



Transportation Department

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BOULDER COUNTY PLANNING COMMISSION AGENDA ITEM #6

Wednesday, November 20, 2019
Commissioners' Hearing Room, Third Floor
Boulder County Courthouse, 1325 Pearl Street, Boulder, CO

PUBLIC HEARING

STAFF PLANNERS: Kelly Watson, Floodplain Program Planner and Varda Blum, Floodplain Program Manager, Boulder County Transportation Department

Docket Z-19-0001: Zoning Map Amendments to the Floodplain Overlay District

Request: Zoning map amendments to the Floodplain Overlay District (FO District), specifically the Boulder County Floodplain and Floodway, based upon the floodplain remapping of the Colorado Hazard Mapping Program (CHAMP), Federal Emergency Management Agency (FEMA) Risk MAP and other best available information.

Location: Waterways throughout unincorporated Boulder County

Zoning: Areas to be rezoned as other flood risk zones within the FO District

Applicant: Boulder County Transportation Department

AGENDA:

1. Staff Presentation
2. Public Hearing
3. Planning Commission Discussion
4. Planning Commission Decision

PACKET CONTENTS

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o Best Available Information: A Tool for Your Community to Reduce Flood Risk (FEMA & State of Colorado, 2017) (Exhibit A)	A1 – A6
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BACKGROUND

The 2013 flood event caused widespread damage along waterways throughout Boulder County and other areas of the state. In response, the State of Colorado took steps to bolster long-term planning and resiliency efforts by approving funds through Senate Bill 15-245 for

the Colorado Hazard Mapping Program (CHAMP), managed by the Colorado Water Conservation Board (CWCB). CHAMP is updating local hazard information, including producing new regulatory floodplain maps for the most affected waterways (Figure 1).

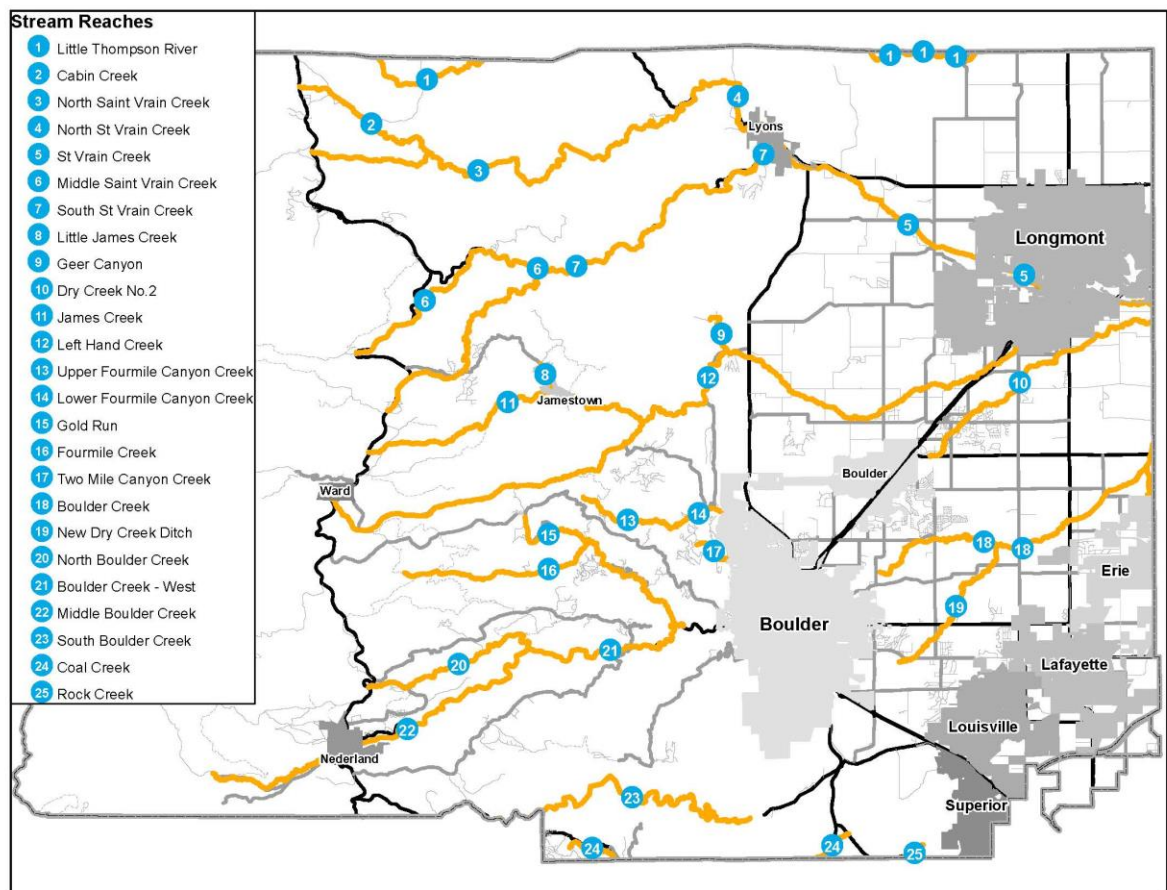


Figure 1. All Stream Reaches included in CHAMP study within unincorporated Boulder County.

