

Facility Tours Overview

PNCWA 2022 Annual Conference

City of Spokane – Riverside Park Water Reclamation Facility Tour

Date: Tuesday, September 13th

Time: 8am-12pm



The Riverside Park Water Reclamation Facility (RPWRF) is located in northwest Spokane. Sited on the edge of Riverside State Park, RPWRF treats around 30 million gallons of wastewater per day. The facility serves most of the City limits along with areas of Spokane County. The primary plant was built in 1958 and upgraded in 1977 to advanced/secondary treatment. The City just completed upgrades to RPWRF with tertiary membranes. Designed to meet low phosphorus limits of 0.042 mg/L, the pressurized membranes, manufactured by the Pall Corporation, came online in 2021.

RPWRF Features the following treatment processes:

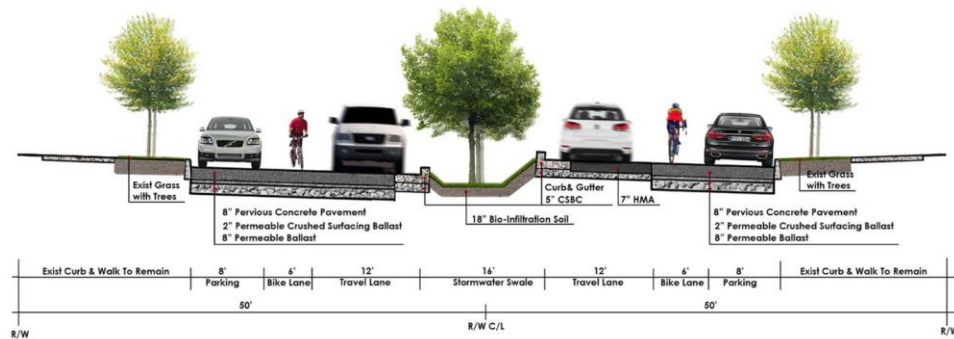
- Preliminary Treatment: Fine Screens and Grit Removal
- Primary Treatment: Primary Clarifiers with Chemically Enhanced Primary Treatment (Alum/Polymer)
- Secondary Treatment: Aeration Basins with Anoxic Zones and Secondary Clarifiers with Alum for Phosphorus Removal.
- Tertiary Treatment: Microfiltration with 0.1 μm Membranes
- Disinfection: Chlorination with Sodium Hypochlorite followed by Dechlorination with Sodium Bisulfite
- Discharge: Spokane River

The facility tour will highlight these treatment processes. Special focus will be given to the new membrane facility.

Downtown Spokane Green Stormwater Infrastructure (GSI) Walking Tour

Date: Tuesday, September 13th

Time: 1:30-3:30pm



Join Osborn Consulting, Evergreen StormH2O, and representatives from the City of Spokane on a walking tour where we will visit and learn about local green stormwater infrastructure sites. Our route will journey from the Spokane Convention Center to Sharp Avenue’s green stormwater improvements (permeable pavement and bioinfiltration swales) and Gonzaga University’s bioretention pilot testing site. Tour attendees will enjoy this hands-on opportunity to learn about how local jurisdictions are meeting their MS4 Permit requirements. Both green stormwater projects are located within just a couple miles of the conference location, with plenty of time to stop and explore sites along the way. If preferred to walking, tour attendees may provide their own transportation to meet us at Sharp Avenue and enjoy a shorter walk to Gonzaga campus site and back to the Convention Center.

Spokane County Regional Water Reclamation Facility Tour

Date: Wednesday, September 14th

Date: 8am-12pm



The Spokane County Regional Water Reclamation Facility (SCRWRF) is located near the border of the City of Spokane and the City of Spokane Valley – near the intersection of Freya Street and Trent Street. The SCRWRF opened in late 2011 and treats 8 million gallons per day. Excess flow continues to the Spokane City treatment facility (RPWRF) through the North or South Valley Interceptor pipes.

SCRWRF treatment includes the following processes:

- Preliminary Treatment: Screening and Grit Removal
- Primary Treatment: Primary clarifiers with Ferric Chloride to help with phosphorus removal
- A 1.5 million gallon equalization tank went into service in 2020
- Secondary Treatment: Aeration Basins with anoxic and aerobic zones
- Tertiary Treatment: Membrane Filtration with 0.04 μm holes and about 6 million membranes
- Disinfection: Chlorination with Sodium Hypochlorite, dechlorination with Sodium Bisulfite
- Discharge: Spokane River

The SCRWRF also has a robust education program centered out of its Water Resource Center (WRC) which will be highlighted on the tour. Adjacent to the treatment facility, the WRC hosts all ages but most visitors are K-6 students. Teachers can also request an in-person or virtual visit to their classroom. Tours of the water reclamation facility are also operated out of the WRC. The County has held about 100 events a year with an average almost 6,000 people per year totaling over 1100 events since opening with over 65,000 people.

The program provides locally-relevant water education to promote stewardship of water quality and quantity in the Spokane Valley-Rathdrum Prairie Aquifer and the Spokane River. Topics for all ages include the Spokane River watershed and regional sole-source aquifer, the natural water cycle, and the “human water cycle”. The basics of area wastewater and stormwater management are taught along with how we can minimize our impact on these systems to help maintain water quality. County educators lead students through hands-on activities, and new, interactive exhibits demonstrate how water moves, how we use it, and how it is cleaned so it can be safely returned to the environment.

Saltese Flats Wetlands Tour

Date: Monday, September 12th

Time: 12:30-4:30pm



Saltese Flats is a shallow lake/wetland created around 20 thousand years ago during the Great Missoula Floods. In the late 1800s, Saltese Flats was drained so that it could be used as agricultural land. The area was used for farming for around 100 years by the Morrison family until Spokane County bought the land (approximately 600 acres) in the early 2000s.

Spokane County originally bought Saltese Flats as an alternative discharge site for their reclaimed water – in case discharging to the Spokane River was no longer an available option. Saltese Flats has not been used for reclaimed water yet, but it is still being considered as an option for both Spokane County and nearby Liberty Lake.

Starting in 2009, Spokane County has been planning and implementing a wetland restoration at Saltese Flats. After planning and some studies of the area, the implementation started by building water control structures to retain water in the old lakebed. There was also extensive work done to remove invasive species, which allowed some native species which laid dormant in the seed bank to flourish. With the restored habitat, wildlife has returned including fish, deer, otters, turtles, and a large variety of birds.

The County added five miles of combination raised and rough mowed trail system to the wetlands, two parking lots, and several interpretive signs to promote public use of the area. The County is also in the process of building the Doris Morrison Learning Center at the north end of the wetlands to educate the public about the wetland restoration, the history of the area, and the wildlife that has returned. The learning center is expected to open in early 2023.