

**Engineering and Planning Subcommittee  
Metropolitan Water Pollution Abatement Advisory  
Committee**

**October 6, 2022**

**Leadership**

Steve Hitch appointed as chair of the subcommittee to fill the recent vacancy for the remainder of the term.

**Decennial Flow Monitoring Program**

King County Wastewater Treatment Division (Jenny Ho and Nicole Smith)

- Goal is to update existing sewer model basins and account for growth and changes in local systems. Coincides with census updates.
- An interactive map is available showing monitoring station locations.
- Sharing technical information about locating meters, maintaining, data review, diurnal flow patterns, manual verifications, finalization & verification.
- There is some meter redundancy. Flow meters are inspected twice a week to minimize data loss and ensure high data quality. Battery and communications issues are common. Installation requires attention to detail including hand measurements of flow to calibrate sensors.
- Meters are installed for 3 wet seasons
- This monitoring program is the first step to beginning the next Conveyance System Improvement (CSI) planning process, which begins in 2023
- Will be back in 2023.

**Sammamish Plateau North Sewer Service Area Inflow & Infiltration Investigation**

Sammamish Plateau Water (Andy Tuchscherer)

- They experienced flow events that exceeded target thresholds that raised concern for future sewer overflows.
- Statistical analysis showed correlation between rainfall and system capacity challenges. This was a surprise to them since their system is relatively new and I&I was unexpected. In response, the district implemented I&I prevention measures:
  - Temporary moratorium on new development.
  - Installation of manhole pick hole plugs system-wide
  - Installation of temporary sewer lift station overflow storage tanks
  - Smoke testing
- Smoke testing identified trouble spots and they worked with customers to disconnect stormwater discharges from the system.
- The smoke testing cost of \$73K to remove 16 illicit connections might seem like a low cost/benefit until you recognize that the 16 connections are comparable to 175 RCE flow reduction.

**Questions?**

Steve Hitch, Chair

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