Boulder County has already incorporated draft CHAMP data into its Regulatory Floodplain Maps. In 2017 and 2018, Boulder County undertook comprehensive zoning map amendments to the Floodplain Overlay District (FO District), specifically the local Boulder County Floodplain and Floodway, to adopt the two phases of CHAMP draft floodplain mapping (Dockets Z-17-0001 and Z-17-0002). These map amendments were accomplished through the map adoption process set forth in the floodplain regulations in Article 4-400 of the Boulder County Land Use Code, and included technical review, public notification, and hearings before the Planning Commission and the Board of County Commissioners. The draft CHAMP data were adopted via Board of County Commissioners Resolutions 2017-68 and 2018-78.

In September 2019, the Federal Emergency Management Agency (FEMA) released Preliminary Flood Insurance Rate Maps (Preliminary FIRMs) based on the CWCB/CHAMP remapping efforts. The Preliminary FIRMs have several minor differences compared to the already adopted draft CHAMP maps; however, most of the differences are due to the smoothing of boundaries. The Preliminary FIRMs are likely to be very similar to the future effective final FIRMs; however, the final FIRMs are unlikely to be ready for another two years. Local adoption of the Preliminary FIRMs, as compared to waiting two or more years

for release of the final FIRMs, will accelerate the ability for staff and residents to rely on floodplain risk mapping and associated zoning that will be most similar to the county's and FEMA's final floodplain mapping.

Further, FEMA requires the extents of the FEMA effective 100-year floodplain to remain a part of the FO District until it adopts the local studies as new FIRMs. Per guidance from FEMA and CWCB (Exhibit A), in locations within the FO District where there is overlapping FEMA and Boulder County Floodplain and Floodway, the most conservative study controls. When the CHAMP study is eventually adopted by FEMA into the effective FIRM, the Boulder County Floodplain and Floodway will become one and the same with the FEMA effective map in CHAMP reaches. FEMA flood insurance requirements and rate calculations will not change until FEMA adopts the final FIRMs.

In addition to the CHAMP remapping process, FEMA periodically conducts new floodplain studies through its Risk Mapping, Assessment, and Planning (Risk MAP) process. One such study on portions of Coal Creek and Rock Creek resulted in a recent (August 15, 2019) update to the effective FIRM and reflects multiple topographical and drainage changes from the previously effective flood studies conducted in the 1980s. The FIRM update was automatically incorporated into the FO District, as required by Article 4-403.A.1 of the Land Use Code. The Boulder County Floodway in this reach is now superseded and is proposed for removal from the FO District.

CHAMP Floodplain Mapping

Floodplain mapping is based on hydraulic studies involving data collection, analysis, and numerical modeling of the interaction between the existing topography and the predicted flow in creeks during the 1% annual chance flood event. The CHAMP mapping incorporates post-flood topographic survey and analysis of flow that incorporates rainfall and stream data collected during the 2013 floods.

Traditionally, information about revised flood hazards is not received by the communities until after FEMA has already created Preliminary FIRMs and distributed those Preliminary FIRMs at the beginning of a formal appeal period. However, at the request of county staff, CWCB committed to delivering 'draft' mapping associated with the CHAMP project to the county much earlier than typical so that county staff would be able to:

- Engage in technical review and provide feedback to CWCB/FEMA early in the process when change is easier to make,
- Engage community members that have site specific on-the-ground knowledge to also provide timely feedback to the remapping process, and
- Allow the county, after a period of technical review and outreach, to adopt the draft floodplain mapping as best available information.

As a result, before the draft floodplain mapping was adopted in 2017 and 2018, county staff engaged in technical review, requested revisions to draft data, and conducted extensive outreach to residents. Based on this review and feedback from residents, the most significant changes to the floodplain mapping occurred before the draft maps were adopted; therefore, the changes between the draft maps and the Preliminary FIRMs in this docket are relatively minor.

SUMMARY OF PROPOSED FO DISTRICT ZONING MAP AMENDMENTS

The proposed zoning map amendments include updates to the Boulder County Floodplain and Floodway within the Floodplain Overlay (FO) District, along approximately 230 miles of stream reaches within unincorporated Boulder County (Figure 2). This includes both CHAMP reaches and sections of Coal Creek and Rock Creek where Boulder County Floodway was superseded by FEMA Risk MAP analysis.

