

Thornton Creek Confluence

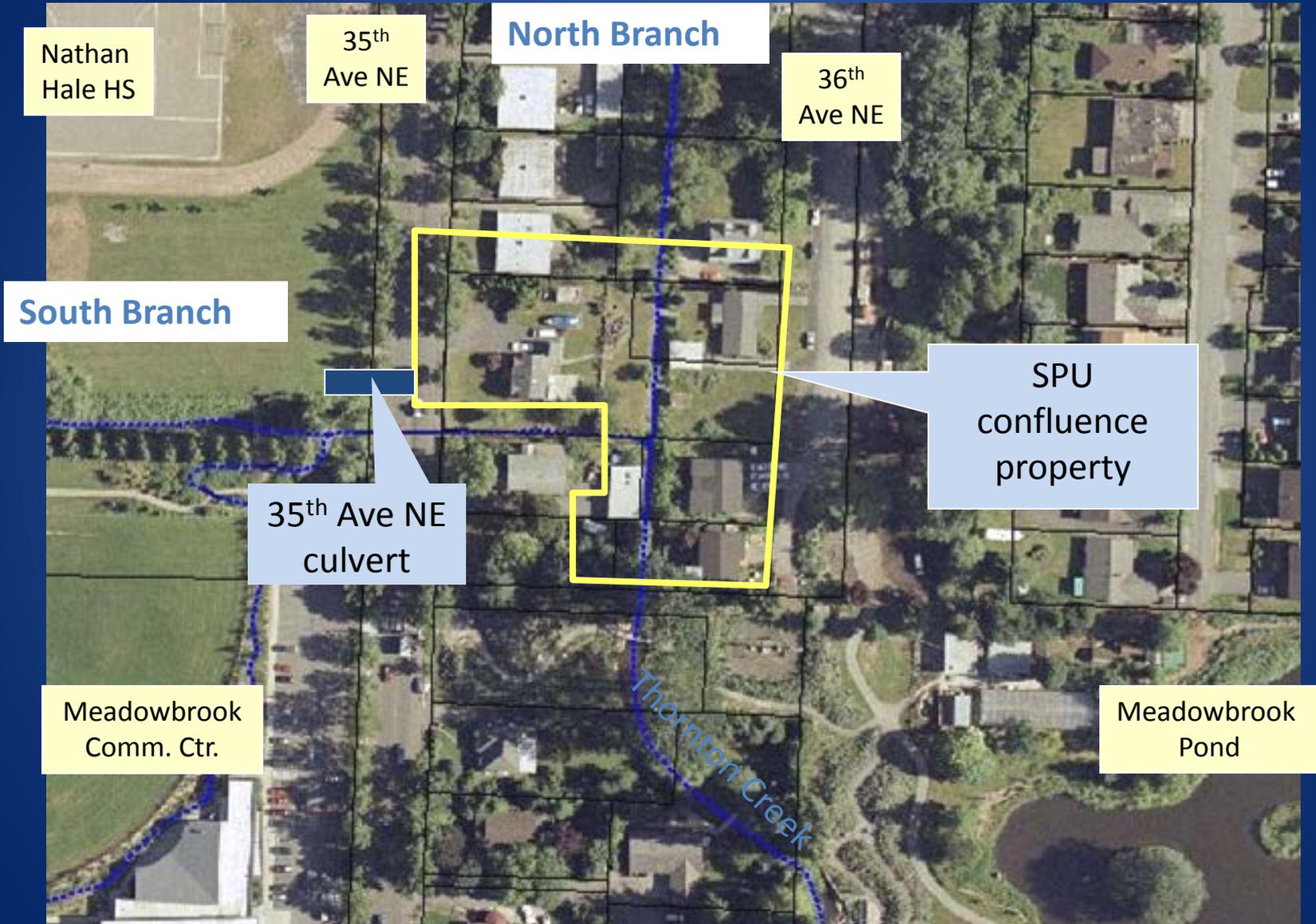


Urban Forestry Commission - September 5, 2012

Agenda

- Welcome and Introductions
- Project Overview
- 60% Design
- Discussion: What are your thoughts?
- Next Steps

Project Site



There are a number of problems
throughout the Thornton Creek Basin

Such as...

