# A Cleaner River Faster Now

Realizing the **Benefits** of the **Combined Sewer Overflow System** and **Tertiary Treatment Facility** 

Spokane River Forum Conference - April 2025















# Combined Sewer Overflow (CSO) System Overview

- 29 CSO Tanks & Interceptor Protection Tanks (7 tanks with pump stations)
- Combined Sewer Overflow Storage = 14 million gallons (5 largest tanks hold almost 10 million gallons)
- Interceptor Protection Tank Storage = 2.4 million gallons
- ► 17 Outfalls to Spokane River
- ► 2 Stormwater Tanks with pump stations











# **The CSO Process**











# **Combined Sewer Overflow** (CSO) Reduction Program Results



Dramatic **decline** in number of **overflow events** and **volume** of **untreated water** entering the Spokane River.

**2024** = 1 overflow event releasing 113,000 gallons.



#### **Overflow Events vs. Precipitation Levels**











#### Downtown

W. Sprague Ave. & N. Adams St.



CSO 24-1 = 2.4 million gallons

#### **East Central**

E. Riverside Ave. & N. Crestline St.



CSO 34-1 = 1.5 million gallons





### Go with the Flow











- ► How it came about Mike Taylor story
- ► Where is it in the wastewater treatment process
- By the Numbers 16 membrane racks the size of a semi-truck trailer 6,900 "fibers" in each module 38,000 miles of membrane fibers
- Phosphorus Removal meeting TMDL









**Dissolved Oxygen TMDL** *Total Maximum Daily Load* 

- TMDL is based on the "assimilative capacity" of the Spokane River and Long Lake
- **Total Phosphorus** (TP) critical season is March 1-October 31
- 2021 permit requirement at 30 MGD is approximately 18 lbs. per day
- Daily average in 2024 with Membrane Treatment was 5.4 lbs. per day







0.6

## **Effluent Total Phosphorus**







20

# Effluent Total Suspended Solids





90

## **Effluent Fecal Coliforms**







# Questions?

