Integrated Clean Water Plan

Presentation: Spokane Regional Toxics Task Force

City of Spokane
June 26, 2013

Overview

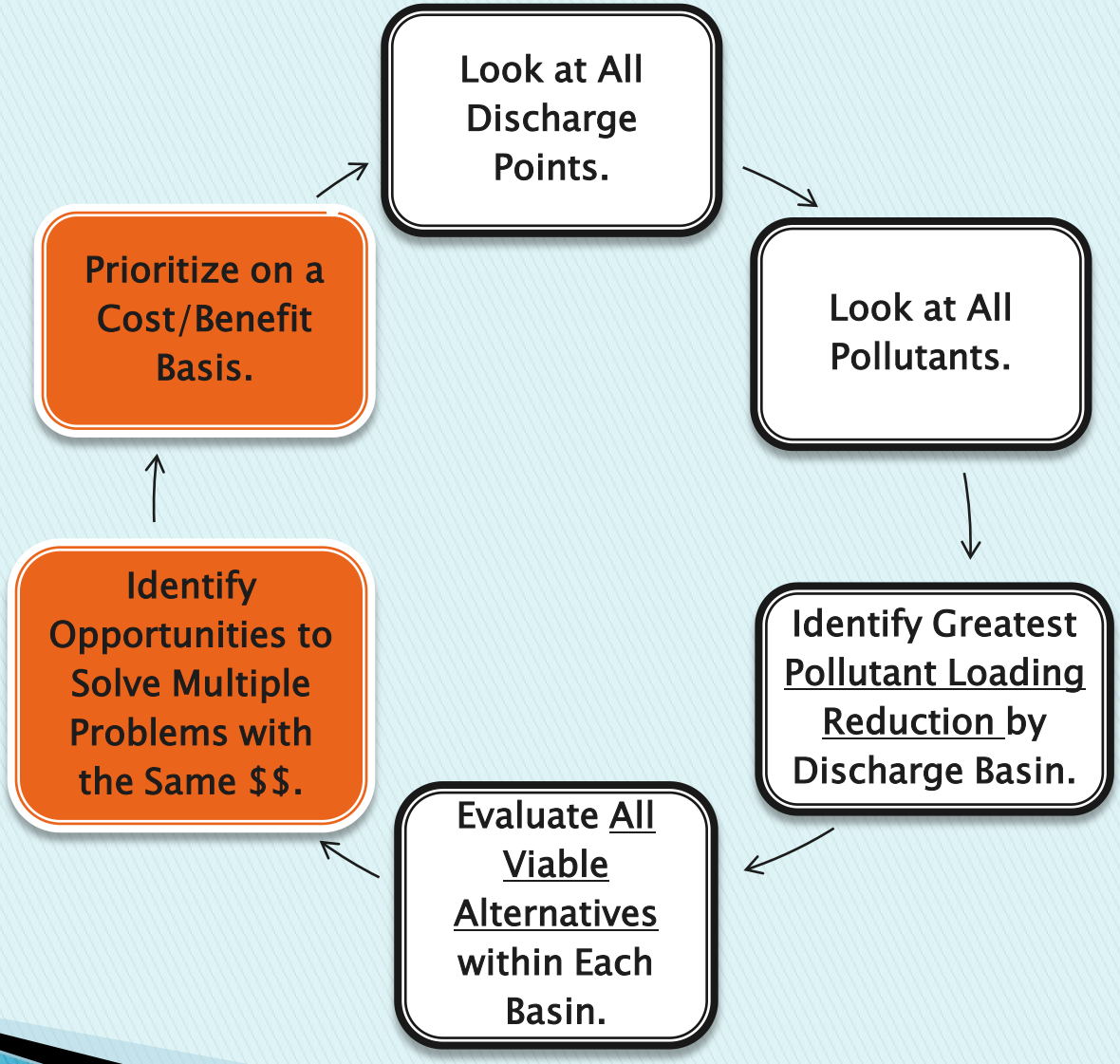
- What are we doing?
  - The City is working to create an Integrated Plan for CSO and Stormwater control.
  - Entering new territory so want to share our work broadly.
- Largest infrastructure investment in City history.
- Fits with other work that's under way, including work of this task force.

