


**PUBLIC WORKS DEPARTMENT
MEMORANDUM #2015-49**

DATE: November 23, 2015
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: David Willett, Acting City Manager 
SUBJECT: **Councilman's Bill 1861**
Amendment to the Flood Hazard Ordinance

ITEM/ISSUE

An update to the Flood Hazard ordinance (11-52) is required due to updated mapping and reports of floodplain areas within Northglenn. Per Section 11-37-1(a) all proposed amendments to the zoning ordinance have been referred to the Planning Commission for study, consideration, and recommendation prior to final action by Council. Article 52 of the zoning ordinance outlines regulations to minimize flood losses.

BACKGROUND

The Urban Drainage and Flood Control District (UDFCD) was established to work with local governments to address multi-jurisdictional drainage and flood control challenges in order to protect people, property and the environment. This work includes updates to Master Drainage Plans and Flood Hazard Area Delineations – mapping of floodplains. The results of this work assists communities and our property owners in planning for appropriate precautions to take relative to their position within or adjacent to mapped floodplains. It also provides more accurate mapping based on updated information and mapping technologies.

In 2012, the Urban Drainage and Flood Control District, Thornton, Westminster and Adams County began the process of updating the 1986 Master Drainage Plan (MDP) and Flood Hazard Area Delineation (FHAD) for Big Dry Creek and all its tributaries. The updated planning work was used to develop the documentation necessary to apply to the Federal Emergency Management Agency (FEMA) regarding floodplain mapping revisions. The process is now at the point that FEMA has issued Physical Map Revisions (PMR) for the Flood Insurance Study report (FIS) and all Flood Insurance Rate Maps (FIRMs) affected by Big Dry Creek and its tributaries.

It should be noted that typically FEMA mapping efforts are done strictly within county boundaries. Big Dry Creek and its floodplain impacts extend into Weld County. While the mapping updates in Adams County are at the point of a PMR, Weld County is not there yet. The mapping updates to properties within Weld County will be considered a Letter of Map Revision (LOMR) until the PMR for Weld County is completed in about 2 years.

This mapping effort also identified existing backwater flooding (not previously mapped) of properties at the SE corner of Section 36 in Weld County. This is due to undersized culverts under the existing Railroad line south of WCR 2 that causes water to back up and inundate the properties before the water level is high enough to flow over the Railroad tracks on the north side of WCR 2.

Since these properties are now identified to be within mapped floodplains, it would be advisable for the property owners to obtain flood insurance for all the insurable structures, and any proposed improvements must meet the requirements of the Flood Hazard Ordinance.

Due to the mapping update the effective date of the FIS & FIRM must be revised in our ordinance. Staff also took this opportunity to fix a few minor typos within the ordinance. Attached is the proposed revised ordinance (Attachment A).

BUDGET/TIME IMPLICATIONS

This ordinance update has no budget impacts. The revised mapping takes effect on January 20, 2016 and the ordinance must be updated prior to that date.

RECOMMENDATION

Staff recommends approval of CB 1861 Amendment to the Flood Hazard Ordinance.

STAFF REFERENCE

Kent Kisselman, PE, Engineering Manager
Pam Acre, Stormwater Coordinator

kkisselman@northglenn.org	303.450.4005
pace@northglenn.org	303.450.8792

ATTACHMENTS

- Councilman's Bill
- Prior mapping – Attachment B1-B2
- Updated mapping – Attachment C1-C2
- Comparison aerial – Attachment D
- Planning Commission Recommendation – Attachment E

SPONSORED BY: MAYOR DOWNING

COUNCILMAN'S BILL

ORDINANCE NO.

No. CB-1861
Series of 2015

Series of 2015

A BILL FOR AN ORDINANCE AMENDING THE NORTHGLENN MUNICIPAL CODE REGARDING FLOOD REGULATIONS

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

Section 1. Section 11-54(f) is hereby amended as follows:

(f) *Appeal* means a request for a review by the Board of Adjustment of the ~~flood plain~~ FLOODPLAIN administrator's interpretation of any provision of this Ordinance or a request for a variance.

Section 2. Section 11-52-4(l) is hereby amended as follows:

(l) *Development Permit* means for the purposes of this ordinance only, an application to the ~~flood plain~~ FLOODPLAIN administrator on forms supplied by the ~~flood plain~~ FLOODPLAIN administrator, for permission to develop land and/or construct any structure within any area of special flood hazard.

