Understanding Challenges to the Combined Sewer System

Aging Infrastructure
Our pipes, treatment plants, and tunnels need ongoing repair, replacement, and vital upgrades.

Climate Change
Sea level rise could cause saltwater to flow back into our system, causing flooding and endangering our treatment plants.

Seismic Reliability
Requirements must be met to ensure public health and safety in the case of an earthquake.

Water Quality
Requirements may become more stringent in the future, and we must continue to protect the health of our coastal waters and marine life.

Localized Flooding
Stormwater runoff can overwhelm our system during heavy rains and lead to neighborhood flooding and partially treated wastewater discharging into the SF Bay and Pacific Ocean.

Odor Control
Odors can be a problem during dry weather in flat areas when there is minimal flow to push wastewater to treatment plants.
San Francisco’s Combined Sewer System

Our combined sewer system collects and treats wastewater from sinks, showers and toilets, as well as the stormwater that runs off roofs and streets – and the pollution and debris it picks up along the way.

A. RAIN GARDENS: collect and infiltrate stormwater
B. CATCH BASIN: collects stormwater runoff
C. PERMEABLE PAVING: infiltrates stormwater to reduce runoff
D. SEWAGE: wastewater from residences and businesses flow into the combined sewer system
E. SEWER PIPELINE: wastewater pumped to treatment plant
F. TRANSPORT BOX: holds stormwater runoff and wastewater
G. OUTFALL: primary treated wastewater discharges to Bay or Pacific Ocean
OneWater SF: Sustainable Stormwater Management

We are **restoring** the natural drainage patterns of the Yosemite Watershed and **managing 5.1 million gallons** of water during a typical year.

Yosemite Creek will irrigate the new soccer field in Reach 2 with stormwater, which will **save 1 million gallons of potable water annually**.
Existing Sewer Capacity & Challenges

On a rainy day, stormwater runs off San Francisco’s streets, sidewalks, and parking lots and flows rapidly into the City’s combined sewer system. During heavy rains, stormwater has nowhere to go but our sewer system leading to problems like neighborhood flooding and wastewater discharges into the San Francisco Bay and Pacific Ocean.

Much of the water that historically flowed into Yosemite Creek is collected in Yosemite Marsh and McNab Lake. Both waterbodies currently overflow into the combined sewer system.

Past, Present, and Future Creeks

Yosemite Creek continues to flow in this neighborhood even after development has hidden the original channel. The graphic at top shows increased risk of flooding in nearly the same location as the historic creek. This project will reduce that risk by allowing water to flow close to it’s natural path in this area.