Agenda Item 18 Rulemaking Hearing to Revise Rules and Regulations for Regulatory Floodplains in Colorado

November 18, 2021





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Rulemaking Timeline

- June 29, July 9, July 12 Stakeholder workshops held (nearly 150 attendees)
- July 30 Filed Notice of Rulemaking with Secretary of State and Department of Regulatory Agencies (DORA)
- August 10 Notice of Rulemaking published in Colorado Register
- July through September Stakeholder subgroups formed for further refinement of Rules 12 and 14
- July through November Continued outreach and interactions with stakeholders for further refinement of rules





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Rulemaking Timeline

- August 16 Staff notified of APA Cost Benefit Analysis request (deadline for posting of November 8)
- October 22 Staff Pre-Hearing Statement filed
- October 25 Pre-Hearing Conference Held
- November 2 Cost Benefit Analysis approved by DORA and posted on their website
- November 18 Rulemaking Hearing at CWCB Board Meeting
- November 19 File adopted rules with Secretary of State and request Attorney General Opinion (deadline for filing of December 8)
- December 8 Attorney General Opinion filed (deadline December 8) and File final adopted rules
- December 25 Rules published in the Colorado Register
- January 14, 2022 Rules effective



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Summary of 2021 Process

- CWCB Staff are only party to this hearing
 - No outside groups filed for party status

 To the best of staff's knowledge, there are no remaining stakeholder concerns that still need to be addressed



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Rulemaking Website

https://cwcb.colorado.gov/floodplain-rules-revisions

- Link provided on CWCB front page
- Contains folders for
 - Project Timeline
 - Rulemaking Hearing Final Documents
 - Progression of Draft Updates and Revisions
 - Current Colorado Floodplain Rules and Regulations
 - Public Comments Received
 - Prehearing Documents
 - Cost-Benefit Analysis



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Cost Benefit Analysis (CBA)

- Staff notified by DORA on August 16 that a CBA must be completed by November 8
- CBA requested by Rocky Mountain Mechanical Contractors Association
- Final CBA submitted to DORA on November 1
- CBA approved by DORA and posted on their webpage
- Also posted on CWCB project webpage



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Summary of 2021 Rules Revisions

- Updating Standards
- Amending and Clarifying Rule 4
- Update References to External Documents
- Specific Clarifications
 - Rule 5, Rule 7, Rule 8.D, Rule 9.B.(3), Rule 10.C-F, Rule 11, Rule 12.D, Rule 12.G, Rule 12.J (now 12.H), the introductory paragraph to Rule 14, Rule 17, and Rule 20

*Final version to be discussed is v.8 as posted on website



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No Substantial Changes

- <u>RULE 1</u> TITLE
- RULE 2 AUTHORITY
- **RULE 3 PURPOSE AND SCOPE**
- RULE 6 CRITICAL FACILITIES
- RULE 13 PROCESS FOR DESIGNATION AND APPROVAL OF REGULATORY FLOODPLAINS
- RULE 15 VARIANCES
- RULE 16 ENFORCEMENT OF FLOODPLAIN RULES AND REGULATIONS
- RULE 18 SEVERABILITY
- RULE 19 RECOMMENDED ACTIVITIES FOR REGULATORY FLOODPLAINS



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<u>RULE 4</u> DEFINITIONS

- Added definitions to provide clarity to Rules
- Clarified existing definitions
- Removed outdated terminology and terms not used in Rules
- Examples of heavily discussed definitions Approximate Floodplain Information, Model-Backed Approximate Flood Elevation, Accessory Structure, Agricultural Structure



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RULE 5 STATE REGULATORY FLOODPLAIN

- Intent: Clarify definition of Regulatory Floodplain
- Modifications:
 - Clarifies that the Regulatory Floodplain is the 100-Year-Floodplain unless a community chooses to regulate to the 500-Year-Floodplain
 - Clarifies that CWCB automatically designates 500-Year-Floodplain information when available





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RULE 7 STANDARDS FOR DELINEATION OF REGULATORY FLOODPLAIN INFORMATION

- Intent: Discuss technical criteria for Floodplain mapping
- Modifications:
 - Minor clerical and grammatical revisions for clarification
 - Updates of external references
 - Removal of listing of Floodplain report requirements these are covered in external references and this section is redundant
 - Clarified that reports submitted to CWCB must be in digital format



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RULE 8 STANDARDS FOR REGULATORY FLOODWAYS

- Intent: Discuss the use of Floodways as regulatory tools
- Modifications:
 - Minor clerical and grammatical revisions for clarification
 - Updates of external references
 - Clarifies that Floodway regulations still apply to areas of Model-Backed Approximate Flood Elevations (Zone A) but not to Zone A without supporting documentation



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- RULE 9CRITERIA FOR DETERMINING THE
EFFECTS OF FLOOD CONTROL
STRUCTURES ON REGULATORY
FLOODPLAINS
- Intent: To address regulatory criteria that must be met in order for a Community to claim credit for effects of Flood or stormwater detention structures.
- Modifications:
 - Minor clerical and grammatical revisions for clarification
 - Updates of external references
 - Clarifies Public operation and maintenance to qualify for credit of effects.



