Welcome!

Councilman Kevin Flynn, District 2

• City and County of Denver, Public Works; Water Quality.
  • Sarah Anderson – WQ Program Manager
  • Brian Wethington – WQ Project Manager
  • Ashlee Grace - Senior Planner

• Consultant Team
  • Chris Kroeger – Muller Engineering
  • Ryan Taylor – Muller Engineering
  • Paul Thomas – Stream Design, Landscape Architects
  • Carly Gelatt – Stream Design, Landscape Architects
Agenda:

• Presentation (About 15 Min.)
  • Our Stormwater System
  • Why is Water Quality Necessary?
  • What does Green Infrastructure look like?
  • Project Site & Key Considerations

• Open House Discussion (35 Min.)

• Share back of key issues from discussion (10 Min.)
Our Stormwater System
Increasing Impervious Area

47% of Denver* is currently covered in impervious surfaces
Source: DRCOG LiDAR Data

57% of Denver* is projected to have impervious cover by 2020 based on future land use
Source: CCD Drainage Master Plan, 2014
Objectives

1. **Data Driven**: Prioritize basins with greatest WQ needs based on data
2. **Strategic Prioritization**: Identify large & site-scale GI projects by using “Scorecard” criteria
3. **Proactive**: Address wet and dry weather discharges
4. **Meet Multiple City Goals**: Work with other city agencies to maximize collaboration opportunities & ‘OPM’ (DPR, CPD, DEH, Transportation & Mobility)
Green Infrastructure Planning

**REGIONAL SCALE**
- Asbury & Tejon
- 38th & Holly
- High Line Canal

Total Treatment: 937 acres

**SITE SCALE**
- 21st & Broadway
- Lowell & Evans
- Federal Blvd

- Prioritized from Scorecard and Metrics Machine
- Inform future policies, project budgets, etc.
- Key for continued program improvement
Why Green Infrastructure?

**Why Green Infrastructure:**

**Economic:**
- Cost effective approach to stormwater management that meets multiple goals
- Increased property values
- Increased building efficiency and reduced energy costs

**Quality of Life:**
- Increased resiliency of Denver’s neighborhoods
- Enhanced recreational corridors
- Healthier, greener neighborhood connections

**Environment:**
- Healthier South Platte River, streams, gulches and lakes
- Improved aquatic and terrestrial habitat
- Better air quality
- Reduced urban heat island effect

**Common Pollutants Found in Urban Stormwater:**
- Bacteria
- Nutrients
- Trash
- Metals
- Other

**Impacts of Polluted Stormwater:**

**Public Health:**
* E. coli levels in Denver’s streams and river often exceed swimmable beach standards by the EPA.

**Environment:**
* Water quality in most of the streams in Denver is not sufficient to support a health and diverse population of aquatic wildlife.
What does Green Infrastructure Look Like?

URBAN AESTHETIC

NATURALISTIC

COMBINATION
Green Infrastructure Design

- Inlet from Roadway or Parking Area (Grass, Vegetated, or Stone-Lined Swale)
- Optional Gutter Tile (Inlet Only)
- Perforated Separator

[Diagram of a green infrastructure design with labels for Mulch Layer, Temporary Ponding Area, Overflow Inlet, Native Planting, Optional Stone Wall (Overflow Spillway), Optional Lined Drain, Inflow, Outflow, Detention Soil, Gravel Bed, Existing Soil.]

- MAINTENANCE
- VEGETATION
- PLUMBING (IN-FLOW & OVER-FLOW)

LOWELL & EVANS
Green Infrastructure | Water Quality | Community Space
Project Context

- Project was identified through
  - Community input
  - Water Quality analysis
- Strong community support
- Multiple Benefits
  - Community Space
  - Water Quality
  - Intersection improvements
  - Depaving
Project Site

A. Lowell & Evans looking East
Project Site

B. Warren Street looking North

C. Warren & Lowell Intersection looking North
Project Site

Site Information:
- Approximately 10,000 SF of impervious area
- 8-inch sanitary line and manhole
- Water main
- New bike lanes

Known Site Considerations:
- Maintain parking and waste pick-up at for adjacent property owners
- Protect and preserve utilities, sanitary and water services
- Safety (lighting and site-lines)

Technical Considerations:
- Provide area to treat ~2 acres of stormwater runoff (from Iliff, Lowell, Marshall, & Evans)
- Provide area for community space
Thank you!

• Break-Out sessions;
  • 2 to 3 stations, each one is the same

• What are we looking for?
  • What do we need to know about this site? History of site, community impacts, etc.
  • What do you want to see in the future? Types of compatible uses, things you’d like to see, your favorite community spaces, anything you’d like us know.
  • Write down feedback on boards, flip-charts, or comment cards

• 35 Minutes – Consultant or City Representative will readout key feedback and issues at the end of the meeting

• Public Meeting #2 planned for November 2017
LOWELL & EVANS

Green Infrastructure | Water Quality | Community Space

What We Heard.

More information or feedback?

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