Property Flooding



Street Flooding/Closures



↑
36th Ave NE

35th Ave NE



Utilities and road infrastructure at risk due to flooding



Stormwater Capacity is Exceeded



Landslides and Erosion



Many areas with little habitat value



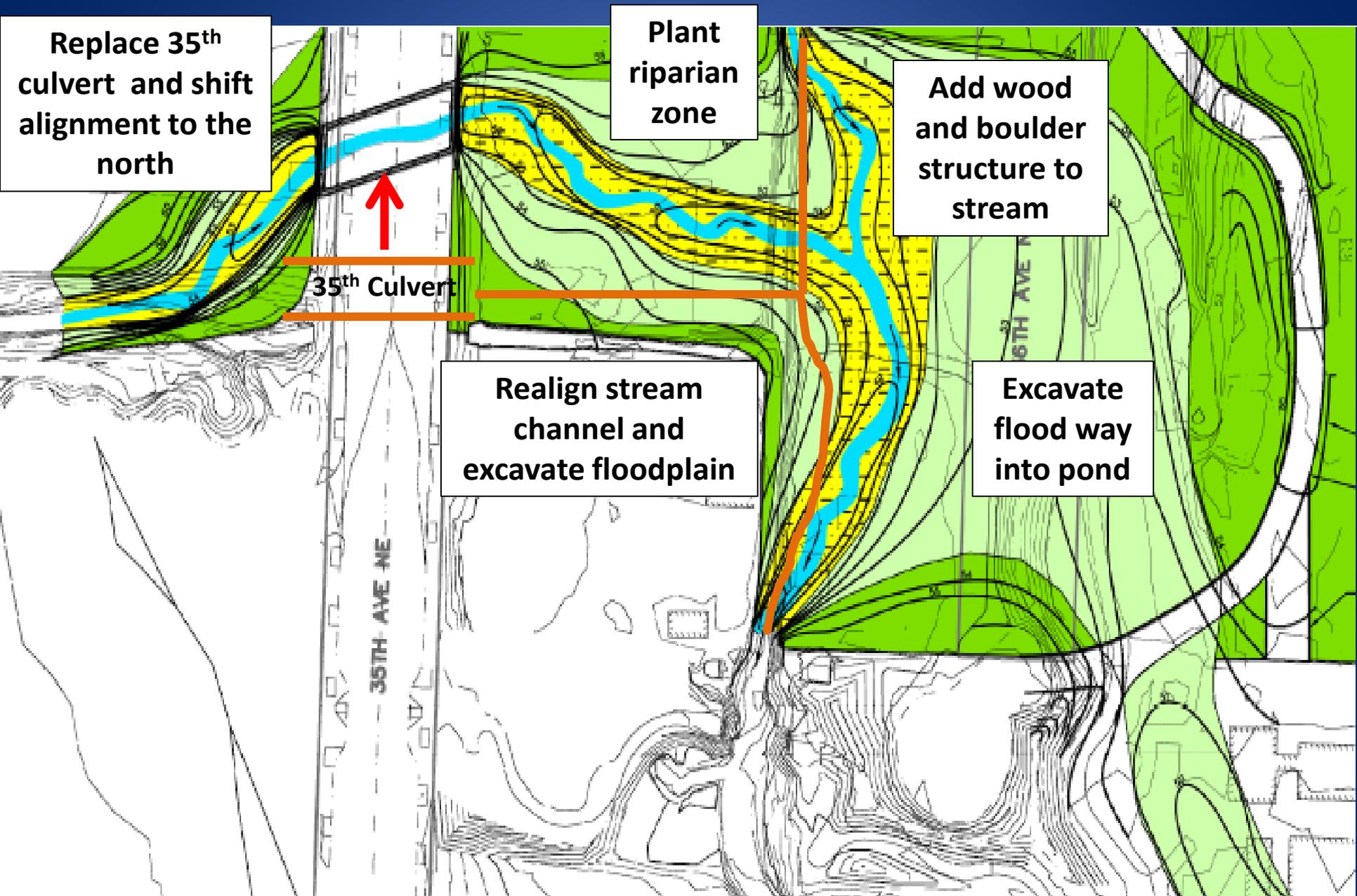
Confluence Project Objectives



- Meet drainage service levels for 35th Ave NE
- Remove flow choke point to address upstream flooding.
- Reduce downstream peak flow velocities.
- Improve instream spawning and rearing habitat.
- Improve water quality.



