Thomas Fayram, President Brad Ross, Vice President Mike Arme, Director Lisa Palmer, Director



PO Box 345, Los Olivos Ca 93441 Telephone (805) 500-4098 <u>losolivoscsd@gmail.com</u> www.losolivoscsd.com

## **DISTRICT UPDATE AUGUST 2022**

The Los Olivos CSD was formed in 2018 to give Los Olivos residents and property owners local control over how to provide a funding mechanism for the building and operation of the facilities needed to collect, treat, and dispose of sewage, wastewater, and recycled water in Los Olivos.

Your Board is steadfast in its commitment to implementing a cost-effective wastewater treatment solution that benefits all District residents, property owners, and the business community. Any final wastewater treatment and water reclamation solution put forth by the Board will be the result of significant community input and is subject to a vote by District property owners in accordance with Proposition 218. This proposed solution must also protect our groundwater quality and meet the regulatory requirements of the Central Coast Reginal Water Quality Control Board and the County of Santa Barbara.

For the past year, we have been diligently gathering information on potential system types and designs, along with cost estimates for those possible solutions, but have made no final decisions on a collection system type or treatment facility site. This information gathering and development of design options have been largely funded by County of Santa Barbara and State of California grants.

The bulk of this information gathering should be concluded in the next several months. I hope you are attending our monthly meetings in person or virtually to stay current with our information gathering efforts and future deliberations about the best solution for Los Olivos. This is the best way for you to stay informed, to ask questions and get answers, and to ensure your ideas and concerns are heard.

Here is a brief summary of our work the last few months:

Public Workshops on Septic Tank Effluent Pumping (STEP) Systems and Membrane Bioreactor (MBR) Treatment Plants: The Board held two workshops in June and July to provide the community with more information about Septic Tank Effluent Pumping (STEP) Systems and Membrane Bioreactor (MBR) Treatment Plants.

In June, we heard a very interesting presentation from <u>Orenco</u> regarding their <u>Advanced On-Site</u> and <u>Prelos</u> Septic Tank Effluent Pumping (STEP) solutions. In July, <u>Cloacina</u> provided an overview of packaged Membrane Bioreactor (<u>MBR</u>) wastewater treatment solutions.

**Wastewater Collection and Reclamation Project Update:** At our upcoming August 10<sup>th</sup> meeting, our engineering contractor Stantec will provide an overview of the 30% Design and associated costs. While the Stantec presentation will only focus on gravity fed sewage collection coupled with a MBR treatment solution, residents should know that the use of STEP is still being evaluated and may be part of the solution recommended by your Board.

**Collection and Treatment:** When thinking about wastewater treatment, it is often helpful to separate approaches and technologies used during the collection of wastewater from the systems used to treat the wastewater.

## Collection

We are primarily focused on two potential collection approaches: gravity fed and septic tank effluent pumping (STEP). Gravity fed collection is what most of us think of when we think of sewer systems. When using a gravity fed system, a large pipe is placed in the ground and all the waste from your home or business flows, by gravity, downhill. Once the waste reaches a low-point or the bottom of the hill, it is either pumped uphill using a lift station or treated at that location. Importantly, should we decide on a gravity fed approach, all our septic tanks would be replaced with piping that connects to the community-wide sewage pipes and nothing, beyond the pipes, would remain on your property.

With STEP collection, our septic tanks would be replaced with a tank system that operates much like a septic tank. However, instead of disbursing the waste effluent into a leach field, the effluent would be sent via a pressurized pipe to a centralized treatment facility. The facility would remove the nitrates and other impurities that resulted in our community being designated as a special problems area in 1972. Since the pipe is pressurized, the collection system could be simpler. Much like our septic tanks, STEP tanks do need occasional pumping and cleaning. The Board has made no determination about who would be responsible for this maintenance. However, future discussion will be held about whether this would be a District or a homeowner responsibility should STEP be chosen as the preferred collection approach.

## **Treatment**

Our District is primarily focused on packaged MBR wastewater treatment solutions given their lower costs and ease of construction and installation. Like traditional wastewater treatment facilities, MBR packaged systems use a series of physical and biological processes to separate contaminants in the waste stream. The resulting effluent can then be disinfected using ultraviolet light or other approaches. Following extremely high standards, such as those called out in Titles 17 and 22 of the California Code of Regulations (CCR), treated effluent can be safely reintroduced into the groundwater basin or used for other applications. For example, you will often see "purple pipe" being used by large municipalities to reuse the recycled water for irrigation, agriculture, and industrial purposes. In some communities, the recycled water undergoes further treatment and is reintroduced directly back into the drinking water systems (aka turned into potable water). Because of the high levels of treatment, all of these options are on the table for effluent disposal. We will learn more about the costs and benefits of disposal options with our effluent disposal study results, due to be reviewed by the Board in October.

