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# DISTRICT UPDATE JULY 2023

The Los Olivos Community Services District (LOCSD) continues to methodically evaluate technical approaches, obtain cost estimates, gather information, and pursue grant opportunities for feasible community wastewater treatment solutions. This quarterly update includes information on:

- Technical Solutions Under Consideration
- LOCSD 2023-24 Budget
- Groundwater Monitoring Wells
- Adding Transparency Through Subcommittees
- Wastewater Treatment Solutions
- County of Santa Barbara Housing Element Update

The LOCSD Board is steadfast in its commitment to implementing a cost-effective wastewater treatment solution that benefits all LOCSD residents, property owners, and our business community. Any final wastewater treatment and water reclamation solution put forth by the Board will be the result of significant community conversations and input and is subject to a vote by District property owners in accordance with Proposition 218.

**Los Olivos Community Services District – Collection, Treatment, and Disposal**
You may recall, at the January 2023 workshop, community members stated a clear preference about wastewater disposal options. Attendees overwhelmingly said they would like to see subsurface percolation chambers, coupled with reuse, for final disposal of our wastewater. This helps us define what level of treatment is required prior to disposal. At that same meeting, there was significant discussion about collection and treatment. While attendees at the meeting expressed that cost should be the highest consideration when selecting solutions, no specific front-runners were clearly identified for collection or treatment.

Recently, your District Technical Subcommittee has been looking at hybrid solutions for collection and treatment, and reexamining our view of implementation zones. The subcommittee has developed an approach that would combine both traditional gravity-fed collection, Septic Tank Effluent Pumping (STEP) collection and treatment, and advanced on-site treatment solutions.

Under the Technical Subcommittee's approach, gravity-fed collection would be used in commercial areas and smaller lots in the District. Larger lots, which are further away from downtown or that are on the west side of Alamo Pintado Creek, would be evaluated for either STEP treatment and collection or advanced on-site treatment. At our upcoming Thursday, August 24 meeting, it is anticipated that a review of the approach by the full Board of Directors could lead to a contract with a wastewater consultant who will further examine the plan for feasibility, appropriateness, alternatives, and cost.

While the District has mostly focused on Membrane Bioreactor (MBR) treatment solutions due to their compact size and relatively low costs, the Technical Subcommittee has discussed looking at alternative solutions raised during public comment and a potential revisit of connecting to the Solvang treatment facility to better understand the potential costs and tradeoffs.

**District Budget Update**

On July 12, your District Board of Directors approved our budget for fiscal year 2023-24, which runs from July 1, 2023 to June 30, 2024. If you would like to review the proposed budget that was approved, visit: https://www.losolivoscsd.com/fy-2023-24-proposed-budget

If you have been attending our meetings, you know that the District is not currently able to complete all the substantial study and design work needed because it exceeds our annual revenue. The District has identified approximately $800,000 of efforts (not including groundwater monitoring) we would like to complete in the next couple of years, but we only have an annual budget of $200,000. Consequently, the District continues to focus heavily on obtaining grants to close the funding gap. You can see the efforts targeted for completion in the table below.

**LOCSD - Septic to Sewer / Water Reclamation Roadmap - WORKING DRAFT**

| | 2023 | | 2024 | | | | FY 2023-24 | Total | Well |
|---|---|---|---|---|---|---|---|---|---|
| **Task** | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Costs | Costs | Costs |
| **Board and Public Education** | | | | | | | | | |
| Public workshops and outreach | | | | | | | | | |
| **Engineering / Design** | | | | | | | | | |
| Technical Review | | | | | | | | | |
| Additional Technical Study / Design | | | | | | | $90k+ | $90k+ | |
| Final Project Description | | | | | | | | | |
| 60% Design | | | | | | | $300k+ | $300k+ | |
| Assessment Engineer Report including benefit factors/rates | | | | | | | $50k+ | $50k+ | |
| Finalize siting options | | | | | | | | | |
| **Environmental Review** | | | | | | | | | |
| Environmental study, assessment and report (incl. public review) | | | | | | | $100k | $150k+ | |
| **Grants and Financing** | | | | | | | | | |
| MHI study | | | | | | | $50k+ | $50k+ | |
| Develop financing plan | | | | | | | | | |
| Seek grants and financing | | | | | | | | | |
| **Prop 218 - Property Owner vote on proposed project** | | | | | | | | | |
| Polling for election feasibility | | | | | | | | $25K | |
| Conduct Prop 218 workshops with public | | | | | | | | | |
| Voting process | | | | | | | | $125k | |
| **Monitoring Well(s)** | | | | | | | | | |
| Find funding for well monitoring program | | | | | | | | | |
| Drill three additional monitoring wells | | | | | | | | | $150k+ |
| Monitoring of wells, completed every 6 months (5 years) | | | | | | | | | $150k |
| | | | | | | **Total** | **$590k+** | **$790k+** | **$300k+** |