Integrated Plan Objectives

Environmentally & Financially Responsible

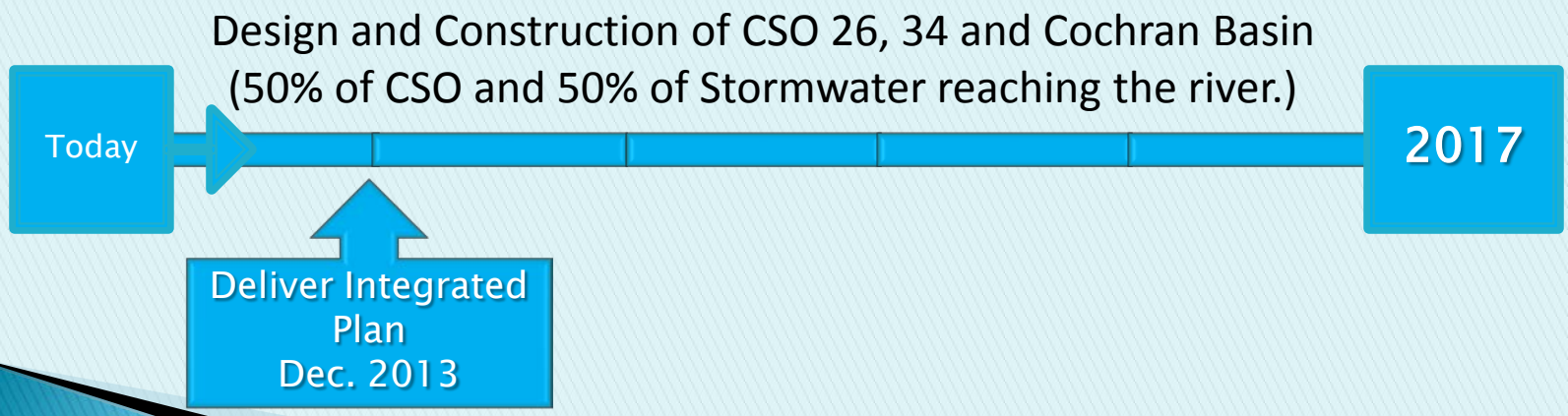
- Cleaner River faster.
  - Prioritize work that has a greater impact on pollutants.
- Implement cost-effective & innovative technologies.
  - Add “green” technologies.
  - Right-size existing projects.
- Holistic integration with other critical infrastructure.
  - Solve multiple problems.
  - Better streets, new water mains, better parks…

