

City of McCleary
STAFF REPORT



To:	Mayor Miller and City Council
From:	Kevin Trehwella
Date:	September, 2024
Department:	Water and Wastewater

Wastewater:

In a survey of WWTP with flows ranging greater than 10,000,000gpd to less than 100,000gpd which was Published by Industrial WaterWorld Magazine. In 2011 it was predicted that Annual Wastewater Treatment costs were expected to rise at a moderate pace of 5% over the next five years, and that facilities would have an average spending of \$2.06 (ranging from \$1.23 to \$3.42) per 1000 gallons of water discharged. Also, they were able to determine that treatment cost per 1000 gallons was nearly 15 times greater for plants with flows less than 100,000 gpd, than those incurred by the largest facilities.

In 2023 WaterSense published a report based on the same criteria that the treatment of residential wastewater has increased to \$8.57 per 1,000 gallons.

100,000gpd cost of treatment = \$ 857.00

700,000gpd cost of treatment = \$5,999.00

Recently, I was going through archived files. In those files was a complaint regarding the I&I. That letter, from 1966, was addressed to the city council. What it tells me is that different City council's and City managers have known about this problem for 58 years. I am sure that since it was brought up in 1966, there have been investigations into the causes of the I&I. The last time there was an investigation was in 2013(11years ago), yet very little money has been spent on this problem. Out on Summit one pipe and two manholes were relined.

In the August staff report, problems associated with High I&I flows were highlighted and how they can affect the quality of our City's Wastewater Treatment Plant (WWTP) Effluent. The problems associated with High flows, caused by a large volume of I&I, start with increased hydraulic pressure on the overall processes of the WWTP. The High flows sweep in

dirt and other inert materials. When the flow volume becomes too great the system will switch over to what is termed as "Storm Mode". What this means is treatment process is shortened and of lower quality with more Suspended Solids and Settleable Solids are leaving the SBR and going through the UV disinfection system. This Settleable Solids material along with the increased suspended solids increases the chance that we will have a higher risk of Fecal Coliform in our Effluent going out to Wild cat creek.

It is imperative that we direct funding to resolve the largest portions of the City's I&I problems.

Kevin Trehwella