

Oxford Brookes Water Action Plan

Annual report 2021/22

Background:

The Oxford Brookes Water Strategy and Action Plan have been developed to meet the objectives of our Social Responsibility Framework, Environmental Policy and integrate into the University-wide 2035 Strategy. Improving the water efficiency of our organisation will save us money, reduce our impact on the environment and enhance our reputation.

National Framework:

A core pledge of the UK Government's [25 Year Environment Plan](#) (2018) is to protect our natural world and leave it in a healthier state for the next generation. The Environment Plan sets out the government's goals for clean and plentiful water and to reduce the risks of harm from environmental hazards. The [Environment Act](#) was passed by parliament in the autumn of 2021 and sets out how the Government will maintain environmental standards and build on the 25 year strategic plan. Part 5 of the Environment Act brings together measures to strengthen and update the existing regulatory and long-term planning framework for water, helping to reduce environmental risks the measures in the Bill address eight stewardship elements for water:

- Water resources management plans: The current statutory water resources planning process is being amended to ensure there is more effective collaboration between water companies and other sectors to manage supply and demand, deliver resilience against droughts, and facilitate environmental improvement through a better understanding of environmental need.
- Drainage and sewerage management: for the first time the bill makes drainage and sewerage management planning a statutory duty.
- Storm Overflows: reducing the harm from discharges of storm overflows in England is a UK government priority.
- Water industry regulation: the bill sets out to modernise the process for modifying water and sewerage company licence conditions enabling Ofwat to improve its regulation.
- Water abstraction: Steps are being taken to further minimise the environmental risks from water abstraction.
- Water quality: the bill provides powers to enable the Secretary of State to maintain the list of priority substances used to assess the chemical status of water bodies

The bill will be partly enacted through the [Environment Act](#), which became law in 2021 and acts as the UK's new framework of environmental protection. Once the UK left the EU, rules on nature

protection, waste reduction, water quality, clean air and other environmental protections that originally came from Brussels were at risk, this Act is intended to fill the gap.

Water Strategy

VISION

A culture of efficient water use and management across our estate, in line with our Social Responsibility Framework, the Environmental Policy and the 2035 University Strategy.

KEY DRIVERS

1. Maintain our reputation as a sustainable and socially responsible organisation
2. Maintain legislative, regulatory and stakeholder compliance
3. Conserve our limited water resources through efficient use

OBJECTIVES

- Ensure compliance with legislation, regulation and stakeholder requirements
- Quantify, monitor and report water use
- Analyse, assess and benchmark water use
- Develop SMART targets and KPIs to measure progress
- Design in water efficiency measures
- Avoid surface water contamination and comply with all trade effluent consents
- Promote water conservation best practice

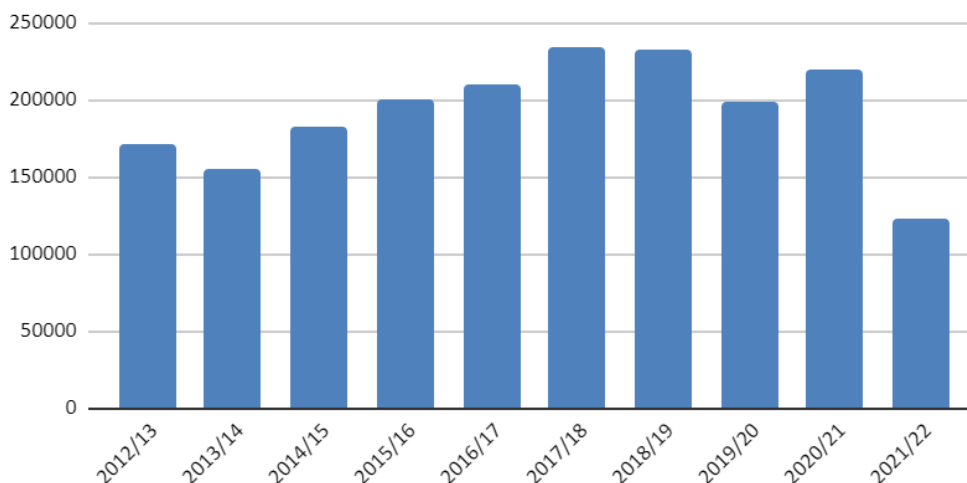
Aims of the Water Action Plan

To deliver the requirements of the University Water Strategy. The Water Action Plan details actions to be taken by faculties and directorates enabling us to meet our objectives and high level targets for effective water management. Lower-level targets/actions have been set as detailed below in ANNEX 1.