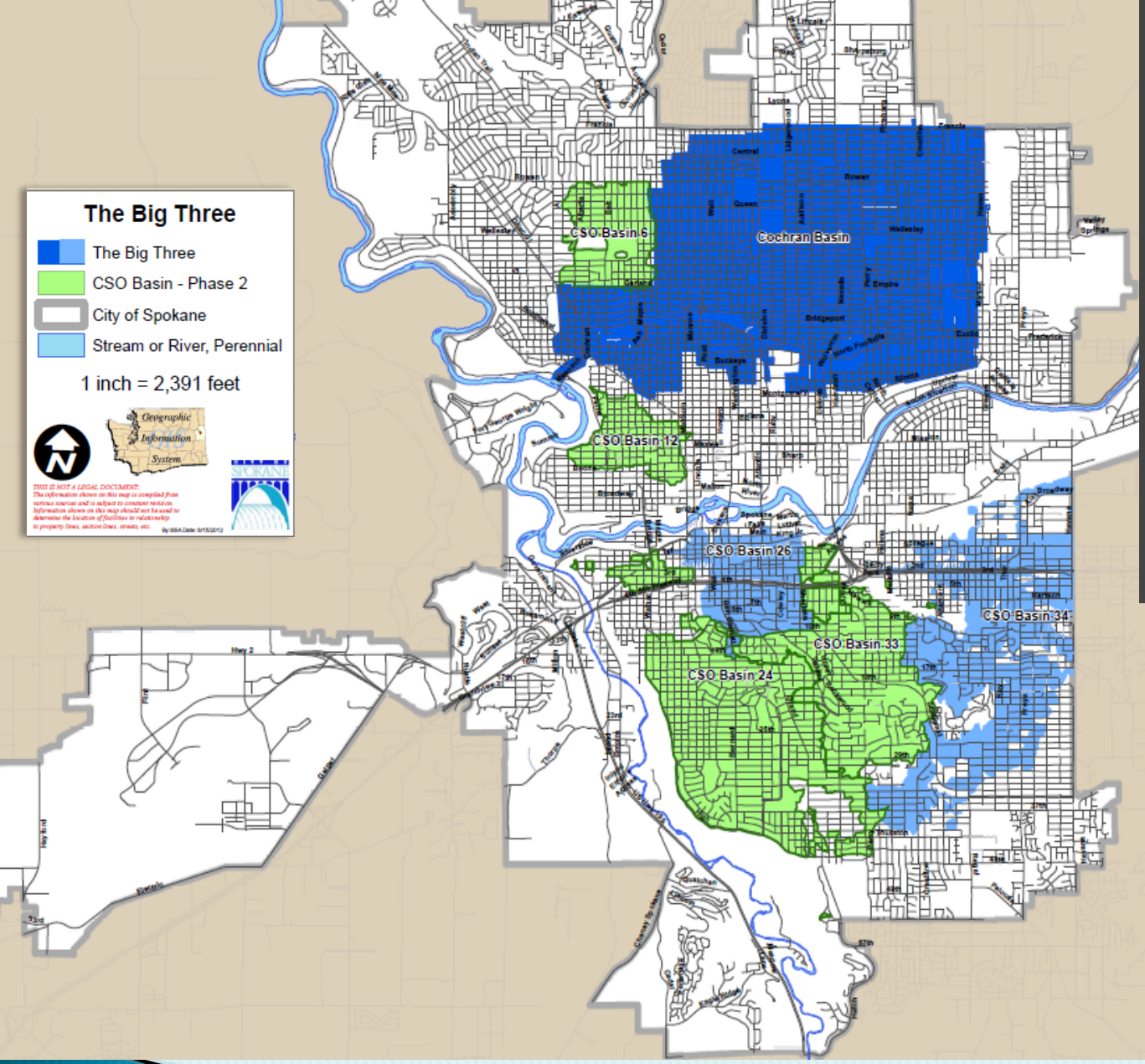
What is an Integrated Approach?



Original Strategy & Timeline

- Accelerate work in 3 areas that have the greatest impact.
- Simultaneously work on Integrated Clean Water Plan for remaining work.
- Communicate throughout the year.
- Deliver plan by December 2013.





Integrate:

- ✓Streets
- ✓Parks
- ✓Water
- ✓Wastewater
- ✓Sidewalks
- ✓Ped / Bike
- ✓Golf Courses
- ✓Greenways
- ✓Street Trees

By the Numbers

Volume	From Where
54 Million Gallons	From combined sewers to River annually
28.5 Million Gallons	From two largest combined sewer basins to River annually
1 Billion Gallons	Untreated stormwater to River annually
300 to 600 Million Gallons	Stormwater going to River from Cochran Basin alone
34 Million Gallons	Average amount processed at City's Water Reclamation Plant daily

