

Lake Windermere, Lake District National Park

Reforming the water sector visit note

Date: Wednesday 9 September 2026

Location: Lake Windermere, Cumbria

Attendees

- Mr Alistair Carmichael (Chair)
- Sarah Bool
- Charlie Dewhirst
- Sarah Dyke
- Ben Goldsborough
- Terry Jermy
- Henry Tufnell

Purpose of the visit

The Committee visited Cumbria as part of its ongoing thematic inquiries into the Future of farming, Land use and nature, and Reforming the water sector. This visit note covers the part of the visit focused on Reforming the water sector.

The Committee visited Lake Windermere. Given its status as part of a National Park and a UNESCO World Heritage site, the pollution of the lake has garnered a lot of media attention. 2023 Environment Agency data suggests that rural land use contributes around 28-41% of pollution, storm overflows contribute around 17-25% and United Utilities sewage treatment works contribute around 12-22%.¹ Private sewage systems and other sources of run-off also contribute. The purpose of this visit was to hear about the issue of sewage in Lake Windermere from a range of stakeholders. The Committee met with representatives from [Love Windermere](#), a campaigner from [Save Windermere](#), [United Utilities](#), and the organisations behind [Only Rainwater into Windermere](#).

¹ Environment Agency, [New data identifies amount of pollution from different sources in Windermere](#), 20 December 2023

Meeting with Love Windermere

The Committee met with representatives from [Love Windermere](#), a partnership of organisations with a shared interest in addressing pollution in Lake Windermere. The partnership is made up of nine lead organisations:

- Cumbria Tourism
- National Park Authority
- Westmoreland and Furness Council
- National Trust
- National Farmers Union (NFU)
- South Cumbria River Trust
- Lake District Foundation
- Love Windermere Business Group
- United Utilities

A representative from the Lake District National Park Authority (LDNPA) explained that the physical geography of the area made good soil management particularly important, because the steep hills and high rainfall made run off a significant concern. To this end, LDNPA is working in partnership with farmers.

The UK Centre for Ecology & Hydrology samples the water in Windermere every two weeks, which has created a massive evidence base. Attendees explained that this evidence base makes Lake Windermere one of the most studied water bodies in the UK. Systematic monitoring on Windermere began in 1930, meaning that there are decades of data to draw from.

A researcher explained that, contrary to public perception, not all water quality metrics in Lake Windermere are worse when compared to historic data. While some measurements have deteriorated, others have improved. In addition, they explained that the changing baseline for certain characteristics of the lake (e.g. water temperature), means that an increasing level of intervention is needed to see an improvement in water quality.

There was concern from some representatives that the perception of a polluted and unsafe lake would impact tourism, which many of the businesses operating around Lake Windermere are reliant on, including hotels, catering outlets, and companies running boat trips.

The NFU talked about a programme involving 25 farms in the catchment area. They are sampling soil on the in-bye (the land enclosed and lower down) land to monitor the phosphate levels and pH of the soil. The findings indicate that the legacy soil nutrients could be enough to maintain yields for some years, although the pH of the

soil may need to be correct to make the phosphate accessible. The number of years for which legacy nutrients can support will vary from farm to farm, and thereafter a maintenance amount of fertiliser would need to be applied. The biggest barrier to this practice is the need for sufficient evidence to support decision making, which has a cost to businesses already operating on very tight margins.

Meeting with Environment Agency

The Committee held a meeting with the Environment Agency to discuss their enforcement and monitoring in the Windermere catchment area. The Environment Agency highlighted the 400% increase in the number of inspections carried out across England, and the increased number of prosecutions they had pursued. The Committee was interested in the driving force behind the Environment Agency's change in approach, and how things had got to this point. The representative from the Environment Agency explained that the focus on keeping bills down had meant that the management of and investment in assets had not always been a priority, and this had led to the issues with leaks and non-compliance.

The Environment Agency talked about their expectations for United Utilities, around respecting regulation, compliance as default, and an incident rate no worse than the sector norm. They are encouraging United Utilities to move from fix on fail to a more proactive approach to asset management.

The Committee asked about how the Environment Agency was able to act as a regulator and an advisor, and the need to maintain a distance from the water companies it is regulating. The Environment Agency representative explained that the line was that the Environment Agency was very interested in the status of single point of failure assets, but would not be involved in investment decisions. There was discussion about the necessity of the new integrated regulator keeping a similar distance.

Meeting with United Utilities

United Utilities met with the Committee on the site of the new Ambleside Wastewater Treatment Works. The discussion was primarily about the investment plan for the Windermere catchment. United Utilities has set out a programme of five years of accelerated investment, spending £200 million in the Windermere catchment over 2025-30. It aims to be 20 years ahead of the government target for no more than ten sewage overflow spills a year, and the company is creating a lot of extra storage capacity to achieve this aim.