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RULE 10CRITERIA FOR DETERMINING
EFFECTS OF LEVEES ON
REGULATORY FLOODPLAINS

• Intent: To address technical and regulatory criteria that must be met in order for a Community to claim credit for effects of Levees.

• Modifications:

- Minor clerical, formatting, and grammatical revisions for clarification
- Updates of external references
- Refers Levee requirements to external documents this section is currently redundant



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RULE 11 FLOODPLAIN MANAGEMENT REGULATIONS

- Intent: Sets forth minimum Floodplain management standards statewide.
- Modifications:
 - Minor clerical, formatting, and grammatical revisions for clarification
 - Updates of external references
 - Clarification for regulations associated with non-residential structures to be in conformance with FEMA



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Specific Rule #11 Revisions

- Minimum Freeboard. A minimum Freeboard of one foot above the 100-Year-Flood elevation (BFE or Model-Backed Approximate Flood Elevation) shall apply to structures in the Floodplain as follows:
 - (1) **Residential Structures**. New, *Substantially Damaged*, and/or *Substantially Improved* residential structures, and Additions to existing residential structures shall be constructed with the Lowest Floor, including basements, placed with a minimum of one foot of Freeboard above the BFE or Model-Backed Approximate Flood Elevation. In AO Zones, New, Substantially Damaged, and/or Substantially Improved residential structures, and Additions to existing residential structures shall be constructed with the Lowest Floor, including basements, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Community's FIRM (at least two feet if no depth number is specified) plus one foot of Freeboard.
 - (2) Non-residential Structures.

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- a. New, Substantially Damaged, and/or Substantially Improved non-residential structures, and Additions to existing non-residential structures shall be constructed with the Lowest Floor, including basements, placed with a minimum of one foot of Freeboard above the BFE or Model-Backed Approximate Flood Elevation, or together with attendant utility and sanitary facilities, be designed so that the structure is watertight to an elevation at least one foot above the BFE or Model-Backed Approximate Flood Elevation with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. In AO Zones, New, Substantially Damaged, and/or Substantially Improved non-residential structures and Additions to existing non-residential structures shall be constructed with the Lowest Floor, including basements, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Community's FIRM (at least two feet if no depth number is specified) plus one foot of Freeboard, or together with attendant utility and sanitary facilities be completely floodproofed to that level with walls substantially impermeable to the past of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Agricultural Structures and Accessory Structures shall be exempt from the Freeboard requirement but shall meet all other requirements set forth in FEMA Policy No. 104-008-03: Floodplain Management Requirements for Agricultural Structures and Accessory Structures.
- b. Critical Facilities shall be regulated according to Rule 6.D. This Rule does not affect the Freeboard requirement for Levees described in Rule 10.D.
- C. Permit Restrictions for Properties Removed from the Floodplain by Fill. No Community shall issue a permit for the construction of a new structure on a property removed from the Floodplain by the issuance of a FEMA LOMR-F unless the Lowest Floor elevation placed below the BFE or Model-Backed Approximate Flood Elevation with one foot of Freeboard that existed prior to the placement of fill. In AO Zones, New structures shall be constructed with the Lowest Floor, including basements, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Community's FIRM (at least two feet if no depth is specified) that existed prior to the placement of fill plus one-foot of Freeboard. Issuance of any such permit shall constitute a violation of these Rules. Critical Facilities are exempted from this restriction if the facility is protected according to Rule 6.D. herein.
- D. Highest Adjacent Grade. For the purposes of this Rule 11, highest adjacent grade means the highest natural elevation of the ground surface, prior to the start of construction, next to the proposed walls of a structure.



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RULE 12EFFECTS OF FLOOD MITIGATION MEASURESAND STREAM ALTERATION ACTIVITIES ONREGULATORY FLOODPLAINS

- Intent: Provide Floodplain regulation requirements for Stream Alteration Activities.
- Modifications:
 - Minor clerical and grammatical revisions for clarification
 - Rule 12.D maintenance requirements for dams and levees
 - Clarification of the State's position of when a Letter of Map Revision (LOMR) is required, when a hydraulic analysis is required and clarification that this does not circumvent other (i.e. FEMA) requirements





Specific Rule #12 Revisions

- <u>Initial Revisions</u> were intended to remove information included in external references; clarify when Rule 12.D (formerly 12.E) was applicable and set when CWCB would expend resources to ensure post-project flood hazard modifications occurred.
 - <u>Stakeholders</u> requested revisions to specify that in areas with a designated floodway, projects constructed within the flood fringe would not be *required* to pursue a formal map revision. Rule 12.G (formerly 12.H) clarifies what is required for compliance. Rule 12.H (formerly 12.J) clarifies what is required for map revisions.



