



# Water Treatment Plant Membrane Filter Replacement October 5, 2021



**Presentation By:**  
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# WTP Membrane Filter Replacement Background



- In 2007, the City supplemented its existing granular media filters at the Water Treatment Plant (WTP) with new submerged membrane filters as part of a plant expansion project.
- The membrane filters consist of thousands of hollow fibers contained in cylinders called modules. Suction pressure pulls raw water through the fiber walls, which collect turbidity and suspended solids. Clean water passes through the hollow core of the fibers.
- The City's modules are Memcor S10N membrane filtration modules manufactured exclusively by DuPont Water Solutions.

# WTP Membrane Filter Replacement Background (cont.)



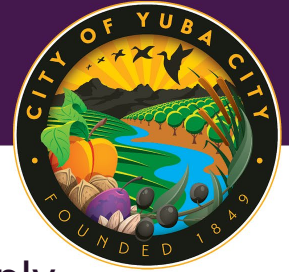
- In October 2019, the State Water Resources Control Board Division of Drinking Water amended the City's permit to specifically include the Memcor S10N membrane filtration modules.
- These membrane filters are an integral repair part compatible with existing equipment and manufactured exclusively by DuPont Water Solutions.
- There are no other suppliers of these integral repair parts.

# WTP Membrane Filter Replacement Analysis



- The WTP has two cells consisting of 800 membrane filtration modules each.
- The membrane modules in Cell #1 were replaced in the spring of 2021 after reaching the end of their 10-year expected service life.
- It is now time to replace the membrane modules in Cell #2.

# WTP Membrane Filter Replacement Fiscal Impact



- DuPont Water Solutions has provided a quote of \$750,904.99 to supply 800 Memcor S10N membrane filtration modules and related appurtenances.
- Capital Improvement Program (CIP) Account No. 971289 (Membrane Replacement) has a current balance of \$800,000.

# WTP Membrane Filter Replacement Recommendation



- Adopt a Resolution authorizing the purchase of 800 Memcor S10N membrane filtration modules and related appurtenances from DuPont Water Solutions in the amount of \$750,904.99, with the finding that it is in the best interest of the City.