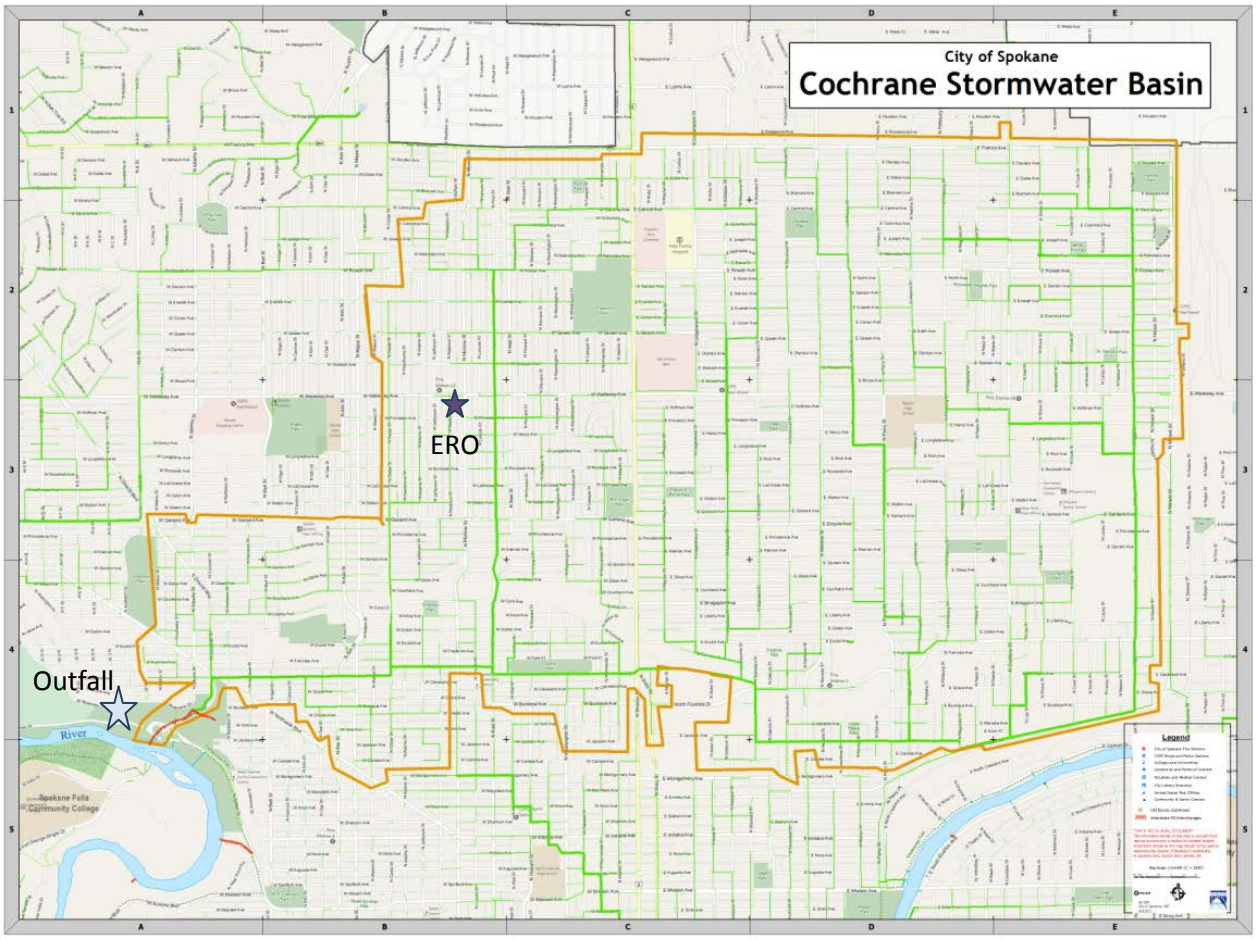
Cochran Basin

The Cochran Basin is the largest separated stormwater system basin within the City of Spokane. Located in the north of Spokane, the basin covers an area of over 8 square miles and discharges untreated stormwater directly to the Spokane River. The City aims to eliminate this direct discharge of stormwater by treating and infiltrating the stormwater runoff.

