

Fact Sheet Pilot Site Ireland



THE POWER OF EARTHWORMS

INNOQUA is a four-year EU-funded Horizon 2020 project. Bringing expertise from multiple disciplines, the 20 project partners are seeking to demonstrate a novel, modular system for wastewater treatment based on the purifying capacity of earthworms, zooplankton and microalgae, operating under real conditions.

Due to its modular configuration, the INNOQUA system can address multiple aspects of wastewater treatment and water re-use in water stressed communities, rapidly expanding cities and industries – both in developed and developing countries. The decentralised approach helps to reduce pressure on inadequate wastewater networks while reducing the water and energy demands of typical centralised wastewater treatments – supporting sustainable development. INNOQUA has installed pilot and demonstration sites in 11 countries (France, Ireland, Italy, Romania, Scotland, Spain, Turkey, Ecuador, Peru, India and Tanzania) to showcase the long-term viability of modular and locally sustainable solutions under real conditions. The modules include lumbrifilter, daphnia filter, bio-solar purification and UV lamp. The sites provide a robust platform for scientific research and act as a focus for local training and dissemination activities.

KEEP IN TOUCH – innoqua-project.eu





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SEPTIC TANK

LUMBRIFILTER

R DA

DAPHNIAFILTER

RETENTION TANK





Inspecting the lumbrifilter at NUI Galway WRF

PILOT SITE TUAM

Tuam is located in the county of Galway 35 km north of Galway city. The town has a population of 8,500 people and is the site of the NUI Galway Water Research Facility (WRF), next to the Tuam Wastewater Treatment Plant. The INNOQUA system at this pilot site is treating municipal wastewater from the town. The wastewater also comprises stormwater during rainfall periods.

BENEFICIARIES: The INNOQUA system installed is designed for a 10 population equivalent and would be able to treat 1.5 m³/day. The treated water would be suitable for discharge to surface water and some re-use applications. Applications include small decentralised villages or businesses and single houses.

DESIGN CAPACITY: 10 population equivalent SOURCE OF WASTEWATER: Municipal

SPECIFIC SCIENTIFIC RESEARCH OBJECTIVES

The purpose of this pilot site is to test various technology configurations and operational regimes.

CONFIGURATION: In Tuam the INNOQUA system comprises a lumbrifilter, daphniafilter and UV lamp, installed on the outflow from a primary settlement tank.

LOCATION: NUI Galway Water Research Facility, Killaloonty, Tuam, County Galway, Ireland

To arrange a visit to this site, please contact the INNOQUA partner whose details are provided below.



Location of pilot site (see green tanks)

This demo site is run by the INNOQUA partner



WEBSITE: CONTACT: www.nobatek.inef4.com Eoghan Clifford Senior Lecturer Civil Engineering at NUIG eoghan.clifford@nuigalway.ie





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