



Los Olivos Community Wastewater Program Project Description

OUR PURPOSE

The Los Olivos Community Services District (District) was formed by voters in 2018 to provide a funding mechanism for the development, building and operation of facilities necessary to collect and treat wastewater in the unincorporated community of Los Olivos.

PROJECT GOAL

The purpose of the Los Olivos Wastewater Reclamation Program Project Description (Project Description) is to define a strategy to provide economically viable wastewater treatment and reclamation solutions to the residents and property owners within the District that meets public health needs and the regulatory requirements of the Regional Water Quality Board (RWQCB).

The Los Olivos Wastewater Reclamation Program is comprised of four distinct components, each being interdependent and implemented concurrently:

1. Development of Residential Onsite Wastewater Treatment System (OWTS) Requirements
2. Financial Outreach and Assistance for Program Development, Construction and Operation
3. Implementation of a Local Groundwater Monitoring Program; and
4. Phased Collection and Treatment

DEVELOPMENT OF RESIDENTIAL OWTS REQUIREMENTS

Currently, residential Onsite Wastewater Treatment System (OWTS) in Los Olivos are governed by the Santa Barbara County Public Health Department's (County EHS) Local Area Management Plan (LAMP).

Los Olivos residents who seek County EHS guidance on OWTS-related issues have been repeatedly met with ambiguous and indistinct direction regarding dwelling expansion, system failure, need for installation of an advanced treatment system (ATS), existing system maintenance and other issues and costs associated with requirements for connection to a community collection and treatment system.

To resolve this the District will develop a customized Local Area Management Plan (LAMP) that addresses the conditions specific to the Los Olivos Community Services District Area. This Plan will be similar to the County's LAMP but tailored to Los Olivos. This Plan will include local District standards and policies and provide clear guidance on OWTS matters including operations of conventional systems, routine maintenance, management of existing low and high-risk systems within the community, dwelling expansion, system failure, requirements and need for installation of an advanced treatment system (ATS) and requirements for connection to a community collection and treatment system.

The District's LAMP will endeavor to establish requirements that are equal in nature and application to those required for all County parcels based on existing site conditions.

The District will be charged with the administration of the RWQCB approved Los Olivos LAMP to include the State mandatory reporting requirements. Permitting and enforcement of the LAMP will remain with the County EHS through an agreement approved by the County and the District extending the County EHS authority to within the District.

The creation of a District governed LAMP benefits residents by enabling the District to seek out grants and low interest loans, competitive procurement of select vendors, and consortium-based pricing from service providers.

FINANCIAL OUTREACH AND ASSISTANCE

Concurrently, the District - having held Public Community Workshops which presented potential project alternatives, a project approach and Project Description - is now able to seek Local, State and Federal funding mechanisms to minimize property owners and business economic impacts associated with implementing the defined Program.

With this well-defined Project Description, the District will pursue available grants and funding for all elements and components of the Program.

Every potential source of funds will be explored to minimize any eventual Fee Assessment that must be established in accordance with State Law (Proposition 218), and as required by the Local Agency Formation Commission (LAFCO).

The District will also seek additional sources to augment these economic impacts that may include but are not limited to public-private partnerships (P3), identifying matching fund opportunities, Program Privatization, and commercial/private financing alternatives.

A public-private partnership (P3) is a cooperative arrangement between two or more public and private sector entities, typically long-term in nature. They are primarily used for infrastructure provision, such as the building and equipping of schools, hospitals, transport systems, water and sewer systems.

IMPLEMENTATION OF A LOCAL GROUNDWATER MONITORING PROGRAM

The District remains committed to proactively work with the residents of Los Olivos, regulatory community and other stakeholders to develop an economically acceptable, technically feasible and timely solution to the potential impacts OWTS density has in our community.

However, one of the basic tenants to this approach is dependent on the development and implementation of a comprehensive groundwater monitoring program. Historical assessments, plans and feasibility studies developed specifically for Los Olivos validate the need for further groundwater characterization in order to:

- Determine the nature and extent of groundwater impacts associated with OWTS in and around the Community of Los Olivos,
- Investigate known upgradient sources impacting groundwater quality in Los Olivos,
- Provide information to address data gaps associated with site specific conditions and critical modeling considerations including infiltration rates, permeability and other geological, hydrological and geotechnical parameters not currently available, and
- Establish baseline conditions that can be utilized to monitor the effectiveness of treatment and mitigation measures implemented in the Los Olivos Community.

The District will work closely with the Santa Barbara County Environmental Health Services (EHS) and the Regional Water Control Board (RWQCB) to develop and finance a groundwater monitoring work plan that establishes the number, type and locations for monitoring locations, a suite of analytical and geotechnical sampling parameters, along with frequency and reporting requirements.

Once the work plan is approved, installation of monitoring points and ongoing monitoring will occur. The results of the initial and ongoing monitoring will be used to influence subsequent treatment phases, if necessary, within the District.

The analytical and geotechnical data obtained during groundwater monitoring point installation, will also be used to identify and site locations favorable for aquifer recharge and existing contaminant mitigation.

PHASED COLLECTION AND TREATMENT

Historic documentation establishes the fact that there are a large number of small to very small lots in the Los Olivos Commercial Core, areas of high OWTS density and historic records of system failures. These factors may contribute to groundwater impacts from nitrate migration from OWTS.

