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DISTRICT UPDATE FEBRUARY 2024

The Los Olivos Community Services District (LOCSD) continues to methodically evaluate technical approaches, obtain cost estimates, engage our community, and pursue grant opportunities for feasible wastewater treatment solutions. This past quarter the District:

- Received a progress report for the 30% engineering design and cost estimate on hybrid collection approaches
- Engaged with the City of Solvang to explore the potential use of the City's wastewater treatment plant and understand the related costs
- Installed three new groundwater monitoring wells for a total of five wells installed since November 2022
- Applied for grants in the amount of \$462,500 through the Resources and Development Act (WRDA) of 2024

As noted in prior updates, any final wastewater treatment and water reclamation solution put forth by the Board will be the result of significant community input, environmental review and then subject to a vote by District property owners in accordance with Proposition 218. Since the District is still evaluating technical solutions, no specific timeline for the property owner vote has been established.

Progress Report - 30% Engineering Design and Cost Estimate - Hybrid Collection

The Board of Directors authorized an engineering contract with REGEN, PLLC. to examine a "hybrid" approach to sewage collection on October 16, 2023. At its February 28, 2024 Board of Directors meeting, the District heard an update from REGEN on progress related to the engineering design and cost estimating effort. A final report from REGEN is anticipated in April.

The hybrid collection engineering effort is an attempt to find the most cost-effective mix of collection technologies for our community's wastewater treatment solution. Three collection technologies are being examined:

- 1. gravity-fed collection
- 2. effluent collection
- 3. advanced on-site collection and treatment

You can review the update from REGEN on February 28, 2024 on the District's website at: https://www.losolivoscsd.com/2024-02-28-regular-board-meeting

As a reminder, initial estimates from June 2022 for 100% traditional gravity-fed collection system, coupled with a membrane bioreactor (MBR) treatment plant were just under \$48 million. Based on early comments from effluent collection vendors, a 100% effluent collection system could reduce the total cost by several million dollars. Given that our district is comprised of only 376 parcels, the savings would represent thousands of dollars per parcel. Details and cost estimates for the gravity fed collection design can be found at: https://www.losolivoscsd.com/technical-studies-and-reports.

The REGEN engineering and cost estimating effort is being made possible by a generous grant from Preservation of Los Olivos, a 501(c)4 organization.

Effluent Sewer System vs. Traditional Gravity fed System: Effluent sewer systems use a tank on or near your parcel to separate solids from liquids (see Diagram 1). Once the solids are separated, an effluent sewer system conveys the liquid portion of the sewage to a centralized sewage treatment plant for further processing, as opposed to putting it directly in the ground via a dry well or leach field as is done with your current septic system. As with your current septic system, the solids that remain in the tank are pumped out every three to five years. Sending the liquids to a centralized sewage plant allows them to be treated. As the waste is treated, harmful substances, such as concentrated nitrates, can be removed. The resulting treated liquids can be safely put back into the groundwater table or used for other purposes such as watering landscaping.

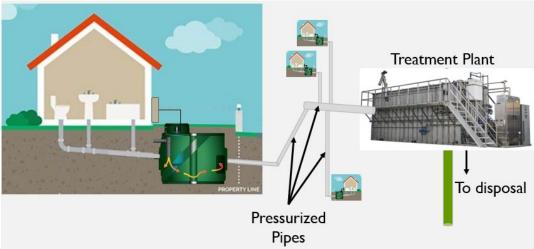


Diagram 1 - Effluent Collection System Example

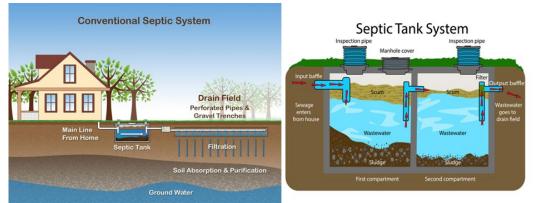


Diagram 2 - Conventional Septic Tank System Example

Most of our conversation about effluent sewer systems has been focused on a specific effluent sewer system known as septic tank effluent pumping, or STEP. With STEP systems, once the initial solids/liquid separation is completed, the liquid portion is pumped *under pressure* to the treatment plant. Using pressure helps solve some of the problems presented by gravity systems. For example, the liquid can easily be "pushed" uphill without additional system components. STEP collection pipes can also be

installed without digging deep trenches required for gravity fed systems. Avoiding deep trenches would likely mean a quicker installation, fewer impacts to our roadways, less disruption in our community, and cost savings.

One of the problems with implementing STEP systems in our community is recently implemented requirements to separate sewage tanks from drinking water lines. Regulations require that community drinking water lines be at least 25 feet from new sewage separation tanks. For many commercial properties and smaller parcels within the District, obtaining this separation is anticipated to be very problematic. For these parcels, gravity fed collection may be the only viable solution. This is one of the reasons why REGEN was tasked with exploring whether a more cost-effective mix of gravity fed and effluent collection techniques is possible.



