Long-term municipal stormwater planning
An overview

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Water Quality Program

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Agenda

- An overview of long-term MS4 planning
  - Background
  - Approach
- Discussion and feedback

Background

Municipal Stormwater Permits

- Preliminary drafts – comments due **1/19/18**
  - Includes preliminary drafts for Manual
- **Long-term MS4 planning –comments due 2/2/18**

Send comments to:
http://ws.ecology.commentinput.com/?id=tkx29

Path to long-term MS4 planning

Watersheds are important

Current watershed-scale stormwater planning

- Pilot program –Ph I counties and partners
- Model a specific watershed
  - Based on local data/conditions
  - Develop strategies to meet WQ standards

Desired Outcome

- Set of recommended stormwater management actions, including:
  - adjustments to designated or allowed land uses,
  - building code requirements, and
  - locations and types of capital projects.

Study take-aways

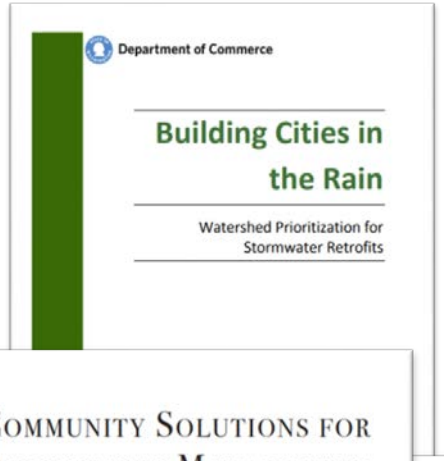
- Current conditions are impaired
- Future conditions remain impaired
  - Even all feasible LID measures were not sufficient to restore beneficial uses
- Consistent with messages from SWMMWW – additional measures are required

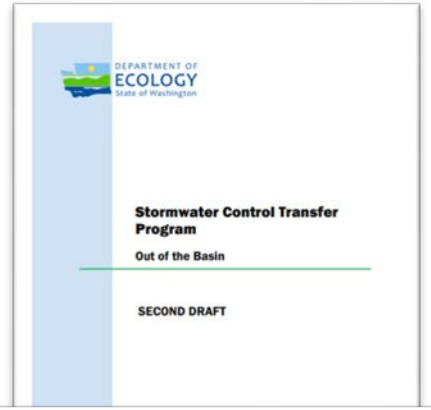
Study proposed measures

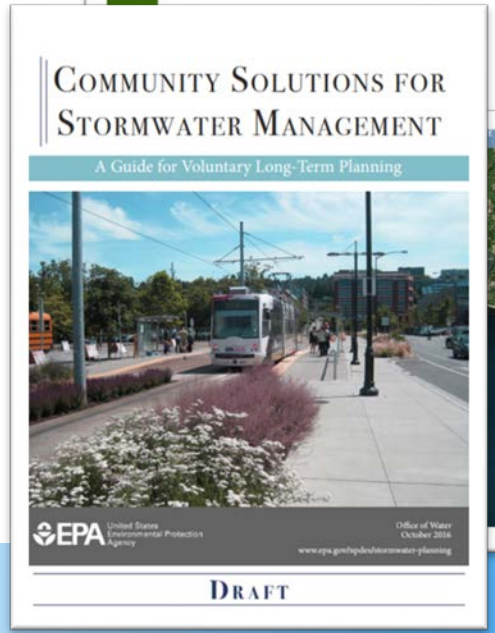
- Proposed actions are unfunded
  - Costs per acre are much lower for these basins than for more developed basins
- Riparian restoration and large amounts of detention are needed to improve conditions
- Fecal coliform seems difficult to work with as a target variable
- Similar suite of supplemental strategies were considered despite unquantified benefits

