

# LOWE ENVIRONMENTAL IMPACT Wastewater Management

Wastewater management is an essential issue for every community. As urban and rural populations grow, the challenge of safely discharging treated wastewater becomes increasingly important. Effective discharge solutions are critical to protecting waterways, ecosystems, and public health.

LEI specialises in designing and implementing discharge systems that are environmentally responsible, technically sound, and tailored to the unique needs of each site. Whether it's land treatment, surface water discharge, or exploring innovative reuse strategies, our team ensures that wastewater is returned to the environment in a way that meets regulatory standards and supports long-term sustainability.

## Regulatory Requirements

Wastewater producers and managing councils must comply with both the local and regional council regulations as well as navigating Taumata Arowai requirements. Many council policies promote consideration of land treatment.

## Land Treatment of Wastewater

Land treatment aims to beneficially use the applied 'waste' material for productive use, while using the environment to provide further treatment through nutrient sequestration and removal, evapo-transpirative uptake and atmospheric loss, and pathogen reduction.

## Decentralised Wastewater Design and Management

Our solutions provide a range of treatment options; from onsite systems with simple, passive treatment and soil dispersal to more complex and mechanized approaches that collect and treat waste from multiple buildings and discharge to land.

## Municipal Wastewater Design and Management

LEI has experience with a wide range of wastewater treatment technologies available including traditional small community options such as oxidation ponds and wetlands, through to tertiary treatment options such as UV treatment or oxidation.

## How can Lowe Environmental Impact (LEI) help you?

Our wastewater management expertise includes:

- **Development of Sustainable Land Treatment Solutions to Manage Wastewater**
  - On a small or large scale, from individual dwellings to reticulated communities
- **Industrial Sites**
  - Provides integrated solutions
  - Builds on & refines existing infrastructure
  - Practical & cost effective
- **Comprehensive Oversight**
  - Design and consenting
  - Build and installation
  - Commissioning
  - Monitoring & reporting
- **A Collaborative Process**
  - Initial assessment of alternatives
  - Implementation of selected solutions
  - Focus on achieving your goal in a cost-effective manner

## Nutrient Management

LEI combines expertise in farm systems and soil science to enable sophisticated nutrient management approaches to be developed. This ensures the opportunity to utilise nutrient from treated wastewater is optimised while the farming operation remains compliant and profitable.