United Utilities also talked about the community engagement work they have done in the area. For example, it has worked closely with the local Park Run and village football team to avoid planning objections for the construction of the new Treatment Works. It has set up a high street information centre and runs monthly tours of the new Wastewater Treatment Works to help the local community understand what is happening.

Representatives also talked about the work United Utilities is doing to build skills and provide employment, and to make United Utilities a desirable place to work. It has its own apprenticeship centre where they aim for “best in class” skills.

United Utilities staff talked the Committee through various performance metrics. When challenged on whether outperforming other water companies who are known to be underperforming is impressive, United Utilities explained that they are aiming to be an industry leader as engineers and asset managers, not just compared to the water industry.

Meeting with Save Windermere

The Committee met with the founder of the [Save Windermere](#) campaign, Matt Staniek. Matt talked the Committee through how the campaign had started, what the issues were, and what progress had been made.

As highlighted in other meetings, Matt noted that Lake Windermere is subject to greater public attention than other bodies of water. Save Windermere’s aim is for Lake Windermere to be “a shining example of what freshwater should look like”.

Matt started by outlining the ecological impacts of sewage being discharged into Lake Windermere. Lake Windermere is home to sensitive fish which are at risk of extinction, and algal blooms are a major threat to them and their spawning grounds. He explained that Lake Windermere is naturally an oligotrophic lake, meaning that it should be nutrient-poor and oxygen-rich, but human impacts have changed this.

Matt identified several feedback loops that are exacerbating the problems. Rising temperatures throughout the year, and particularly hotter summers, are increasing lake water temperatures. This can result in more frequent and more intense algal blooms and increase the thermal stratification of the lake. The increased thermal stratification prevents the more oxygen-rich surface water from mixing with the deeper water, reducing the oxygen at depth. When algae die, they sink to the bottom and decompose, which consumes oxygen and further reduces the oxygen at depth. Matt also highlighted other pressures, including population growth.

As in other discussions, the potential impact on the visitor economy on which the Lake District depends was highlighted, but it was also identified as a pressure on the lake, as an increase in visitor numbers increases the volume of sewage.

Matt explained that Save Windermere believes that sewage being discharged is the primary driver of the pollution issues in Windermere. He argued there are three causes of pollution: sewage (treated and untreated), septic tanks, and agriculture.

However, he was clear that the view of Save Windermere is that agriculture in the Windermere catchment is not the source of the nutrients in the lake. The farming in the area is not dairy, poultry, or arable, all of which are more closely linked to water pollution. Matt said that much of the farmland in the catchment is in various agri-environment schemes, and that it is low-intensity farming. He felt that the assumptions from the Environment Agency around causes of pollution were based on agricultural practices that are not present in the catchment. He also mentioned a study which analysed sediment from 200 years of algae assemblages, and concluded it was wastewater, not agricultural run-off, which was the cause. He also noted that, in the 1980s, there were more livestock and more fertiliser use in the catchment than there is today, but the condition of the lake has not improved, which would be expected if that was the cause of pollution.

There are also many private sewage systems in the catchment: 89 larger sites operating under Environment Agency permits, and up to 2000 smaller sites, in the form of cesspits, septic tanks, and package treatment plants. Matt explained that there is a mechanism which allows the water company (in this case United Utilities) to take over a private sewage system if property owners apply to the company and there are likely to be environmental risks. This mechanism has been rarely used, but Save Windermere is running a campaign which has helped more than 200 properties apply to United Utilities to be connected to mains sewerage. Save Windermere's motivation is that private systems cannot have enough nutrients effectively removed to protect Windermere's water.

Save Windermere's conclusion was that United Utilities was responsible for most of the nutrient load in the lake. If the sewage in the lake was stopped, the algal blooms and water quality issues would stop. Matt felt that a primary driver was longstanding inadequate investment in assets, and while the investment plan United Utilities are delivering would address illegal discharges, further action was needed.

Matt praised the changes being made in the catchment: there had been a clear improvement in United Utilities asset management, and the Environment Agency was reviewing discharge permits in the area. He felt this was a direct response to the work of the Save Windermere campaign. Save Windermere argued that, while

good progress is being made and there is a sense that the Environment Agency and United Utilities intend to make a difference, if the campaigners take the pressure off, there will be no impetus to keep the work going. Matt explained that there have been similar campaigns and initiatives in the past, which have aimed to address pollution in Windermere, but that they have been short term and have not made a significant difference.

Only Rainwater into Windermere

The Committee's final meeting at Lake Windermere was with the Only Rainwater into Windermere coalition, who are working on a feasibility study into hard engineering solutions for removing both sewage and highway run off entirely from the catchment.

Sewage treatment is able to reduce phosphorus levels to the lowest possible technical level, but in ecological terms this may not be low enough.

The coalition brings together:

- Environment Agency
- Lake District National Park
- Love Windermere Partnership
- Save Windermere
- United Utilities
- Westmorland and Furness Council