

Lower Mapes Creek Restoration and 52nd Ave CSO Conveyance Projects



Public Meeting: August 14, 2012

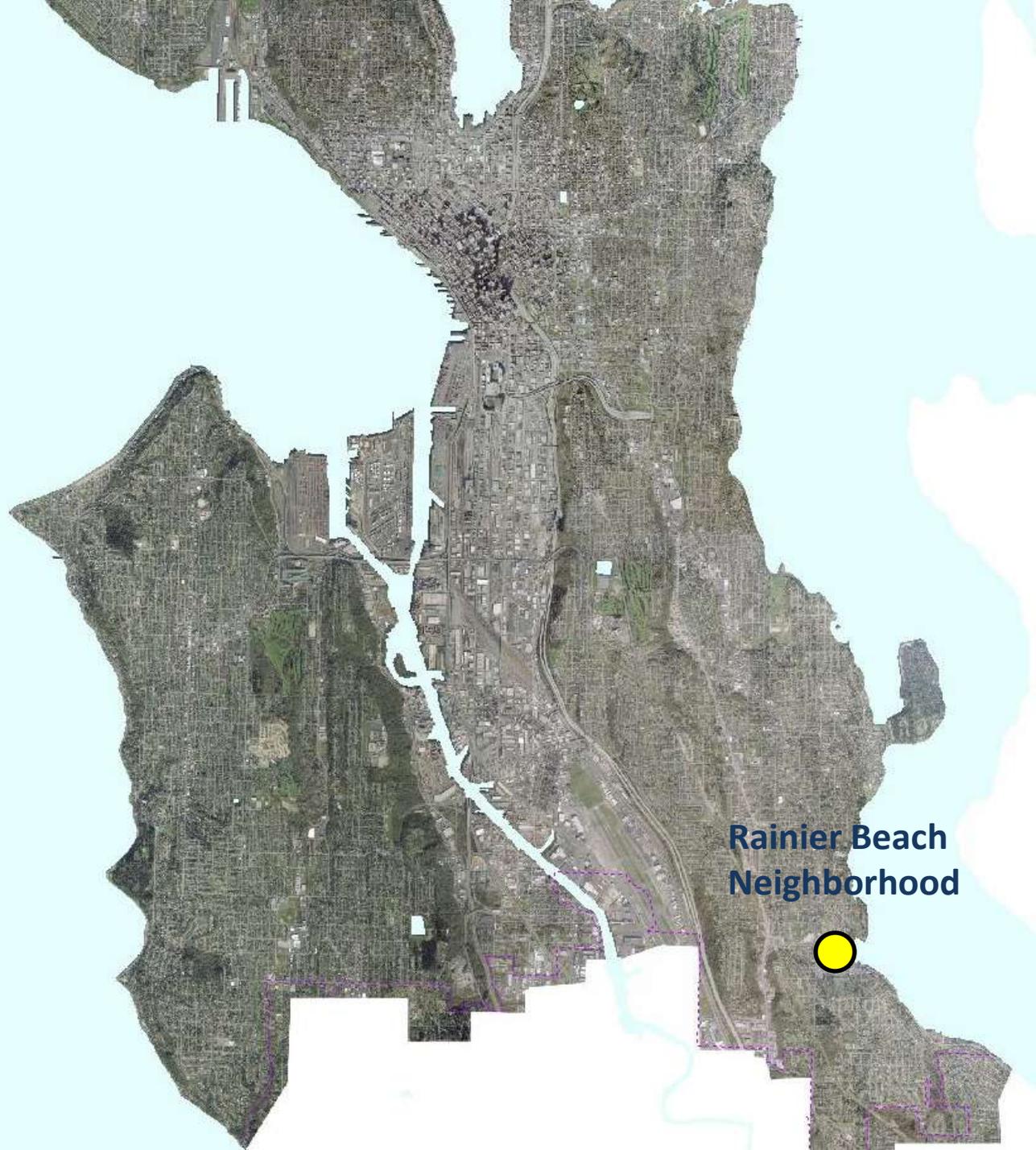
Presentation Outline

- Overview of projects
- Project elements
- Project benefits and impacts

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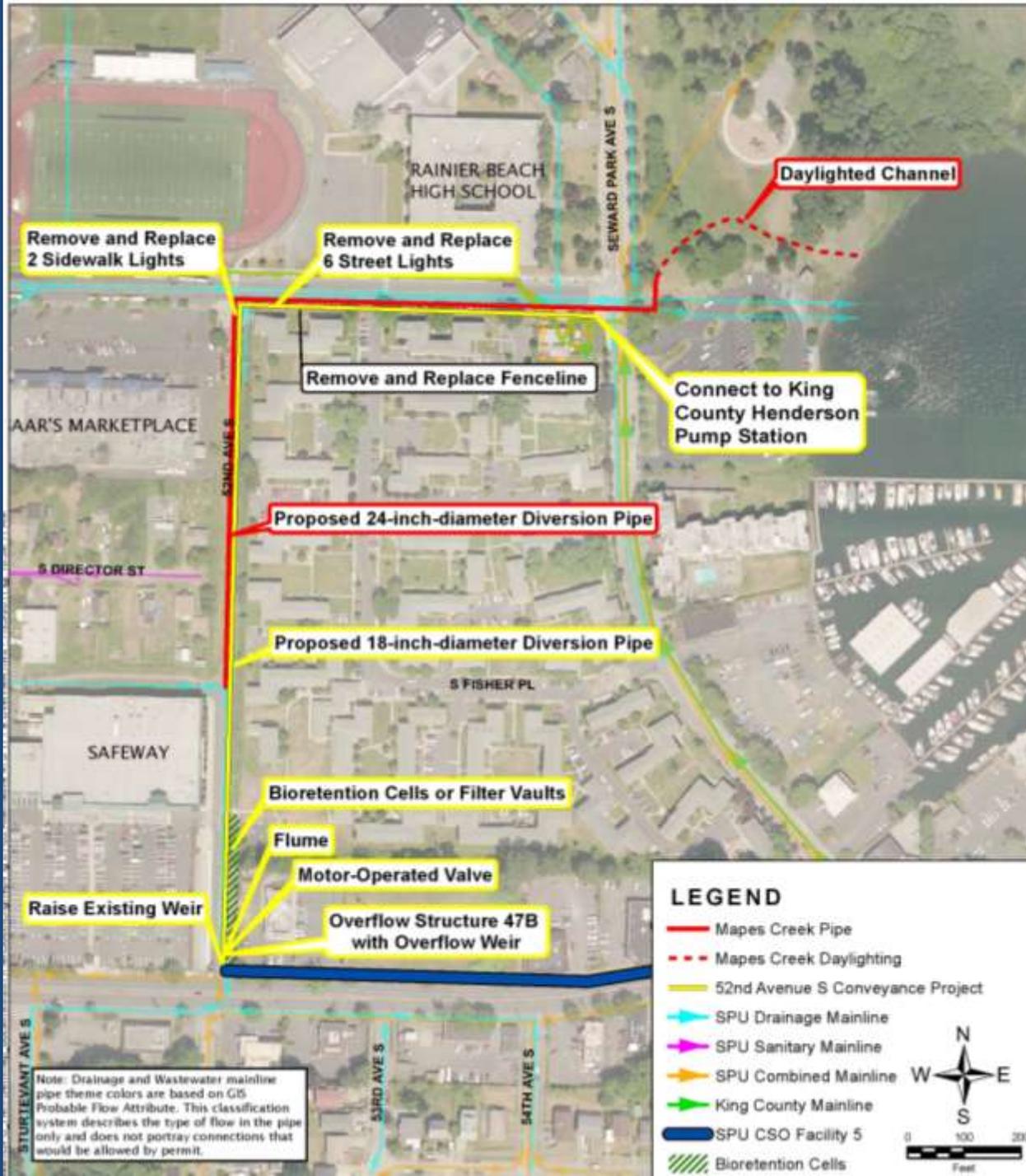
Project Location



Rainier Beach
Neighborhood

Project Objectives

- 52nd Ave CSO Reduction
 - Reduce combined sewer overflows by building a new conveyance line to meet regulatory requirements and Level of Service
- Mapes Creek Restoration
 - 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 John Grade



Remove and Replace
2 Sidewalk Lights

Remove and Replace
6 Street Lights

Daylighted Channel

Remove and Replace Fenceline

Connect to King
County Henderson
Pump Station

Proposed 24-inch-diameter Diversion Pipe

Proposed 18-inch-diameter Diversion Pipe

Bioretention Cells or Filter Vaults

Flume

Motor-Operated Valve

Raise Existing Weir

Overflow Structure 47B
with Overflow Weir

Note: Drainage and Wastewater mainline pipe theme colors are based on GIS Probable Flow Attribute. This classification system describes the type of flow in the pipe only and does not portray connections that would be allowed by permit.

LEGEND

- Mapes Creek Pipe
- - - Mapes Creek Daylighting
- 52nd Avenue S Conveyance Project
- SPU Drainage Mainline
- SPU Sanitary Mainline
- SPU Combined Mainline
- King County Mainline
- SPU CSO Facility 5
- ▨ Bioretention Cells



Project Schedule

for Mapes Creek and 52nd Ave CSO Conveyance

Project design and permitting	January 2012 - August 2013
Public meetings and outreach	February 2012 - November 2014
Construction	September 2013 - November 2014
Plant establishment and monitoring	November 2014 – December 2017

Presentation Outline

- Overview of projects
- Project elements: pipeline, stream channel, art installation
- Project benefits and impacts