**Groundwater Monitoring Well Update**

The District continues conversations with both the Central Coast Regional Water Quality Control Board (CCRWQCB) and County of Santa Barbara Environmental Health Services (EHS) regarding additional testing of our two existing groundwater monitoring wells, and installation and testing of three additional wells. Installation of three new wells, coupled with five years of testing, is estimated to cost $300,000.

Gaining a better understanding of septic tank impacts on our shallow groundwater table is important. But, at this time, your District Board is placing a higher priority on bringing a solution to you via a Proposition 218 vote. Consequently, our limited and precious funds are being targeted towards expenses that lead to finding solutions and the District will only be completing the three new wells if grant funds can be found to pay for them.

Prior to the two wells we installed last November, no testing was consistently performed on the shallow groundwater aquifer within the LOCSD boundaries for more than 30 years. These wells are expensive, each costing the District $75,000 to install. The water quality sample test results from our two groundwater monitoring wells in January were as follows:

- 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" 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.

Measurements of the depths of water in the shallow groundwater aquifer were completed by the County in May to assess the impact of last winter's storms. Groundwater was encountered more than 40 feet closer to ground surface than last November's samples. Water was encountered around 44 feet below ground surface for MW-1, while water was encountered just 29 feet below ground surface for MW-2. To learn more about our groundwater monitoring wells, visit:
https://www.losolivoscsd.com/district-drills-two-groundwater-monitoring-wells

**Reconstituting Subcommittees to Increase Transparency**

Also at the July 12 meeting, your Board made all of its existing ad hoc subcommittees standing committees. Previously, the technical, project management, and grant subcommittees were treated as ad hoc committees. While ad hoc subcommittees are temporary and more nimble than standing committees, your Board of Directors wanted to ensure that there was as much transparency as possible and full compliance with Brown Act requirements as we move towards a Proposition 218 vote. If you are interested in attending any of these meetings, please reach out to the District's General Manager at gm.locsd@gmail.com and he will add you to a mailing list to ensure you receive agendas for all of our upcoming Brown Act meetings.

**A Reminder About Wastewater Treatment Processes – Collection, Treatment, and Disposal**

As has been discussed in previous updates, the wastewater treatment process can be simplified into three basic processes: **collection, treatment, and disposal.** These same three processes are currently used at different scales and complexity by individual properties with septic tanks, small systems such as the ones installed at Dunn and Mattei's Tavern, and municipal systems such as the one operating in Solvang.

With your septic tank, collection is a short pipe that leads from your house to your septic tank. Treatment includes the solids separation and bacterial decomposition processes that occur in your septic tank. Final treatment and disposal occur as wastewater is moved through your tank into a leach field or drywell and absorbed into the soil on your property. Note that wastewater flowing through your septic tank is only minimally treated. It is the soil absorption that removes much, but not all, of the harmful contaminations before they reach our groundwater. Septic tank wastewater often contains harmful bacteria, viruses, and nutrients that could make you sick if it comes into direct contact with drinking water.

Systems such as the ones at Dunn or Mattei's Tavern have a more complex collection system than an individual septic tank. These collection systems have numerous pipes that gather waste from different buildings and channel them, often through gravity, to a centralized treatment facility on their property. The centralized treatment facility is also more complex than your septic tank. For example, the system operated by Dunn uses a series of engineered textile media (essentially filters) to treat wastewater, thereby producing water that is over 95% cleaner than the wastewater that entered the system. Disposal then occurs using what is essentially a very large leach field. Similar to septic tank disposal, wastewater from these types of system contains bacteria, viruses, and nutrients that could make you sick if it were to

come into direct contact with your drinking water. It is important to note that wastewater from these systems can be additionally treated to allow it to be used for landscape irrigation and other situations that do not require potable water. When wastewater is used for landscape irrigation**,** it travels through a purple pipe system that helps to delineate the difference between treated wastewater (non-potable) and water that is safe to drink (potable).