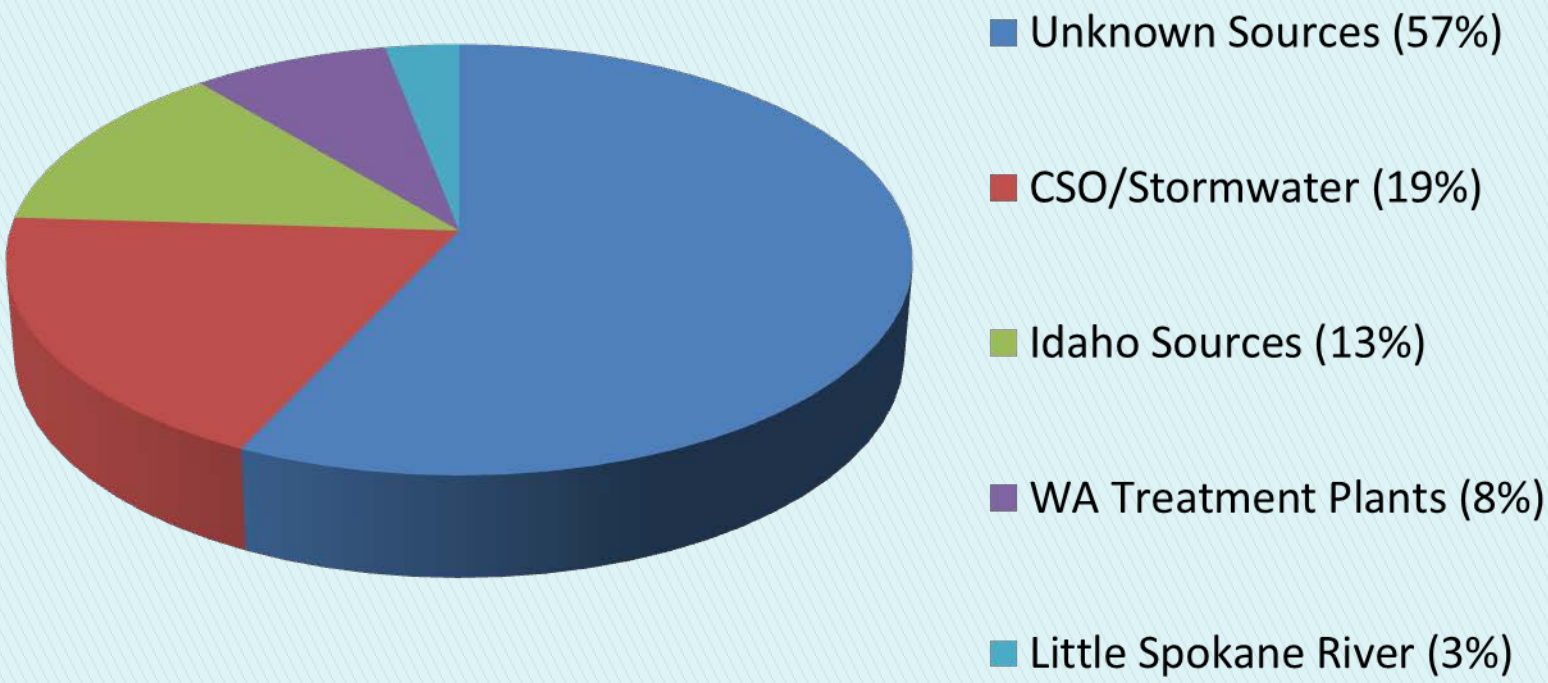
CSO 24 – Last week

CSO 24 – Last week (Another view)

Cochran Basin– Last week

Cochran Basin– Last week

How do PCBs enter the River?



Reference: Ecology Spokane River PCB Source Assessment, April 2011

Evolution of Integrated Plan

Summer/Fall 2012:
Go with an integrated plan to reach Clean Water standards that's environmentally & financially responsible

November 2012:
Prioritize projects based on volume of discharge to the River – Identify the Big 3; Use dollars for greater value

December 2012:
Prioritize projects based on pollutant loading – Still points to the Big 3 & same cost

Mid-January 2013:
New Cochran Basin solution thinking: Single "green" solution at Downriver GC; Lower cost

February 2013:
Considering more ways to get multiple benefits. Consider Glover Field for CSO Basin 26 tank. Peaceful Valley improvements.

March 2013:
Find considerable need to "right size" tanks based on actual rainfall and outfall data

April/May 2013:
Looking at capacity within the interceptor with addition of County plant; considering timing of all work.

