

# case study

## Transforming Wastewater Management at One Hope Winery.

In today's fast-paced and competitive wine market, One Hope Winery recognized the need for a transformative approach to stay ahead of the curve. By leveraging innovative strategies and embracing change, One Hope successfully redefined its wastewater system, leading to significant savings and improved operational efficiency, with a focus on sustainability.

*“Hydros Agritech transformed our wastewater from a land-intensive liability into a compact, revenue-enabling, water-reusing asset,” said Frank Klobberdanz, One Hope Winery Construction/Operations Engineer.*

### THE CHALLENGES

As a highly utilized 10-acre property with winery, residential, and hospitality uses competing for space, One Hope Winery needed an alternative to traditional wastewater solutions (leach fields), which consume valuable vineyard and development land.

The team sought an integrated, efficient treatment solution that could compress infrastructure without limiting growth, while seamlessly processing both winery and domestic waste streams. Enter Hydros Agritech.

### THE HYDROS AGRITECH SOLUTION

One Hope partnered with Hydros Agritech to design and implement the integrated wastewater system.

By using an in-pipe biological treatment technique while capitalizing on a novel permitting approach under the California State Water Board, Hydros Agritech conceived a system that enabled safe surface reuse of treated water. Wastewater is now routed through an engineered piping network where a proprietary microbial community naturally lives within the pipes, breaking down contaminants as water flows through the system.

More than a treatment solution, it represents a fundamental redesign—transforming how water and land are utilized to create a more efficient, compact, and sustainable system.

### KEY SYSTEM BENEFITS

#### Stabilization

- Buffer and equalization tanks to stabilize variable wastewater inputs

#### Efficiency

- Sensor-driven activation to optimize treatment efficiency
- In-pipe biological treatment, eliminating the need for large, external processing infrastructure

#### Sustainability

- On-site recycled water storage for reuse
- Minimal physical footprint, with core operations housed in a small utility structure, offering a low-profile, aesthetically unobtrusive solution

### RESULTS

- **Land-Use Efficiency:** The system eliminated the need for traditional leach fields, allowing the winery to reclaim approximately **one acre** of usable land.
- **Water Reuse & Conservation:** Treated water is stored and reused for landscape irrigation, reducing reliance on groundwater and supporting more sustainable water management practices.
- **Cost Reduction:** Designed as a low-cost system, it reduces both capital and operational costs.
- **Proven Performance:** The system has been in continuous operation for nearly three years, serving as a scalable, future-facing solution as water constraints and regulations tighten.