



ARAPAHOE COUNTY

High Line Canal Stormwater Management Business Case

Board of County Commissioner
Study Session February 10, 2026



Direction Request of the BOCC

1. Concurrence of the desire of the BOCC to allow new stormwater into the HLC
2. Support of the framework proposed to develop the HLC Stormwater Management Program
3. Concurrence that both PWD and OS shall work on this program
4. BOCC provided reactions and feedback
5. Timeframe for completion – January 1, 2027

Included in the Backup Materials is:

- Detailed Business Case for HLC Stormwater Management Program
- One Page Summary of the Business Case
- ArapCo Decision Framework





Background

- The County recently took ownership of 45-miles of the High Line Canal (HLC)
 - Preserve a natural/recreational amenity.
- “Historic” stormwater is allowed to be discharged into the HLC
- Illicit discharges currently exist
- External stakeholders have worked together to identify a vision, plan and new uses of the HLC
 - Interest & General Support for New Stormwater



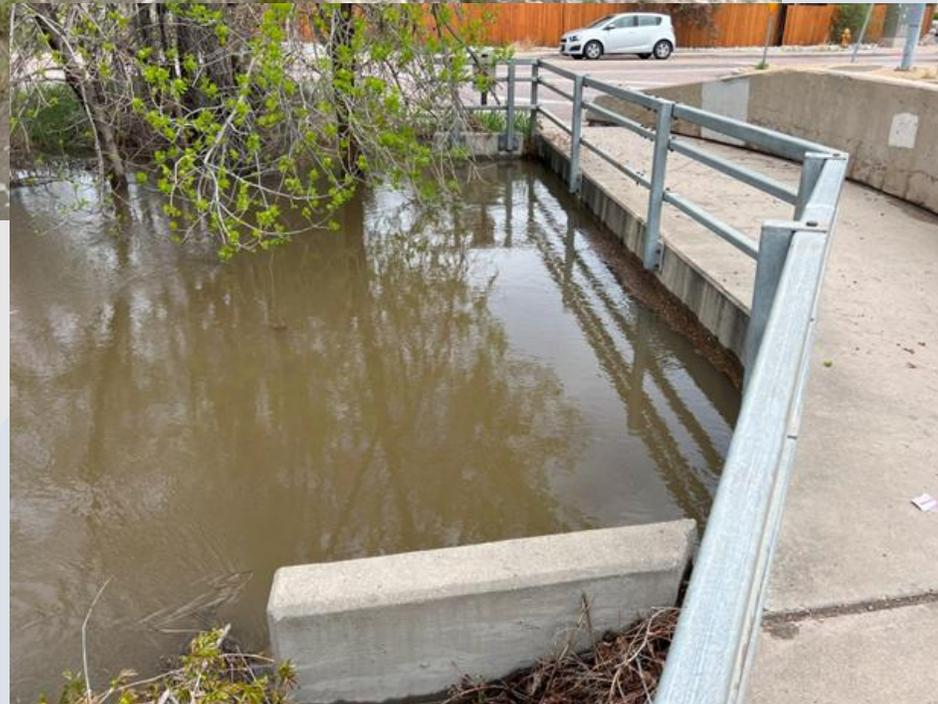
ARAPAHOE COUNTY

High Line Canal
Overtopping in
Holly Hills →



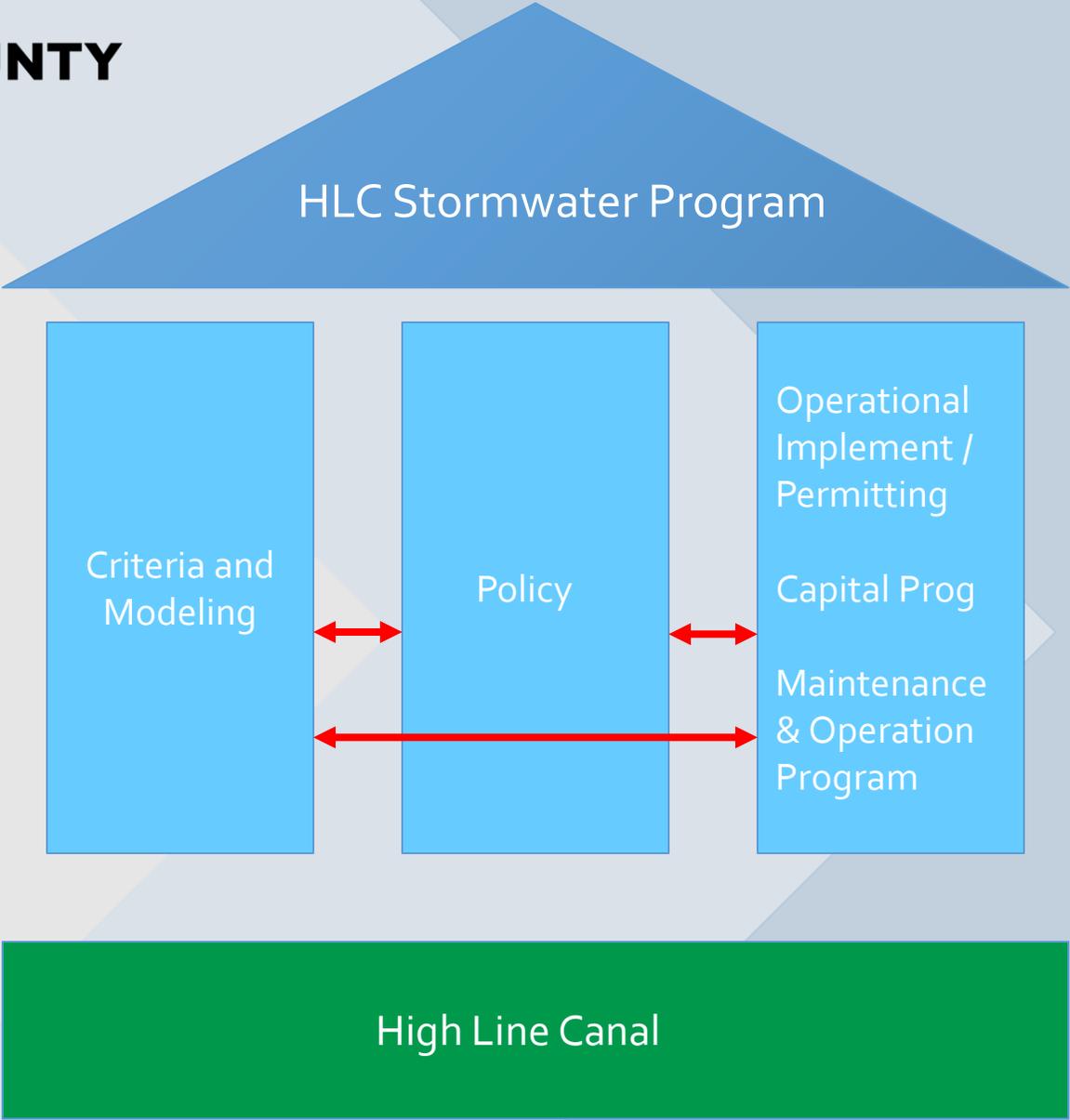