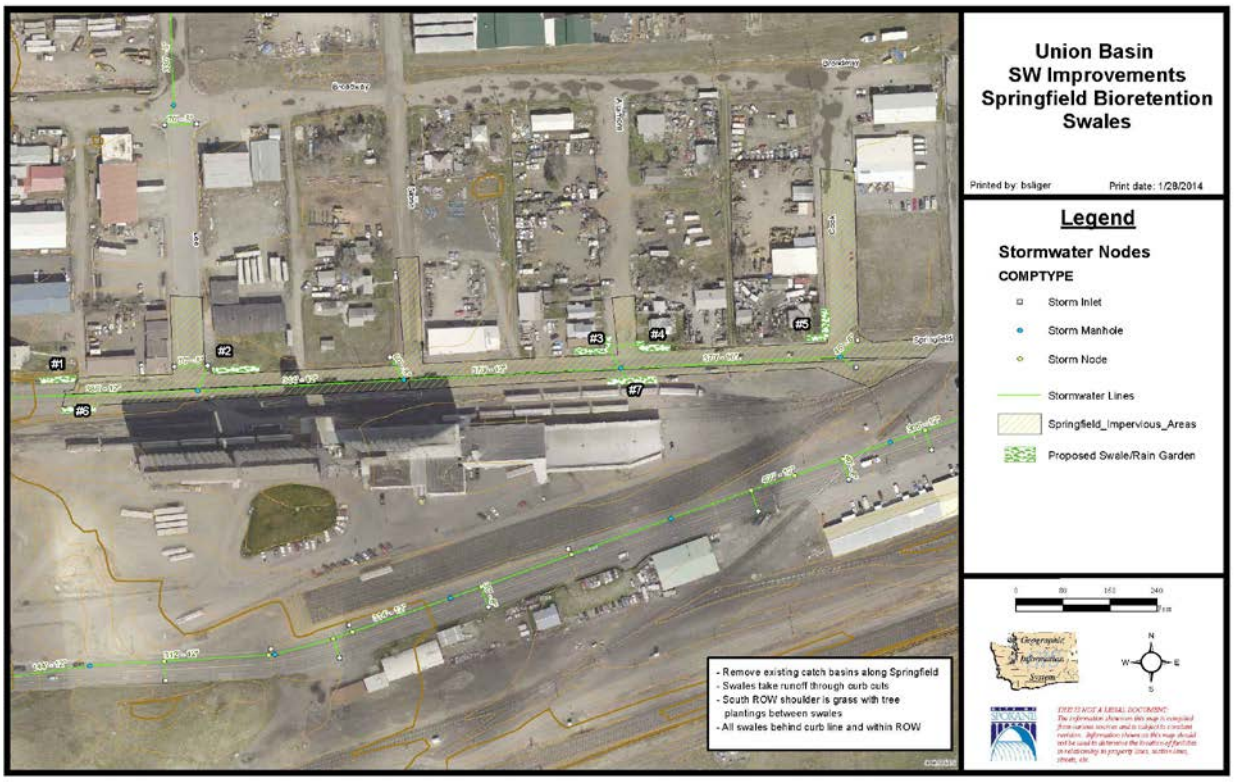
The City has considered LID management, but the cost was exorbitant. Regional facilities were next considered, but City-owned property near the outfall was determined to adequate for the project. Currently the City is developing treatment and infiltration facility concepts.