Section 3. Section 11-52-4(m) is hereby amended as follows:

(m) *DFIRM Database* means a database (usually spreadsheets containing ~~data~~ DATA and analyses that accompany DFIRMS). The FEMA mapping specifications and guidelines outline requirements for the development and maintenance of DFIRM databases.

Section 4. Section 11-52-4(s) is hereby amended as follows:

(s) *Flood Insurance Study (FIS)* means the official report, ~~originally dated March 1978 and prepared for the City of Northglenn~~ ENTITLED, *THE FLOOD INSURANCE STUDY FOR ADAMS COUNTY, COLORADO AND INCORPORATED AREAS*, DATED JANUARY 20, 2016, WITH ACCOMPANYING FLOOD INSURANCE RATE MAPS AND/OR FLOOD BOUNDARY FLOODWAY MAPS (FIRM AND/OR FBFM) and any revisions thereto, in which the Federal Emergency Management Agency has provided flood profiles, the Floodway Map, and the water surface elevation of the base flood, and any subsequent additions, updates, revisions or modifications to said study.

Section 5. Section 11-52-4(x) is hereby amended as follows:

(x) *Floodway and ~~Flood-Plain~~ FLOODPLAIN Zoning Administrator* is the City Manager of the City of Northglenn or the City Manager's authorized representative.

Section 6. Section 11-52-4(ss) is hereby amended as follows:

(ss) ~~Threshold Planning Quality~~ *QUANTITY (TPQ)* means a quantity designated for each chemical on the list of extreme hazardous substances that triggers notification by facilities to the state that such facilities are subject to emergency planning requirements.

Section 7. Section 11-52-5(b) is hereby amended as follows:

(b) Basis for Establishing Areas of Special Flood Hazard. The Federal Emergency Management Agency has identified the areas of special flood hazard in ~~the Flood Insurance Study for the City of Northglenn originally dated March 1978~~ *THE FLOOD INSURANCE STUDY FOR ADAMS COUNTY, COLORADO AND INCORPORATED AREAS, DATED JANUARY 20, 2016, WITH ACCOMPANYING FLOOD INSURANCE RATE MAPS AND/OR FLOOD BOUNDARY FLOODWAY MAPS (FIRM AND/OR FBFM) and any revisions thereto*, and this study and accompanying Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of this Ordinance. For the purpose of final determination of the areas of special flood hazard, the flood profile shall control. The Flood Insurance Study and the Flood Insurance Rate Maps are on file in the Department of Public Works.

Section 8. Section 11-52-6(a) is hereby amended as follows:

(a) Designation of Administrator. The City Manager, or the City Manager's authorized representative shall be the ~~flood-plain~~ FLOODPLAIN administrator and shall administer, interpret, and implement this Ordinance by granting or denying development permit applications in accordance with its provisions.

Section 9. Section 11-52-6(b) is hereby amended as follows:

(b) Duties of the Administrator. The duties of the ~~flood-plain~~ FLOODPLAIN administrator shall include, but not be limited to:

(1) Review of all development permits to insure that the permit requirements of this Ordinance have been satisfied.

(2) Review of all development permits to insure that all necessary permits have been obtained from which prior approval is required, including, but not limited to, Federal and/or State law including Section 404 of the Federal Water Pollution Control Act amendments of 1972, 33 U.S.C. 1334.

(3) Review of all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 11-52-10 are met.

(4) Review of all development permits to determine that all such proposals are consistent with the need to minimize flood damage within the flood-prone area, that all public facilities and utilities such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage and to assure that adequate drainage is provided to reduce exposure to flood hazards.

(5) Obtain and record the elevation in Mean Sea Level of the lowest floor, including basement, of any new or substantially improved structures located in a special flood hazard area, and whether or not the structure includes a basement.

(6) For all new or substantially improved floodproofed structures located in a special flood hazard area:

(A) Require that a professional engineer or architect licensed in the State of Colorado develop and/or review all structural design specifications and plans for such structures.

(B) Verify and record the actual elevation, in Mean Sea Level, to which the structure has been floodproofed.

(C) Maintain the floodproofing certifications required in Section 11-52-6(d)(4) of this Ordinance.

(7) Maintain for public inspection all records pertaining to the provisions of this Ordinance.

(8) Notify adjacent communities and the Colorado Water Conservation Board prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

(9) Require that maintenance is provided within the altered or relocated portion of a watercourse so that the flood carrying capacity is not diminished.

