Summary of Engineering and Planning (E&P) Subcommittee February 4, 2021 Meeting for February 2021 MWPAAC General Meeting

Asset Management (AM) - Conveyance (Joint Topic with Rates and Finance)

WTD's conveyance system includes 400 miles of pipelines, 48 pump stations, and 25 "regulator" stations. Regulator stations in the combined system provide overflow relief points to protect the system and private property if storm flows start to exceed the system's capacity. Replacement/rehabilitation often are limited to summer when the lower flows can be diverted.

Pipelines:

Issues

- Corrosion, capacity, and blockages due to fats, oils, and grease
- Coordination required between projects since outages/diversions may affect other facilities
- Few specialized contractors for rehabilitation (pipe lining)

Status

- 150 miles of primarily concrete pipe is over 50 years old
- Concrete pipe vulnerable to corrosion from sulfuric acid formed from sewer gases will need to be replaced or lined. New pipes are plastic, composites, or lined with corrosion-resistant material.
- Over the past 15 years, WTD has replaced or rehabilitated 10 major interceptor segments
- Upcoming pipeline replacements/rehabilitation include: Coal Creek Trunk (Bellevue), N Mercer Island/Enatai Interceptors, Lake Hills Trunk and NW Lake Sammamish Interceptor (Bellevue and Redmond area), and Interbay Force Main (Seattle)

Pump Stations:

Issues

- Wear from grit and rags, saltwater corrosion, pump and controls obsolescence/age
- Need for standby generators

Status

- Over the past 10 years, replaced/upgraded Juanita Bay, Bellevue, and Sunset/Heathfield
- Continuing to replace variable frequency drives (6 pump stations planned for 2021)
- Upcoming installation of permanent generators at 4 pump stations and numerous regulator stations
- New pumps needed at Lakeland Hills (Auburn); Lake Ballinger and Hidden Lake (Shoreline); Murray, Matthews Park, and North Beach (Seattle)

WaWARN Agreement

King County Council is considering an Ordinance to execute a mutual aid agreement for emergencies with the Washington Water/Wastewater Agency Response Network (WAWARN). WAWARN is part of a national network that provides for pre-signed agreements that address costs and liabilities so that the members can assist each other during emergencies without having to stop to negotiate terms. Although King County Emergency Management has worked with WAWARN for many years, there has not been a formal agreement. Many MWPAAC members belong to WAWARN, which in Washington includes 42 city or county governments and 108 special purpose districts.

Puget Sound Nutrient General Preliminary Permit (Draft)

On January 27, 2021, Ecology released a preliminary draft of the Puget Sound Nutrient General Permit for a 45-day comment period (due March 15, 2021). This is the permit that we discussed last year which may have significant implications for WTD's wastewater treatment plants that discharge to Puget Sound, in terms of potential new treatment processes and costs. Unlike other permits like the NPDES permits that many of us are familiar with, this draft preliminary permit is very conceptual, with 17 questions for which Ecology is requesting input. The first 5 years of the permit will include optimizing existing processes to achieve the maximum amount of nutrient removal that is feasible, and planning for future plant upgrades for additional nutrient removal. There is no provision in the preliminary draft for a "bubble" permit (grouping the discharges of plants to meet a total quantity of nutrients) or for water quality trading that WTD staff discussed with Ecology last year.

Please review the draft (Marla Oughton separately emailed to all MWPAAC members links to the preliminary draft) and we will discuss it further at the March 4 E&P meeting. Unfortunately, the short comment period will not allow sufficient time for full MWPAAC to send comments, but individual agencies can provide comments.

Questions?

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