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Specific Rule #12 Revisions

- D. Any Stream Alteration Activity proposed by a project proponent in *either i*) a Floodway or *ii*) a Regulatory Floodplain with no established Floodway (except in shallow Flooding areas, defined as Flooding with an average depth limited to 3.0 feet or less where no defined Channel exists) must be evaluated for its impact on the Regulatory Floodplain. All Stream Alteration Activity shall be in compliance with all applicable federal, state and local Floodplain rules, regulations and ordinances.
- E. Any Stream Alteration Activity shall be designed and sealed by a Colorado Registered Professional Engineer.
- F. All activities within the Regulatory Floodplain performed by federal agencies using local or state funds, or by private, local or state entities shall meet all applicable federal, state and local Floodplain requirements.
- G. For compliance purposes, Stream Alteration Activities shall not be constructed in a Floodway unless the project proponent demonstrates through a Floodway analysis and report, sealed by a Colorado Registered Professional Engineer, that there is no rise resulting from the project unless a CLOMR has been obtained. No rise means a 0.00-foot rise or a decrease in the Flood elevation between the existing and proposed conditions. Stream Alteration Activities proposed in a Regulatory Floodplain with no established Floodway (except in shallow Flooding areas, defined as Flooding with an average depth limited to 3.0 feet or less where no defined Channel exists), shall demonstrate no more than ¹/₂-foot rise in Flood elevations (or a more stringent standard adopted by the Community) between the existing and proposed conditions unless a CLOMR is obtained. This requirement only applies on stream reaches with BFEs or Model-Backed Approximate Flood Elevations established.
- H. Rule 12.D. addresses when hydraulic modeling is required for Stream Alteration Activities. For map update purposes, regardless of whether modeling is required or not, whenever a Stream Alteration Activity is shown by hydraulic modeling to increase or decrease the established BFE in excess of 0.30 vertical feet between the pre-project and postproject conditions (or a more stringent standard adopted by the Community), a LOMR (or comparable revision process) showing such changes shall be obtained in order to accurately reflect the proposed changes on the Regulatory Floodplain map for the stream reach. This is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk assessment and Floodplain management requirements will be based upon current data, 44 CFR § 65.3. The Community is responsible for ensuring that this process is pursued. This section herein does not require a CLOMR to be applied for, unless mandated by the Community. This section reflects state policy and may not fully reflect federal and other requirements for map maintenance. This section is not intended to undermine or replace federal requirements, and Communities and project proponents are responsible for satisfying any other map maintenance requirements as a result of Stream Alteration Activities.



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- RULE 14DESIGNATION AND APPROVAL
OF CHANGES TO REGULATORY
FLOODPLAINS
- Intent: Outlines the process and procedure for CWCB consideration of a request for Designation and Approval of changes to a previously designated Regulatory Floodplain.
- Modifications:
 - Minor clerical and grammatical revisions for clarification
 - Clarification that undesignated information to a previously designated reach may be used under certain conditions as specifically outlined



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Specific Rule #14 Revisions

Initial Revisions were intended to clarify when undesignated information may be used for regulatory purposes. <u>Stakeholders</u> requested revisions to accommodate when designated, non-FEMA flood mapping changes occur. These are Local Regulatory Floodplains.

- A. In the event that a Community is aware of and has access to better available information on a previously designated flooding source, then the CWCB allows for that undesignated information to be used for regulatory purposes if it is to the same or greater level of detail as the previously designated Regulatory Floodplain information, has been approved through a detailed technical review by a qualified Colorado Professional Engineer, and meets one of the following conditions in (1) (3). Communities may need to formally adopt this information through its local adoption process.
 - (1) Regulatory Floodplain included on a FEMA FIRM the revised Floodplain mapping is more restrictive, the Community has informed all impacted property owners of the change and provided due process as established in Community guidelines, and the revised Floodplain mapping is ultimately Designated and Approved by the Board; or
 - (2) Regulatory Floodplain not included on a FEMA FIRM the Community has informed all impacted property owners of the change, and provided due process as established in Community guidelines. The Community must submit Floodplain mapping revisions for Designation and Approval by the Board in a timely manner (not to exceed two years from the date of completion); or
 - (3) Regulatory Floodplain the revised Floodplain mapping has been approved by FEMA through a LOMR or Physical Map Revision process, and ultimately Designated and Approved by the Board.





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RULE 17 INCORPORATION BY REFERENCE

- Intent: Provides a list of all external documents that are incorporated by reference in these Rules.
- Modifications:
 - Minor clerical and grammatical revisions for clarification
 - Placement of all external documents to be incorporated by reference throughout the document listed here in one location for easy reference – previously these listings were throughout the document



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<u>RULE 20</u> EFFECTIVE DATE

- Intent: Identifies the effective date for the Rules update
- Modifications:
 - Minor clerical and grammatical revisions for clarification
 - Update effective date for these rule revisions (to be filled in upon completion of rulemaking process) – see Timeline
 - Reference to community ordinance updates removed – unlike 2010 update, this proposed update will not require local ordinance updates



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PUBLIC COMMENT AND DISCUSSION





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Thank you



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