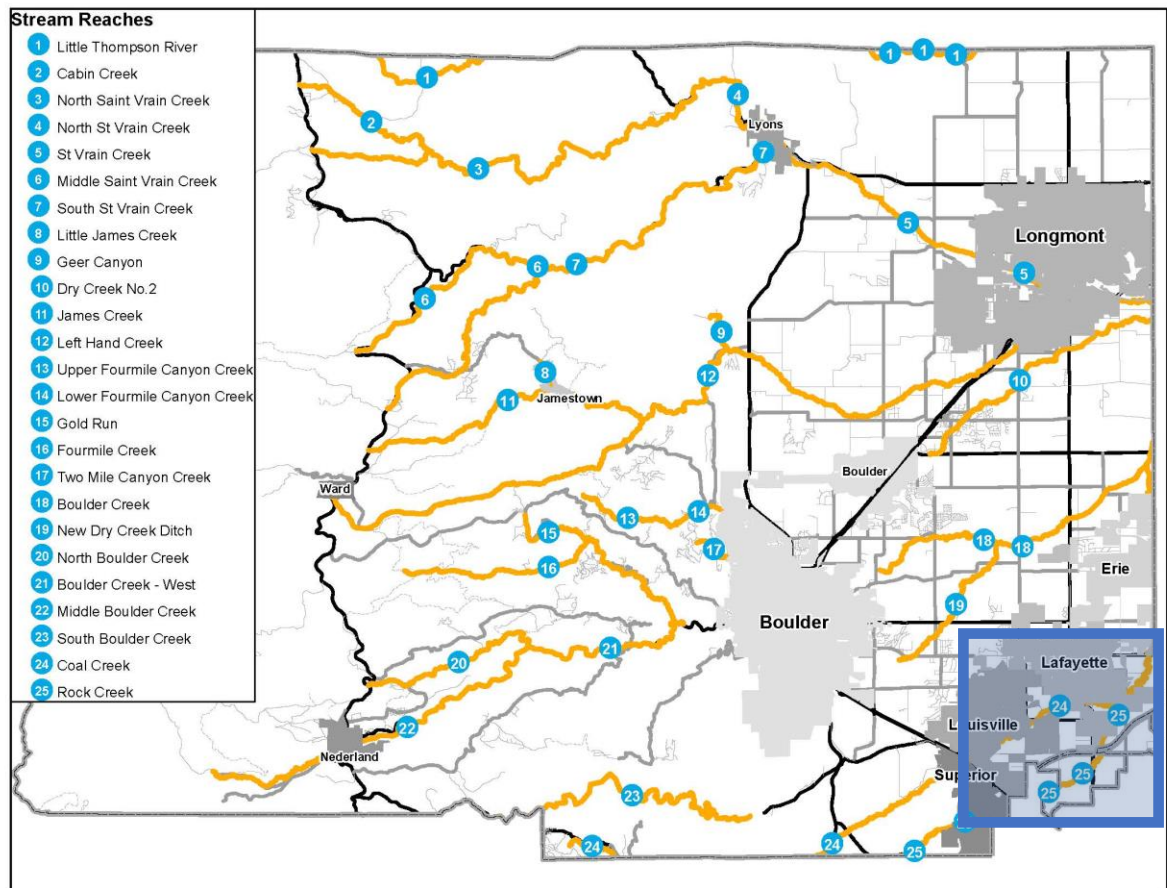


Figure 2: Locations of Proposed Zoning Map Amendments to Boulder County Floodplain within the Floodplain Overlay District (Z-19-0001), including both CHAMP reaches and sections of Coal Creek and Rock Creek where Boulder County Floodway has been superseded by FEMA map updates (highlighted in blue square).

The details of the proposed zoning map amendments are shown on an interactive web map at www.boco.org/FloodplainMapUpdate. The web map can also be accessed from the www.BoulderCounty.org homepage, by going under 'Property & Land' in the main heading, then going to 'Floodplain Management' in the drop-down window that appears. A link at the top of the Floodplain Management main page will connect the viewer to the Floodplain Remapping Project pages where all remapping-related information is located. On that page, the viewer can click the 'View Proposed Changes to Flood Risk Zones' button to access the web map.

On the web map, the proposed amendments to the FO District are on the layer labeled 'Proposed Regulatory Flood Risk Zones'. This layer includes changes to the FO District based upon the layer titled 'Preliminary CHAMP Flood Risk Zones'. In order to see which areas of the FO District are currently effective FEMA Floodplain and Floodway versus

Boulder County Floodplain and Floodway, toggle on and off the ‘Boulder County Regulatory Flood Risk Zones’ and ‘FEMA Flood Risk Zones’ layers.

REFERRAL, PUBLIC NOTICE, AND PUBLIC COMMENT

Staff held regular coordination meetings with FEMA and the CWCB throughout the technical review and outreach portions of the CHAMP remapping project. All agencies are in support of the proposed map amendments.

Referral Responses

The rezoning application was referred to relevant agencies and stakeholders. Copies of all comments received by the Floodplain Remapping Team are compiled in Exhibit B. The following agencies reviewed the proposal and had no conflicts / no comment:

- Boulder County Parks and Open Space
- Boulder Valley Conservation District
- City of Boulder Open Space & Mountain Parks
- City of Longmont
- Colorado Division of Water Resources
- Coal Creek Canyon Improvement Association
- Larimer County Engineering Department
- Larimer County Planning
- Longs Peak Water District
- Niwot Sanitation District

Additional Public Comments

Notification of property owners and stakeholders affected by the proposed comprehensive zoning map amendments in Docket Z-19-0001 occurred in a variety of ways, including:

1. Maintenance of a [Floodplain Remapping Project website](#) (over 600 unique visits since September 1st, 2019) and [docket webpage](#) established September 23rd, 2019
2. [Floodplain Remapping Newsletter](#) distributed to approximately 2,400 email addresses on October 17th, 2019
3. Maintenance of an interactive [web map](#) for comparison of current regulatory and proposed regulatory floodplain zones (over 650 total visits since September 1st, 2019)
4. Boulder County Planning Commission Public Hearing on November 20th, 2019 (1,646 postcard notifications mailed to property owners and 2,440 email addresses contacted via Boulder County listservs)

Property owners were able to provide comments through an online comment form linked to the web map, as well as through email and telephone inquiries. All public comments that county staff received regarding Docket Z-19-0001 are compiled in Exhibit B. Members of the public will have another opportunity to review maps and provide technical input to FEMA during the formal FEMA appeal period, expected in 2020.