Today:
Recognize that being effective requires us to work collaboratively with regulators; New Territory; constant change

Significant game changers

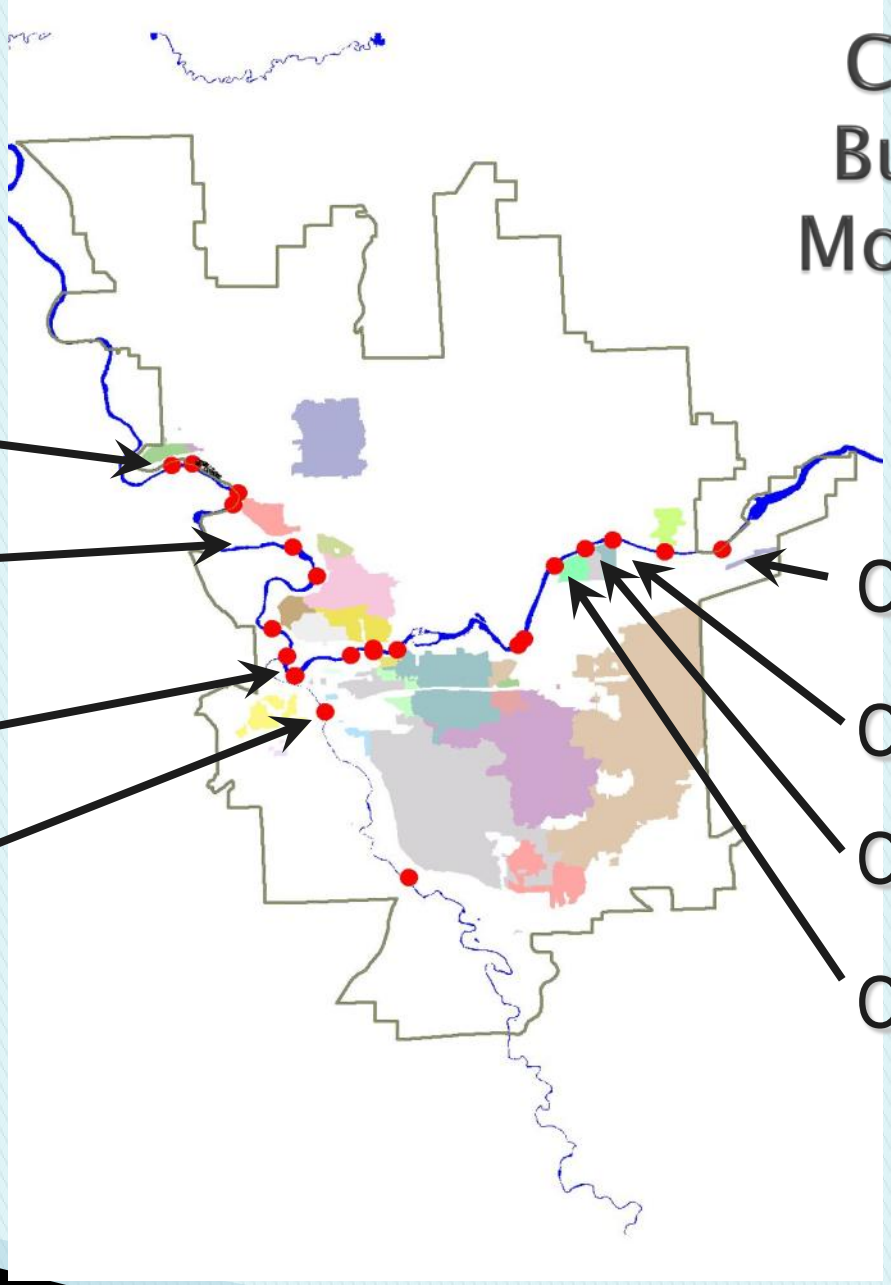
- Integrated planning framework
- Compliance period changed
  - NPDES permit requirement: 5-yr rolling average changed to 20-year rolling average
- Design Storm Approach
  - Built CSO storage facilities have never overflowed
- Additional interceptor capacity from County
  - System optimization alternative

Builds on completed work

- 8 CSO facilities have been completed
- 4 CSO outfalls have been eliminated
- 7 weirs have been modified
- More projects in design and ready for construction.