(10) Review of State and Federal regulations related to the National Flood Insurance Program and to maintain this ordinance in compliance with those regulations through periodic updates and revisions.

Section 10. Section 11-52-6(d) is hereby amended as follows:

(d) Development Permit Required. A development permit shall be obtained before construction or development begins within any area of special flood hazard. Application for a development permit shall be made on forms furnished by the ~~flood plain~~ FLOODPLAIN administrator and may include, but not be limited to: plans drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures; fill; storage of materials outside; drainage facilities; and the location of the foregoing. Specifically, the following information is required:

(1) Base flood elevation data in relation to the land surface that is proposed for development.

(2) Elevation in relation to Mean Sea Level of the lowest floor (including basement) of all new and substantially improved structures.

(3) Elevation in relation to Mean Sea Level to which any structure has been floodproofed.

(4) Certification by a registered professional engineer or architect licensed in the State of Colorado that the construction or development complies with all requirements of this Article 52.

(5) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(6) All necessary permits for which prior approval may be required, including, but not limited to, any applicable Federal and/or Stat

Section 11. Section 11-52-6(e) is hereby amended as follows:

(e) Mapping Disputes. The ~~flood plain~~ FLOODPLAIN administrator shall make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards. The Board of Adjustment shall decide cases in which a boundary is disputed, according to the provisions for appeal contained in Section 11-52-11.

INTRODUCED, READ AND ORDERED POSTED this ____ day of _____, 2015.

JOYCE DOWNING
Mayor

ATTEST:

JOHANNA SMALL, CMC
City Clerk

PASSED ON SECOND AND FINAL READING this ____ day of _____, 2015.

JOYCE DOWNING
Mayor

ATTEST:

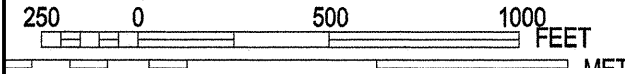
APPROVED AS TO FORM:

