

Summary of Engineering and Planning (E&P) Subcommittee April 2, 2020 Meeting for April 2020 MWPAAC General Meeting

Priority Asset Management Needs

WTD's 2021/2022 rate proposal included an increase for funding a significant increase in rehabilitation and repair of existing wastewater assets, which were identified through WTD's Asset Management (AM) Program. In the current Capital Facilities Plan, funded AM projects averaged about \$70 million per year over the next 6 year period. The newly-identified and currently unfunded AM projects raises that annual expenditure to an average of \$175M per year through 2026, then continues above \$200M per year through 2030. For comparison, WTD's annual AM expenditures over the past 2 decades averaged about \$57M per year. MWPAAC requested additional information about these projects to inform MWPAAC's evaluation of the proposed rate proposal.

About half of the proposed AM projects are conveyance system and half are at facilities (pump stations, treatment plants, etc.).

Conveyance AM projects are identified based on condition assessment and criticality (consequences of failure). Internal corrosion due to naturally-occurring sewer gases (hydrogen sulfide) destroys the concrete and reinforcing steel in the concrete pipes that make up much of the conveyance system. The most critical identified projects are the Bellevue Interceptor, Lake Hills Boulevard Siphon, and Elliott Bay Interceptor.

Facilities AM projects are prioritized based on condition (less than 2 years left in service life), criticality, obsolescence (parts/service no longer available), and organizational impact (requires up to twice as long to operate compared to normal). Level control system replacements, pump station upgrades, electrical upgrades, West Point pumping systems, and \$40M in South Plant upgrades are some of the most critical projects that have been identified.

Effects of Toxics on the Sound

In November 2018, the King County Council directed WTD to conduct an independent research study on the presence of over 600 toxic chemicals (including contaminants of emerging concern [CECs], pharmaceuticals, personal care products, pesticides, and industrial chemicals) in treated wastewater effluent and in Puget Sound. WTD will assess the potential impact on Orcas and Chinook salmon and assess potential treatment options. The report is due June 2021. WTD assembled a team of independent researchers (WSU-Puyallup fisheries scientists, NOAA, UW-Tacoma, and SGS Axys Lab from Canada). They plan to collect spring and summer samples from the 3 main treatment plants, from the discharge points at West Point and South Plant, and from an area near Vashon Island that represents an average Puget Sound water quality condition. The sampling schedule has been disrupted by the Covid-19 pandemic. Stay tuned for future updates.

Questions?

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