Project Element: Pipeline Alignments

52nd Ave Walkway, looking
north from near Safeway



Henderson, looking
east from 52nd Ave
plaza toward lake

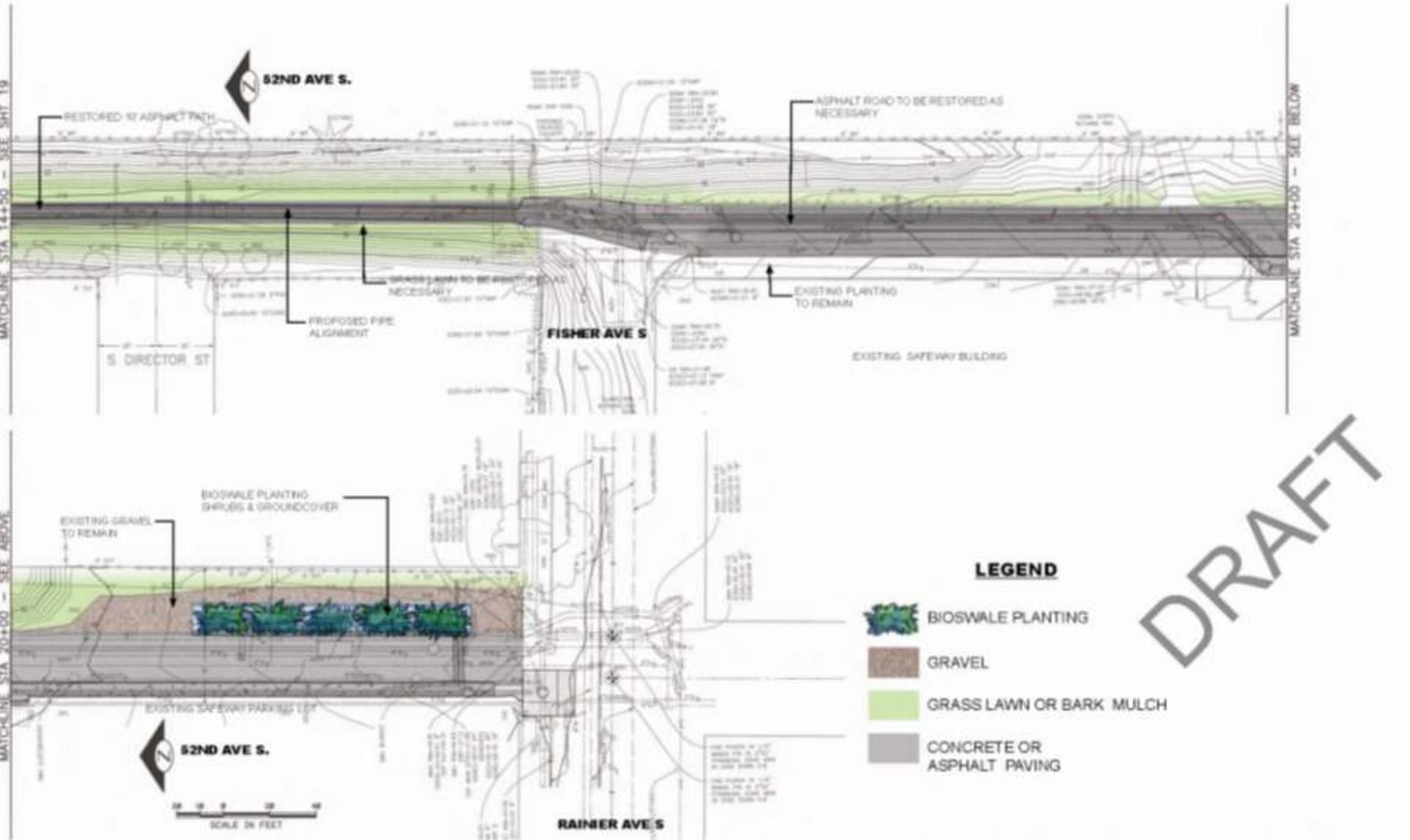


52nd Ave Walkway, looking
south from Henderson



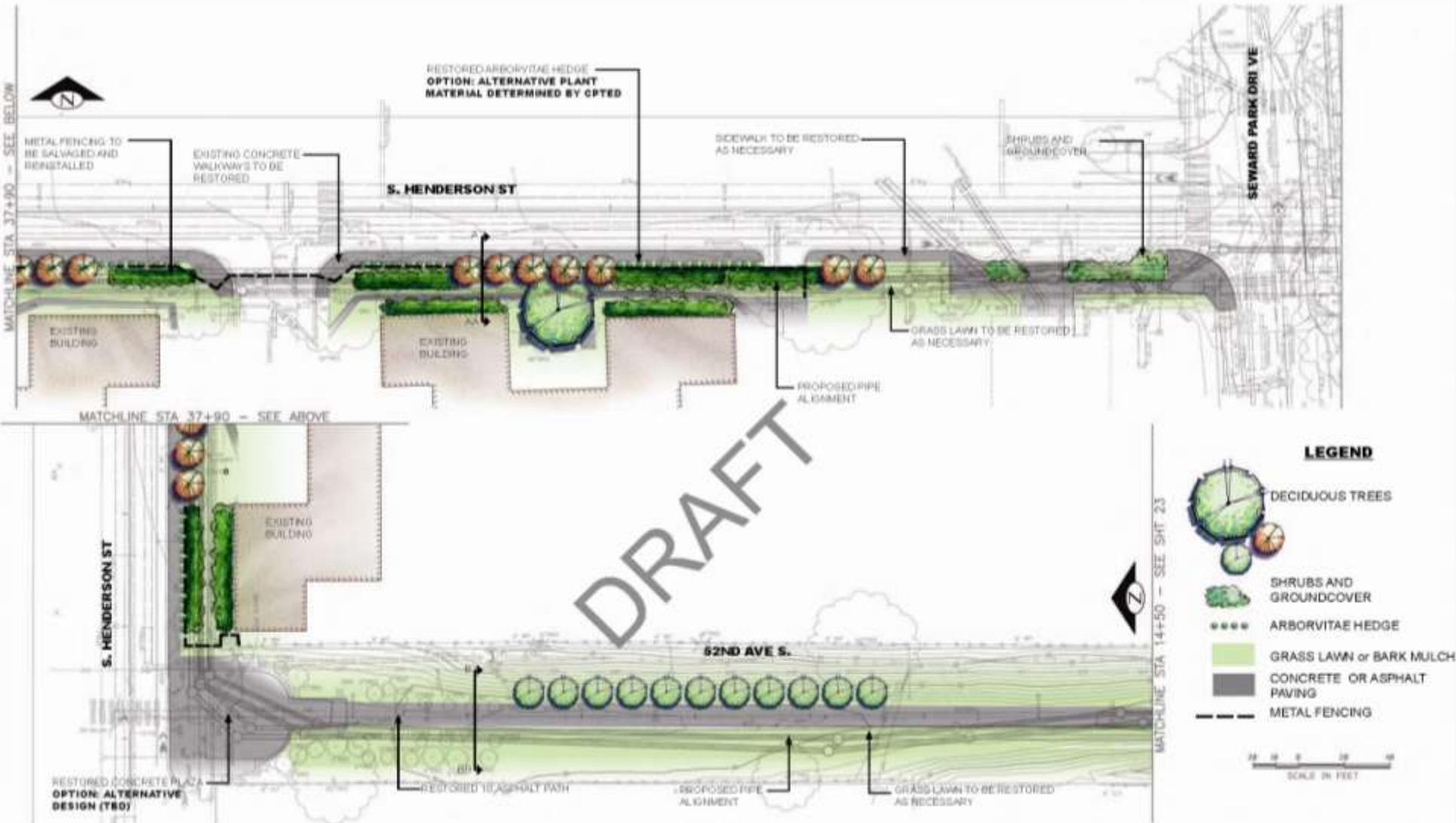
Pipeline Preliminary Restoration Concepts