JOHANNA SMALL, CMC
City Clerk

COREY Y. HOFFMANN
City Attorney

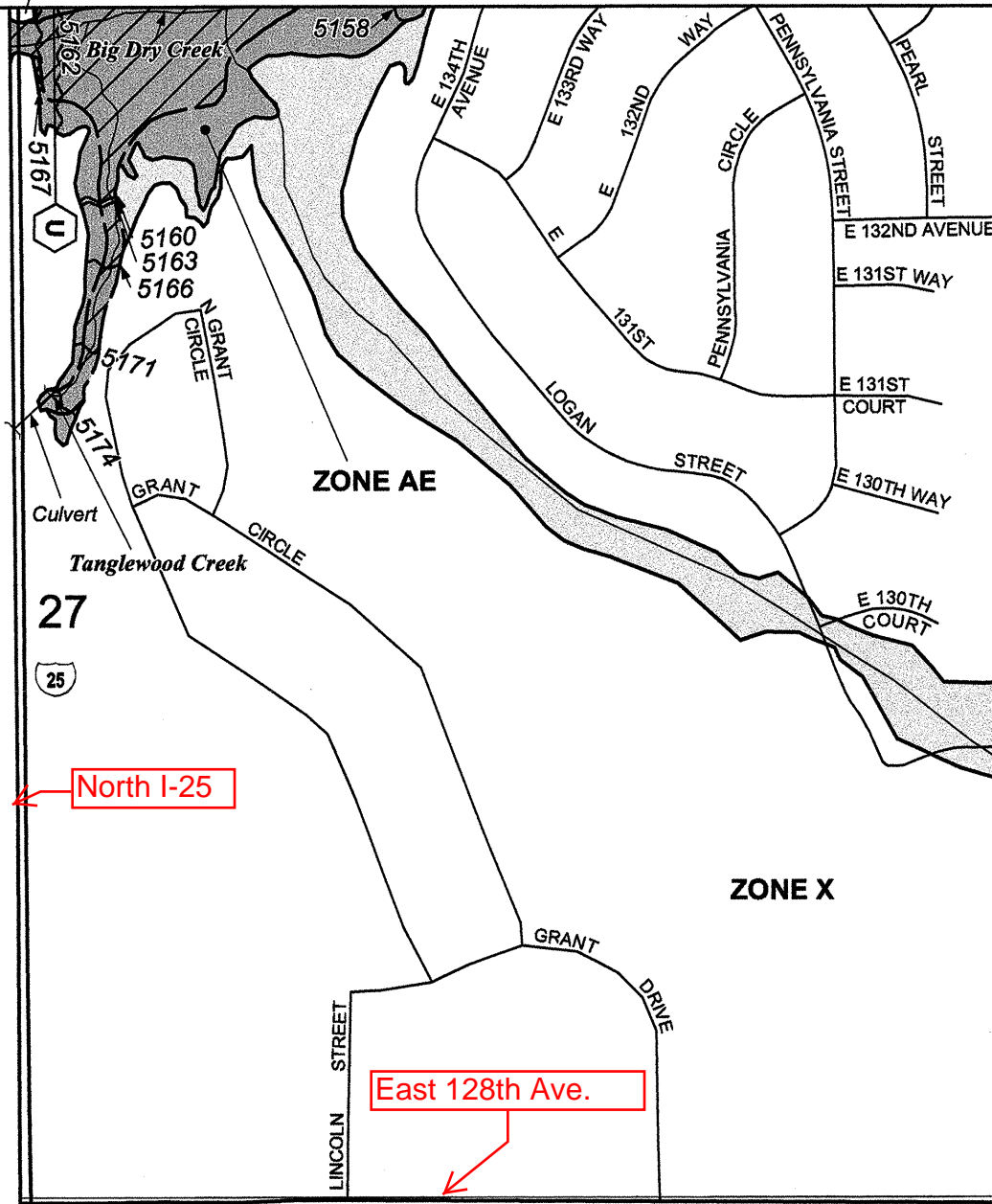


MAP SCALE 1" = 500'



501000m E ZONE X

JOINS PANEL 0303



**FIRM
FLOOD INSURANCE RATE MAP
ADAMS COUNTY,
COLORADO
AND INCORPORATED AREAS**

PANEL 311 OF 1150
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
NORTHGLENN, CITY OF	080257	0311	H
THORNTON, CITY OF	080007	0311	H

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



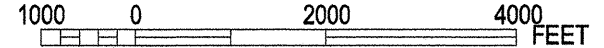
**MAP NUMBER
08001C0311H
MAP REVISED
MARCH 5, 2007**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



MAP SCALE 1" = 2000'



NOTE: MAP AREA SHOWN ON THIS PA
WITHIN TOWNSHIP 01 NORTH, RANG
TOWNSHIP 01 NORTH, RANGE

Unincorporated
Weld County

FIRM

FLOOD INSURANCE RATE MAP

ADAMS COUNTY, COLORADO

AND INCORPORATED AREAS

PANEL 25 OF 1150
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
ADAMS COUNTY	080001	0025	H
NORTHGLENN, CITY OF	080257	0025	H
THORNTON, CITY OF	080007	0025	H

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MAP NUMBER
08001C0025H
MAP REVISED
MARCH 5, 2007

Federal Emergency Management Agency

UNINCORPORATED AREAS

South Fork Preble Creek

ZONE A

Preble Creek

ZONE X

ZONE AE
(EL 5078)

ZONE X

ZONE X

ZONE AE
(EL 5042)

ZONE X

Big Dry Creek

LIMIT OF S

ZONE X

ZONE X

E 168TH AV.