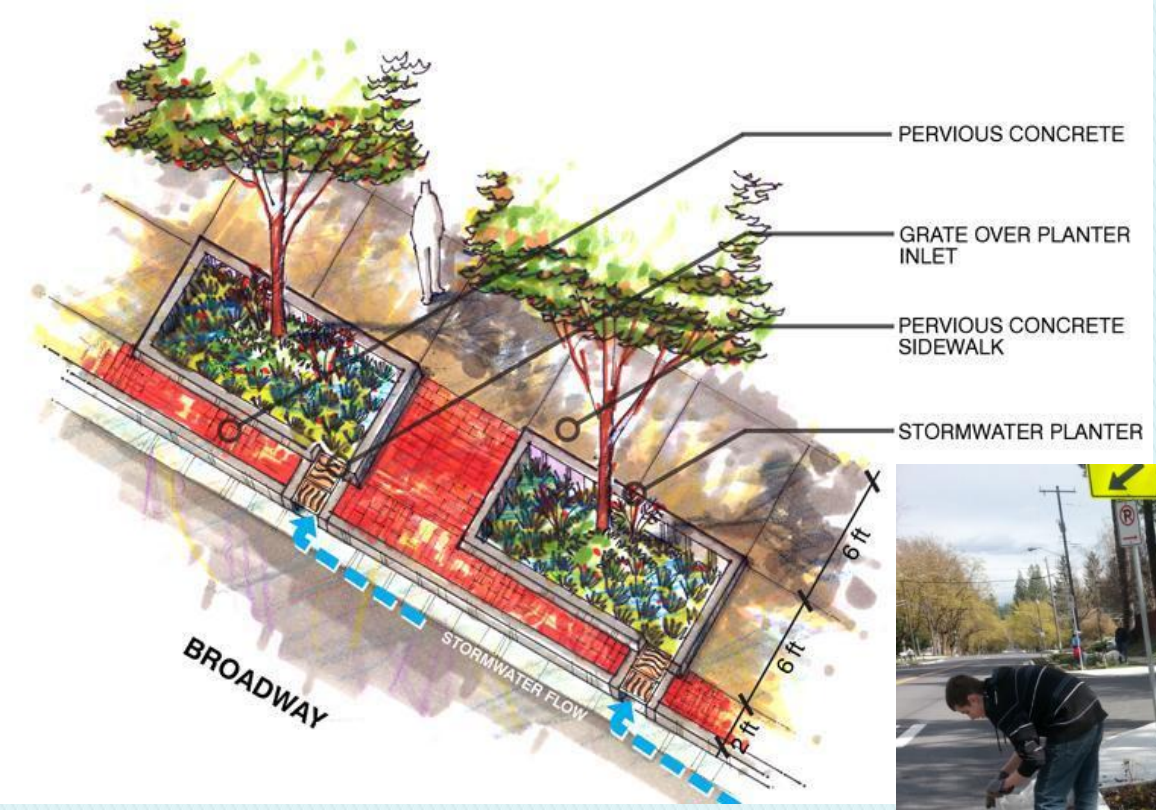
- Implementing some “green” strategies
  - Lincoln Street Rain Gardens
  - Broadway Ave. SURGE
  - Kendall Yards/City Stormwater Project
  - Street Tree inventory
  - Developing LID ordinance