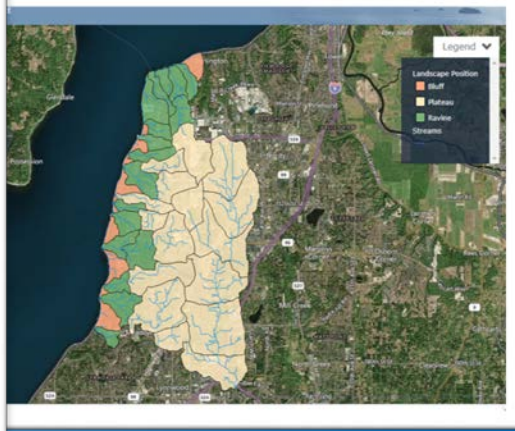
2016 – Bumper year for guidance

- Building Cities in the Rain
  - Commerce
- Stormwater Control Transfer Program
  - ECY
- Watershed characterization
  - ECY
- Long term planning
  - US EPA



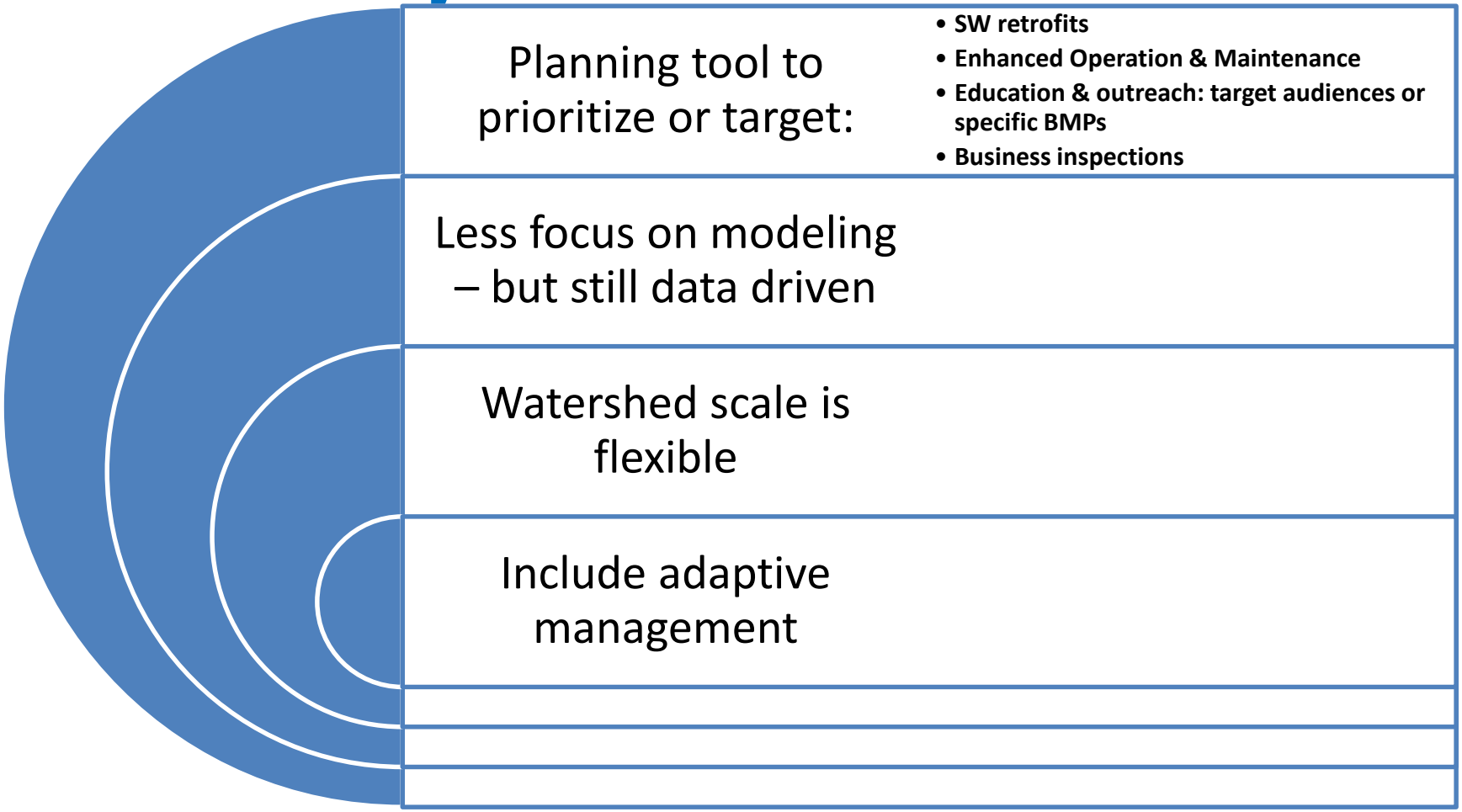






2015-16 status assessments of Puget Sound lowland streams and nearshore areas

