TO: Mayor and City Council

FROM: Joe Zierden, Public Works Supervisor

RE: Wastewater Facility Study Comments

DATE: May 21, 2024



## **Background**

The waste water treatment facility was constructed in 1978 consisting of the control building, primary treatment pond 1, storage pond 2, storage pond 3 and a 40-acre effluent irrigation field.

Below is a list/date of the major upgrades over the past 46 years at the wastewater treatment facility include:

- Original storage shed and storage addition build dates unknown 1980's to 1990's
- 1 additional storage pond 4 approximately 1992-93
- New spray field zones 1,2,3 (40 acres) approximately 1993
- New spray field zones 4, 5 (40 acres) approximately 2000
- 1 additional primary treatment pond 1A approximately 2004

Facility studies have been performed in 2001, 2011 and 2024. The 2001 study recommended construction of pond 1A and it also indicated a future site for pond 5 north of pond 4, sized at 9 million gallons (2001 study, page 4-16). The 2011 study identified 85% of winter capacity would be reached in 2023 (2011 study, page 11 & 2011 Capacity Analysis). An October 3, 2022 memo to city council on sewer capacities identified 85% of winter capacity would be reached within 5 years. The 2024 study identified a new pond of 10.5 million gallons as needed, along with needed structural repairs/replacement, fencing, gates and operational changes to reduce labor that will improve irrigation efficiency.

The various studies illustrate different approaches and thought processes to future growth and wastewater treatments needs, but all the studies demonstrate consistent growth with recommendations that have been implemented to handle the growth. Previous planning has kept the waster water treatment facility in tune with growth and forward thinking has allowed the facility to be well positioned to handle the upgrades required for the foreseeable future of Breezy Point.