CSO Tanks Built & Weir Modifications



Gray Solutions

Green Infrastructure/LID



Broadway SURGE

Lincoln Rain Gardens

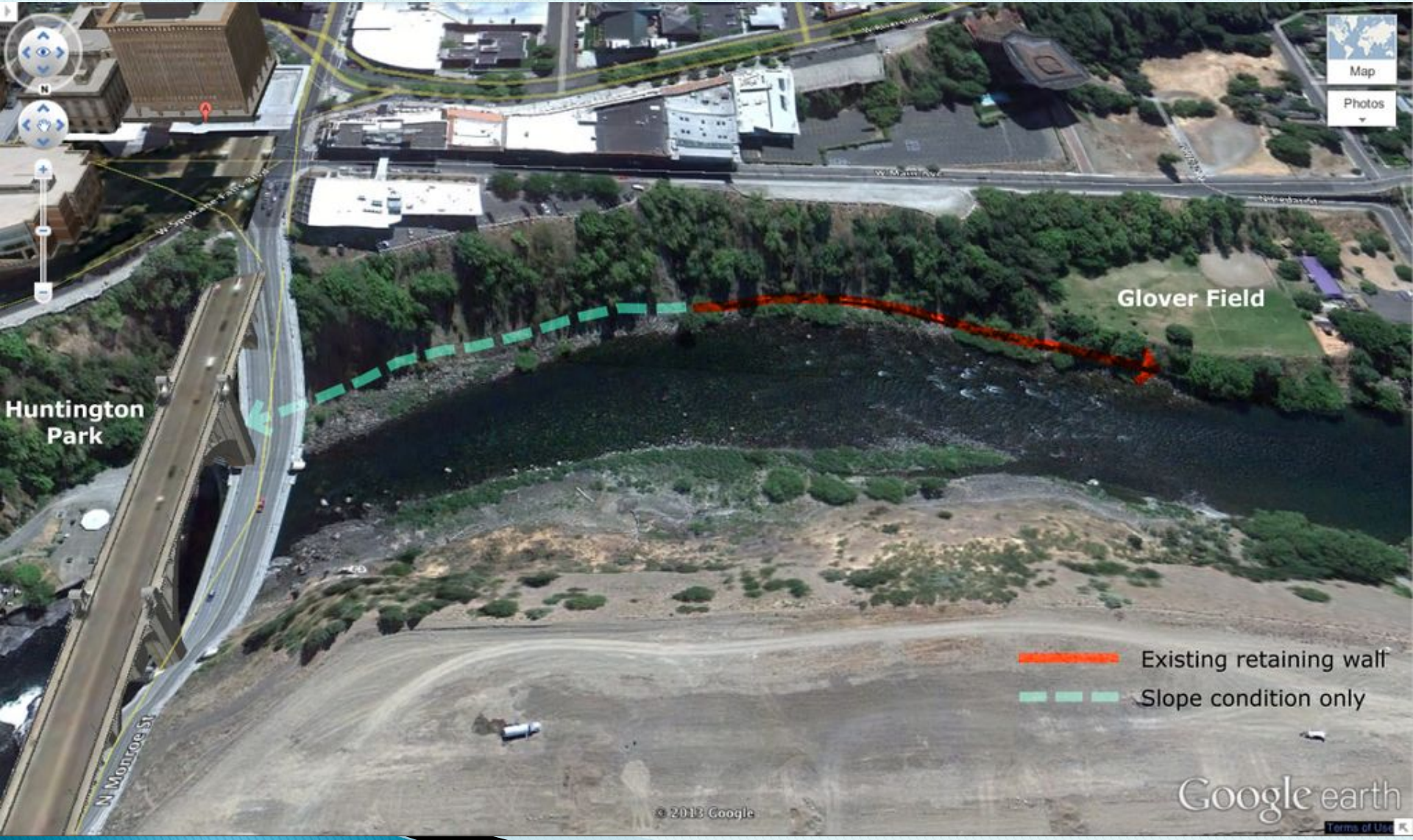
Upcoming construction

- 21st & Ray (CSO 34-3)
  - Have Conditional Use Permit
  - Advertise for construction bids in August
  - Begin construction in fall
- Underhill Park (CSO 34-2)
  - Finishing Conditional Use Permit Process
  - Finishing design elements
  - Go out for construction bids in the fall
- Total storage of 2.5 M gallons