Project Overview Confluence Area



Replace 35th culvert and shift alignment to the north

Plant riparian zone

Add wood and boulder structure to stream

35th Culvert

Realign stream channel and excavate floodplain

Excavate flood way into pond

35TH AVE NE

6TH AVE NE

View 1: 35th Avenue Looking East Over Thornton Creek Floodplain



current conditions

Thornton Creek Confluence - Design Renderings
August 2, 2012 #09029



View 1: 35th Avenue Looking East Over Thornton Creek Floodplain



rendering: 2 yrs after completion

Thornton Creek Confluence - Design Renderings
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View 2: 36th Avenue Looking South to Meadowbrook Pond



current conditions

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View 2: 36th Avenue Looking South to Meadowbrook Pond



rendering: 2 yrs after completion

Thornton Creek Confluence - Design Renderings
August 2, 2012 #09029



Project Task	Schedule
Design and permitting	1Q 2011 - 1Q 2013
Construction Contract Preparation	1Q 2013 - 2Q 2013
Construction	2Q-3Q 2013

60% Design

Thornton Creek Confluence Improvement Project

LEGEND

- HYPOHEIC GRAVEL LEASE
- POOL
- ARTICULATED CONCRETE

NOTES

- EXISTING CULVERT TO REMAIN AS HYPOHEIC CONVEYANCE. FILL INLET AND OUTLET WITH 2-MAN BOULDERS.
- MAINTENANCE STAGING AND ACCESS ROAD - SURFACING TO BE ARTICULATED CONCRETE. VEGETATED WITH GRASS.
- SPILLWAY INTO FLOOD RELIEF AREA. PROTECT KC METRO SERIES LINE FROM DAMAGE.
- FLOOD RELIEF AREA.

B New culvert under 35th Ave NE

C Pedestrian bridges will be removed and will not be replaced. This includes a dead end bridge adjacent to the high school field and the small footbridge near the 36th Ave street end.

D Shorten street and create turn around

E Create new access path for people and maintenance vehicles.

A note on trees....

Unfortunately trees will be removed where they are in the path of the realigned stream, floodplain, or new access path. Large trees, particularly conifers, are avoided wherever possible. There will be substantial riparian plantings, with a net increase in the amount of native plants at the site. Removed trees will be re-used on-site as instream and riparian structure to the maximum extent possible.

A

Realign stream channel, meander, create pools. Reconnect floodplain areas for flood storage and habitat. Woody debris and other structure will be installed in stream.

G

Plant riparian area with mix of native trees, shrubs, and ground covers. Conifers will be preferred for tree species. Several planting palettes will be used based on elevation and soil conditions. Plantings will be planned in consideration of safety and sightlines.

F Create new high-flow floodway and connect with Meadowbrook Pond.

H Recreate surface-subsurface hydrologic (e.g., hyporheic) connections

All comments are welcome, but particular areas we'd like feedback:

- To improve habitat and create more flood storage, we need to remove about 13 poplar trees west of 35th Ave NE. Is this an acceptable trade-off?
- The existing gravel lot at the end of 36th Ave NE will go away. Should another gravel area be provided for parking along 36th?
- Culvert replacement under 35th Ave NE will require 3 to 7 weeks of construction, depending on full versus partial road closure. This will impact travel on 35th. Do you prefer a full road closure and shorter duration (3-4 weeks)?
- In order to maximize flood storage, the plans currently have no paths through the site and show removal of the existing footbridge near the 36th Ave NE street end. Is there a preference for allowing some limited pedestrian access versus keeping the area natural?
- Would an overlook from the 35th Ave NE sidewalk be preferred in place of a path through the site or in addition to?

Discussion: What are your thoughts?

Next Steps

- **August 4, 2012:** onsite drop-in question/answer session
- **August 17, 2012:** Deadline for public comments on 60% design
- **September 2012:** SEPA Checklist released for public review and comment
- **January 2013:** 90% project design released

Thank you!

www.seattle.gov/util/meadowbrook

Sign up for the project mailing list:

www.seattle.gov/lists/meadowbrook.htm