

FPR 18-691

**Colorado Hazard Mapping Program, Phases I and II, Larimer County and Phase II,
Boulder County**

COLORADO WATER CONSERVATION BOARD
721 State Centennial Building
1313 Sherman Street, Room 721
Denver, Colorado 80203

November 5, 2018

RESOLUTION

PREVIOUS FLOODPLAIN INFORMATION

WHEREAS, the following floodplain studies have been designated by the CWCB for Boulder County and Larimer County:

Table 1
Previously designated floodplain information for Boulder County and Larimer County

Report Date	Res. #	Report Title	Author
01/69	04	Floodplain Information Report - Left-Hand Creek, Volume I Boulder County, Colorado	USACE, Omaha, NE
04/69	13	Floodplain Information Report - North Tributary Streams of Boulder Creek, Colorado, & Drainageways to S. Boulder Creek	Wright-McLaughlin Engineers
08/69	08	Floodplain Information Report - Boulder Creek and South Boulder Creek, Volume II, Boulder Metropolitan Region, Colorado	USACE, Omaha, NE
05/72	20	SFHIR - Boulder Creek, City of Boulder, Colorado	USACE, Omaha, NE
06/72	24	Floodplain Information Report - Upper St. Vrain Creek, Volume IV, Boulder County Colorado; Lower St. Vrain Creek, Volume III, Boulder County, Colorado	USACE, Omaha, NE
12/73	33	Major Drainageway Planning, South Boulder Creek, Volume I&II	R.W. Beck & Assoc.
06/75	47	Flood Hazard Area Delineation, Boulder Creek & Dry Creek, Boulder County Colorado	Leonard Rice Consulting Water Engineers, Inc.
10/76	66	Flood Hazard Analyses, Coal Creek and Rock Creek, Boulder and Weld Counties, Colorado	Soil Conservation Service, Denver, CO
12/76	67	Special Floodplain Information Report, Volumes I and II, Big Thompson River and Tributaries, Larimer County, CO	Gingery and Associates
06/77	83	Floodplain Information, Big Thompson River, Loveland to the Larimer-Weld County Line, Colo. And Little Thompson River, Boulder and Larimer Counties, CO	USACE, Omaha
06/78	124	Floodplain Information, Dry Creek, Boulder County-Weld County, CO	USACE, Omaha
02/78	126	Floodplain Information Report, (South) St. Vrain Canyon upstream of Lyons, Boulder County, CO	Camp, Dresser & McKee, Inc.
09/78	128	Flood Insurance Study, Larimer County, Colorado	FIA
04/80	173	Floodplain Information and Flood Control & Drainage Plan, Dry Creek No. 1	Water Resource Consultants, Inc.

Table 1 (continued)