CRITERIA REVIEW

Staff reviewed the conditions and standards for approval for zoning map amendments under Article 4-1102 of the Boulder County Land Use Code, and finds the following:

1) A public need exists for the map amendment;

Local adoption of the Preliminary FIRMs, as compared to waiting two or more years for release of the final FIRMs, will accelerate the ability for staff and residents to rely on floodplain risk mapping and associated zoning that will be the most similar to the county's and FEMA's final floodplain mapping. The proposed map amendments are based on best available information that will more accurately represent where flooding is likely to occur; provide detailed information for property owners regarding flood risks; and, enable more effective floodplain management that will better protect the health, safety, and welfare of Boulder County residents.

Therefore, staff determines that this criterion is met.

2) The amendment is consistent with and in furtherance of the stated intent and purposes of this Code;

Staff finds that the proposed FO District map amendments are consistent with and in furtherance of the stated intent and purpose of Article 4-400 of the Land Use Code, FO District as noted in Criteria 1 above:

Section 4-401, Purpose, '*...to protect life, property, and health; to ensure the best available data is used in making development decisions; ...*'.

Therefore, staff determines that this criterion is met.

3) The amendment is in accordance with the *Boulder County Comprehensive Plan* and any applicable intergovernmental agreement affecting land use development;

Staff finds the proposed map amendment is in accordance with the Boulder County Comprehensive Plan, Natural Hazards Element, Goals, Policies, & Maps including:

- Natural Hazard Goal L.1: '*Inappropriate development in natural hazard areas should be reduced as much as possible or eliminated in order to minimize potential harm to life, health, and property*'
- Natural Hazards Policy NH1.02: '*Natural hazards potentially affecting the county should continue to be identified and made known to the public and public officials. The county should promote a high level of public awareness about the risks of these identified hazards which may impact people, property, and their environment...*'
- Natural Hazards Policy NH4.01: '*The county should strongly discourage and strictly control land use development from locating in designated floodplains, as identified in the Boulder County Zoning Maps*'

Adopting the best available floodplain information to the FO District will help significantly reduce inappropriate development in known flood risk areas. The proposed amendments will also make the best available flood risk information known to the public and public officials and result in the desired high level of public awareness of the risks of the identified flood hazards. This information will allow property owners to make better informed decisions about their property and will enable the county to make better regulatory decisions.

Therefore, staff determines that this criterion is met.

4) The subject property is an appropriate site for the map amendment, and is a reasonable unit of land for such reclassification;

Staff finds that their technical review of the hydrologic data, modeling procedures, and floodplain mapping support the proposed amendments. CHAMP and FEMA have also engaged in extensive quality assurance, indicating that the proposed amendments represent the best available flood hazard information and that the subject properties are appropriate sites for the map amendment and should be reclassified as proposed.

Therefore, staff determines that this criterion is met.

5) The map amendment would not have a material adverse effect on the surrounding area;

Staff finds that this map amendment will benefit the welfare, health, and safety of surrounding areas by supporting appropriate regulation of development within identified flood hazard areas, minimizing development that might increase flood hazard risks for those surrounding areas.

Therefore, staff determines that this criterion is met.

6) The map amendment will not result in an over-intensive use of land;

Staff finds this criterion is not applicable.

7) The map amendment will not have a material adverse effect on community capital improvement programs;

Staff finds that appropriate regulation of development within identified flood hazard areas will benefit community capital improvement programs.

Therefore, staff determines that this criterion is met.

8) The map amendment will not require a level of community facilities and services greater than that which is available;

Staff finds that local adoption of the best available flood hazard risk information serves to inform residents and visitors to the county of known flood hazards. Knowing the risk encourages preparation for that risk and ultimately results in a more resilient community and better use of community resources during flooding events.

Therefore, staff determines that this criterion is met.

9) The map amendment will not result in undue traffic congestion or traffic hazards;

Staff finds this criterion is not applicable.

10) The map amendment will not cause significant air, water, or noise pollution;

Staff finds this criterion is not applicable.

11) The map amendment will not permit the use of any area designated within the *Boulder County Comprehensive Plan* for the extraction of commercial mineral deposits in a manner which would interfere with the present or future extraction

of such deposit by an extractor to any greater extent than under the present zoning of the property;

As an overlay zoning district, the proposed amendments to the FO District will not permit additional uses on impacted properties beyond the uses currently allowed by the existing underlying zoning. As such, the amendments will not permit uses which would impact extraction of mineral deposits to any greater extent than under present zoning.