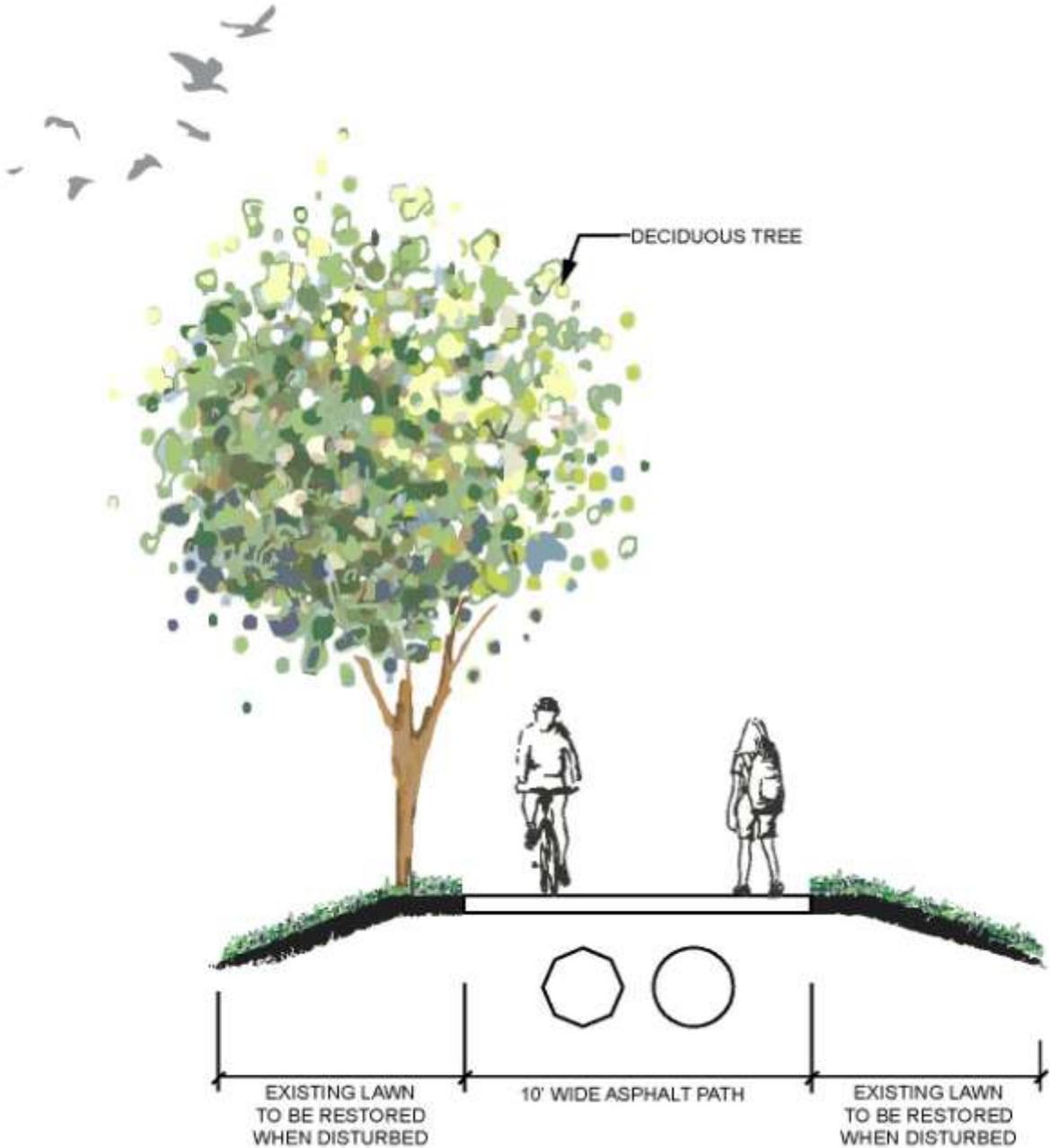
52nd Ave from Rainier Ave S to Director Street