JOINS PANEL 0302

County Road 2

JOINS

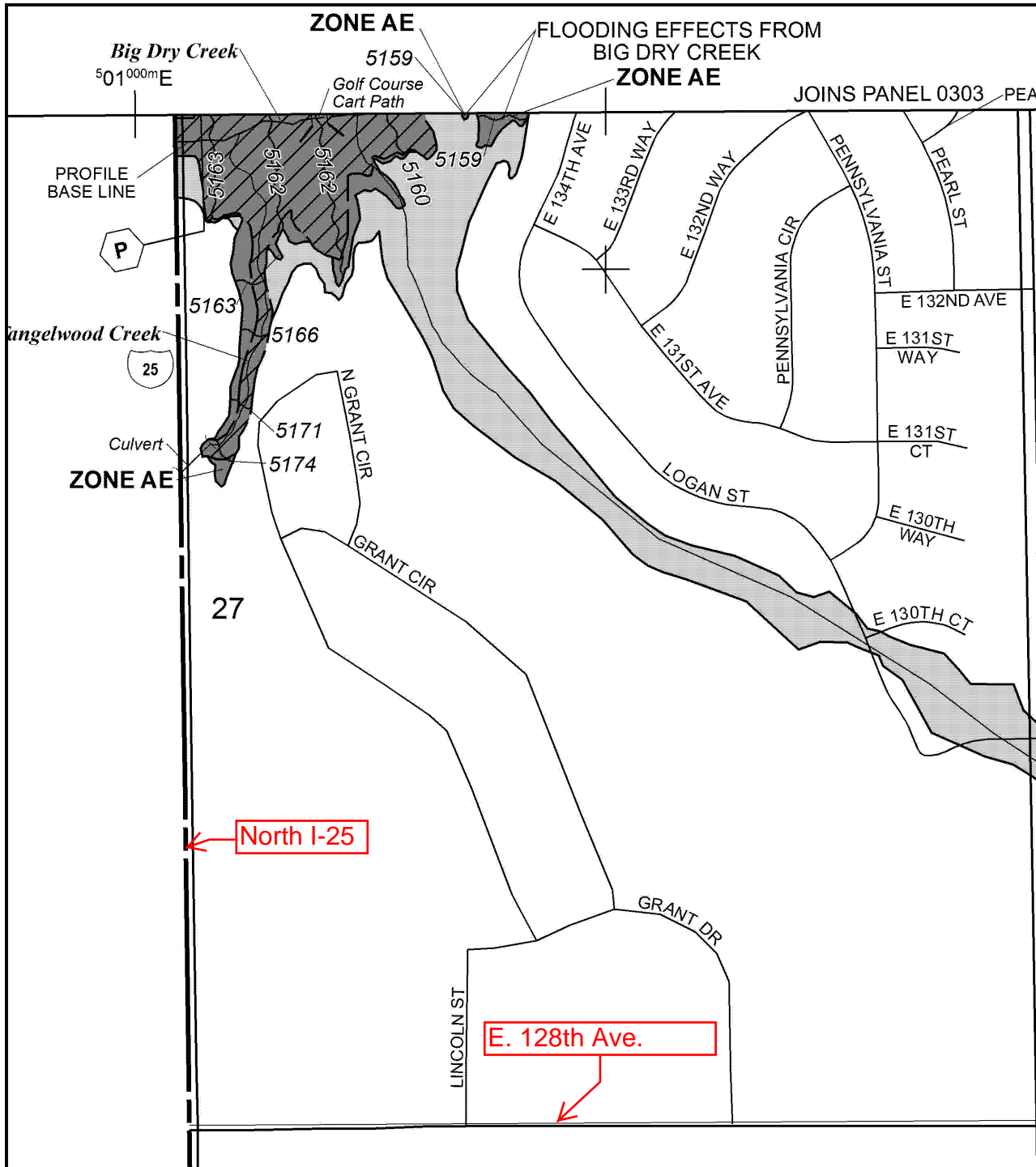
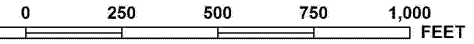
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ZONE AE

**FLOODING EFFECTS FROM
BIG DRY CREEK
ZONE AE**



MAP SCALE 1" = 500'



North I-25

E. 128th Ave.

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0311J

FIRM

**FLOOD INSURANCE RATE MAP
ADAMS COUNTY,
COLORADO
AND INCORPORATED AREAS**

PANEL 311 OF 1150

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

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08001C0311J**

**MAP REVISED
JANUARY 20, 2016**



Federal Emergency Management Agency

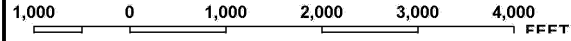
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If insurance is available in this community, contact your insurance agent or the National Flood Insurance Program at 1-800-638-6620.