Therefore, to the extent the proposed FO District amendments include any areas designated within the Boulder County Comprehensive Plan for the extraction of commercial mineral deposits, staff finds this criterion is met.

12) It must be demonstrated that any structures to be built on the property will not be affected by geologic hazards if they exist;

Staff finds this criterion is not applicable.

13) The map amendment will not otherwise be detrimental to the health, safety, or welfare of the present or future inhabitants of Boulder County;

Staff finds that the proposal to amend the extent of the FO District with best available information in the form of updated floodplain maps, as compared to the alternative of waiting for FEMA to adopt maps as FIRMs, is beneficial to the health, safety, and welfare of both present and future inhabitants of Boulder County because it provides more accurate hazard information critical for bolstering long term planning and resiliency efforts.

Therefore, staff determines this criterion is met.

STAFF RECOMMENDATION

Local adoption of best available information in the form of updated floodplain maps, through the proposed zoning map amendment, as compared to the alternative of waiting for FEMA to adopt maps as final FIRMs, provides more accurate hazard information critical for bolstering long term planning and resiliency efforts, and enables land use planning and regulatory actions using the best available information. Use of the more accurate information prior to final adoption by FEMA allows county staff to better protect the health, safety, and welfare of the residents of and visitors to Boulder County in a more timely and transparent manner.

Staff recommends the Planning Commission recommend to the Board of County Commissioners approval of Docket Z-19-0001: Zoning Map Amendments to the Floodplain Overlay District and certify the Docket for action to the Board and the official record of the Docket before the Commission with its staff comments, public testimony, and Commission discussion/action.

The Board of County Commissioners is scheduled to review the proposed map amendments and regulations at a public hearing on Thursday, December 12, 2019 at 1:00 P.M.

ATTACHMENTS:

- Exhibit A: Best Available Information: A Tool for Your Community to Reduce Flood Risk (FEMA & State of Colorado, 2017)
- Exhibit B: Public Comments and Referral Responses Received Regarding Docket Z-19-0001

LIST OF HYPERLINKS

- Floodplain Remapping Project website: www.BoCoFloodplainRemapping.com
- Z-19-0001 docket webpage: www.boco.org/Z-19-0001
- Floodplain Remapping Project Newsletter #9: <https://assets.bouldercounty.org/wp-content/uploads/2019/10/newsletter-9-Oct-2019-floodplain-remapping-project.pdf>
- Interactive web map for comparison of current regulatory and proposed regulatory floodplain zones: www.boco.org/FloodplainMapUpdate

Best Available Information

A Tool for Your Community to Reduce Flood Risk

FEMA and the State of Colorado

What is best available information?

The Federal Emergency Management Agency (FEMA) defines Best Available Information (BAI) as either:

- The existing flood hazard information adopted by a community and reflected on an effective Flood Insurance Rate Map (FIRM), Flood Boundary and Floodway Map and/or within a Flood Insurance Study report; or
- Draft or preliminary flood hazard information supplied by FEMA or from another source and reasonably used by the community.

In general, when draft or preliminary information is available, only that information which consists of more restrictive 1% annual-chance (100-year) flood discharges, flood hazard zone boundaries (including floodways), and water-surface elevations shall be considered BAI, so long as it meets FEMA's technical and accuracy standards.

Why is best available information important for Colorado communities?

BAI is an important component of local floodplain management because it represents the most suitable flood hazard information for performing community planning, engineering, development review, permitting, and emergency management functions, and helps communities become more hazard-resilient by working towards the following floodplain management goals:

- protection of life, health, and property
- protection of public and private infrastructure
- improving public flood risk awareness
- reduction in rescue and relief efforts
- reduction of economic and social hardships
- compliance with minimum National Flood Insurance Program (NFIP) Standards
- lower flood insurance premiums



COLORADO
Colorado Water
Conservation Board
Department of Natural Resources



FEMA

How can my community use this data?

First, check the local codes and ordinances. Your community may have to go through a local adoption process before the data can be used to make planning, permitting, and development review decisions. Otherwise, you can use the new data starting immediately. The ways in which this data can be applied are almost limitless. We encourage you to think of unique ways your community can put this data to work, and have provided a few examples below.

- Zoning district updates
- Land use code/ordinance updates
- Permitting
- Community Rating System points
- Mitigation project planning
- Grant applications
- Stormwater management and design
- Flood evacuation route planning
- Reverse 911 system updates
- Emergency shelter planning
- Capital Improvement Project planning
- Outreach applications
- Social Vulnerability analyses

For an example of how adopting higher regulatory standards can benefit your community, check out the [case study that was conducted after the 2013 flood event in Colorado](#).

For more information on how your community can use BAI to guide development in potential and established flood areas, please visit the FEMA website at <https://www.fema.gov/use-flood-insurance-study-data-available-data>.

What qualifies as “reasonable” use of draft or preliminary flood hazard information?