Report Date	Res. #	Report Title	Author
04/81	230	Flood Control and Floodplain Management Plan for St. Vrain Creek at Longmont, Colorado	Water Resources Consultants, Inc.
12/81	187	Floodplain Information Report, Upper Boulder Creek and Fourmile Creek, Boulder County, Colorado	Gingery Associates, Inc.
12/81	186	Floodplain Information Report, Lefthand Creek, Volume I (Mouth to Foothills Highway), Boulder County & City of Longmont	Gingery Associates, Inc.
01/83	215	Flood Hazard Area Delineation, Boulder Creek	Gingery Associates, Inc.
03/83	218	Flood Hazard Area Delineation, Lower Boulder Creek (Valley View Road to Boulder Weld County Line)	Muller Engineering Company, Inc.
08/83	223	Upper Lefthand Creek, Volume II, Boulder County, Colorado	Simons, Li and Associates, Inc.
07/86	265	Flood Hazard Area Delineation, South Boulder Creek	Greenhorne & O'Mara, Inc.
03/87	272	Flood Insurance Study, Larimer County, Colorado	FEMA
05/87	281	Flood Hazard Area Delineation, Boulder and Adjacent Boulder County Drainageways	Greenhorne & O'Mara, Inc.
12/87	294	Floodplain Information Report, North St. Vrain and St. Vrain Creeks	Engineering Professionals, Inc.
08/88	298	Floodplain Information, St. Vrain Creek, Boulder County, Colorado	Boulder County Public Works Dept.
12/88	295	Request for Letter of Map Revision Involving Fill, Bear Canyon Creek, CU Boulder Research Park, Boulder, Colorado	Love & Associates, Inc.
01/89	297	Request for Letter of Map Revision, Boulder Creek	Love & Associates, Inc.
07/88	336	Flood Insurance Study, Boulder County, Colorado, Unincorporated Areas	FEMA
07/90	337	Flood Insurance Study, Boulder County, Colorado, Unincorporated Areas	FEMA
11/93	350	Flood Insurance Study, Larimer County, Colorado	FEMA
08/78	354.1	Flood Insurance Study, Boulder County, CO, Unincorporated Areas	HUD/FIA
03/96	431	Flood Insurance Study, Larimer County, Colorado	FEMA
06/98	467	Floodplain Information Report, North St. Vrain & St. Vrain Creeks, Floodplain Update, Town of Lyons, Boulder County, Colorado	BRW, Inc.
07/97	481	Flood Insurance Study, Larimer County, Colorado	FEMA
03/99	491	Flood Insurance Study, Larimer County, Colorado	FEMA
06/95	536	Flood Insurance Study, Boulder County, CO and Incorporated Areas	FEMA
10/02	615	Flood Insurance Study, Boulder County, CO and Incorporated Areas	FEMA
12/06	617	Flood Insurance Study, Boulder County, CO and Incorporated Areas	FEMA
08/14	651	Hydrologic Evaluation of Big Thompson Watershed	Jacobs
08/14	652	Hydrologic Evaluation of Left Hand Creek Watershed	Jacobs
08/14	653	Hydrologic Evaluation of St. Vrain Watershed	Jacobs
08/14	654	Boulder Creek Hydrologic Analysis	CH2MHill
08/14	655	Little Thompson Hydrologic Analysis	CH2MHill

07/15	657	Lower St. Vrain Watershed, Phase 2 Hydrologic Evaluation	Jacobs
07/15	658	Lower Big Thompson Watershed, Phase 2 Hydrologic Evaluation	Jacobs
07/15	659	Boulder Creek Hydrologic Analysis, Phase 2: Boulder Creek Above St. Vrain Creek	CH2MHill
07/15	660	Little Thompson River Hydrologic Analysis, Phase 2: Boulder Creek Above St. Vrain Creek	CH2MHill
04/17	669	Colorado Hazard Mapping Program, Phase I and Related Study Areas, Boulder County	AECOM
12/12	677	Flood Insurance Study, Boulder County, CO and Incorporated Areas	FEMA
02/13	678	Flood Insurance Study, Larimer County, CO and Incorporated Areas	FEMA

; and

WHEREAS, previous floodplain information consists of detailed and approximate information that has become outdated; and

FLOODPLAIN INFORMATION TO BE DESIGNATED

WHEREAS, the Colorado Water Conservation Board (CWCBC) completed a new report entitled "Colorado Hazard Mapping Program, Larimer and Boulder Counties"; and

WHEREAS, the said new report has the following sub-documents:

- Boulder County (excluding the 2D draft floodway reaches for Boulder Creek from Kenosha Rd/115th Street to the Weld County Line)
 - Colorado Hazard Mapping Program Hydraulic Analysis, Technical Support Data notebook (TSDN) for the Big Thompson Watershed (HUC-8 10190006), by CWCBC/AECOM, submitted March 21, 2017; and,
 - Colorado Hazard Mapping Program Hydraulic Analysis, Technical Support Data notebook (TSDN) for the St. Vrain Watershed (HUC-8 10190005), by CWCBC/AECOM, submitted April 2018; and,
 - Colorado Hazard Mapping Program Hydraulic Analysis - Volume 2, Technical Support Data notebook (TSDN) for the St. Vrain Watershed (HUC-8 10190005), by CWCBC/AECOM, submitted June 2018.
- Larimer County
 - CHAMP Colorado Hazard Mapping Program Hydrology Technical Support Data notebook (TSDN) for the Big Thompson Watershed (HUC-8 10190006), by CWCBC/AECOM, submitted March 2016; and
 - CHAMP Colorado Hazard Mapping Program Year 1 and Year 2 Draft Hydraulics for the Big Thompson Watershed (HUC-8 10190006), excluding Year 2, 2-D draft hydraulics model for the Big Thompson River and its tributaries through

the City of Loveland and surrounding portions of unincorporated Larimer County, by CWCB/AECOM, submitted March 2017 for Year 1 and March 2018 for Year 2."