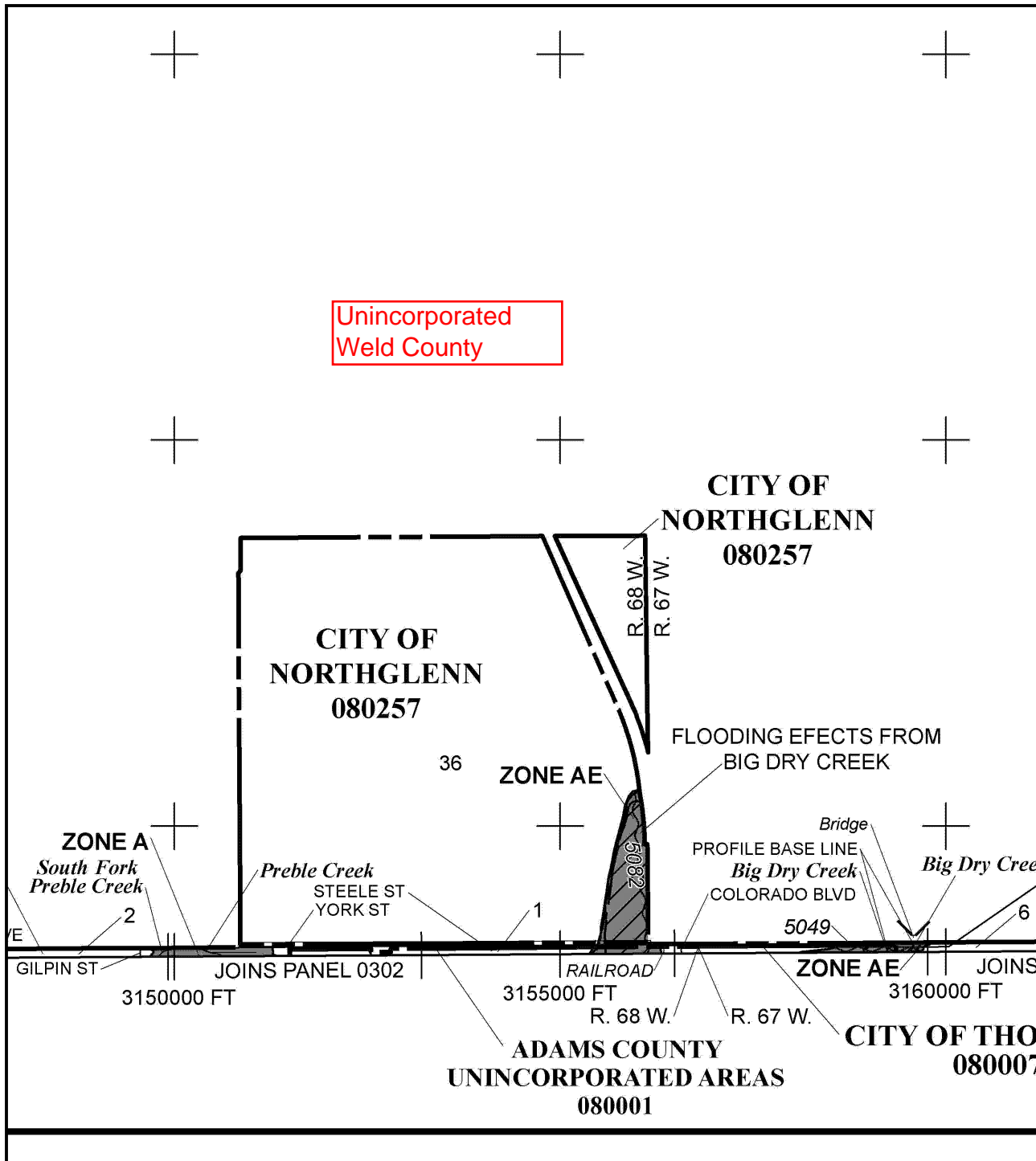
Attachment C2



MAP SCALE 1" = 2000'



