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Blue Health

Visiting water bodies worth £700bn to economies, study finds

Europeans spend more than £700 billion (€800bn) a year on recreational visits to water bodies - but perceived poor water quality costs almost £90 billion (€100bn) in lost visits, a new study has found

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The new research – led by a European collaboration involving the University of Exeter and the University of Stirling – used data from 11,000 visits in 14 different countries to analyse the economic value of water bodies, such as rivers, lakes, waterfalls, beaches and seaside promenades.

The research team estimated that people spend an average of £35 (€40) travelling to and from these sites, with a typical family making 45 such trips each year.

The team also found that people were much less likely to visit sites if the perceived water quality fell, at a cost of well over €100 billion per year. The finding highlights the importance of maintaining and improving high bathing water quality standards.

Published in *Science of the Total Environment*, the team's calculations indicate that, across Europe, total expenditure relating to trips to water-based settings is in excess of £700 billion annually.

Professor Tobias Börger, of the Berlin School of Economics and Law, used data collected as part of the European Union-funded BlueHealth project, which surveyed more than 18,000 people on their use of water bodies and their health and wellbeing. He explained: "The COVID-19 crisis has taught us all, how important access to natural green and blue spaces is for people's mental health and wellbeing. Our research highlights that it's also critical for the economy to maintain high standards of water quality, as the pandemic crisis begins to ease."

Following a Directive adopted by the European Commission, across the EUmember states, more than 15,000 coastal and almost 7,000 inland designated bathing water sites must now prominently display signs stating water quality over the past four years. Around 95 per cent of sites meet minimum quality standards and are considered safe for bathing, while 85 per cent are rated as having excellent water quality.

Professor Danny Campbell, from the University of Stirling, a co-author on the study, added: "While the study reveals that changes in water quality matter to people, we found that household income and educational attainment are not related to visiting water bodies. This shows that all parts of society can and do

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enjoy the benefits of such visits in terms of recreation, health and wellbeing."

The findings fit well with a growing body of work looking at people's experiences of inland and coastal waters and health across Europe. Co-author of the study, Dr Mathew White at the University of Exeter, said: "Blue spaces benefit people in a variety of ways. They encourage physical activity, they help de-stress and relax people, and they are important places for spending quality time with family and friends, all things which help people's mental and physical health. This research finds that good water quality is key in encouraging people to take up these benefits."

The team hopes their study will help planners and regulators justify the costs of building and maintaining the infrastructure needed to keep bathing water quality high.

Journal: Science of the Total Environment

Title: The value of blue-space recreation and perceived water quality across Europe: A contingent behaviour study

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About the University of Exeter Medical School

The University of Exeter Medical School is part of the University of Exeter's College of Medicine and Health. Our mission is to improve the health of the South West and beyond, through the development of high quality graduates and world-leading research that has international impact. As part of a Russell Group university, we combine this world-class research with very high levels of student satisfaction. Exeter has over 19,000 students and is ranked 12th in The Times and Sunday



Times Good University Guide 2020. The University of Exeter Medical School's Medicine course is in the top 10 in the Complete University Guide 2020.

The College's Medical Imaging programme is ranked in the top 5 in the Guardian Guide 2020 and the Complete University Guide 2020. The University of Exeter entered the world top 20 for Biomedical and Health Sciences in the CWTS Leiden Ranking 2019, based on the percentage of publications ranked in the top 10 per cent most cited.

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The University of Stirling is ranked fifth in Scotland and 40th in the UK for research intensity in the 2014 Research Excellence Framework. Stirling is committed to providing education with a purpose and carrying out research which has a positive impact on communities across the globe – addressing real issues, providing solutions and helping to shape society. Interdisciplinary in its approach, Stirling's research informs its teaching curriculum and facilitates opportunities for knowledge exchange and collaboration between staff, students, industry partners and the wider community. The University's scenic central Scotland campus – complete with a loch, castle and golf course – is home to more than 14,000 students and 1500 staff representing around 120 nationalities. This includes an ever-expanding base for postgraduate study. The University received a Queen's Anniversary Prize in the latest round of awards, in recognition of the quality and innovation exhibited by its Institute of Aquaculture. The University is the UK Sports University of the Year 2020, as conferred by The Times / Sunday Times Good University Guide.

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[Translate to English:]

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