

# Water Guidelines

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#### 1. Purpose

University of Galway is committed to the effective and efficient use of water resources because we recognise the economic and environmental cost of providing safe, clean drinking water and the need to safeguard the supply for the future. Concerted efforts to reduce water consumption have been ongoing across the campus for more than a decade, from extensive leak detection and repair to improved monitoring, equipment upgrades and the adoption of behaviour change campaigns.

We are committed to continuing to reduce water consumption and to highlighting the importance of water as a critical and limited resource and eliminate all unnecessary water usage on campus. We will engage staff, students and visitors in responsible water usage on campus and by example, encourage responsible water use practice in the wider community. We will continue to lead and contribute to water research providing sustainable local and global solutions for water resource management, supply and treatment. Through research-led teaching and on campus applied solutions, we will ensure that our future water professionals are cognisant of best, sustainable practises in water resources management, treatment and supply.

In line with our Water Stewardship Charter and Sustainability Strategy 2021-2025, our strategic aims are:

- To raise awareness with staff, students and visitors of water as a critical and limited resource that must be used responsibly.
- To reduce water usage on campus by 10% by 2025 based on 2019 baseline
- To eliminate all unnecessary water usage on campus, to maintain and further improve the water usage reductions achieved on campus in the last period.
- To utilise new technologies and methods to reduce water consumption in our laboratories and research labs
- To eliminate the reliance of staff, students and visitors on single use plastics for water consumption.



# 2. Legal framework

This document has been developed within the context of:

- Urban Wastewater Treatment Directive 1991
- Habitats Directive 1992
- Water Framework Directive 2000
- Dangerous Substances Directive 2006
- Waste Water Discharge (Authorisation) Regulations 2007
- Drinking Water Regulations 2023

# 3. Certified water stewardship

University of Galway has achieved the Certified Water Stewardship badge, demonstrating that key staff have undertaken a course designed to show leadership and set goals/targets in reducing water consumption. The University of Galway Water Stewardship Charter outlines our key actions and targets. The Charter commits to maintaining and achieving further reductions in water usage on campus and to highlighting the importance of water of as a critical and limited resource. It aims to ensure that our future water professionals are cognisant of best, sustainable practices in water resource management, treatment and supply, through research-led teaching and oncampus applied solutions.

## 4. Measurement and reduction of water consumption

University of Galway measures the total volume of water that is taken from mains supply and has installed a system of metering and sub-metering to monitor water consumption across the main campus and other campuses. These data are analysed to identify leaks, large water consumers and opportunities for reducing water consumption. Water-saving devices are installed in laboratories, kitchens workshops and WC facilities across the campus, e.g. low-flow taps, dual flush WCs, time control on urinal flushes and showers, and low-flow shower heads. Water usage reduction is incorporated as a key project design component as part of new buildings and retrofits, e.g. water efficient sanitary fittings, rainwater harvesting systems, leak detection, water sub-metering, and presence detectors controlling the water supplies to washrooms. Water-efficient irrigation practices are used to minimise water usage for plants, landscapes and gardening. See also engagement and research.



## 5. Water reuse

University of Galway measures and strives to maximise water reuse through greywater and rainwater harvesting.

#### 6. Drinking water and single-use plastics

University of Galway is committed to reducing single-use plastics for water consumption by increasing drinking water facilities, improving signage and implementing a programme of education and awareness. We have installed a network of over 30 drinking water fountains on campus, which provide free drinking water for students, staff and/or visitors. This contributes to our efforts to reduce single-use plastics on campus in line with the Waste Reduction, Reuse & Recycling Guidelines.

## 7. Wastewater, trade effluent and pollution prevention

University of Galway works under a water discharge licence with Irish Water through Galway City Council and all our wastewater discharge goes into the Galway City Council public sewer network and treated by the Galway Wastewater Treatment Plant. This plant is licensed by the Environmental Protection Agency (EPA) which outlines strict guidelines and quality control for wastewater treatment. We thereby abide by the water quality standards and guidelines for water discharge laid out in European and Irish legislation and guidelines.

University of Galway's Carna Research Station is a leading facility for aquaculture research and development on a diverse range of marine finfish, shellfish and seaweed species. The wastewater discharge is under license with Galway County Council and discharged water is tested monthly by Complete Laboratory Solutions with all results sent to GCC for reference.

University of Galway has a Trade Effluent licence in compliance with Irish regulations, which governs the discharge of all our liquid waste (other than domestic wastewater and stormwater). University of Galway complies with the conditions of our Trade Effluent Licence across our Campus including food services, research facilities and our sports facility.



All wastewater in laboratories in University of Galway are trapped at source with water going through dilution traps which are cleaned and changed every 6 months, this reduces any chemicals entering the waste treatment systems.

The University of Galway main campus is adjacent to a Special Areas of Conservation (SAC), designated under EU and Irish law as it contains several ecologically important habitats and species. We manage the watershed and prevent polluted water entering the water system thereby protecting aquatic ecosystems and species.

## 8. Engagement and research

University of Galway raises the awareness of staff, students and visitors of the importance of water as a critical resource that must be used responsibly. We engage staff, students and visitors in responsible water usage and water consumption reduction at a building level and beyond by providing water consumption information and inviting inquiry and feedback. We will continue to lead and contribute to research activities in water resources management, water usage reduction, water supply and water treatment. We share knowledge and information with the wider community about sustainable water practices locally and globally and by example seek to encourage responsible water use beyond the campus. We use research-led teaching and on campus applied solutions to instil sustainable water practice in our future generations of water professionals.