Unincorporated
Weld County



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0025J

FIRM
FLOOD INSURANCE RATE MAP
ADAMS COUNTY,
COLORADO
AND INCORPORATED AREAS

PANEL 25 OF 1150
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

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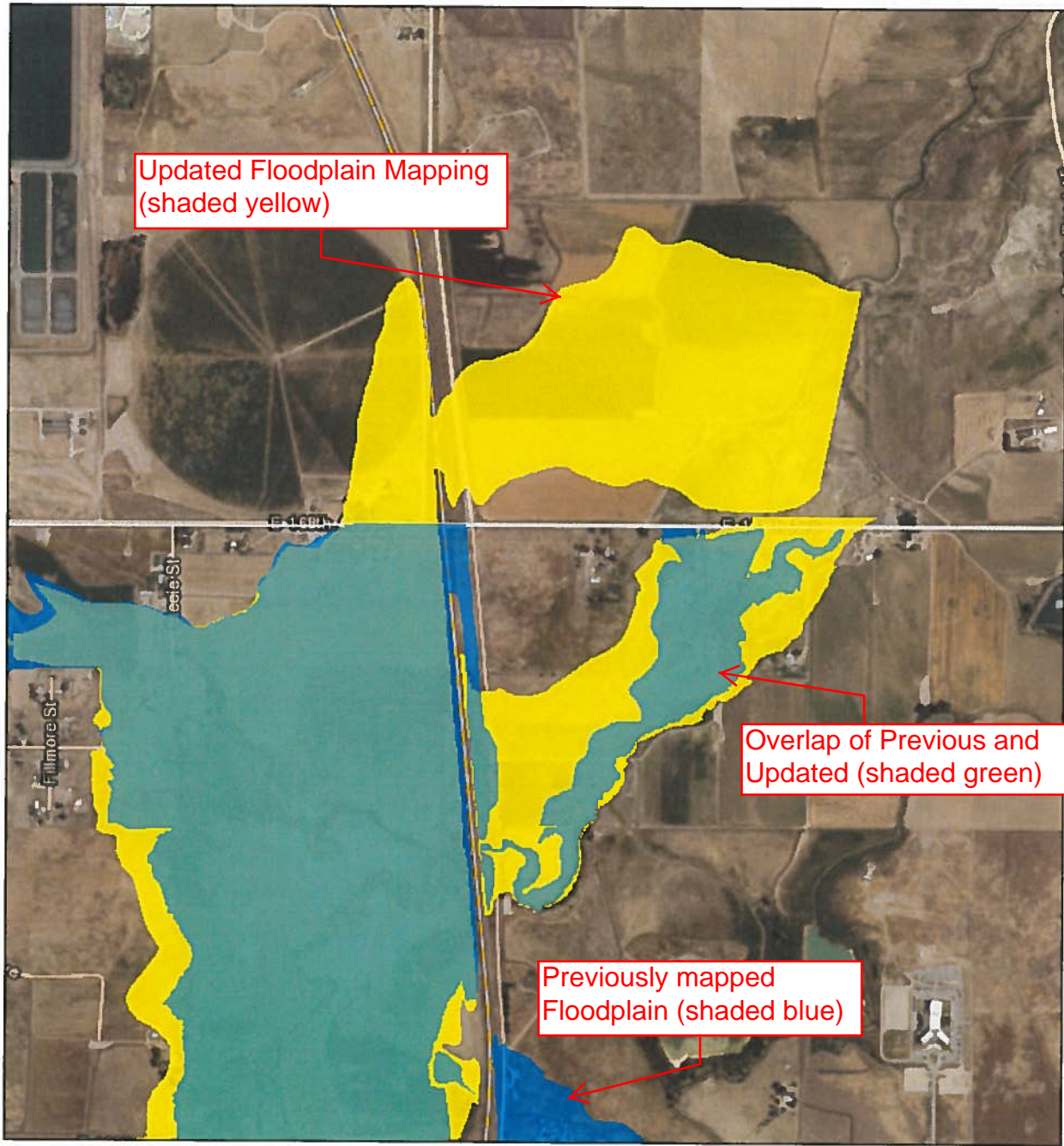


MAP REVISED
JANUARY 20, 2016

Federal Emergency Management Agency

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Big Dry Creek - Physical Map Revision

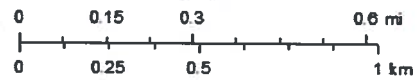


October 5, 2015

USA Counties

World Transportation

1:18,056



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerio, IGN, IGP, swisstopo, and the GIS User Community
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

**RESOLUTION 2015-13
NORTHGLENN PLANNING COMMISSION**

**A RESOLUTION RECOMMENDING APPROVAL OF
PROPOSED CHANGES TO ARTICLE 52 OF THE
NORTHGLENN ZONING ORDINANCE PERTAINING TO
REGULATIONS TO MINIMIZE FLOOD LOSSES.**

WHEREAS, the Chapter 11 Article 37 of the Northglenn Municipal Code requires that the Northglenn Planning Commission review and make a recommendation to the City Council regarding any amendments to Chapter 11.

WHEREAS, the Northglenn Planning Commission therefore desires to make its recommendations to the City Council as required by law.

BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF NORTHGLENN, COLORADO, THAT:


Section 1. The Commission hereby recommends approval of the proposed changes to Article 52 of the municipal code to aid in minimizing flood losses.

DATED this 17TH day of NOVEMBER 2015



Planning Commission Chair

ATTEST:



Travis Reynolds
Secretary