Lower Mapes Creek Restoration and 52nd Ave CSO Conveyance Projects

Seattle Design Commission

July 5, 2012
Project Location

Rainier Beach Neighborhood
Project Objectives

• 52nd Ave CSO Reduction
  – Reduce combined sewer overflows by building new conveyance line to meet regulatory requirements and Level of Service go

• Mapes Creek
  – Improve aquatic habitat through reconnecting Mapes Creek to Lake Washington.
  – Increase juvenile Chinook salmon rearing and migration habitat.
  – Provide an accessible environmental amenity in the Rainier Beach neighborhood

• 1% for the Arts – Artist selected; location and art TBD
Pipeline Alignment
Focus: Mapes Creek Project and Changes in Beer Sheva Park

• Why are we doing this project?
• How is the park used now? What are the major park amenities?
• How are we proposing to change the park?
• How will that affect park amenities and the experience for park users?
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Chinook Salmon listed under Endangered Species Act in 1999
Chinook salmon habitat research

Scientist Roger Tabor conducts a snorkeling survey along the Lake Washington shoreline.

The U.S. Fish and Wildlife Service studies how small Chinook use vegetation as protection from predators.
Juvenile Chinook salmon need rearing habitat and “rest stops” for the 3-5 months they inhabit Lake Washington.

Preferred rearing habitat includes:

- Shoreline areas with shallow depths (>1 m) and gentle slopes
- Fine substrates
- Overhanging vegetation/small woody debris
- Small creeks: mouths and shallow, low gradient, upstream portions
Vanished Small Creeks in South Lake Washington
The City of Seattle is building a network of rest stops for juvenile Chinook salmon to use during their trip to Puget Sound.

Chinook encounter limited areas with habitat. Most of shoreline has docks and bulkheads.

Mapes Creek planned habitat site.

Pritchard Beach completed habitat site.

Chinook Beach completed habitat site.

Taylor Creek planned habitat site.

Cedar River Chinook enter Lake Washington from March to May.

Seward Park completed habitat sites.

Martha Washington Park completed habitat site.
Neighborhood “Charrette” Suggested Creek Daylighting

Early concept for Beer Sheva Park:
Mapes Creek Watershed

- Headwaters are mostly forested
- Little pavement, buildings, roads
- Stable creek flows
- Relatively good water quality
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View into Beer Sheva Park from S Henderson St.
Beer Sheva Park – Current and Proposed

Looking from Seward Park Ave toward lake
Beer Sheva Park – Current and Proposed

Looking from Lake toward Seward Park Ave
Example Planting Plans

* Not to scale
Example Bridge Designs

• Considerations
  – Views: for users, for police
  – ADA access/code requirements
  – Maintenance/graffiti
  – Match comfort station (galvanized, metallic finish)
Signage

• None is proposed
  – Maintenance/graffiti

• Need to acknowledge funders
  – Rock with logos?
# Project Schedule
for Mapes Creek and 52nd Ave CSO Conveyance

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