May 2023
Storm Photos

Bridge over
High Line
Canal at Yale
and Holly



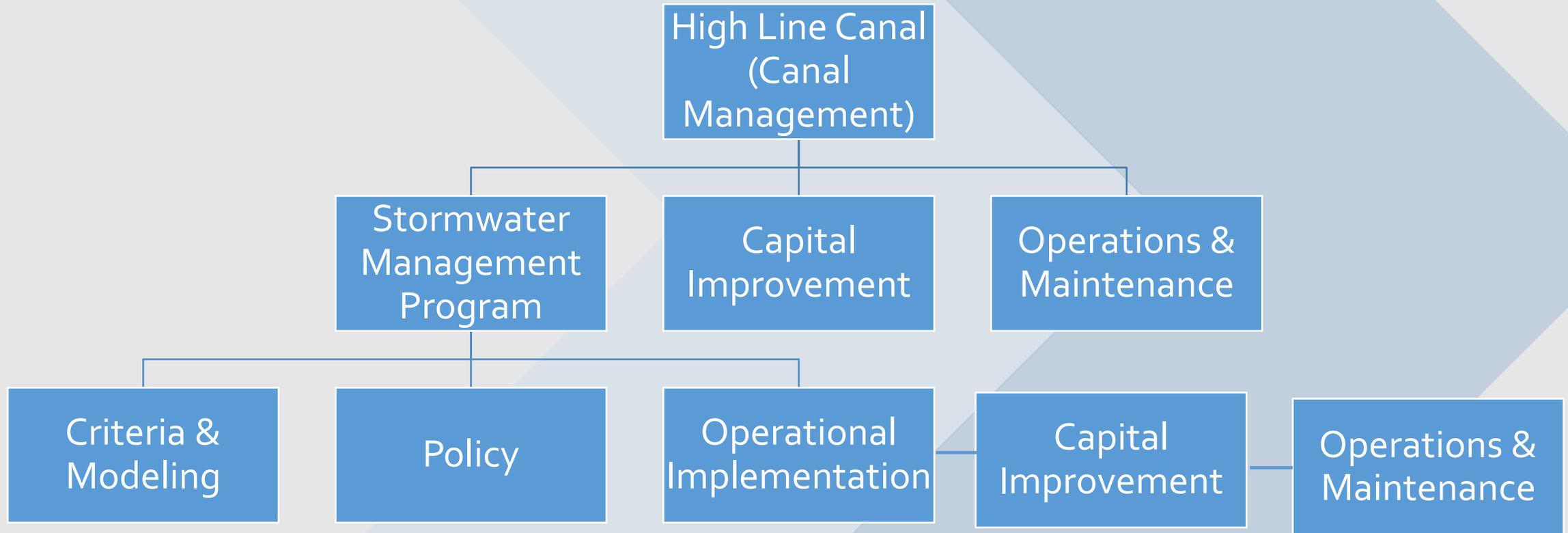
High Line Canal meets
the Cherry Creek







Typical Organization for Asset Management





Guidance Needed

- Presenting a Framework for Establishing a Program
- There are several scenarios to implement a HLC Stormwater Management Program
- Today we'll share what is needed to establish an effective program
- Topics that need direction from the BOCC
 - Schedule/Timing
 - Initial Implementation Structure



This business case would allow the BOCC to consider the addition of “new” stormwater in the future



HLC Stormwater Management Program – Criteria & Modeling

- Develop technical criteria with partners
 - *County Stormwater Criteria*
 - *MHFD Stormwater Criteria*
 - *Canal Specific Criteria*

- Stormwater Modeling Impacts
 - *Analysis of Impact of New Stormwater*
 - *MHFD – Offered to Perform Analysis No Cost (Icon Model)*
 - *Likely Need More Detailed Modeling (definition of New Stormwater)*
 - *Cherry Hills Village & Aurora Already Have done*



Modeled Spill Area – Current Conditions





HLC Stormwater Management Program - Policy

- Develop policy, regulations, operational agreements
- Define what historic flows are while considering the potential of new stormwater flows
- Define roles and responsibilities with partners
- Develop implementing documents for the program to protect the canal and reduce risk





ARAPAHOE COUNTY HLC Stormwater Management Program Operational Implementation Consideration

The implementation and size of the Program will be highly dependent on around the outcome of the policy and criteria partner facilitation outcome. The following items are a few examples that will likely be considered.

- *Deployment of a software platform for tracking and record keeping*
- *Implementation of the policy and criteria to review requests to authorize additional stormwater to the HLC*
- *Develop Fee Structure*
- *Look at Funding Strategies*
- *Ensure that approvals support Capital Improvement and O&M programs*
- *Enforcement related to permit non-compliance*



Height Existing 2D 1%-AC

Freeboard



- < -0.6
- 0.6 - -0.2
- 0.2 - -0.04
- 0.04 - -0.01
- 0.01 - 0.01
- 0.01 - 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- > 1.5

1%-AC Existing Max Flood Depth

Depth

- < 3"
- 3" - 6"
- 6" - 1.0'
- 1.0' - 1.5'