Early recommendations



Proposed approach

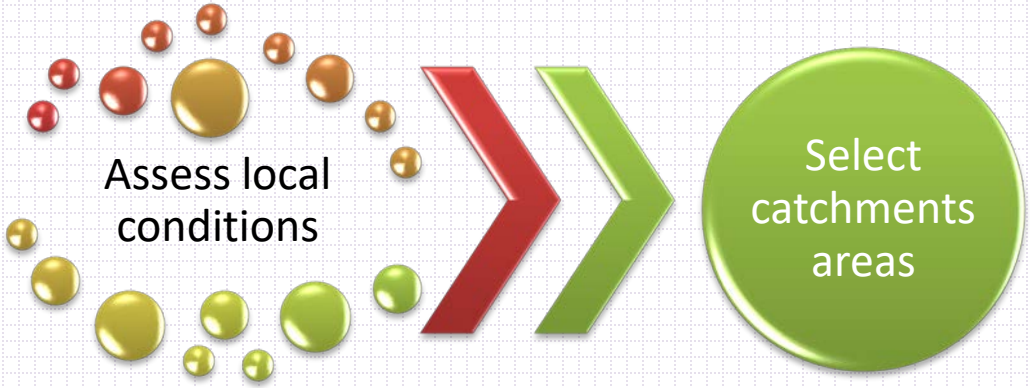
Develop inventory of basins inside your jurisdiction

Use existing information to prioritize your basins

- assess data gaps

Identify catchment areas for planning within priority basins

Identify specific approaches to apply within the catchment areas.



