Bassett Creek Valley - Floodplain and Stormwater Management Study - Supplemental Handout December 2019



Prepared for:

Bassett Creek Watershed Management Commission and City of Minneapolis

Minneapolis
City of Lakes

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Responsive partner.
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BACKGROUND

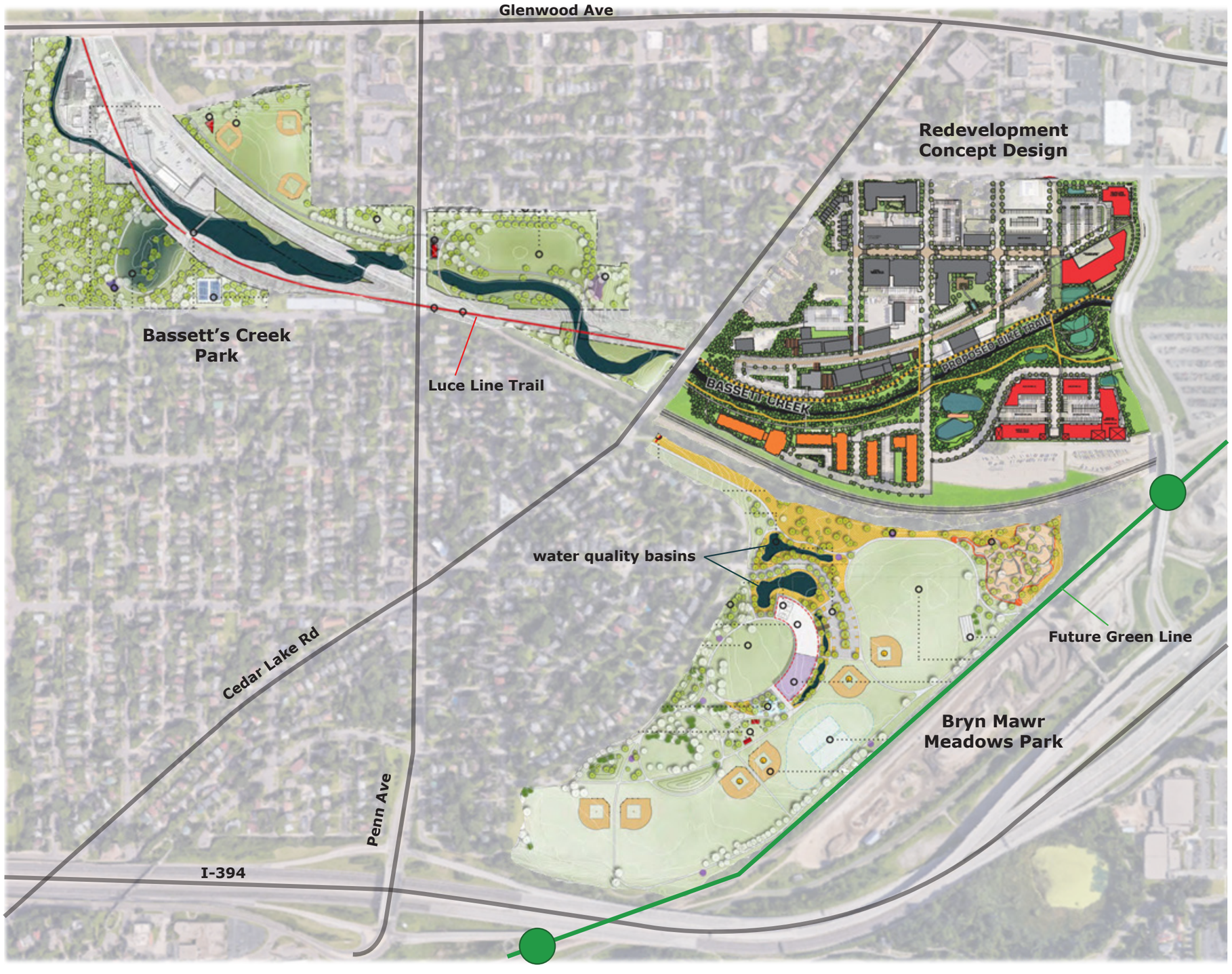
Purpose: To integrate natural resources, recreation, and redevelopment into a regional solution. To provide floodplain storage, water quality and bring regional amenities to the area.