Introduction

Existing Conditions Map

Table



Existing Conditions Map

Alternatives Map



Recommendation

(assumes allow New Stormwater & Approach)

- Write Scope of Work to use Icon through MHFD Contract to:
 - Help In Development of Criteria for Canal
 - Help in Development of Policy
- Utilize MHFD to Facilitate Meetings with Stakeholders in Development of:
 - Criteria Development
 - Policy Development
 - Implementation
- PWD Staff Lead (Ceila) and Technical Staff (Lisa, Other) – County Rep in Meetings (Gini & Bryan Oversight)
 - Assumes January 1, 2027 Target Completion Date
 - Open Spaces Staff Coordination and Support
- Establish Long-Term Program Structure
- Negotiate IGAs with Municipalities
- Implement



Next Steps

- Address guidance and comments from BOCC
 - Schedule/Timing
 - Organizational Structure
- Review Draft STAMP Report and Comment
- Finalize Framework Activities with partners on BOCC guidance
- Meeting with MHFD and Icon & Develop Scope of Work
- Set Meetings

Questions?

Gini Pingenot, Director of Open Spaces
Bryan Weimer, Director of Public Works
and Development

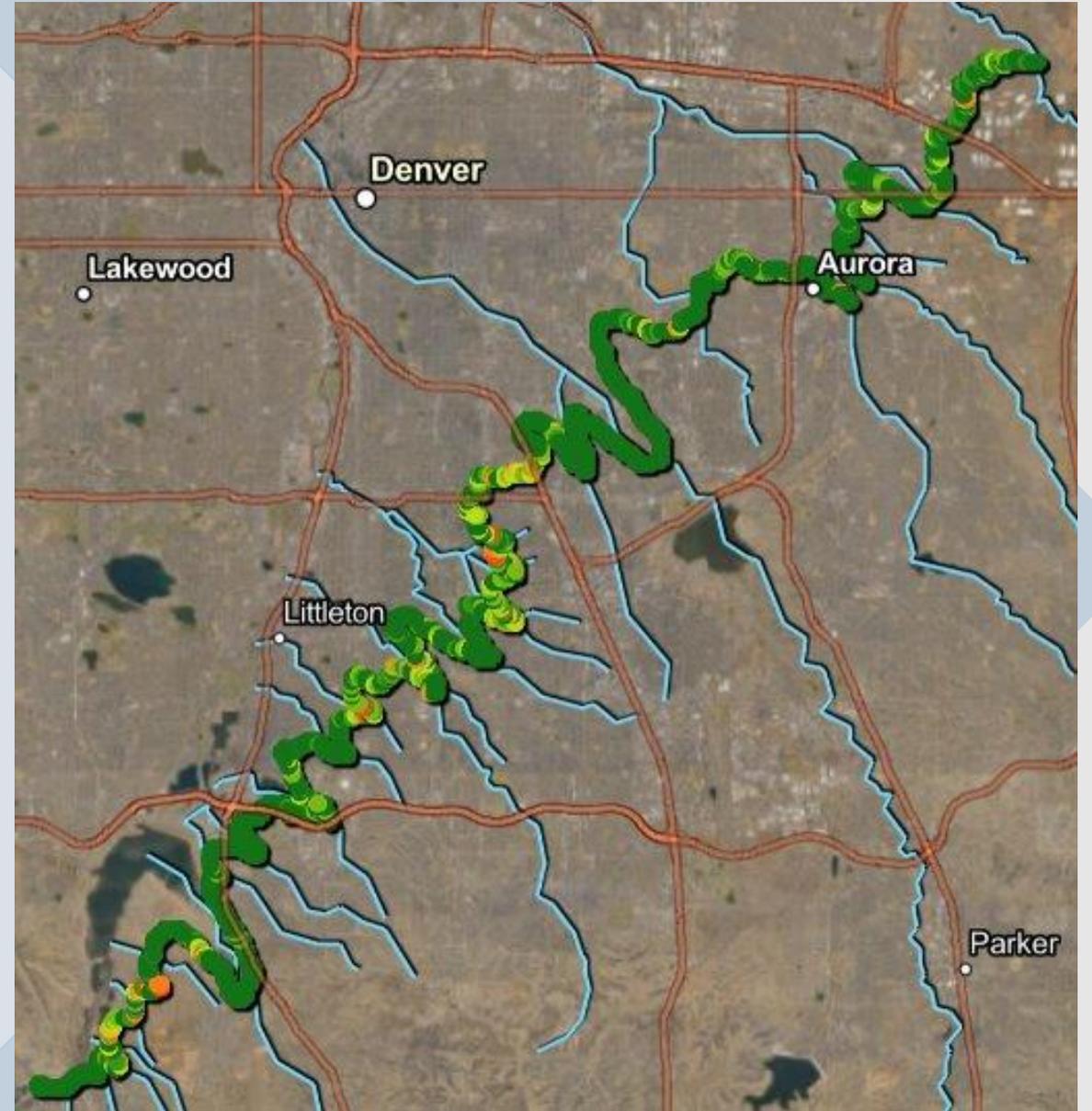