**30% Design and Associated Cost Estimates:** In early July, the District received and posted on its website (<a href="https://www.losolivoscsd.com/technical-studies-and-reports">https://www.losolivoscsd.com/technical-studies-and-reports</a>), the 30% design documents that were delivered by Stantec. The documents provide the first detailed look at a district-wide <a href="gravity fed collection">gravity fed collection</a> and MBR treatment. This district-wide "master plan" approach is the only way to fully understand the costs and benefits of potentially implementing a solution in phases or all at one time. Our August 10 Board meeting will include a presentation by Stantec on the design documents and related cost estimates.

The design estimates include the costs for buildout of all three zones (Zone 1 commercial parcels, Zone 2 commercial-adjacent residential parcels, and Zone 3 residential parcels). The design documents offer estimates for both a wastewater treatment plant constructed near the south end of the District (\$46,200,000) and to the north of the District (\$47,800,000). The northern solution is more expensive as it will require significantly more pumping of waste. Given the variability of existing septic solutions and their locations, the estimates do not include costs for the pipes needed to connect a business or residence to the shared collection infrastructure (aka lateral connections). The design documents are useful to understand how a gravity fed system will work in our community and what it will cost; they are also useful to our Assessment Engineer in their financial modeling, and provide the first real opportunity for us to begin pursuing significant state and federal grants and other financing that will impact how much each of us will pay to implement the wastewater treatment and reclamation project. Given the magnitude of the estimates, grants will certainly be required to significantly offset the costs to property owners for our project to move forward.

**Selection of Assessment Engineer:** At the May 11 Board meeting, the District hired NV5 as its Assessment Engineer. Using the 30% design documents, the Assessment Engineer has begun working on financial models that will be used to develop property owner assessment estimates for the costs associated with the development and operation of the wastewater collection and reclamation system. The estimates will take into consideration the Board's efforts to develop a mix of grant and financing options focused on reducing costs to the District's property owners and residents. The Assessment Engineer's models will detail financing and benefit assessment information in an Engineer's Assessment Report that will be shared with the public prior to the property owner benefit assessment vote required by Proposition 218.

**Effluent Disposal Study:** Also at the May 11 Board meeting, the District hired <u>GSI/Confluence ES</u> to perform an effluent disposal study. The study primarily looks at all options for what can be done with the resultant effluent (water) after it has gone through all treatment processes and the costs associated with each option. The study will evaluate and provide cost estimates for the following potential effluent disposal options:

- 1. Percolation ponds
- 2. Percolation chambers
- 3. Shallow aquifer injection well(s)
- 4. Alamo Pintado Creek outfall
- 5. Disposal by sale for reclaimed (recycled) water use

While it is important to explore all options and understand their costs and benefits, the Board has expressed keen interest in #3 – shallow aquifer injection and #5 – reuse.

**Board Elections:** As noted in the July meeting, four seats are up for election this November – three seats are for four years, while one seat is for two years. If you are interested in running for election to the Board of Directors, visit the County of Santa Barbara's election page at: https://www.countyofsb.org/793/Candidate-Filing.

**Hybrid Meetings for the Foreseeable Future:** In April 2022, your Board voted to continue holding hybrid meetings until further notice in order to maximize community access and participation. The public can attend Board meeting in person at St Mark's in the Valley Episcopal Church - Stacy Hall or remotely using the Zoom information provided with each <u>agenda found on the district website</u>. Meetings are held beginning at 6:00PM on the Wednesday that follows the second Tuesday of the month. A special thank you to St. Mark's for welcoming the District and allowing us to hold our public meetings where residents can easily participate.

The remaining regular meetings scheduled for 2022 are:

August 10 September 14 October 12 November 14

December 14

Got 60 Minutes for an Informative Overview of Wastewater Treatment and Water Reclamation? The Stuff You Should Know (SYSK) Podcast dropped a "How Wastewater Treatment Works" episode on April 16, 2020. The episode, typical of the Podcasters, is laced with tangents quips, and Simpsons references, plus sea monkeys and the artist formerly known as Prince even get mentioned. To quote the authors, "All that gross stuff we humans put in the water that gets flushed down the sewers has to be taken back out before that water is reintroduced to the environment. That's the ideal, and it's essential to staving off the imbalance people bring to the planet." Listen at: <a href="https://www.iheart.com/podcast/105-stuff-you-should-know-26940277/episode/how-wastewater-treatment-works-61277066/">https://www.iheart.com/podcast/105-stuff-you-should-know-26940277/episode/how-wastewater-treatment-works-61277066/</a>

**Stay Informed:** Check the District's Website for meeting agendas and materials at <u>losolivoscsd.com</u> or phone us at 805-500-4098. You can also email the General Manager at <a href="mailto:sml.lossd@gmail.com">sml.lossd@gmail.com</a>.

If you haven't already, please go to <a href="https://www.losolivoscsd.com/subscribe">https://www.losolivoscsd.com/subscribe</a> to sign up for email updates. Please encourage your neighbors 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 <a href="mailto:gm.locsd@gmail.com">gm.locsd@gmail.com</a> or call him at (805) 500-4098.