Integrated Clean Water Plan
Presentation: Spokane Regional Toxics Task Force

City of Spokane
June 26, 2013
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?

1. Look at All Discharge Points.
2. Look at All Pollutants.
3. Identify Greatest Pollutant Loading Reduction by Discharge Basin.
4. Evaluate All Viable Alternatives within Each Basin.
5. Identify Opportunities to Solve Multiple Problems with the Same $\$
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.

Design and Construction of CSO 26, 34 and Cochran Basin (50% of CSO and 50% of Stormwater reaching the river.)

Deliver Integrated Plan Dec. 2013

2017
Integrate:
- Streets
- Parks
- Water
- Wastewater
- Sidewalks
- Ped / Bike
- Golf Courses
- Greenways
- Street Trees
## By the Numbers

<table>
<thead>
<tr>
<th>Volume</th>
<th>From Where</th>
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<tbody>
<tr>
<td>54 Million Gallons</td>
<td>From combined sewers to River annually</td>
</tr>
<tr>
<td>28.5 Million Gallons</td>
<td>From two largest combined sewer basins to River annually</td>
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<tr>
<td>1 Billion Gallons</td>
<td>Untreated stormwater to River annually</td>
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<tr>
<td>300 to 600 Million Gallons</td>
<td>Stormwater going to River from Cochran Basin alone</td>
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<tr>
<td>34 Million Gallons</td>
<td>Average amount processed at City’s Water Reclamation Plant daily</td>
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CSO 24 – Last week
CSO 24 –
Last week
(Another view)
Cochran Basin– Last week
How do PCBs enter the River?

- Unknown Sources (57%)
- CSO/Stormwater (19%)
- Idaho Sources (13%)
- WA Treatment Plants (8%)
- Little Spokane River (3%)

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.

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

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

**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
Green Infrastructure/LID

Lincoln Rain Gardens

Broadway SURGE
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**
Glover Field

Existing retaining wall
Slope condition only
Cochran Basin

Overflow to Percolation Areas
Thank you!

More to come

Thank you!