The concept of ‘reasonable’ ensures that use of the data would not be detrimental to a proposed development or to the community’s standing within the NFIP. FEMA specifies that draft or preliminary information should be used in cases where it is more restrictive [i.e., where there are discharges, floodplain boundaries, or increasing Base Flood Elevations (BFEs)] when compared to the current effective information. FEMA prohibits its use when discharges or BFEs are decreasing when compared to the current effective information. This is because draft or preliminary information has not been through a formal appeal period and is subject to change. After draft or preliminary information proceeds through a formalized appeal process, any appeals have been resolved, and a final notice has been provided to the community through issuance of a Letter of Final Determination (LFD), the information is required to be used for floodplain management decisions, not for ‘reasonable’ use.



In Zones B, C, or X:

There is no requirement for a community to use the draft or preliminary flood risk data in these zones. FEMA does, however, encourage communities to reasonably use this information to help meet the floodplain management goals outlined on Page 1.

In Zone A:

Local officials are required by the NFIP regulations to reasonably utilize draft or preliminary flood risk data as BAI to manage development in Zone A areas. Examples of ways BAI must be used in Zone A areas are:

- 1) Use BAI to determine the required minimum elevation of the first floor, HVAC, electric, and plumbing fixtures for new residential construction/substantial improvements.
- 2) Use BAI to identify floodway boundaries, which can impact permitting submittal requirements for proposed development projects (proposed projects in the floodway must, at a minimum, demonstrate through hydraulic modeling that they will not result in any increase greater than 0.00 feet in 1-percent-annual-chance (100-year) water-surface elevations.

In Zone AE, A1-30, AH, and AO:

FEMA encourages communities to reasonably utilize draft or preliminary flood risk data in instances where it provides more restrictive 100-year flood discharges, flood hazard zone boundaries (including floodways), and water-surface elevations to ensure the floodplain management goals outlined on page 1 are met. The community cannot use the less restrictive data to regulate development until a LFD has been issued. Use of less-restrictive draft or preliminary flood hazard information prior to the issuance of a LFD may result in significantly higher flood risk to people and property if the data changes before it is finalized. Additionally, it may result in higher flood insurance premiums, and the community may be in violation of their locally-adopted Flood Damage Prevention Ordinance.

Using factors such as years of gage record, amount of development, and presence of new hydraulic structures, FEMA has inventoried many of the effective detailed study areas (Zone AE, A1-30, AH, AO, VE, and V1-30) to determine if the study information presented on the current effective FIRM is still a reasonable representation of flood risk. In areas where validated studies exist, these studies should take precedent over Large-Scale Automated Engineering or Base-Level Engineering studies.

For more on the application of BAI in different flood risk zones, refer to FEMA Policy #104-008-2 <https://www.fema.gov/use-flood-insurance-study-data-available-data>.

How does this data help me with disaster response and recovery activities?

BAI should be used to help plan and implement response activities such as creating evacuation zones, evacuation routes, emergency shelters, and emergency notification systems like Reverse-911.

Flood recovery projects funded by all Federal and most state grant programs must use BAI as the basis for design, unless a local design standard is more restrictive. An example of this is FEMA Public Assistance. The following is an example scenario which demonstrates how this data can be used:

- A public vehicular bridge on a county road is destroyed during a large flood event. Once the bridge is replaced, the county intends to apply for reimbursement through the Community Development Block Grant- Disaster Recovery program.
- Following the flood event, a state agency developed an updated 100-year flood discharge at the bridge (2,400 cfs), which turned out to be lower than the current effective flood discharge (3,100 cfs).
- The county's bridge design consultant must use the BAI to design the replacement bridge. In this case, the BAI is the higher of the 2 discharges; therefore, the bridge must be designed using the higher discharge of 3,100 cfs.

Additionally, much like its application to new construction and substantial improvements, BAI can be used to regulate repair of substantial damage. For example:

- A home has been determined to be 60 percent damaged (when compared to current market value) by a recent flood event. The current effective flood risk zone for the home is Zone AE and the current effective BFE is 1,110.0 feet NAVD88.
- Following the flood event, a draft Base-Level Engineering study completed by FEMA shows that the 100-year water-surface elevation at the home is approximately 1,112.0 feet NAVD88. This study should be considered the BAI for this specific home.
- Because the home was substantially damaged, during repair the first floor should be elevated to the higher of the two available BFEs, which is 1,112.0 feet NAVD88, plus any additional freeboard regulated by the local community.

What about other grant programs that are not related to flood recovery?

The requirement to use BAI applies to any Federal or state grant program.

How can I leverage this data to update my mitigation plan and/or apply for a mitigation project?

Mitigation planning relies on having quality data available to prioritize, design, and implement mitigation projects. In most cases, the highest-quality data will be synonymous with BAI. Good hazard mitigation plans will have procedures built in to account for updates to flood risk information. If BAI is available, local planners should use this information in conjunction with projects identified in the plan to determine if the project priority and design is still appropriate considering the hazard and risk identified with the BAI. In addition, as mitigation projects are funded, their designs should consider the best flood hazard information available at the time of design.

Furthermore, incorporating BAI into risk assessment tools or computer programs, such as Hazus, can produce more-refined flood loss information. These results can be directly incorporated into the local hazard mitigation plan or used for operational and response planning.

