Agenda

1. Problem
2. Goal
3. Site Conditions
4. Proposed Solution
5. Schedules
6. Design Challenges
7. Public-Private Partnership
1. Problem
- Capitol Hill Stormwater Runoff is polluted
- Drainage Discharges to South Lake Union (SLU) Untreated

2. Goal
- Remove as much of the pollutant load as possible before discharging to SLU
  - Provide cost-effective water quality treatment
  - Create more green space and friendly street-scape
  - Treat equivalent of 150-acres of Capitol Hill
3. Site Conditions

Lake Union

Capitol Hill

Minor Avenue Outfall

Combined area
Separated area
Separated area draining to Minor Ave outfall
Western Mill Co., South Lake Union, Seattle, ca. 1891
Photo by Frank La Roche, Courtesy UW Special Collections (Neg. LAR303)

Cascade neighborhood and portion of Capitol Hill behind it, Lake Union off picture to left, Seattle, 1890
Photo by F. Jay Hayes, Courtesy Montana State Historical Society

Cascade neighborhood from 5th Avenue and Stewart Street, 1891
Courtesy UW Special Collections
Project Area
Cascade Neighborhood
North Block
South Block
South Block
4. Proposed Solution
Biofiltration Swale

How does it work?
Key Design elements

- Swale takes parking lane
- Swale ~10-17 ft wide, 12 to 23-in deep
- 26-ft wide driving/parking roadway
- Minimum 6-ft sidewalks
- Mid-block (~ 17 ft) pedestrian crossing
Stormwater Design Inspiration
Conveyance & Pretreatment

North Block Redevelopment

South Block Redevelopment

North Block Paving

South Block Paving
## 5. Project Schedule

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*SPU Lead* | *Developer Lead*

*Timing of South Block work depends on market conditions*
Commission Presentation Schedule

- November 2006: Concept
- December 2008: Early designs
- 11.07.10: 30% Design
- 1Q 2011: 60% Design
- 2Q 2011: pre-90% Design
- 2013: pre-construction North Block Swales
- 2017: pre-construction South Block Swales
6. Design Challenges

A. PEDESTRIAN MID-BLOCK CROSSING
B. SWALE EDGE TREATMENTS
Denny Way
Discovery Center
Swale Edge Treatments
Swale Edge Treatments
Swale Edge Treatments

- Cantilever seating
- 42" tall railing wraps around corner and end of block
- Transition panel (to edge of curb & gutter)
- Curb & gutter
- Slope to drain
- 6'-0" sidewalk
- 8" retaining wall
- Swale
Swale Edge Treatments

- Swale Edge Treatment
- Seating Transitions
- Pedestrian Bridge

Capitol Hill Water Quality Project (Swale on Yale) | 10/22/2010
7. Public-Private Partnership

- The project is only possible with support from the adjacent property owner:
- Voluntary 1-ft building set back provides extra room in the right-of-way.
- Shared construction costs.
- Shared maintenance
- Shared vision of sustainability.
F.6 ARCHITECTURAL SITE CONCEPT: CONCEPT K - PREFERRED SCHEME

EARLY CONCEPT SKETCH OF SITE PLAN