Union Basin

The Union Basin covers approximately 29 impervious acres located in an industrially developed area. Originally the stormwater contributed to the combined sewer system, but in the 1980s the system was separated and piped directly to the Spokane River. The City of Spokane and the Department of Ecology have been sampling for PCBs in catch basin sediments and stormwater in the Union Basin since 2010. The catch basin sediments were tested and the catch basins cleaned in 2010. Sediments sampling in 2011 and 2013 revealed the PCBs had been reduced overall by about 30%, but the reduction was inconsistent. Because no significant point sources of PCBs have been identified, reducing PCB source contribution to the MS4 system to a level that meets the water quality standard is infeasible.

There is no easy stormwater solution for this basin because of the limited right-of-way, industrial land use, a high impervious area percentage, and lack of sediment control for unpaved areas. No information of BMP removal rates of the PCB to meet the concentrations required to meet water quality standards. The City has chosen to use Filterra type treatment systems to eliminate the stormwater discharge to the river.



Martin Luther King, Jr. Way Swales

Constructed of Martin Luther King, Jr. (MLK) Way was completed in 2013 and includes a “Gateway Swale” at the intersection with Division Street, the main North-South Arterial in the City of Spokane. Previously, this area was filled with old warehouses and abandoned railways. A second and longer phase to this project, effectively connecting Riverside Avenue to Trent, will go to bid this year.

Swales along Martin Luther King, Jr. (MLK) Way are an example of managing stormwater in a new development. Although located near downtown, the new arterial was constructed to accommodate traffic to Washington State University Riverpoint Campus. Formerly, stormwater in this area was either conveyed to the combined sewer or discharged directly to the Spokane River. Purchasing right-of-way for this project provided the City with the opportunity to manage stormwater from approximately 1800 linear feet (6 blocks) along the project.

These biorention swales are maintained by Washington State University at Riverpoint.

Broadway SURGE

Broadway Avenue between Ash Street and Elm Street is the location of the first project chosen for the Spokane Urban Runoff Greenway Experiment (SURGE). SURGE is a demonstration program to determine the suitable criteria for retrofitting existing stormwater systems utilizing Low Impact Development (LID) stormwater treatment systems in Spokane's urban environment.

Broadway SURGE separates stormwater from the combined sewer system into "storm gardens" designed to collect, treat, and infiltrate stormwater runoff. Storm gardens are the Spokane version of a rain garden, designed for seasonal high peak storms and snow storage. Features of the storm gardens include curb Inlets, sumps and concrete pads to remove sediment and reduce erosion; soil mix to meet treatment requirements, structural soil to provide short-term storage and overflow pipes to accommodate frozen ground conditions.

Broadway SURGE is maintained by the City of Spokane.