Prioritization of receiving waters

Tailored strategies or actions

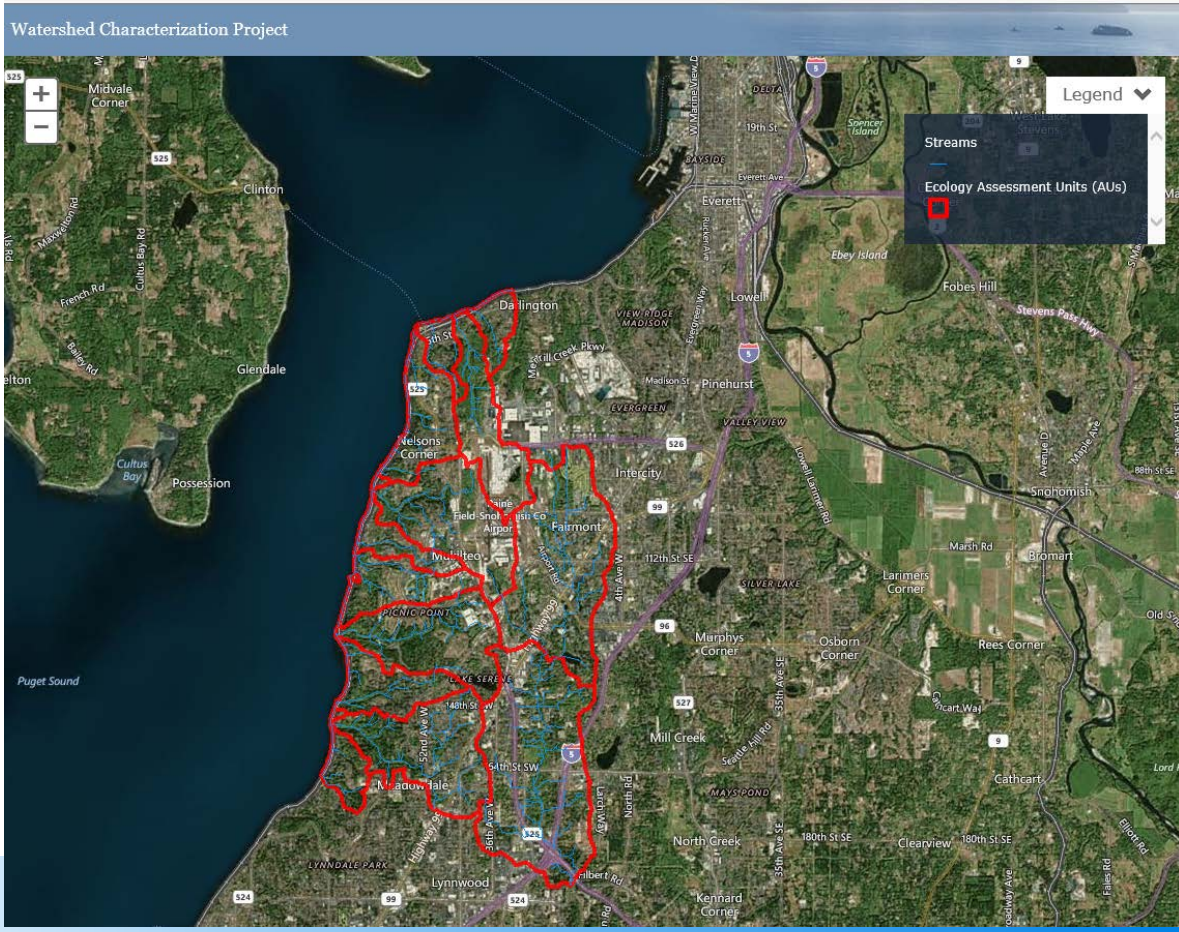
Basin inventory

Convene an interdisciplinary team

http://abcnews.go.com/Entertainment/team-original-cast-now/story?id=18285839

Basin inventory

- Delineate basin boundaries
  - 1-10 square miles
  - All basins in jurisdiction



Basin inventory

- Identify:
  - % of basin in your jurisdiction
  - Other jurisdictions that share the basin
  - Total % impervious area in basin
  - Existing plans to support this effort