Can Best Available Information be used to submit a Letter of Map Change (LOMC)?

For Letters of Map Amendment (LOMAs)/Letters of Map Revision based on Fill (LOMR-Fs): In Zone A areas, BAI can, in some cases, be used to support a request to remove a structure, property, or portion of property from the Special Flood Hazard Area. The BAI study information should be submitted to FEMA with the LOMA/LOMR-F application, where it will be reviewed to determine whether it meets certain technical and accuracy standards in order to be used to process the LOMA/LOMR-F. In detailed flood risk zones such as Zone AE areas, however, FEMA must use the current effective BFEs compared to structure and/or property elevations to determine if that structure and/or property is eligible for a LOMA or LOMR-F.

For Letters of Map Revision (LOMRs): In certain instances, a draft study can be submitted to FEMA with a LOMR application. If the data is obtained from a source other than FEMA, FEMA will review the draft study information to determine whether it meets certain technical and accuracy standards in order to be published as effective information. Should FEMA determine that additional data is necessary, it may be up to the community to submit the additional data.

Can Best Available Information be downloaded and incorporated it into my local GIS software?

Yes. These days, most draft or preliminary study information is provided in digital/GIS format. FEMA encourages the use of BAI in-conjunction with other digital datasets to enhance floodplain management decision making. Examples of other digital datasets to pair with BAI include:

- Aerial imagery
- Local transportation data
- Zoning/land use information
- Building footprints
- Parcel boundaries
- Critical facility locations
- U.S. census bureau information

Who can I contact for more information?

For questions about specific applications of this data in your community, contact your State NFIP Coordinator, Stephanie DiBetitto at stephanie.dibetitto@state.co.us, 303-866-3441, ext. 3221 or Matt Buddie, the NFIP Specialist for FEMA Region VIII at matthew.buddie@fema.dhs.gov, 303-235-4730.

Agency Referral Responses

Count	Referral Agency	Date	Address/Location	Associated Stream Reach	Comment	Date of Staff Response	Staff Response
1	Fourmile Watershed Coalition	10/14/2019	Fourmile Watershed	Fourmile Creek	Is the county regulating to old FEMA maps (light green) that represent the proposed 100 yr floodplain? Some clarification about the two data sets and what the proposed regulations are would be helpful. As you know many homes in upper fourmile appeared to be mapped out of the floodplain with the CHAMP data, but it looks like they would be bank in with the proposed regulatory maps.	10/15/2019	Staff corresponded via email and in-person, clarifying that the zoning docket is only updating Boulder County floodplain; FEMA floodplain will not change until 2021 or later.
2	Fourmile Watershed Coalition	11/6/2019	Fourmile Watershed	Fourmile Creek	Summary of letter: 1) Please add language to the docket acknowledging that the FEMA portion of the FO District will change again in approximately 2021. 2) Please add structure outlines to the "Preliminary and Regulatory Flood Risk Zones" web map. 3) Please advertise the FEMA appeals process well in advance	11/8/2019	1) The docket does acknowledge that "the final FIRMs are unlikely to be ready for another two years." Additionally, this Staff Recommendation further clarifies future and present map changes. 2) Structure outlines were added to the web map on 11/7/2019. 3) The floodplain team is planning appeals-related outreach for December and January, including a new Newsletter, listserv mailings, an appeals webpage, and six public meetings in January.
3	Xcel Energy	11/8/2019	n/a	n/a	Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the request for the Zoning Map Amendments to the Floodplain Overlay District. Please be advised that Public Service Company has existing natural gas and electric transmission and distribution facilities throughout the proposed rezone areas. Public Service Company has no objection to this proposed rezone, contingent upon PSCo's ability to maintain all existing rights and this amendment should not hinder our ability for future expansion, including all present and any future accommodations for natural gas transmission and electric transmission related facilities.	11/8/2019	As an overlay zoning district, the proposed amendments to the FO District will not impact existing right-of-way or zoning for utility transmission and distribution.
4	Pine Brook Water District	10/3/2019	1905 and 1903 Linden Dr	Two Mile Canyon Creek	I am trying to determine what your mapping is showing as it relates to 1905 and 1903 Linden Drive (both properties owned by the Pine Brook Water District). During the preliminary mapping we noted two things/ 1 - that the 2013 flood which was in excess of a 100 flood didn't touch either building or even overtop on to the driveways, 2 - that it appeared that they forgot to include the flood storage in our reservoir and once they did they agreed that we were NOT in either designation. We would be in the 500 year flood plain/way though.	10/4/2019	Staff confirmed that 1903 and 1905 Linden are outside of the 100-year floodplain in the Preliminary FIRMs.