Pipeline Preliminary Restoration Concepts

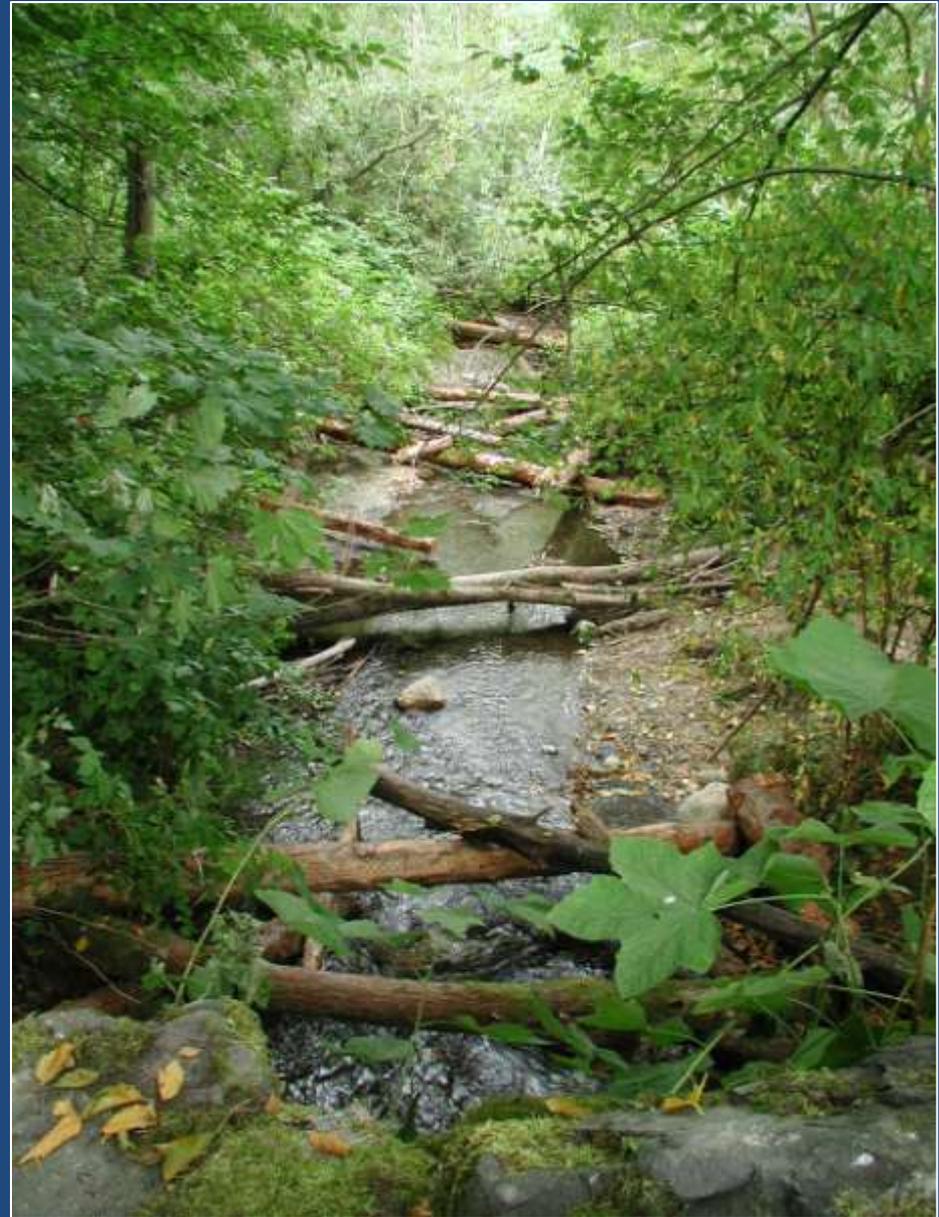
52nd Ave from Director Street to Henderson
and Henderson Ave to Seward Park Ave S