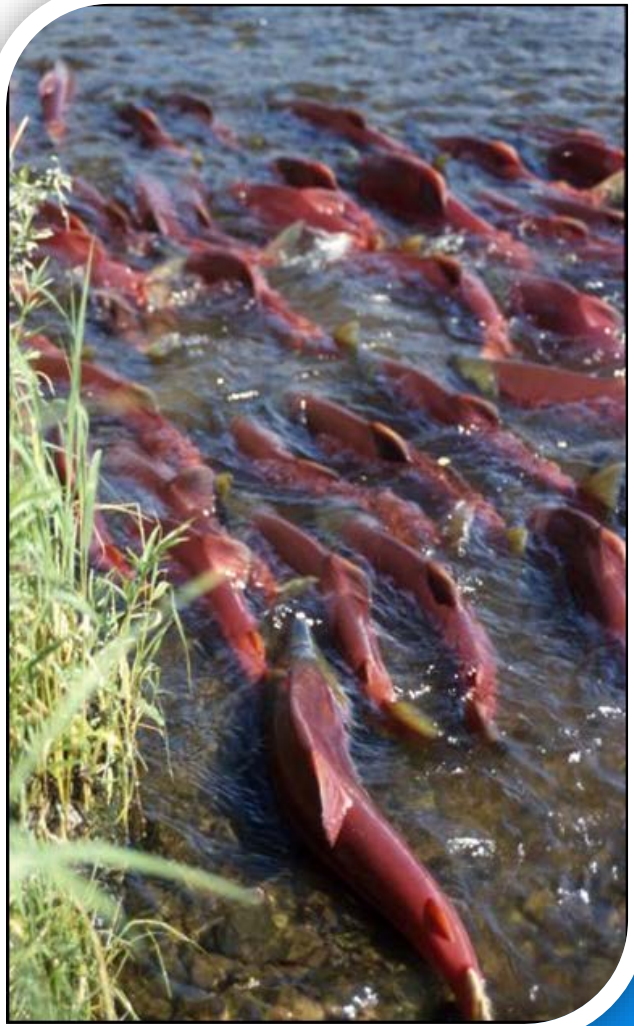
Basin inventory

In basins with at least 10% of the area in your jurisdiction:

- Compile information for prioritization effort (next step)
- Identify data gaps
- Report on key characteristics of each basin

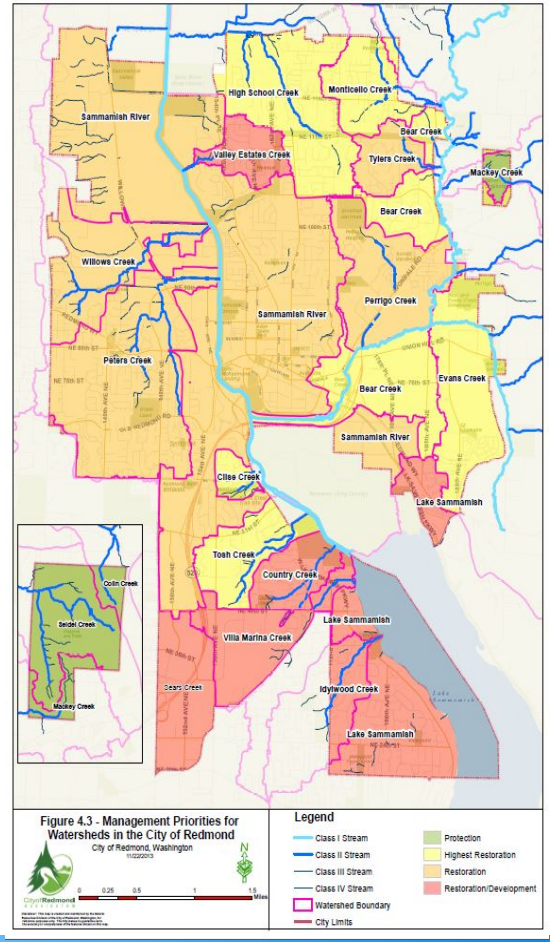
Basin prioritization

1. Fish use and aquatic habitat
2. Opportunities for:
   a. Flow control
   b. Runoff treatment
   c. Development controls
3. Environmental justice considerations