In larger municipal systems like Solvang, the collection and treatment of wastewater is much more complex than either your septic tank or the comparably smaller system at Dunn. As with smaller systems, the collection of wastewater from homes and businesses is through a series of pipes. The pipes from homes and businesses, regularly referred to as "laterals," are owned by the property owner until the point where they are connected to the city's pipes. Wastewater travels through the city's pipes to its treatment facility. Depending on topology, the city's collection system may need to use pumps or lift stations to "lift" the wastewater uphill where it can again flow via gravity or be pressurized to eventually get it to the treatment facility. The Solvang treatment plant is capable of processing 1.5 million gallons per day (MGD). The plant provides secondary treatment of wastewater and disposes treated wastewater through percolation ponds that are located adjacent to the plant. To learn more about the Solvang plant, visit their website at: https://www.cityofsolvang.com/165/Wastewater-Division

**More on Treatment and Disposal**

Once at a treatment plant, wastewater often goes through four steps before disposal:

1. Preliminary treatment (where screens are used to separate large and medium-sized solids)
2. Primary treatment (where gravity is used to separate and remove smaller solids)
3. Secondary treatment (where biological processes remove organic matter and nutrients such as nitrogen, and additional gravitational settling occurs), and
4. Tertiary treatment (an optional step that uses UV light, chemicals or other approaches to eliminate pathogenic agents such as fecal bacteria so that the wastewater can be reused for landscape irrigation and, in some cases, used for human activity).

As noted previously, tertiary treatment is an optional step and, depending on discharge requirements, it is very common for wastewater treatment to end after the secondary treatment step. For example, treatment for the City of Solvang stops after secondary treatment and they then use percolation ponds for disposal of the treated wastewater. As we heard at our January workshop, there are many disposal approaches that can be used. Depending on the level of treatment completed by a municipality, disposal options can include subsurface discharge (injection wells or chambers), reuse (purple pipe for landscaping and crops), direct release into surface waters such as a riverbed, and in other manners. The pros and cons of disposal approaches considered by the LOCSD can be found in the Effluent Disposal Study completed last December. The study is located on the District's website at:
https://www.losolivoscsd.com/files/38814b37d/Effluent+Disposal+Alternatives+Evaluation+v4+2022.12.14.pdf

**County of Santa Barbara Housing Element Update**

Have you ever wondered how plans for future growth and construction of housing are completed? The process starts with the State of California who identifies needs and objectives for housing for every Californian as a "matter of vital statewide importance and a priority of the highest order" (Government Code Section 65580). This objective has become increasingly urgent in recent years as communities across the state, including Santa Barbara County, struggle to meet the housing needs of all of their residents.

State housing element law, established in 1969, recognizes that in order for the private market to adequately address housing needs and demand, local governments, including the County of Santa Barbara,

must adopt land use plans and regulatory systems that provide opportunities for housing production within their jurisdictions. All cities and counties must meet their "fair share" of regional housing needs, which are determined by the California Department of Housing and Community Development (State HCD) through a Regional Housing Needs Allocation (RHNA) for every housing element planning period. For the current planning period, State HCD assigned a RHNA of 24,856 total new housing units to our county. The Santa Barbara County Association of Governments, for the 2023-2031 planning period, has allocated 5,664 of these units to unincorporated areas of the county.

So, why is the County's Housing Element Update part of the District's Update? As we look at wastewater solutions, we too must think about and plan for potential additional wastewater generation from future construction in our community over the coming decades. While no specific RHNA number is assigned to Los Olivos, we know that some of the housing units will be built in or around our District. These units, which could include accessory dwelling units (ADUs), affect our plans for wastewater treatment collection and treatment. If you are interested in seeing the full County of Santa Barbara Housing Element Update, visit: https://www.countyofsb.org/3177/Housing-Element-Update

**ABOUT THE DISTRICT:** The Los Olivos CSD was formed by voters in 2018 to give Los Olivos residents and property owners within the district local control over 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:** 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 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 all meetings on our website should you be unable to attend a meeting in person.

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

Visit https://www.losolivoscsd.com/subscribe to sign up for email updates. Please encourage your neighbors, 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 gm.locsd@gmail.com or call him at (805) 500-4098.