FEBRUARY 23, MARCH 1 – 2, 2017

COMMUNITY OPEN HOUSE

WELCOME!
TONIGHT’S AGENDA

• Understanding the Upper Montclair Basin
• We’ve Heard From You!
• Stormwater Systems
• Approach to this Study
• Workshop Activities
UNDERSTANDING THE BASIN
STUDY AREA

LOWER MONTCLAIR BASIN

PARK HILL BASIN

17TH AVE

COLFAX AVE

COLORADO BLVD

6TH AVE PKWY

ALAMEDA AVE

MONACO PKWY

QUEBEC ST

STAPLETON GREENWAY

CHEESMAN PARK

DENVER CC

LOWRY SPORTS COMPLEX PARK

FAIRMOUNT CEMETERY

CITY PARK
HISTORY OF A PAST CREEK

Geologic Map of Greater Denver Area, 1979 – USGS via Enginuity
HISTORY OF A PAST CREEK

Denver Aerial Imagery, 1933 – Denver Open Data, Enginuity
HISTORY OF A PAST CREEK

Figure 3.7: Housing Construction Year

Montclair OSP, Housing Construction, 1933 Aerial – Enginuity

YEAR BUILT: 1880 - 1934
North Denver Brick Sewer Construction, 1920s – Denver Public Library
UPPER MONTCLAIR BUILD OUT

Parcels by Year Built – Denver Open Data
BUILT, URBAN ENVIRONMENT
WE’VE HEARD FROM YOU!
SIGNIFICANT FLOODING LOCATIONS

Significant Flooding Locations – Denver PW
STORM INTENSITY

City Park

Upper Montclair Basin

Fairmount Cemetery

Rainfall Intensity - Denver PW

JUNE 24, 2015
SIGNIFICANT FLOODING LOCATIONS

Significant Flooding Locations – Denver PW
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UNDERSTANDING
STORMWATER SYSTEMS
The first priority is to provide the capability to move, or convey, the storm water safely away from people and property.

This is traditionally achieved through curb and gutters, streets, underground pipes, and channelized flow (ditch, canal, creek, river).
STORM WATER SYSTEMS

Typically, acceptable flood control cannot be achieved by conveyance only; it is necessary to build **detention capacity**.

Detention structures safely accumulate storm water runoff until the storm event subsides and downstream conveyance structures can manage the flow.
PARKS AND OPEN SPACE

UPPER MONTCLAIR
Parks make up just 1.5% of the basin

- Parks: 54 acres
- Total Basin: 3807 acres

Existing Parks – Denver Open Data
EXISTING DETENTION AREAS

Existing Detention Areas – Denver PW
IMPERVIOUS SURFACES

Impervious surfaces include streets, sidewalks, rooftops, parking lots, and driveways. In more urban areas, less storm water is infiltrated to the \textit{subsurface}, causing greater amounts of surface runoff.
IMPERVIOUS SURFACES

Impervious Surfaces – Denver Open Data
Impervious Surfaces - Denver Open Data

SIDEWALKS 113 ACRES
IMPERVIOUS SURFACES

DRIVEWAYS 139 ACRES

Impervious Surfaces – Denver Open Data
Impervious Surfaces – Denver Open Data

PARKING LOTS 149 ACRES
IMPERVIOUS SURFACES

STREETS & ALLEYS 726 ACRES

Impervious Surfaces – Denver Open Data
IMPERVIOUS SURFACES

UPPER MONTCLAIR
49% of the basin is impervious

Sidewalks 2.9%
Driveways 3.5%
Parking 3.9%
Streets & Alleys 19.0%
Rooftops 19.8%

Impervious Surfaces – Denver Open Data

TOTAL IMPERVIOUS 1879 ACRES/3807 ACRES
WATER FLOW

UPPER MONTCLAIR
49% of the basin is impervious

- Sidewalks: 2.9%
- Driveways: 3.5%
- Parking: 3.9%
- Streets & Alleys: 19.0%
- Rooftops: 19.8%

Impervious Surfaces – Denver Open Data
WATER QUALITY

Inlets carry runoff to underground storm network where it then outfalls, mostly untreated, into South Platte River, Cherry Creek, and other associated tributaries.
WATER QUALITY

Image: City and County of Denver, Public Works
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APPROACH TO THIS STUDY
A RESILIENT COMMUNITY

Ability of communities to rebound, adapt to or thrive amidst changing conditions and challenges

– Colorado Resiliency Framework, 2015
• Develop a **new approach**

• **Understand** the basin’s built environment and relevance to local flooding issues

• Enable **community conversations** around alternatives

• Identify a **toolbox of solutions**

• Foster **community support and participation in solutions**
TYPICAL APPROACH
COLLABORATIVE APPROACH

GREY INFRASTRUCTURE

COMMUNITY

PLANNING & URBAN DESIGN

GREEN INFRASTRUCTURE
A RESILIENT COMMUNITY

STORM WATER BENEFIT

PUBLIC COST

TIME & COMPLEXITY

Individual

Neighborhood

Basin
RESOURCES AVAILABLE

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RESOURCES

• Low Cost / Free Flood Proofing Tips
• Floodplains and Flood Insurance FAQs
• Brochures, Links, and More Information
• We’re here to help!
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TONIGHT’S WORKSHOP
THANK YOU!

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