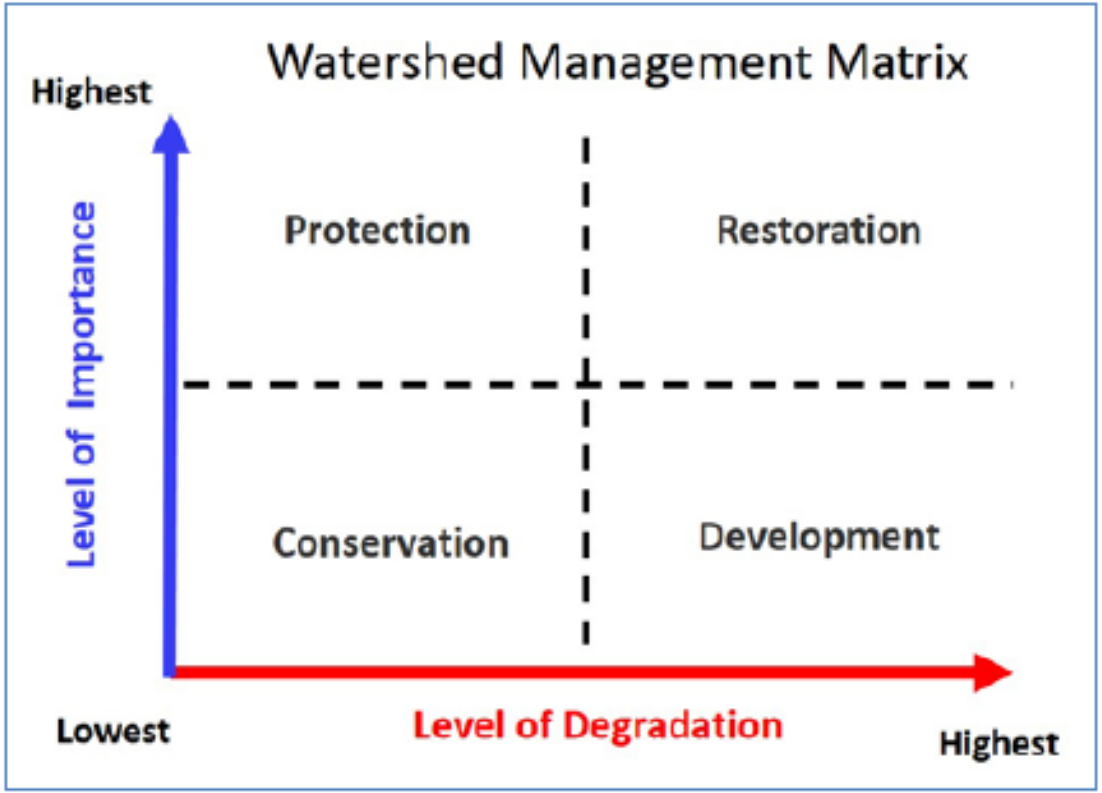
Prioritization Analysis

1. Science-based
2. Watershed-specific information
3. Rank priority of watersheds
4. Input from public, tribal, federal, state natural resource agencies



Prioritize watersheds with:

- Low to moderate impairment
  - Relative to the municipality
- Permittee ability to influence
- Possible synergy with other rehabilitation efforts (e.g., salmon recovery)



Catchment Planning

- Sub-basins within priority basins
- Consider tailored stormwater actions:
  - Regional facilities
  - Land acquisition/conservation easements
  - Land use or zoning code adjustments
  - New critical area designations
  - Riparian area protection or restoration
  - Enhanced maintenance
  - Targeted education & outreach

Catchment Planning

Include:

- The public

Develop & follow:

- Effectiveness assessment process to provide feedback

Provide/submit:

- proposed plan

Comprehensive Plan Update

Policy and development code updates

Legend

C2

C3

C4

C5

D1

D2

D3

D4

D5

D6

D7

D8

W1

W2

Regional facility planning

Snoqualmie River

Novelty

NE 124th St

NE 178th Pl

Mountain View Rd NE

NE Lake Joy Rd

Lake Joy

Duvall Rd

W Snoqualmie Valley Rd NE

232nd Ave NE

Duvall Rd NE

268th Ave NE

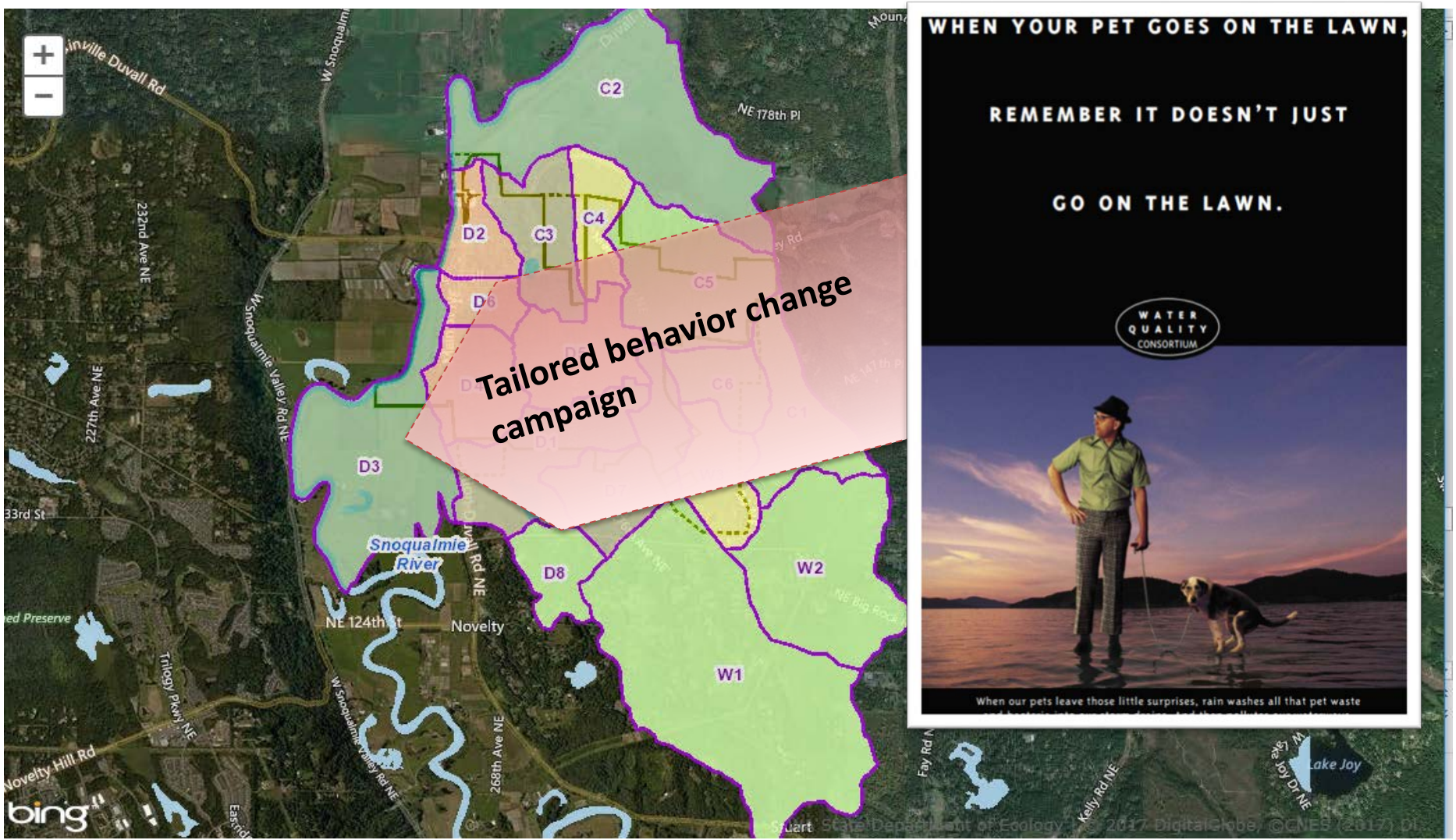
Trilogy Pkwy NE

Fay Rd NE

Kelly Rd NE

Lake Joy Dr NE

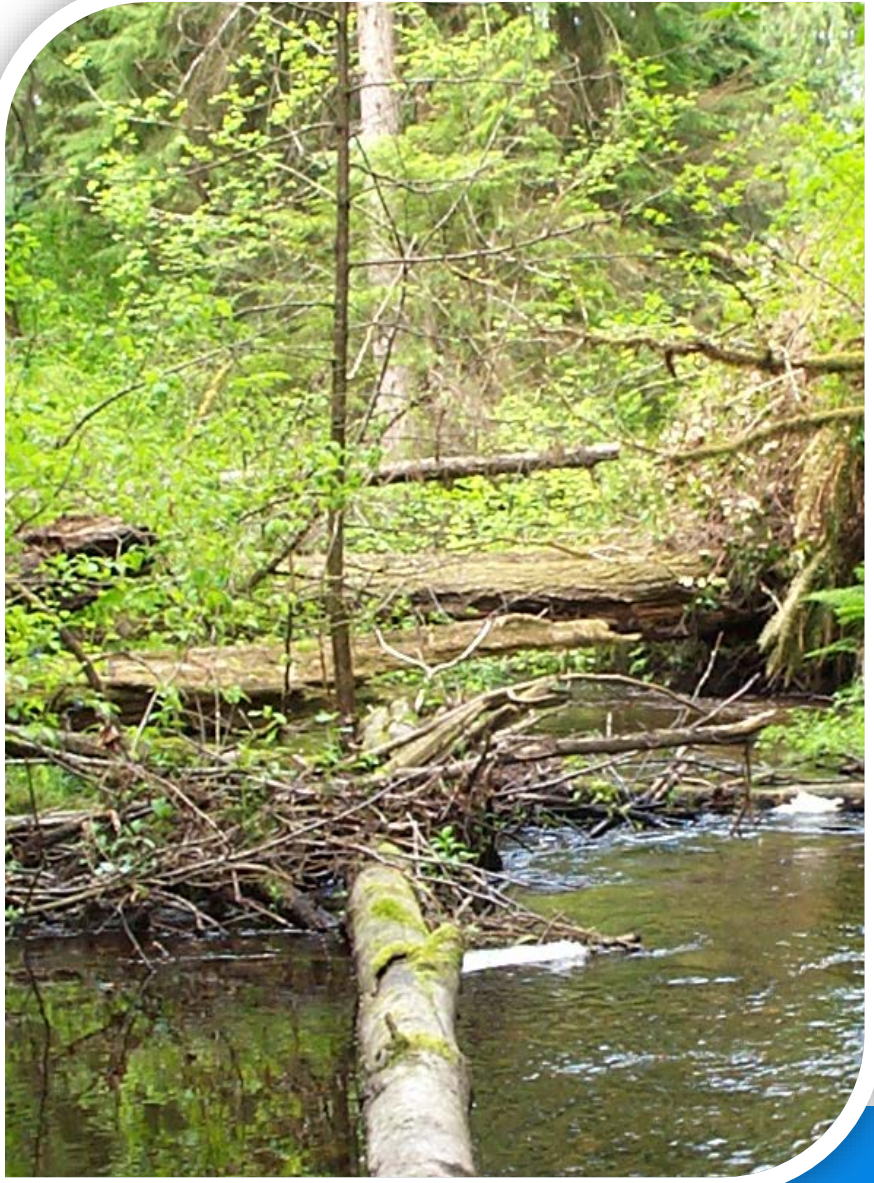
Stuart


C2
D2
C3
C4
C5
D6
D3
D8
W2
W1
Tailored behavior change campaign
Snoqualmie River
NE 124th St
Novelty
NE 178th Pl
232nd Ave NE
227th Ave NE
Snoqualmie Valley Rd NE
Novelty Hill Rd
Trilogy Pkwy NE
268th Ave NE
Kelly Rd NE
Lake Joy
WHEN YOUR PET GOES ON THE LAWN,
REMEMBER IT DOESN'T JUST
GO ON THE LAWN.
WATER QUALITY CONSORTIUM
When our pets leave those little surprises, rain washes all that pet waste


Legend
Targeted CB and line cleaning

Catchment Plans

- Shorter-term goals
  - Implementable in 2-3 yrs
  - Ed & outreach campaign
- Longer-term goals
  - Implementable in 5-10 yrs
  - Comp. plan updates
  - Regional facility planning
- Adaptive Management
  - Feedback loop



Questions