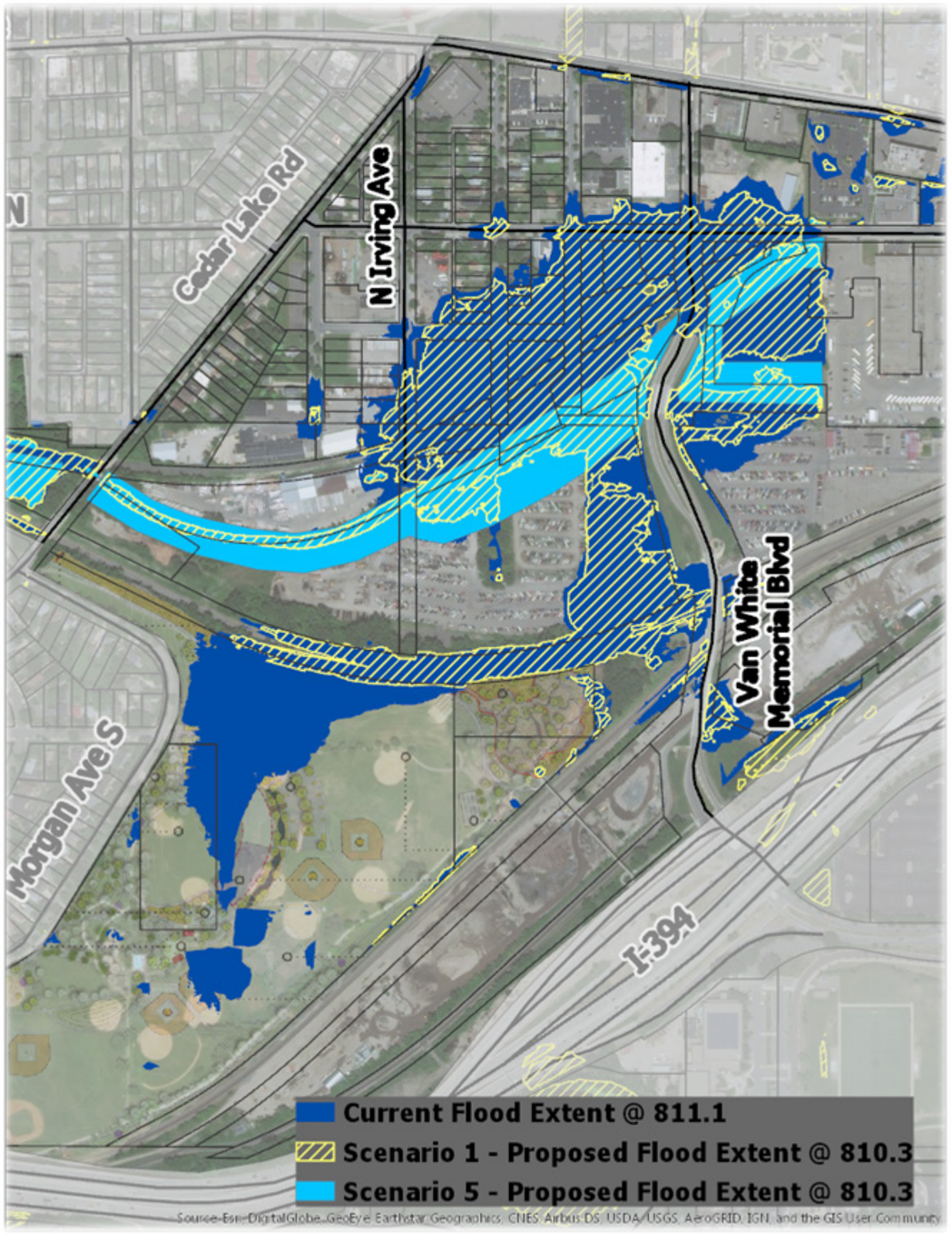
Location: West of downtown Minneapolis, north of I- 394, south of Glenwood Ave. Study Area: Encompasses Bassett's Creek Park, Bryn Mawr Meadows Park and the Redevelopment Area shown on the right.