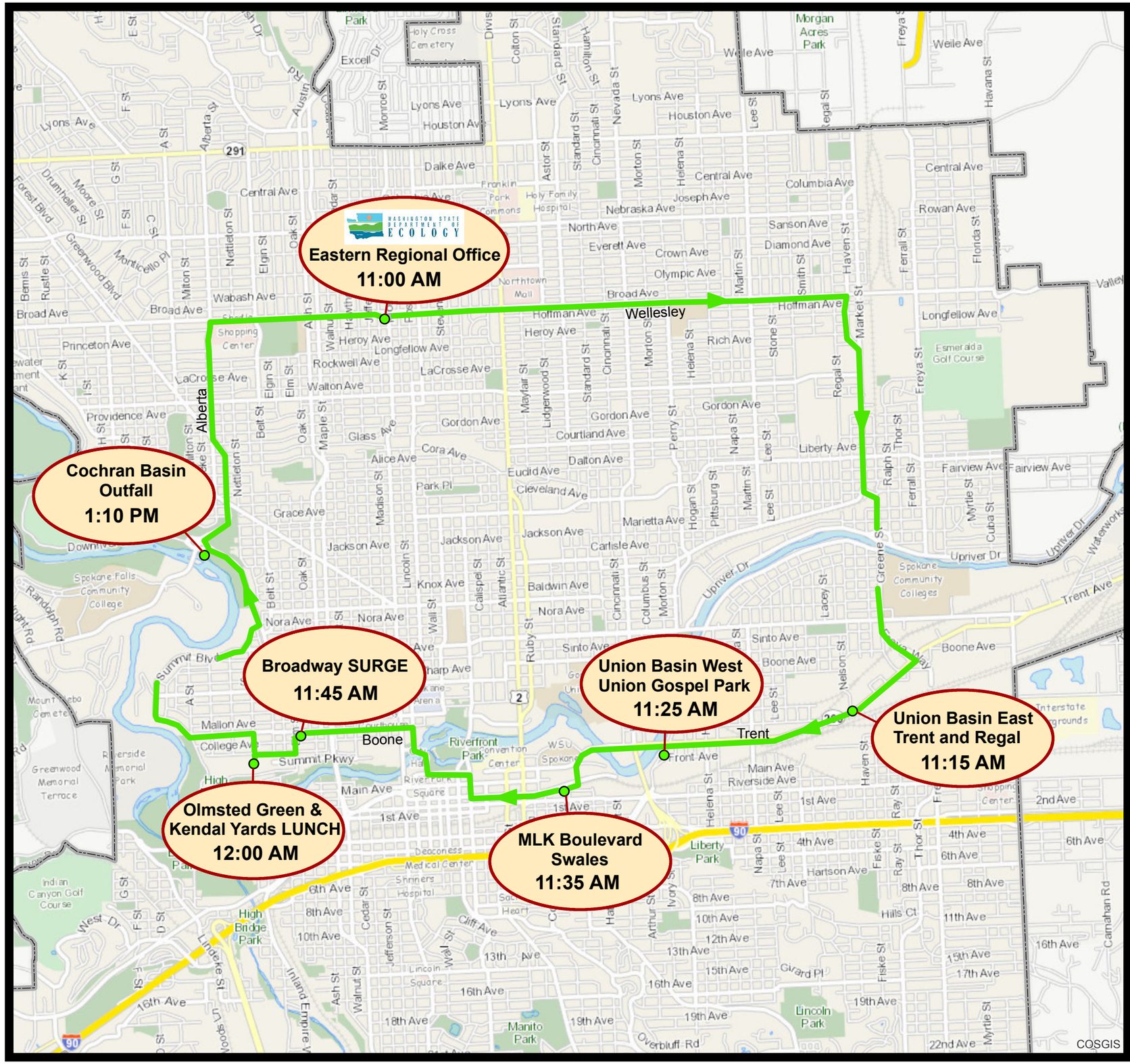
Olmsted Brother Green

The new park in Kendall Yards serves as a stormwater management system, consistent with the vision of Olmsted Brothers in other city parks. Kendall Yards is a multiple use redevelopment of a railroad yard by Green Stone. Before construction of this project, runoff from Monroe Street as well as in the streets of Kendall Yards discharged directly into the Spokane River.

The project has three distinct components, each one necessary to create a fully functioning system. The first component is a storage tank and pumping station located west of Monroe Street under a proposed parking lot. Stormwater stored in the tank will be pumped west through a force main, the second component. The final component is the facility designed to treat and infiltrate stormwater. The Summit Low-impact Urban Retrofit Project (SLURP) redirects the runoff from Monroe Street by pumping the stormwater to the Summit and Nettleton Infiltration Facility (SNIF) in the Olmsted Brother Green Park.

This project is an example of a working together with private development to manage stormwater. The facility, also serve part of the Kendall Yards development, but the cost of the system was proportionately shared based on impervious area Olmsted Brothers Green park including the stormwater system, will be maintained by the Kendall Yards Home Owners Association. The pump, pipes and tank will be maintained by the City of Spokane.

Below is one of the informational sign the will be installed in the park.