; and

WHEREAS, said new report contains detailed 100-year and 500-year floodplain and floodway information for Little Thompson River, Fourmile Canyon Creek, Fourmile Creek, Gold Run, Left Hand Creek, St. Vrain Creek, and North St. Vrain Creek in Boulder County and Big Thompson River, Buckhorn Creek, Little Thompson River, Redstone Creek, Dry Creek, Dickson Gulch, Cedar Creek, Quillan Gulch, Long Gulch, Tributary BT-1, Tributary BT-2, Tributary BT-3, Noel's Draw, Dark Gulch, Fox Creek, Black Canyon Creek, Dry Gulch, Fall River, Fish Creek, North Fork Big Thompson River, and West Creek within Larimer County; and

WHEREAS, said new report contains approximate 100-year floodplain information for Geer Canyon, Little Thompson River, West Fork Little Thompson River, and James Creek in Boulder County and Buckhorn Creek, Dry Creek, Little Thompson River, North Fork Little Thompson River, West Fork Little Thompson River, and Redstone Creek in Larimer County; and

LOCAL REQUEST FOR DESIGNATION

WHEREAS, the study resulting in the said new report was prepared to assist government officials in managing and regulating the aforementioned stream reaches during the recovery from the 2013 flood event; and

WHEREAS, CWCB staff received a letter from Boulder County requesting designation of the subject streams on June 13, 2018. The letter indicated that the Board of County Commissioners was planning to meet in July 2018 to consider adopting the subject reaches at the county level. Although this letter is requesting designation of the Boulder Creek floodway, this reach is not included within this designation; and

WHEREAS, CWCB staff received a letter from Larimer county requesting designation of the subject streams on June 14, 2018 requesting designation of the subject streams. The letter specifically requests excluding the 2D reach of the Big Thompson River around the City of Loveland; and

WHEREAS, the study results were presented to staff of Boulder County and Larimer County throughout various phases of analysis, and local staff and elected officials have been supportive of the study effort; and

WHEREAS, CWCB staff concurs with the request from Boulder County and Larimer County for designation and approval of the study, with the noted exceptions of the Boulder Creek floodway and the 2D reach of the Big Thompson River; and

C.R.S. AUTHORITY

WHEREAS, Section 37-60-106(1)(c), Colorado Revised Statutes, requires the Colorado Water Conservation Board to assist in the prevention of floods and flood damages therefrom; and

WHEREAS, Sections 31-23-301 and 30-28-111, Colorado Revised Statutes, provide that legislative bodies of local jurisdictions may provide zoning regulations for land uses on or along any storm or floodwater runoff channel or basin only after designation and approval by the Colorado Water Conservation Board; and

WHEREAS, Section 37-60-106(1)(c), Colorado Revised Statutes, directs the Colorado Water Conservation Board to designate and approve storm or floodwater runoff channels or basins and to make such designations available to legislative bodies of local jurisdictions; and

CONSISTENCY WITH PREVIOUS FLOODPLAIN STUDIES

WHEREAS, the detailed 100-year and 500-year floodplain and floodway information for Little Thompson River, Fourmile Canyon Creek, Fourmile Creek, Gold Run, Left Hand Creek, St. Vrain Creek, and North St. Vrain Creek in Boulder County and Big Thompson River, Buckhorn Creek, Little Thompson River, Redstone Creek, Dry Creek, Dickson Gulch, Cedar Creek, Quillan Gulch, Long Gulch, Tributary BT-1, Tributary BT-2, Tributary BT-3, Noel's Draw, Dark Gulch, Fox Creek, Black Canyon Creek, Dry Gulch, Fall River, Fish Creek, North Fork Big Thompson River, and West Creek within Larimer County contained in Resolutions No. 678 and previous resolutions; and