Additional Public Comments

Count	Comment Source	Date	Address/Location	Associated Stream Reach	Comment	Date of Staff Response	Staff Response
5	Email	10/9/2019	375 Arroyo Chico	Fourmile Creek	Does this change the flood zone status at 375 Arroyo Chico?	10/10/2019	No, the food zone for this property will not change with this zoning docket.
6	Email	10/29/2019	6231 Fourmile Canyon Dr	Fourmile Creek	I'm 100% for keeping the "CHAMP" floodplain maps. They were done well and are reasonable. They were also done with community input. I'm against reverting to the old FEMA maps, as they were created with inaccurate data and techniques over 35 years ago!	10/31/2019	Staff explained that the old FEMA maps will remain the effective FEMA FIRMs for another couple years.
7	Voicemail	10/14/2019	8768 Fourmile Canyon Dr	Fourmile Creek	Confused about why the county will still be regulating to the old FEMA floodplain.	10/14/2019	Staff left a voicemail offering to explain further.
8	Email	10/21/2019	91 Fourmile Canyon Dr	Fourmile Creek	Upon purchasing our property five years ago, we were told that the new map would almost certainly bring our buildings out of the flood plan, after all they didn't flood during the 2013 100 year flood. I wonder if the new map reflects this? As I heard it actually is moving more land into the flood zone, land that did not flood in 2013.	10/24/2019	Staff explained the changes to the flood risk zones on the property.
9	Email	10/17/2019	5938 Heather Way	Left Hand Creek	There is an error in the "inundated" areas. Our home was not impacted by the 2013 flood. The water did not touch our home and we did not incur any damage. Who do I speak with to have this information changed?	10/21/2019	Staff explained that the "Inundated Areas" layer was not used for modeling. The CHAMP mapping is bringing most of this property out of the regulatory floodplain.
10	Map comment	10/20/2019	6472 Robin Dr	Left Hand Creek	Shouldn't the light green area noted as "Proposed Regulatory 100-Year Floodplain (Includes FEMA and CHAMP Zones AE, A, AO, and AH). Be corrected to exclude "100-Year" as it also includes zone X (500 year)? This is confusing as my house appears to be in both the 100 year floodplain as well as Zone X.	10/22/2019	Staff explained that the "Proposed Regulatory" layer is made up of both Preliminary FIRMs and effective FEMA floodplain.
11	Voicemail	11/12/2019	6536 Robin Dr	Left Hand Creek	Cannot attend the hearing. Please confirm the flood zone changes on this property.	11/12/2019	Staff explained that the "Proposed Regulatory" layer is made up of both Preliminary FIRMs and effective FEMA floodplain. When the CHAMP mapping is adopted by the county and FEMA, the house will likely be outside of the 100-year floodplain.
12	Voicemail	11/12/2019	7945 N 41st St	Left Hand Creek	Please confirm the flood zone changes on this property	11/12/2019	Staff explained that the Preliminary FIRMs are very similar to the existing Boulder County Floodplain on this property.
13	Voicemail	11/12/2019	22317 S St Vrain Dr	Middle Saint Vrain Creek	Please confirm the flood zone changes on this property	11/12/2019	Staff explained that the Preliminary FIRMs do not change the existing Boulder County Floodplain on this property
14	Map comment	11/8/2019	1896 Apple Valley Rd	North Saint Vrain Creek	I disagree with the proposed 100 year flood designation on my property. The property is sloped and the house, which is now shown in the proposed 100 year flood designation, was well above the high water line during the 2013 flood. There was no flooding then and the house should be clearly shown as outside the 500 year flood line as well. Kindly correct this and let me know when it has been done.	11/8/2019	Staff explained that the "Proposed Regulatory" layer is made up of both Preliminary FIRMs and effective FEMA floodplain. When the CHAMP mapping is adopted by the county and FEMA, the house will likely be outside of the 100-year floodplain.
15	Voicemail	11/12/2019	16996 N St Vrain Dr	North Saint Vrain Creek	Please confirm the flood zone changes on this property	11/12/2019	Staff explained that the Preliminary FIRMs do not change the existing Boulder County Floodplain on this property
16	Email	10/20/2019	not specified	not specified	I am wondering why the floodplain maps are not shown on a topographic base map. Having topographic contours would be very helpful in evaluating the maps.	10/21/2019	Staff explained how to view topographic basemaps in the online web map, but clarified that those topo maps were not the maps used to develop the floodplain mapping.

Additional Public Comments, Continued

Count	Comment Source	Date	Address/Location	Associated Stream Reach	Comment	Date of Staff Response	Staff Response
17	Email	11/10/2019	225 Linden Dr	Two Mile Canyon Creek	Last year, I was told that my house was considered to be out of the 100-year floodplain. Now, the diagram at boco.org/FloodplainMapUpdate appears to show that the northwest corner of my house is back in the 100-year floodplain. Is that what you conclude from looking at the map? If so, when will this change back to the NW corner of my house being "officially" in the floodplain, be effective?	11/12/2019	Staff explained that the "Proposed Regulatory" layer is made up of both Preliminary FIRMs and effective FEMA floodplain. When the CHAMP mapping is adopted by the county and FEMA, the house will likely be outside of the 100-year floodplain.
18	Map comment	11/8/2019	270 Cactus Ct	Two Mile Canyon Creek	We have a LOMA for our property which appear to be shown on the wrong parcel. The LOMA removes our entire house structure from the flood map, however the proposed 100 year floodplain would appear to include the house.	11/12/2019	Staff explained that LOMAs are not reflected in floodplain maps, and further explained the current and proposed flood risk zones on the property.