Facility Tour
June 17th 2014

Printed by: rmcdermott
Print date: 6/13/2014

LEGEND

SITE AND TIME

Route

Freeway

0 1,600 3,200 4,800
Feet

Geographic Information System

N
W E
S

CITY OF SPOKANE

THIS IS NOT A LEGAL DOCUMENT: The information shown on this map is compiled from various sources and is subject to constant revision. Information shown on this map should not be used to determine the location of facilities in relationship to property lines, section lines, streets, etc.

Welcome to the City of Spokane Facility Tour June 17th 2014 !!

We will be meeting at the Department of Ecology Eastern Regional Office, located at the Southwest corner of Wellesley Avenue and Monroe Street.

We will be travelling in a convoy of vehicles. Each of you will have a packet of information that includes a tour map with destination times, as well as informational sheets on each project.

In case we get separated, here is the route and approximate timetable of events.

1. 11:00 am leave ERO headed East on Wellesley. Proceed 2.8 miles to Haven St.
2. Turn Right on Haven head South, Haven will merge into Market and then cross over to Greene Street. You will cross the river after 1.6 miles. Continue traveling South 0.8 miles until you reach Trent, turn right. Proceed 0.5 miles.
3. 11:15 am arrive at Trent & Regal. There will be a large asphalted triangle with ample room to Park. This is the Eastern end of the Union Basin Project. The triangle you are parking on will be transformed into a bioretention swale; additionally the Intersection will be realigned so that Regal will meet Trent at a right-angle.
4. 11:20 am proceed in a southwesterly direction along Trent 1.2 miles to Erie Street. This is the last street before you cross the Spokane River. Turn Left. (Park in the area adjacent to Union Gospel Park.) This area is the location of the outfall and Western terminus of the Union Basin.
5. 11:30 am Get back on Trent , turn Left and proceed 0.6 miles to the intersection of Sherman. Follow the sign, left lane to MLK JR. Way (0.1 miles). Park in the lot to the North, the entrance is 0.1 miles on your right. Martin Luther King Jr. Way incorporates some of the youngest swales built in Spokane as well as incorporating a “Gateway “ at the Western end adjacent to Division Street.
6. 11:40 am we will be crossing the downtown core, our destination the Broadway SURGE project. Turn Right on MLK Jr. way which will turn into Riverside Ave. Travel a total 0.6 miles , turn Right on Washington St. Travel

north 0.15 miles to Spokane Falls Blvd. Turn Left travel O.26 miles to Post Street, Riverfront Park will be on your right. Turn Right on Post , City Hall will be on your Left, travel 0.4 miles to Broadway (Post transitions to Lincoln). Turn Left, travel 0.7 miles to Elm Street. On Street Parking.

7. 11:45 am You are now at the Broadway SURGE project. The next destination will combine a park and lunch. Olmsted Brothers Green, SNIF, SLURP & Gulp!!!!!!
8. Traveling 0.3 miles, South and West will get you to Olmsted Brothers Green.
9. After Lunch if there is time to leave by 1:00 pm we will travel north to see the Cochran Basin Outfall. (or we can visit at the end of the tour) Travel 0.2 miles north to Broadway, turn Left. Travel 0.4 miles to Summit Boulevard, Turn Right. Travel 1.1 miles until Summit turns to Mission at the intersection of West point road. Turn Left. Travel 0.2 miles until you reach Pettet Drive, Turn Left. Travel 0.6 miles, turn Left into the parking area before you get to the Bridge.
10. After viewing the Cochran Outfall and vicinity we will be heading back to the Eastern Regional Office along the following route. Cross Pettet Drive (Be careful ! Bet into the on ramp for TJMeenach Drive. (This is the road that goes over the River) At the intersection with TJMeenach turn Right and travel 0.3 miles to the Intersection of Cochran and Northwest Blvd. Travel north on Cochran 0.3 miles to Driscoll Blvd. Road bears left. Travel 0.1 miles to Alberta, merge Right. Head North 0.7 miles to Wellesley Avenue Turn Right on Wellesley, 1.1 miles back to the ERO.
11. We hope you enjoyed your visit !!!!