WHEREAS, the approximate 100-year floodplain information for Geer Canyon, Little Thompson River, West Fork Little Thompson River, and James Creek in Boulder County and Buckhorn Creek, Dry Creek, Little Thompson River, North Fork Little Thompson River, West Fork Little Thompson River, and Redstone Creek in Larimer County contained in Resolutions 678 and previous resolutions; and

COMPLIANCE WITH CWCB TECHNICAL STANDARDS

WHEREAS, said new report is based on hydrologic information developed by CDOT and others using various hydrologic methods that are all acceptable under CWCB standards; and

WHEREAS, water surface elevations for the 100-year and 500-year flood frequency and other frequencies for the studied stream reaches were computed using the Corps of Engineers backwater computer model HEC-RAS assuming unobstructed flow; and

WHEREAS, floodway limits for the 100-year flood frequency were computed using the Corps of Engineers backwater computer model HEC-RAS; and

WHEREAS, the new detailed 100-year and 500-year floodplain and floodway information for Little Thompson River, Fourmile Canyon Creek, Fourmile Creek, Gold Run, Left Hand Creek, St. Vrain Creek, and North St. Vrain Creek in Boulder County and Big Thompson River, Buckhorn Creek, Little Thompson River, Redstone Creek, Dry Creek, Dickson Gulch, Cedar Creek, Quillan Gulch, Long Gulch, Tributary BT-1, Tributary BT-2, Tributary BT-3, Noel's Draw, Dark Gulch, Fox Creek, Black Canyon Creek, Dry Gulch, Fall River, Fish Creek, North Fork Big Thompson River, and West Creek within Larimer County and approximate 100-year floodplain information for Geer Canyon, Little Thompson River, West Fork Little Thompson River, and James Creek in Boulder County and Buckhorn Creek, Dry Creek, Little Thompson River, North Fork Little Thompson River, West Fork Little Thompson River, and Redstone Creek in Larimer County in said new report meets the requirements listed under the Board's "Rules and Regulations for Regulatory Floodplains in Colorado" (2 CCR 408-1); and

WHEREAS, CWCB staff do not have the technical resources to review the Lower Boulder Creek Floodway reach in-house and intend to wait for a requested review from FEMA to be completed prior to considering designation of this reach; and

WHEREAS, Boulder County and Larimer County should consider regulating new development and construction in floodplain areas on a case-by-case basis based on the information presented in said new report, or based on the best available floodplain information that is accessible to the communities; and

WHEREAS, this designation does not formally rescind previous resolutions as it is considered best available data, and previous data may be used at the discretion of Boulder County and Larimer County if deemed appropriate on a case-by-case basis; and

WHEREAS, information presented in this report does not formally alter the Flood Insurance Study or Flood Insurance Rate Maps for Boulder County and Larimer County at the time of designation; and

WHEREAS, Boulder County and Larimer County may continue to regulate according to the effective Flood Insurance Study or Flood Insurance Rate Maps if the communities deem this to be the most appropriate information available; and

DESIGNATION, APPROVAL AND RESCISSION ACTION

NOW, THEREFORE, BE IT RESOLVED by the Colorado Water Conservation Board in a regular meeting assembled in Glenwood Springs, Colorado, this 19th day of July, 2018, that it does hereby designate and approve the detailed and approximate 100-year and 500-year floodplain and floodway information for Boulder County and Larimer County contained in said new report; and

BE IT FURTHER RESOLVED that the Secretary of the Board is directed to send a certified copy of this resolution to Boulder County, Larimer County, the Urban Drainage and Flood Control District, and FEMA.

CERTIFICATE

I certify that the foregoing is a true and correct copy of a resolution adopted by a majority vote of the members of the Colorado Water Conservation Board in regular session assembled at Glenwood Springs, Colorado on the 19th day of July, 2018, at which a quorum was present.

Rebecca Mitchell
Rebecca Mitchell, Director