This Commercial Core area has been selected as the location for the initial phase (Phase I) under this Program. The Commercial Core has been identified as the area of highest density, use (volume) and nitrate loading and has been recommended for action in multiple reports specific to OWTS impacts in Los Olivos. Subsequent phases into adjacent high-density areas will be determined by the results of groundwater monitoring.

The Commercial Core area is easily defined by Zoning (C-2), easily expanded, centrally located and its topological nature allows for the most expedient, least complex and economically acceptable setting to initiate this Program.

The District will design, site, permit, procure, construct and manage a Los Olivos Wastewater Reclamation Facility to include the associated collection and transport infrastructure required to provide economically viable wastewater treatment and reclamation solution to District residents and property owners. This system will address public health needs while also meeting the regulatory requirements of the RWQCB.

Adjacent properties outside the C-2 zone, will be permitted to connect to the system at their own cost and as capacity allows.

Treatment Facility

The proposed Treatment Facility will be consistent with the policies and development standards of the Santa Barbara County Comprehensive Plan, including the Santa Ynez Valley Community Plan and the Santa Barbara County Land Use and Development Code.

The system will be designed for potential future expansion and to provide treatment that improves wastewater quality before it is reused, recycled or discharged to the environment. Reclaimed wastewater would be treated to levels compliant with California Code of Regulations (CCR), Title 22 discharge requirements to allow for:

- Beneficial reuse through underground infiltration
- Groundwater recharge
- Strategic flushing of existing nitrate/contaminates
- Local irrigation as site conditions allow

Because the project will generate in excess of 10,000 gallons per day, exceeding the 10,000 gallons per day County EHS limit, it will be under the jurisdiction of the Central Coast Regional Wastewater Quality Control Board, who would be the lead regulator agency, review the system and issue all appropriate permits.

The treatment facility will be comprised of a high-efficiency, low odor, expandable Membrane Bioreactor (MBR) package plant sized to serve Phase I needs and sited to accommodate modular expansion should further study warrant a facility expansion. The facility will be operated by a California licensed and properly trained wastewater treatment plant operator, who will be responsible for ensuring proper operation and maintenance of plant equipment as well as required reporting.

The architectural style will be consistent with the historical architectural details of Los Olivos. Roof materials will consist of earth tone colors and landscaped to blend in locally to reduce visual impacts.

Collection System

The collection system will include a subsurface wastewater collection structure consisting of gravity pipelines, lift stations as required, and effluent handling facilities returning drinking water quality reclaimed water to customers or the groundwater basin for beneficial reuse.

The collection system “backbone” will consist of underground gravity sewer pipe that will be strategically placed under community streets and alleys to allow for the closest possible connection to parcels in the high-density water use areas of the downtown C-2 Commercial Core and small-lot residential parcels near the downtown core. Maintenance holes and an “end of the line” lift station will be provided, with an associated force-main (pressure main) to move the wastewater to the MBR package plant for treatment, as necessary.

Structures will be connected to the District-owned collection system via privately owned laterals. Existing septic systems and leach fields will be abandoned as required by local codes. Certain laterals may be successfully connected with gravity flow while many may require small private grinder pumps to move the sewage into the collection system.

District participation in lateral, grinder pump and septic abandonment costs would depend on grant and funding sources.

Potential expansion of the collection system, as with the treatment system, will be determined based on results of the groundwater monitoring and in coordination with the RWQCB.

Operations and Maintenance

The collection and treatment systems will be operated and maintained initially by contract system operators. System costs will be shared in an equitable manner by those connected to and benefitting from the facility. The District will review and consider established formulas for this participation that may include zoning, water-use, fixture unit counts, etc.

Parcels not connected initially will be subject to the District’s LAMP and will contribute to the cost of management, inspection and enforcement of this plan and operating costs of the District.

Ongoing monitoring and reporting will occur in accordance with operating and discharge permits required by the Board.

Treatment Facility Siting

The District will procure a site for the package plant. Siting factors will include:

- Availability of land,
- Surface and subsurface suitability,

- Economics of procurement,
- Proximity to the collection system and effluent discharge locations, and
- Local, state and federal requirements.

Location and siting of the facility remains under examination. Given the above siting factors, the District prefers that the location be within District boundaries and south of State Route 154. Currently, potential locations include:

- County parcels
- County Right of Ways
- Institutional parcels including churches and schools
- Commercial parcels, and
- Private land

Construction Implementation and Timing

Construction will generally consist of the following phases:

1. Project planning, preliminary design, environmental documentation preparation and review, and permitting.
2. Preliminary design, budgeting, and initiation of the Proposition 218 assessment process.
3. Final Design, including preparation of plans, specifications and estimates. The package plant will be a “design build” component.
4. Advertising and bidding of the various components. The District will procure professional and construction services in accordance with the State Contracting Code. The package plant will be built offsite, most other components will be built by contractors on-site.
5. Service lateral connections will be coordinated with and completed in conjunction with sewer trunk-main installation.
6. Package plant start-up.
7. System Operation and Maintenance.

Construction timing will be affected by many factors, including funding process, environmental process, and construction duration. Lateral connection is anticipated to require significant property owner participation and cooperation.

The District anticipates a minimum of three years to design, review, permit, finance and construct the complete Phase I project.