Drinking Water Quality in Private Group Schemes and Small Private Supplies - 2022



Key Findings In 2022

- One in 30 private water supplies failed to meet the drinking water standards, compared to 1 in 734 public water supplies. Compliance in private supplies has not improved.
- The total number of small private supplies remains unknown as not all have registered with their local authority.
- ➤ There was an increase in the monitoring of registered small private supplies in 2022 to 84% of supplies monitored compared with 75% monitored in 2021.
- ➤ Failure by water suppliers to register, variability in accessing funding for improvements and poor management at some private group schemes were just some of the key issues identified in the government review of the rural water sector and these need to be addressed.

Introduction

Private Group Schemes (PGS) are set up by community groups. PGS source, treat and distribute drinking water to their scheme members. There are around 380 private group schemes serving almost 200,000 people.

The National Federation of Group Water Schemes (NFGWS) represents and works with the community-owned rural water services sector in Ireland. The NFGWS assists both local authorities and group schemes identify and address water quality issues and risks.

Small Private Supplies (SPS) provide water to many rural commercial and public activities e.g., national schools, creches, holiday accommodation and premises providing food and drink. This water is often sourced from a groundwater well. There are almost 1,700 SPS registered with local authorities but there may be many more that have not registered. Thousands of people use these supplies each day as they provide water to employees, customers, and service users.

Local authorities have responsibility for ensuring that private drinking water supplies are monitored for compliance with drinking water standards. The results of monitoring undertaken in 2022 can be found on the EPA SAFER website ¹.

The **water supplier** (PGS or SPS) is legally responsible to ensure that all water supplied by them is wholesome and clean, does not present a risk to human health, and meets the requirements of the Drinking Water Regulations (SI 99 of 2023). Figure 1 below highlights steps that water suppliers with groundwater wells can take to protect their water supplies from contamination.



FIGURE 1: Steps to protect your well.

Compliance in Private Group Schemes

Year	<i>E. coli</i> - Supplies compliant	THM Supplies compliant
2021	95.7%	93.3%
2022	96.5%	94.7%

E. coli

The presence of *E. coli* bacteria in drinking water indicates that the supply has been contaminated and the water has not been fully disinfected. Water sources must be protected as drinking water contaminated with *E.coli*, can cause serious gastrointestinal illness.

In 2022, 13 supplies, supplying approximately 5,500 people, failed the standard for *E.coli* (see Figure 2). This means more than 1 in 30 supplies failed to reach the standard, compared to public supplies where only 1 in the 734 supplies failed.

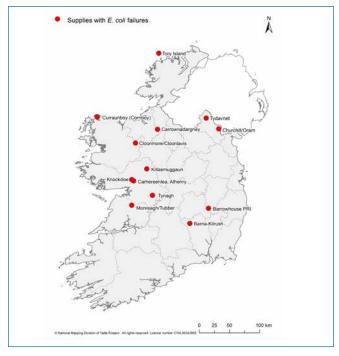


FIGURE 2: Private group schemes with E. coli failures in 2022

THMs

THMs are formed when natural organic matter in the water source, such as vegetation, reacts with chlorine used in the disinfection treatment process. THM levels should comply with the drinking water quality standards, while ensuring that the water is fully disinfected. In 2022, 16 PGS supplying 14,000 people failed the standard for Trihalomethanes (THMs).

In 2020, the European Commission stated that Ireland had failed to take the measures necessary to ensure THM compliance in 13 PGS. During 2021 the Commission escalated Ireland's case to the European Court of Justice. Actions to prevent THM failures need to be prioritised, to protect public health.

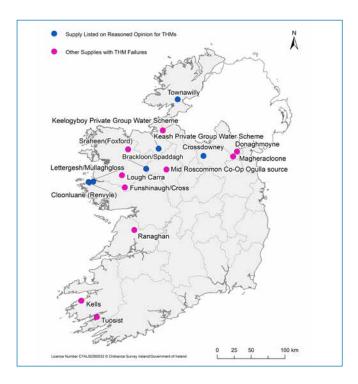


FIGURE 3: Private group schemes with THM failures in 2022

Compliance in Small Private Supplies

Year	E. coli - Supplies compliant	Supplies monitored
2021	95.4%	75%
2022	95.5%	84%

The total number of small private supplies (SPS) in the country remains unknown as not all private suppliers are registered with their local authority. Current drinking water legislation does not require private suppliers to self-register, and this needs to be rectified. If the local authority doesn't know about a supply, they cannot register it or monitor it. The EPA strongly encourages SPS owners to register with the local authority to protect the health of their customers and employees.

Of the 1,700 SPS registered, approximately 84% were monitored by the local authorities in 2022. This is up from 75% in 2021 and shows a significant improvement in the number of supplies monitored. Despite this improvement, all private supplies must be monitored annually in line with drinking water legislation, so greater effort is needed by local authorities to monitor all supplies and protect public health.

Monitoring results show drinking water quality in SPS is below where it needs to be, and far less than the 99.86 % compliance seen in public water supplies.

Department of Housing, Local Government and Heritage

The **Department of Housing, Local Government and Heritage (DHLGH)** is responsible for water policy and making funding available for improvements to private supplies through the Multi-Annual Rural Water Programme (MARWP). A review of the rural water sector was completed in January 2023 on behalf of the DHLGH. The review identified a significant number of issues that need to be examined by the DHLGH to improve the workings of the rural water sector and protect public health. Issues highlighted in the report include:

- ➤ All private water supplies should be registered with the local authority.
- ➤ Access to funding for water quality improvements varies greatly across local authorities resulting in available funding not being used.
- ➤ Measures are needed to improve management at underperforming private group schemes.

The DHLGH must address the issues identified in the review as a matter of priority to improve water quality in the sector.

Improving practices in private group schemes

The National Federation of Group Water Schemes works with private group schemes to protect and improve drinking water quality. They provide training to help private group schemes implement a water safety plan approach which is now required under the new Drinking Water Regulations (SI 99 of 2023). Its particular focus on integrated source protection planning (ISPP) has a dual benefit of improving drinking water quality and protecting natural water sources. The ISPP approach is welcomed by the EPA and is being implemented in a number of schemes around the country (see Figures 4 & 5).



FIGURE 4: Raw water at Glaslough Tyholland PGS before implementing source protection measures.



FIGURE 5: Raw water at Glasough Tyholland PGS after implementing source protection measures.

What needs to be done:

Water suppliers must:	Local authorities must:	Department of Housing, Local Government & Heritage must:
 Make sure their supply is registered with the local authority. 	 Register all private drinking water supplies. 	 Amend legislation to obligate suppliers to register.
 Carry out infrastructural upgrades where required, to comply with drinking water quality standards. Protect the water source and address problems as they arise. 	 Monitor all private drinking water supplies. Investigate supplies that fail to meet drinking water quality standards and take necessary enforcement action. 	 Address the issues highlighted in the rural water review report as a matter of priority, to improve water quality. Encourage and work with local authorities and private group schemes to avail of funding for the improvement of water quality.