

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

May 19, 2018

RESOLUTION

PREVIOUS FLOODPLAIN INFORMATION

WHEREAS, the following floodplain studies have been designated by the CWCB for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow as listed in Table 1:

Table 1
Previously designated floodplain information for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow

Study Name	Author	Report Date	Resolution No.
Flood Hazard Area Delineation, Harvard Gulch, West Harvard Gulch, and Dry Gulch, Metropolitan Region, Colorado	Gingery Associates, Inc.	December 1979	148
FIS, City and County of Denver	Federal Emergency Management Agency	April 1986	255
FIS, Arapahoe County, Colorado and Incorporated Areas, Volumes 1-3 (City of Englewood)	Federal Emergency Management Agency	March 1991	348
Type 15 Flood Insurance Study, City of Englewood	Federal Insurance Administration	November 1971	477
FIS, Arapahoe County and Incorporated Areas (Englewood portion only)	Federal Emergency Management Agency	April 1989	478
FIS, City of Englewood	Federal Emergency Management Agency		502
FIS, Arapahoe County, CO and Incorporated Areas	Federal Emergency Management Agency	March 1991	509
FIS, City and County of Denver, Colorado	Federal Emergency Management Agency	January 1990	512
FIS, City and County of Denver, Colorado	Federal Emergency Management Agency	January 1992	513
FIS, City and County of Denver, Colorado	Federal Emergency Management Agency	January 1993	514
FIS, City and County of Denver, Colorado	Federal Emergency Management Agency	January 1996	516
FIS, City and County of Denver, Colorado	Federal Emergency Management Agency	January 1998	517

FIS, Arapahoe County, CO and Incorporated Areas	Federal Emergency Management Agency	August 1995	538
FIS, City and County of Denver, Colorado	Federal Emergency Management Agency	November 2005	590
FIS, City and County of Denver, Colorado	Federal Emergency Management Agency	November 2013	680
FIS, Arapahoe County, CO and Incorporated Areas	Federal Emergency Management Agency	February 2017	688

; and

WHEREAS, previous floodplain information consists of detailed information that has become outdated; and

FLOODPLAIN INFORMATION TO BE DESIGNATED

WHEREAS, Matrix Design Group completed a new report entitled "Flood Hazard Area Delineation, Harvard Gulch and Dry Gulch" dated February 2017; and

WHEREAS, said new report contains detailed floodplain and floodway information for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow through the City and County of Denver and the City of Englewood; and

LOCAL REQUEST FOR DESIGNATION

WHEREAS, the study resulting in the said new report was prepared to provide local jurisdictions with a basis for managing Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow floodplains and floodways and to minimize threats from flooding to public health and safety; and

WHEREAS, the Urban Drainage and Flood Control District transmitted a letter dated May 17, 2017 to the CWCB requesting designation and approval of said new study for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow; and

WHEREAS, the City and County of Denver transmitted a letter dated June 23, 2017 to the CWCB requesting designation and approval of said new study for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow; and

WHEREAS, no request letter was received from the City of Englewood, but a representative from Englewood was present at the board meeting for which this item was presented, and no concerns were expressed; and

WHEREAS, the Urban Drainage and Flood Control District Board of Directors also passed a resolution at their March 16, 2017 meeting to adopt the subject study; 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 floodplain information for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow revises and is, therefore, inconsistent with the detailed and approximate floodplain information for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow contained in Resolutions No. 148, 255, 348, 477, 478, 502, 509, 512, 513, 514, 516, 517, 538, 590, 680, and 688; and

COMPLIANCE WITH CWCB TECHNICAL STANDARDS

WHEREAS, said new report is based on information gathered and assembled for the existing drainage systems including hydraulic structures, channels, and topography; and

WHEREAS, said new report is based on hydrologic information previously calculated and designated in the previously published 1979 Flood Hazard Area Delineation for the watershed and was subsequently used for flood maps and floodplain designation; and

WHEREAS, a streamgauge analysis was prepared as part of this study to verify hydrologic values, with the results indicating that the previously calculated values are still valid and within reasonable limits and should not be changed as part of this updated analysis; and

WHEREAS, water surface elevations for the 100-, and 500-year flood frequencies for the studied stream reach were computed for said new report using the U.S. Army Corps of Engineers HEC-RAS hydraulic model, Version 4.1.0; and

WHEREAS, a FLO-2D two-dimensional model was used to model the Harvard Gulch overland flow downstream of Logan Street due to complex hydraulic conditions; and

WHEREAS, floodway limits for the 100-year flood frequency assuming a 0.5 foot maximum rise were computed for said new report using the U.S. Army Corps of Engineers HEC-RAS hydraulic model, Version 4.1.0; and

WHEREAS, the detailed 100-year and 500-year floodplain and floodway information for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow 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, the City and County of Denver, the City of Englewood, and the Urban Drainage and Flood Control District should continue to regulate 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 cities and the District; and

DESIGNATION, APPROVAL AND RESCISSION ACTION

NOW, THEREFORE, BE IT RESOLVED by the Colorado Water Conservation Board in regular meeting assembled in Denver, Colorado, this 23rd day of January, 2018, that it does hereby designate and approve as detailed floodplain information the 100-year and 500-year floodplains and 0.5-ft floodway delineations for Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow in the City and County of Denver and the City of Englewood contained in said new Flood Hazard Area Delineation dated February 2017; and

BE IT FURTHER RESOLVED that the Board does hereby rescind the detailed and approximate 100-year and 500-year floodplain and floodway information contained in Resolutions No. 148, 255, 348, 477, 478, 502, 509, 512, 513, 514, 516, 517, 538, 590, 680, and 688 for the studied reaches of Harvard Gulch, Dry Gulch, and Harvard Gulch Split Flow contained in said new report dated February 2017; and

BE IT FURTHER RESOLVED that the Secretary of the Board is directed to send a certified copy of this resolution to the City and County of Denver, the City of Englewood, Urban Drainage and Flood Control District, and the Federal Emergency Management Agency Region 8.

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 Denver, Colorado on the 23rd day of January, 2018, at which a quorum was present.



Rebecca Mitchell, Director