Project Drivers:

- City priority for redevelopment
- New transit corridor
- Minneapolis Park and Recreation Board Master Plans
    - o concept drawings shown on the right for Bassett's Creek and Bryn Mawr Meadows
    - o location for Luce Line Regional Trail shown on the right
- BCWMC's CIP Projects
    - o water quality basins in Bryn Mawr Meadows
    - o streambank restoration and erosion control

See Sections 1 - 3 in the Floodplain Feasibility Report for additional information regarding background, area plans, and site constraints associated with Bassett Creek Valley Area.





Note: Flood elevations referenced to Irving Ave

PROPOSED SCENARIOS INFLUENCE ON FLOODPLAIN

Several brainstorming sessions and design charettes were held to discuss possible project locations, review existing and future plans, and consider amenities of interest and project types.

Although the study analyzed seven different scenarios, the **best locations** for the projects was determined to be either underground or surface storage in **Bryn Mawr Meadows Park** (Scenario 1) or manipulation of **Bassett Creek corridor** (Scenario 5) within the Development Area.

Shown to the left is the flood extent as a result of two of the scenarios presented in the Study. Scenarios 1 and 5 result in a reduction of 0.8 feet of the flood elevation but have different influences on the Development Area. Scenario 1, which includes 50 acre-feet of underground storage in Bryn Mawr Meadows Park, removes 7.1 acres from floodplain but does not impact a single location or parcel to any great extent. Scenario 5, which manipulates the channel cross section and increases the channel's top width from Cedar Lake Rd to Van White Blvd, removes 15.2 acres from the floodplain. **Scenario 5 has a much larger influence on removing entire parcels and contiguous land area from the floodplain than Scenario 1.**

Scenario 1 and 5 illustrate how two options with similar mitigation volumes can produce the same flood elevation but have significantly different impacts on the flood extent.

Projects that mitigate floodplain impacts must be completed prior to or concurrent with redevelopment.

See Sections 4-6 of the Report for further discussion of Scenarios presented.

Scenerio	Project Type & Location	Mitigation Storage Volume (AF)	Area Unlocked (acres)(2)	Flood Elevation (ft)	Estimated Capital Cost ($M)(2)	Cost per Acre Flood Reduction ($M/ac)
1	Underground in Bryn Mawr	50	7.1	810.3	$36 - 72.7	5.1 - 10.2
2	New Cross Section in Corridor	48	15.2	810.3	$3.7 - 7.3 $10.3 - 20.5	0.24 - 0.48 0.68 - 1.3

1 Existing condition has 24.0 acres of flooding in Bassett Creek Valley Development Area
2 Scenario 5: lower range assumes no soil contamination; upper range assumes all soil contaminated

BASSETT CREEK VALLEY TIMELINE

2007
- Bassett Creek Valley Master Plan Adopted

2013
- Van White Blvd Bridge Opens

2015
- BCWMC Adopts New Flood Elevations

2016
- Mpls CPED releases RFP for 2nd & Van White site

2017
- Mpls Public Works announces Impound Lot facility upgrades

2018
- Van White Station Area Plan
- CPED Preredevelopment Study

2019
- BCWMC Floodplain and WQ Feasibility Study
- Mpls CPED environmental site investigation

2020
- MPRB begins Bryn Mawr Meadows Park Concept Design
- BCWMC begins final design on WQ basins in Bryn Mawr Meadows

2021
- Reconstruction starts on Bryn Mawr Meadows Park
- Construction of BCWMC WQ Basins in Bryn Mawr Meadows Park
- Replacement of sanitary sewer line that services area (Irving Ave)

NEXT STEPS

- Explore Funding Mechanisms
- Evaluate Bryn Mawr Design Refinement
- Engage DNR for Permitting Needs
- Finalize Contamination Investigation for Impound Lot
- Refine Local & Regional H&H Models
- Refine Local & Regional WQ Models
- Determine development and floodplain mitigation phasing
- Consider Land Acquisitions



The full Floodplain and Water Quality Feasibility Study Report is available on the Bassett Creek Watershed Management Commissions website. This handout is meant to provide a brief overview of that report.

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