Combined Sewer Overflow (CSO)
Reduction Project
Basin 6
CSO 6 Project Limits

Northwest Boulevard, I Street, “H” Street, W. Columbia Circle, and Downriver Dr.
What is a CSO 6 Project?

- Construct a 250’ long by 50’ wide underground storage tank for excess stormwater
CSO 6 Project

- New sewer main construction from Northwest Boulevard/Providence Avenue to H Street and south to Downriver Drive near N. Columbia Circle
CSO 6 Project

- New street pavement where the tank and sewer main are constructed
- New sidewalk in some areas
CSO 6 Project

- Restore and landscape the area
- Bench and totem pole returned
CSO 6 Project

Proposed sidewalk

CSO 7 a buried ±14’ concrete box

CSO 6 buried concrete tank that is 50’ wide, 240’ long, 25’ deep

sewer piping, full width street paving
Combined Sewer Information

- Combined Sanitary & stormwater into the same pipe
- Combined sewage overwhelms combined sewers and the treatment plant during a storm
- To protect both, excess sewage is intentionally discharged to the river

Riverside Park Water Reclamation Facility (RPWRF)
Why build a CSO Tank?

- Compliance with EPA Clean Water Act and WAC 173-245
- CSO discharges only 1/year per outfall with EPA fines for non-compliance
- Cost - $1,000 for 1 million gallons – current treatment cost only
- $100 million for RPWRF upgrades to meet treatment standards
Combined Sewer System
 Combined Sewage Overflow Reduction
Basin 6

• Two types of sewer systems
  – Combined storm and sanitary
  – Separate storm and sanitary
    • Storm sewer (i.e. rainwater) discharges to river
    • Sanitary discharges to treatment plant
    • Very expensive to convert a combined system to a separated system
  – Spokane has both types of systems
Combined Sewage Overflow Reduction
Basin 6

• Alternatives to fix a combined sewer
  – Install a separate storm sewer
    • Very expensive, have to dig up every street
    • Have to do something with the water once collected, new river discharge without treatment is no longer permitted
Combined Sewage Overflow Reduction
Basin 6

• Alternatives to fix a combined sewer
  – Install a CSO tank
    • Holds rainwater for 12-48 hours during a storm
    • Slowly releases the stored water back into the sewer system after the storm
    • Least expensive, most environmentally friendly alternative in built out areas
Combined Sewage Overflow Reduction Basin 6

- History (i.e., how did we get into this predicament?)
  - Cesspools
  - Septic systems
  - Sanitary/storm sewer systems piped to river
  - Interceptor parallel to the river with wet weather overflow
CSO 6 Construction Schedule

Schedule

• 12 month duration (entire project)
• Beginning Spring 2015 – anticipated start in March
CSO 6 tank

Garland Ave. – G Street – NW Blvd.

Traffic Detour During Construction
CSO 6 (Phase 1) Construction

- Tank and utilities constructed
- NW Blvd. south of Garland intersection to east of H Street intersection closed to all traffic
- Local access will be provided on side streets
CSO 6 (Phase 2) Construction Schedule

- CSO 7 installed
- Roads closed to all but local access
- 100’ long trench with sewer construction moving about 200’ per day
- During period hole is in front of your property, even local access is restricted
- Some access restrictions while paving is in front of your property
Questions?

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Website for more CSO information:
http://www.spokanewastewater.org