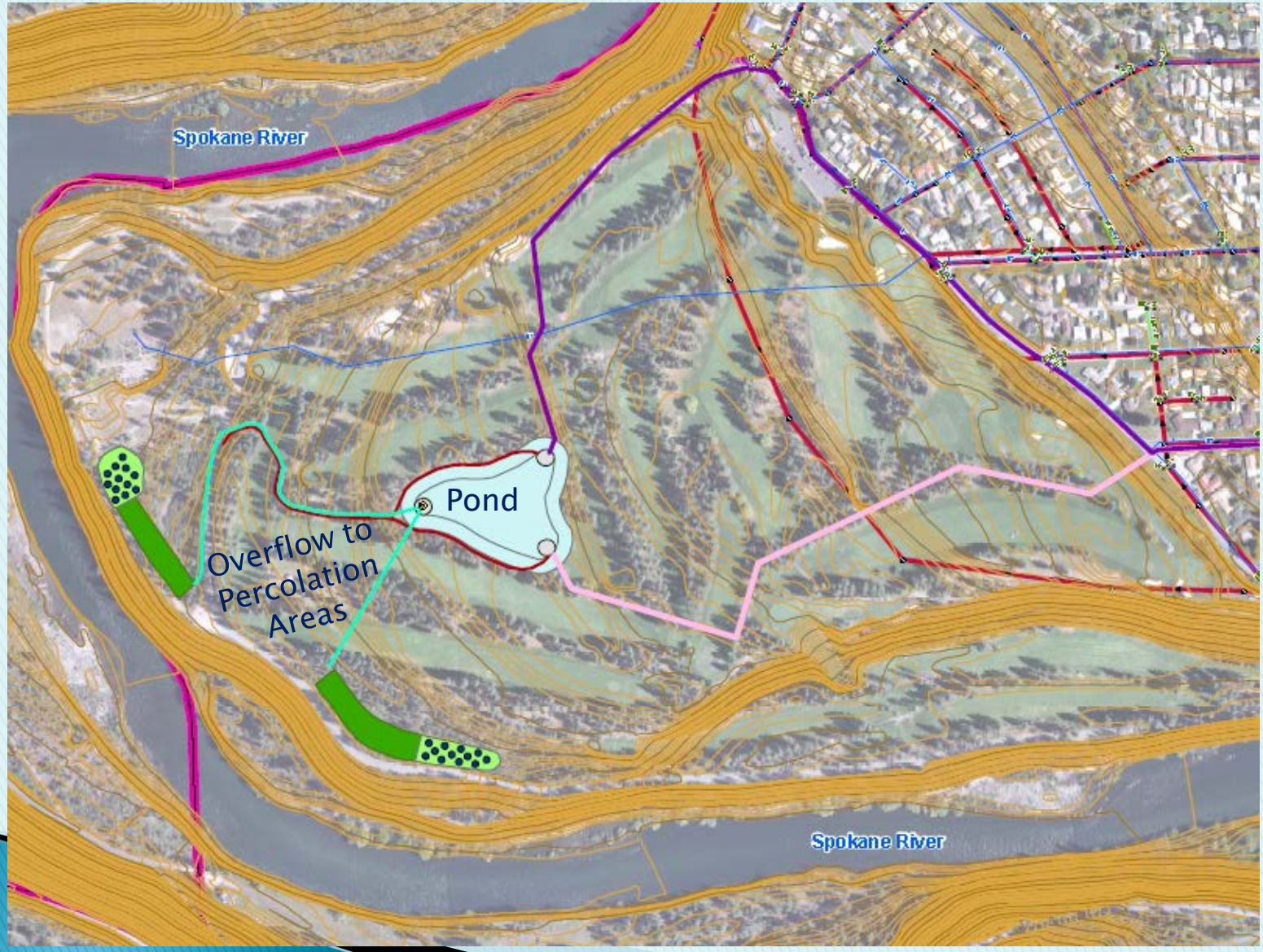
Draft Conceptual Plan for CSO 34-3

March 8, 2013

Glover Field



Cochran Basin



More to come »

Thank you!