Annual Reporting:

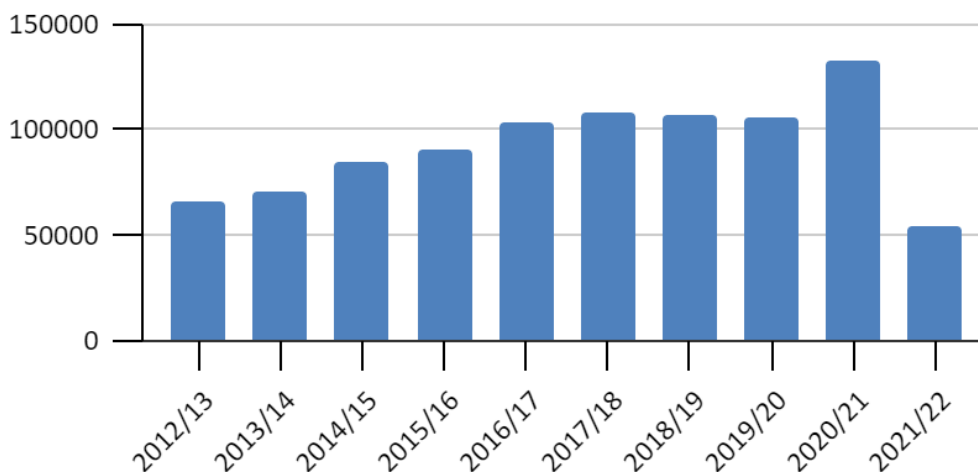
Year 2021/22 shows a significant decrease in annual water usage to levels significantly below any previous year's water use (baseline data 2012/13). The nine year average (2012-2021) equates to water use levels at approximately 200,000 m³ per annum, this year shows a reduction to 123,000 m³.

Graph 1 - Annual water use reporting (m³)



Reduction can be partly attributed to a decrease in student accommodation and building occupation rates at Clive Booth Student Village (CBSV), Crescent Hall, Warneford, Wheatley and Headington Hill. However, the main contribution and significant decrease can be attributed to the building closures at the CBSV, where the water supply has now been effectively shut-off to the site under redevelopment. This site has had a significant underground water leak problem for some time, contributing up to 60% of the total water use across our portfolio in peak years.

Clive Booth Student Village - Annual water use reporting (m³)



Historically, all water leaks when visible were fixed by the mechanical services team, but there was a continuing water leak across the site caused by old infrastructure. Whenever a leak was fixed it placed extra pressure further down the system and within a short period of time further underground leaks and increased water use were being recorded, with no other visual signs. New infrastructure will be delivered at part of the redevelopment of the site, so these issues should now be resolved. It must be noted though that water use will increase when occupancy rates increase across the portfolio in line with our development plans.

We have recently changed water retailer provider with the appointment of 'The Energy Consortium' (TEC) to act as a third party broker for the supply of water, wastewater and ancillary water services. This will be delivered and managed through a framework agreement between TEC and WAVE a trading name for Anglian Water. Thames Water were also commissioned in the spring of 2022, they reduced flow rates to our showers and taps across our residences and fixed faulty components, which would have contributed to our water use reduction, this service was free. Total water leak fixes per site are as follows:

- Headington Hill/Clive Booth = 18,300 litres per day ~ £14k pa.
- Gipsy Lane = 4,572 litres per day ~ £3,500k pa.

Now the issue of significant water leakages has been resolved, new targets for residential and non-residential properties will be proposed.

High Level Targets 2021&22

1. Quantify, analyse and report baseline water use.
2. Develop new SMART targets & KPIs.
3. Maintain Emergency Response Plan.

This action plan will be reviewed annually by the Environmental Sustainability Team and signed off by the Estates and Campus Services senior leadership team.

ECS SLT sign off date: 5/10/2022

ANNEX 1 : Water Action Plan

Key – Target ■ = Achieved. ■ = Partially Achieved / in progress. ■ = Not Achieved

Objective	2021/22 Actions / Targets	Reporting on 2020/21 targets / actions	Timeframe
Quantify & monitor water use	Track baseline water use	Achieved: Baseline water use	On-going
	Evaluate data and report annually	Achieved: Annual report to SLT/VCG and EMR data.	On-going
Develop SMART targets & KPI's	Develop new SMART targets & KPIs	Not Achieved: Lack of resource - the Environmental Compliance Officer is now in post this will be delivered for this academic year,	July 2022
Design in water efficiency measures	New buildings: Work with Projects team to ensure incorporation of water efficient technology. using the BREEAM Wat 01 calculator. A minimum of a 50% reduction in water use shall be achieved compared to the BREEAM baseline. Alternatively fixtures and fixtures can be specified to performance level 4 in Table - 34: Water efficient consumption levels by component	Achieved: As stated in Sustainable Design Checklist for new and refurbished buildings, Section 3a	Ongoing

Objective	2021/22 Actions / Targets	Reporting on 2020/21 targets / actions	Timeframe
	type (BREEAM Technical Guide 2014 page 200-201)		
Prevent surface water contamination	Emergency Response Plan completed	Partially Achieved: Spill response procedures and training in place. Major Incident and Business Continuity Manager to update the Business Continuity Plans in 2022 (interim manager in post) Drainage plans require progressing as part of our redevelopment programme	Ongoing
Promote water conservation	Develop campaigns and messaging to educate staff and students in water conservation behaviour	Partially Achieved: This was included in the NUS Green Impact programme, with supporting posters and stickers to report leaks.	~