ARAPAHOE COUNTY

Existing Conditions:

- A **majority** of the Canal conveys stormwater flows
- ~80% of the canal has at least 1ft of freeboard in a Canal-wide 100-yr event
- ~60% of the canal has at least 2ft of freeboard in a Canal-wide 100-yr event
- The new stormwater model has identified **35 locations** that are at risk of overtopping in a 100-year storm



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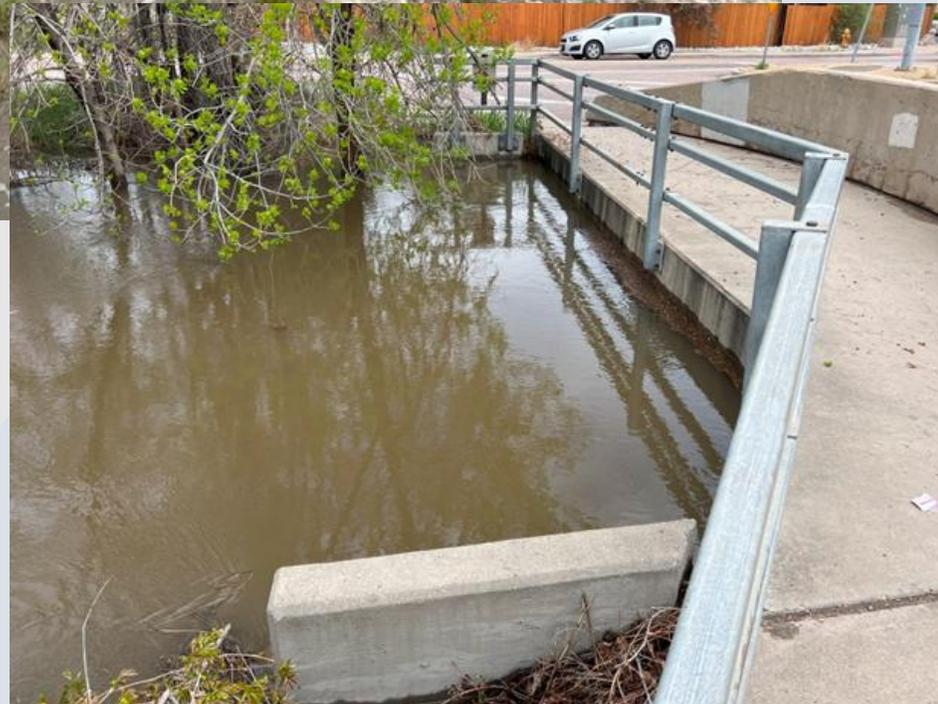
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Modeled Spill Area – Current Conditions



Holly Hills



Jurisdiction-Specific H&H Model

- From Aurora "We paid about \$25,000 for our 14 miles, this work was with RESPEC in 2020. When the conservancy and MHFD did this with Icon, I believe the cost per mile was a little closer to \$1,000. We had also added in some additional impervious update and modelling work that differed from the scope that Icon had. "
- From Cherry Hills Village "Our study was \$59,000.00 for approximately 3 miles. That included modeling, a capital improvement plan, and operations analysis." In addition, Icon developed some concept designs for CIPs.