Diagram 3 – Traditional Gravity Fed System Example

Exploring Use of the City of Solvang's Wastewater Treatment Infrastructure and Related Costs

In January, the LOCSD met with City of Solvang representatives to discuss the possibility of the LOCSD using the City's wastewater treatment infrastructure. On January 22, the Solvang City Council agreed that exploring such a connection could make sense for both entities. No commitments were made by either organization, beyond exploring the technical feasibility and potential costs of sending LOCSD wastewater to the City for treatment. One potential solution would be for the LOCSD to connect to existing City collection pipes near Sunny Fields Park on Alamo Pintado Road. This location represents the closest connection point between City's wastewater infrastructure and the LOCSD district's boundaries. Wastewater would then travel to the City's treatment plant.

The City of Solvang currently operates a Sequencing Batch Reactor (SBR) type wastewater treatment plant with a design capacity of 1.5 million gallons per day. The City's plant has existing excess capacity to receive and treat the LOCSD's estimated average daily flows of 120 thousand gallons per day (0.12 million gallons per day). The City currently receives and treats wastewater from the City of Solvang and the Santa Ynez Community Services District (SYCSD) which serves the town of Santa Ynez. The SYCSD owns 0.30 million gallons per day capacity in the City's plant. The plant provides full secondary treatment of wastewater. The plant discharges treated wastewater to nearby percolation ponds.

District Drills Three Additional Groundwater Monitoring Wells

Earlier this month, the District completed the installation of three new groundwater monitoring wells. This brings the total number of monitoring wells installed within District boundaries since November 20222 to five. Following the installation of the three new wells, water samples were taken from all five wells and sent for testing. Test results are expected in March or April.

Installation of the wells was made possible through a grant from the <u>County of Santa Barbara</u> <u>Environmental Health Services (EHS)</u>.

Recall that one of the key reasons the District lies within a Special Problems Area is due to high nitrate levels in the groundwater table. January 2023 water quality sample test results from our two existing groundwater monitoring wells were:

- Well #1 (MW-1) reported "nitrate as N" at 2.6 mg/L (12 mg/L as N03)
- Well #2 (MW-2) reported "nitrate as N" at 10 mg/L (45 mg/L as N03)

The "nitrate as N" allowed maximum contaminant level (MCL) for drinking water in the State of California is 10 mg/L. This means that MW-1 was below MCL, while MW-2 was right at MCL. Locations of the groundwater monitoring wells can be seen in Figure 1.

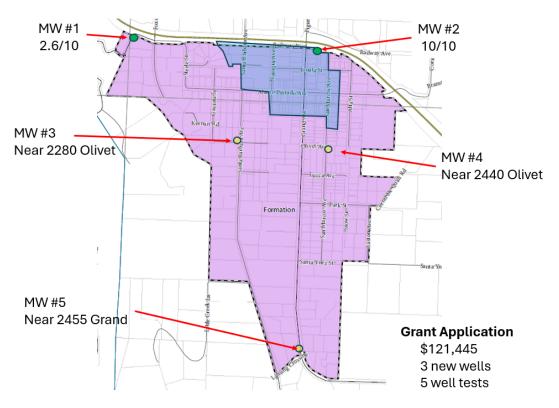


Figure 1 - LOCSD Groundwater Monitoring Wells

District Applies for \$462,500 in Grant Funding Through WRDA

In collaboration with Congressman Carbajal's Office (CA-24), the District applied for \$462,500 in grant funds through the Resources and Development Act (WRDA) of 2024. If approved, the funding will be used to offset costs for the 60% engineering design (\$300,000), environmental impact assessment and review (\$150,000) and provide funds for continued groundwater sampling and testing (\$12,500). WRDA authorizes Environmental Infrastructure (EI) assistance to support local governments in the design or construction of specific water and wastewater infrastructure.

UPCOMING WORK

Community Workshops – The District's Board of Directors is keenly interested in obtaining community input on potential wastewater solutions. In the next few months, the Board of Directors intends to host community workshops on:

- Collection, Treatment, and Disposal of Wastewater
- Wastewater Treatment Plant Location (Siting)
- Development of a Final Project Description

The timing of the workshops will be heavily dependent on receiving the final report from REGEN and information from the City of Solvang.

ABOUT THE DISTRICT: The <u>Los Olivos CSD</u> was formed by voters in 2018 to give Los Olivos residents and property owners within the district local control over a local wastewater management solution and how to provide a funding mechanism for the construction and operation of the facilities needed to collect, treat, and dispose of sewage, wastewater, and recycled water in Los Olivos.

Stay Informed: <u>Attend our monthly meetings</u> in person or virtually to stay current with our efforts to determine the best wastewater solution for Los Olivos. This is the most effective way for you to stay informed, to ask questions and get answers, and to ensure your ideas and concerns are heard. We post video of meetings on our website within 48 hours should you be unable to attend a meeting in person.

Check the District's website for meeting agendas and materials at losolivoscsd.com.

Visit <u>https://www.losolivoscsd.com/subscribe</u> to sign up for email updates. Please encourage your neighbors, local property owners and other interested community members to sign up as well.

If you have any questions about our District's efforts, please contact Guy Savage, General Manager, at <u>gm.locsd@gmail.com</u> or call him at (805) 500-4098.