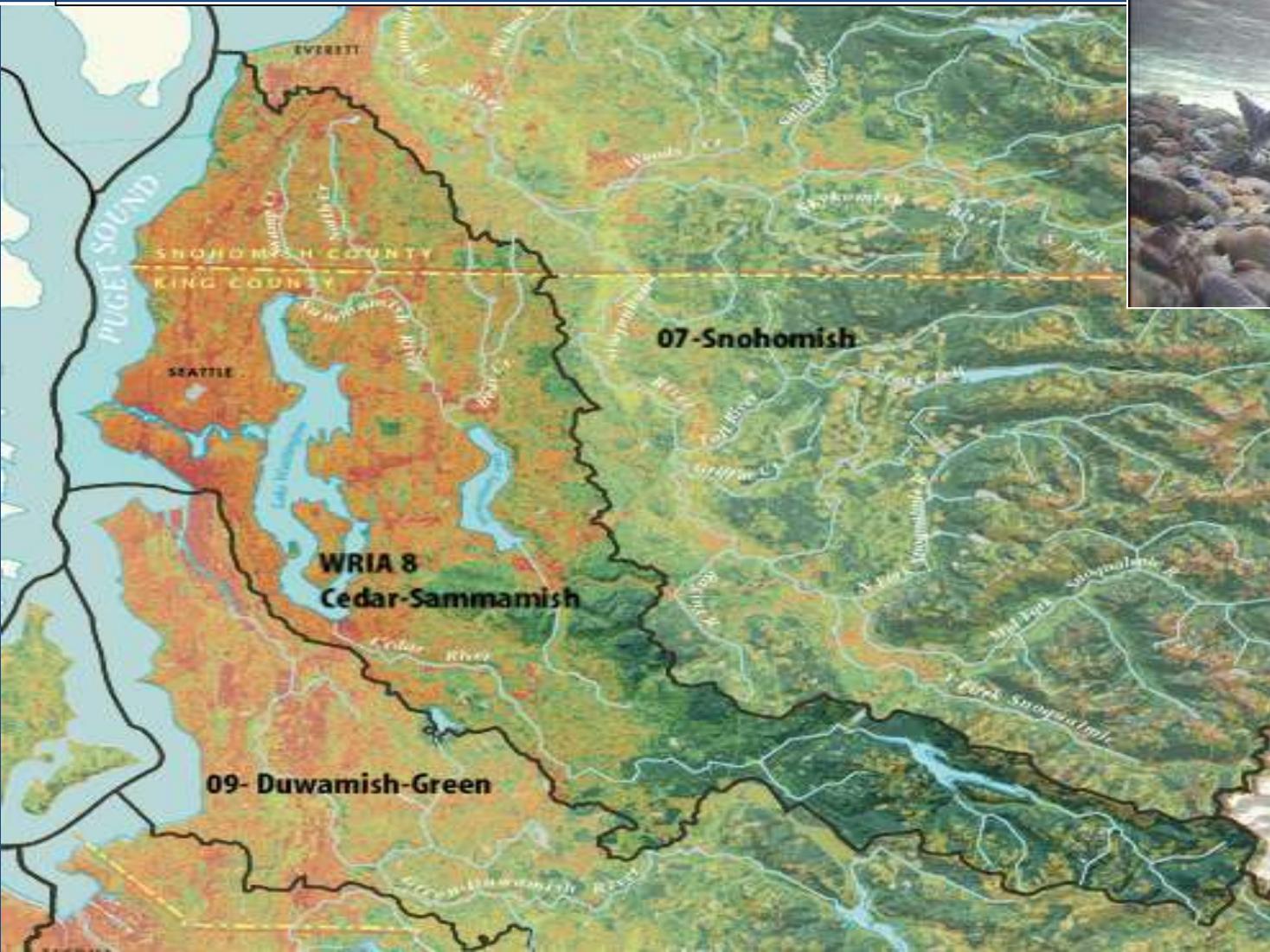


SECTION B-BB
SCALE 1"=5'-0"

Project Element:
Recreate Mapes
Creek in Beer
Sheva Park



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



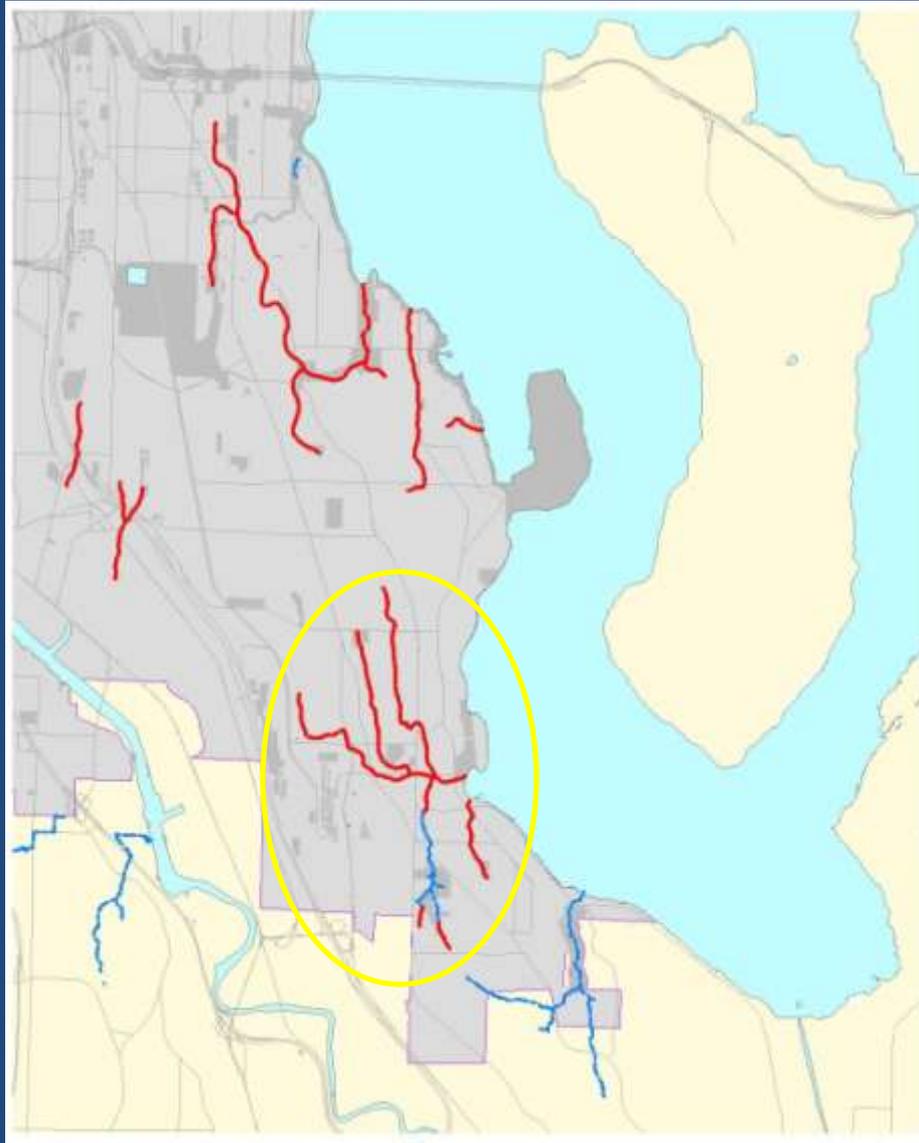
Juvenile Chinook salmon need rearing habitat and “rest stops” for the 3-5 months they inhabit Lake Washington



Preferred rearing habitat includes:

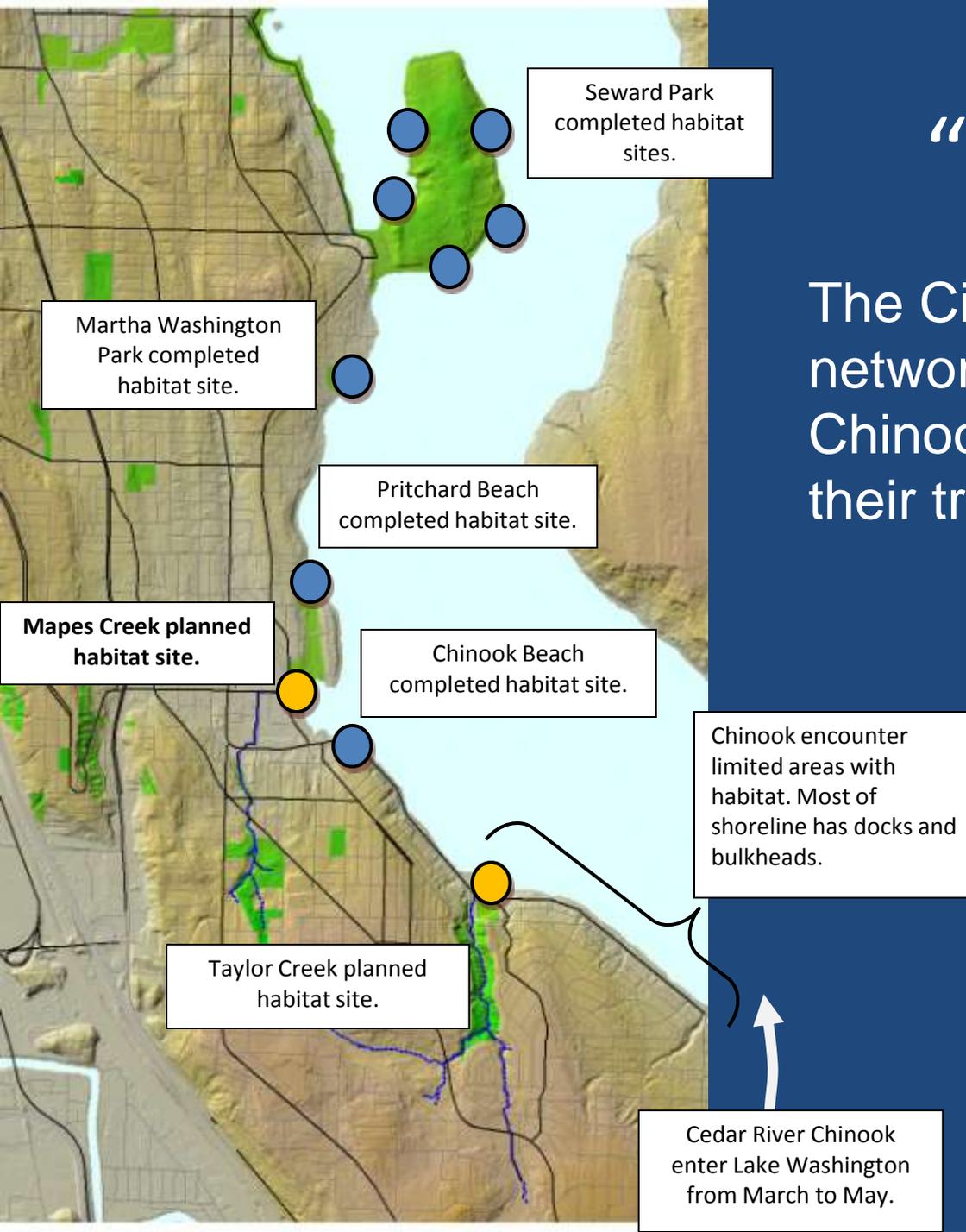
- Shoreline areas with shallow depths (>1 m) and gentle slopes
- Fine substrates
- Overhanging vegetation/small woody debris
- **Small creeks: mouths and shallow, low gradient, upstream portions**

Vanished Small Creeks in South Lake Washington



“Rest Stops”

The City of Seattle is building a network of rest stops for juvenile Chinook salmon to use during their trip to Puget Sound.



Seward Park completed habitat sites.

Martha Washington Park completed habitat site.

Pritchard Beach completed habitat site.

Chinook Beach completed habitat site.

Mapes Creek planned habitat site.

Taylor Creek planned habitat site.

Cedar River Chinook enter Lake Washington from March to May.

Existing Conditions:



Proposed:



