazard Areas (SFHA)
 - Appeals must be submitted through the Community, received by FEMA office, reviewed by MHFD and FEMA contractor, and incorporated, as appropriate

Letter of Map Change



Letter of Map Amendment (LOMA) is for when a flood map shows a building in the floodplain but it is actually on natural ground above the base flood elevation.



Letter of Map Revision Based on Fill (LOMR-F) is for when a building is on fill that puts it above the base flood elevation. Elevating using fill must be permitted under the law.



Lowest Adjacent Grade (LAG) is the lowest point where the ground touches the building.

Special Flood Hazard Area (SFHA) is the high risk area for flooding during the 1-percent-annual-chance flood.

Base Flood Elevation (BFE) is how high the water is expected to rise during the 1-percent-annual-chance flood.



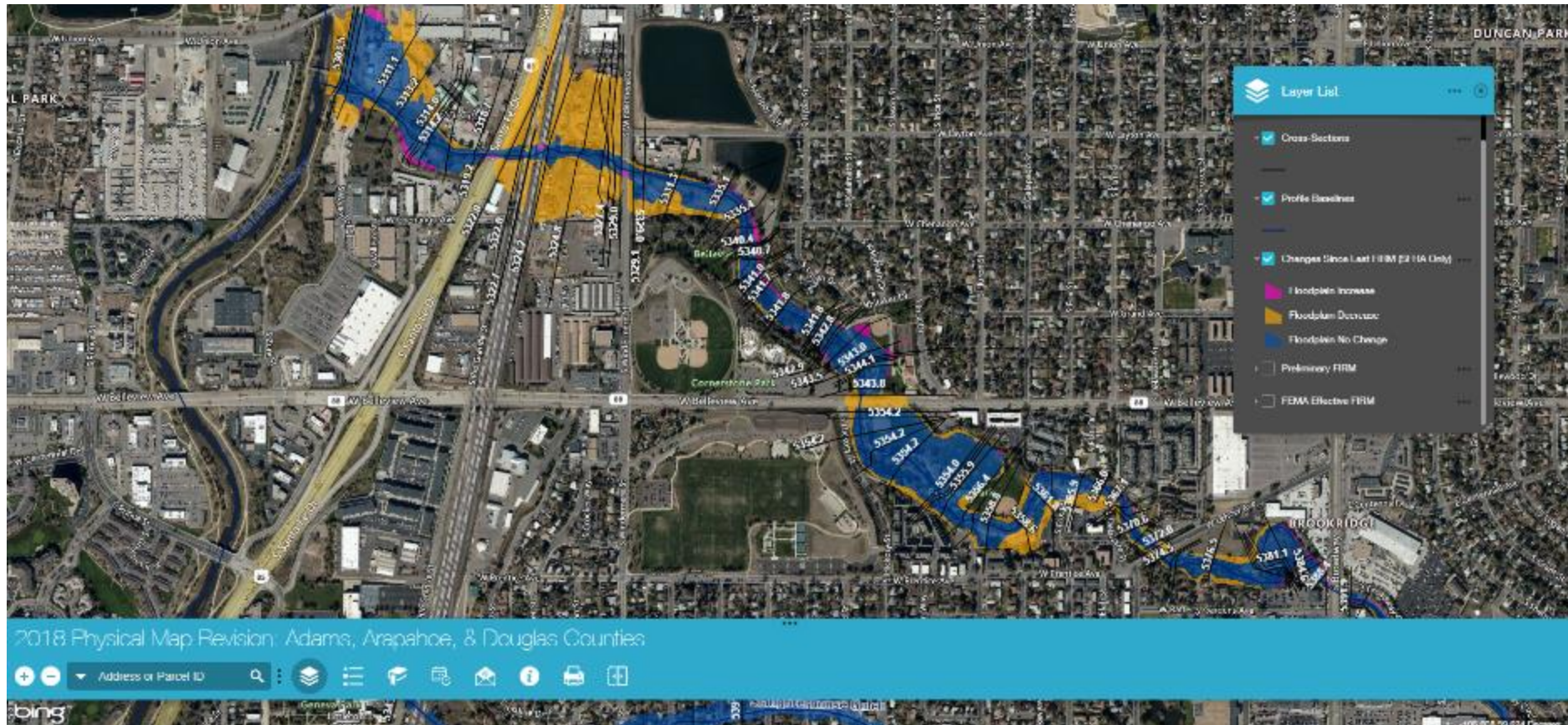
Fill



QUESTIONS?

Changes Since Last FIRM (CSLF)

Click to Open Map Viewer:



<http://udfcd.org/webmaps/PMR2018-AdArapDoGo/>

Local Requirements

- A floodplain development permit is required for all development in the high-risk zone.
- New structures and additions to existing structures in the high-risk zone are prohibited.
- Fencing and storage of hazardous and floatable materials in the high-risk zone are prohibited.
- Existing structures in the high-risk zone can be substantially improved in the flood fringe, but not the floodway, and are subject to additional requirements in the Land Development Code.



Local Mitigation Activities to Reduce Flood Risk

▶ **Nobles Road Tributary**

- Engineering work has been planned for additional alternatives analysis to reduce flood risk

▶ **Big Dry Creek**

- Construction of two improvement projects is scheduled to start this fall
 - Big Dry Creek Reach 12 (downstream of E. Dry Creek Road) – Stream stabilization and sanitary sewer protection
 - Big Dry Creek at E. Easter Avenue – Restore bridge capacity and stream stabilization
- Engineering design work with MHFD is beginning for stream stabilization at SSPRD golf course near S. Colorado Boulevard

▶ **Otero Tributary**

- Engineering design work is underway for stabilization improvements downstream of E. Phillips Avenue

What Can You Do To Protect Your Home?

- **Know Your Risk**
 - Review the preliminary maps
 - Review the CSLF
 - **Ask questions**
- **Understand Your Options**
 - Talk to your local insurance agent about flood insurance
 - Talk to SEMSWA and Centennial officials about development and building requirements
 - Talk to SEMSWA and Centennial officials about ways to reduce your home's flood risk
- **Be Prepared, Be Safe**
 - Purchase flood insurance
 - Develop a home emergency plan



Thank you for attending!

Please ask questions at this time





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Colorado Water Conservation Board

Doug Mahan, CFM
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[FEMA Map Information eXchange](#) (FMIX)
1-(877) FEMA MAP (1-877-336-2627)
NFIP Call Center

Additional Resources

Flood Insurance – floodsmart.gov
Family Flood Plan ready.gov/floods

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