Beer Sheva Park – Current and Proposed



Looking from Seward Park Ave
toward lake



Beer Sheva Park – Current and Proposed

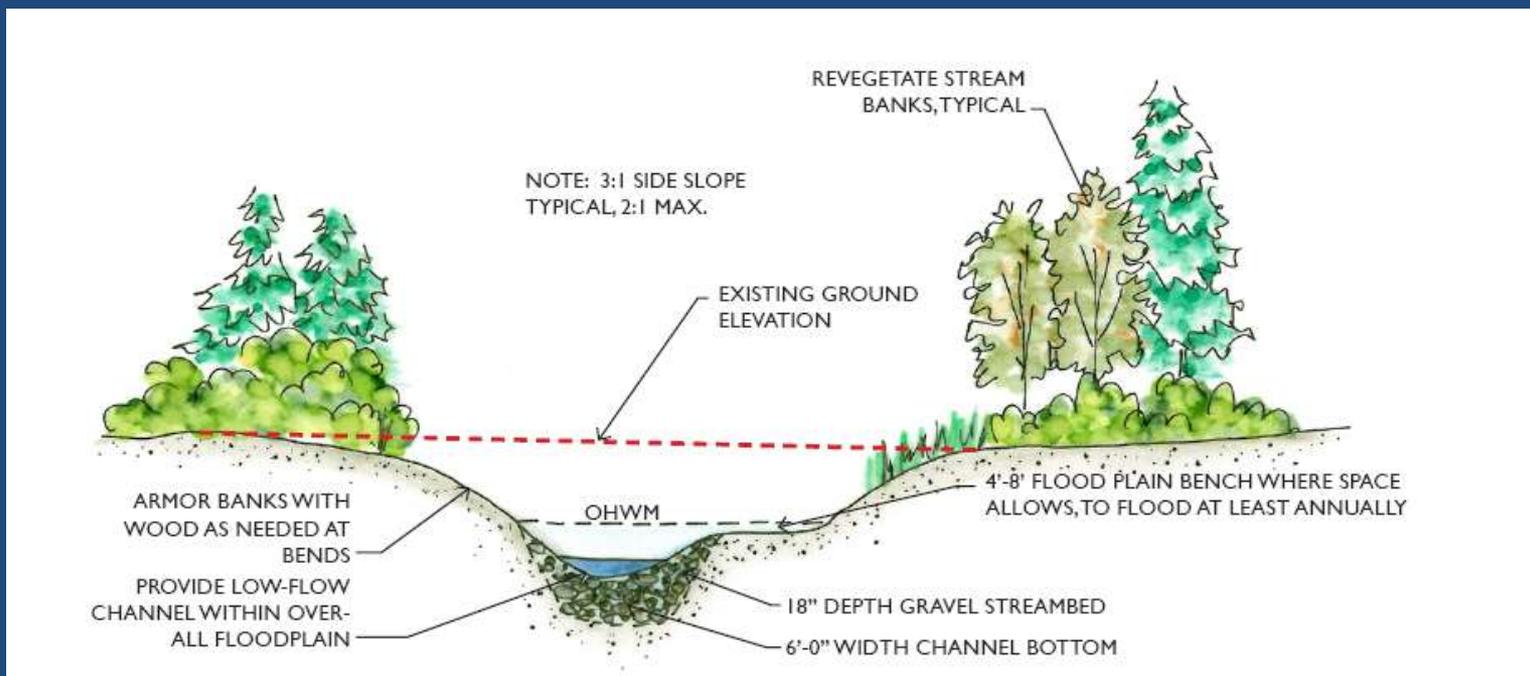
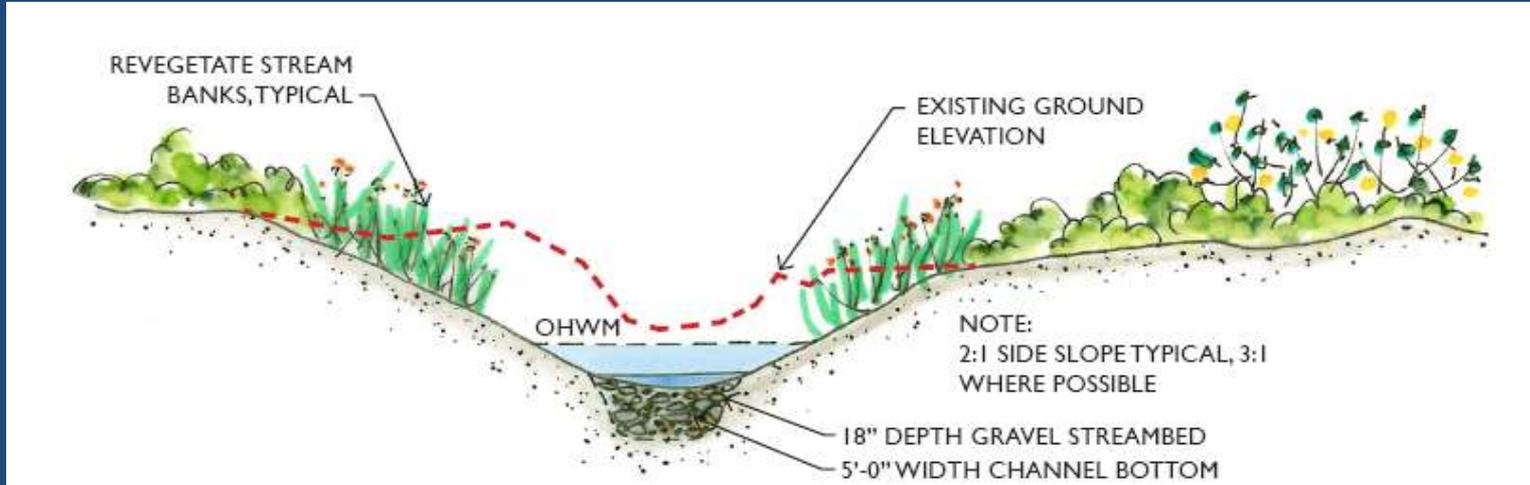


Looking from Lake toward
Seward Park Ave



Planting designed for sightlines and habitat

* Not to scale



Project Artist: John Grade



Permanent Changes in Beer Sheva Park

- Grass area in park becomes stream with surrounding plants
- One cottonwood tree removed, should avoid other existing trees
- Shoreline changes include ADA accessible path, relocated benches, removal of non-native plants, replace plants with natives.



Temporary Project Changes:

- Closure/limited use of the 52nd Ave Walkway
- 52nd Ave/Henderson plaza artwork – removed and replaced
- Partial closures along Henderson with some impacts to bus service
- Closure of construction area in park
- Could be impacts to Atlantic City boat ramp and trailer parking

What are your thoughts on the
project designs?

Stay in Touch!

- Provide your comments:
 - August 24th: project designs posted on website
 - Comments appreciated by September 14th to inform our final designs
- Sign up for the list serve to get project updates
- Check the project websites for the most recent information