

## Key Findings for 2021

- Compliance with drinking water standards in private supplies hasn't improved in recent years. One in 20 supplies failed to meet the standard, compared to 1 in 200 for public water supplies.
- Local authorities are not monitoring over a quarter of small private supplies for *E. coli* – and there may be many more supplies which need to be registered with the local authority.
- Despite these shortcomings, over 60% of government funding available for infrastructural improvements went unused by water suppliers.<sup>1</sup>
- The timely completion of the Government review of rural water services will provide direction and support to water suppliers to address risks to public health.

## Introduction

**Private Group Schemes (PGS)** are set up by community groups. They get water from a local source and manage the treatment and distribution of the water to the 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 local authorities and individual group schemes identify and address water quality issues and risks.



**FIG. 1** Graddum Lough - Cavan, water source for Crosserlough (PGS) is to have source protection measures implemented.

**Small Private Supplies (SPS)** provide water to many rural commercial or public activities (e.g. national schools, holiday accommodation and premises providing food and drink) - often from a well. There are over 1,700 SPSs 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.

The **water supplier** (PGS or SPS) is legally responsible for making sure the water they provide complies with the water quality standards set in the Drinking Water Regulations and is safe to drink.

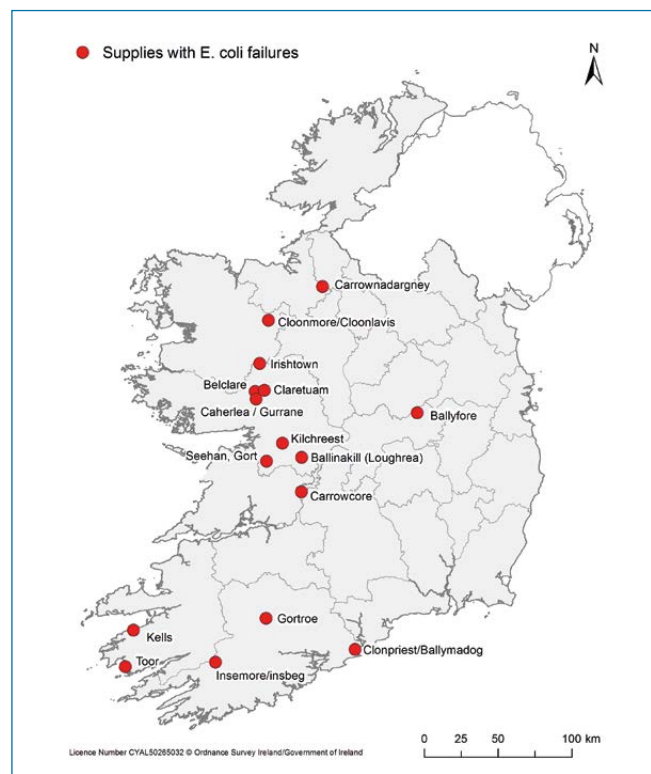
**Local authorities** have responsibility for ensuring that private drinking water supplies are monitored for compliance with drinking water standards. The results of monitoring undertaken in 2021 can be found on the EPA website and on SAFER<sup>2</sup>.

## Findings for 2021

### Compliance in Private Group Schemes

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 contaminated water can cause serious gastrointestinal illness.

In 2021, compliance of supplies with *E. coli* standards was 95.7% (94.6% in 2020) for PGS (16 supplies with failures, supplying almost 3,200 people down from 20 in 2020) – see Figure 2. This means 1 in 20 supplies failed to reach the standard.



**FIGURE 2:** Private group schemes with *E. coli* failures in 2021

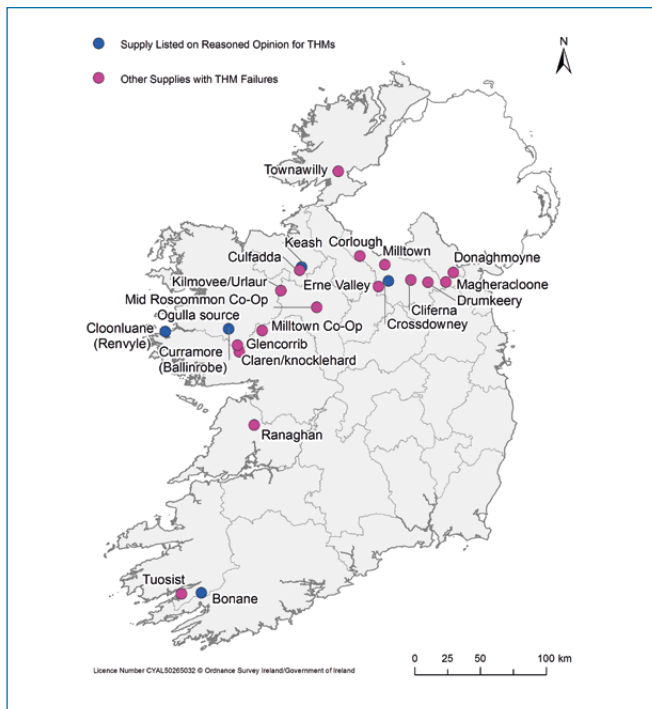
Compliance with *E. coli* standards has remained relatively unchanged in recent years at around 95% which is poor when compared with the compliance levels achieved for public water supplies of 99.5%.

**Trihalomethanes (THMs)** are formed when natural organic matter in the water source, such as rotting vegetation, reacts with chlorine used in the disinfection treatment process. THM levels should be kept as low as possible and in compliance with the drinking water quality standards, while ensuring that the water is fully disinfected.

In May 2020, the European Commission stated that Ireland had failed to take the measures necessary to ensure THM compliance in 44 drinking water supplies, which included 13 PGSS. During 2021 the Commission referred Ireland to the Court of Justice of the European Union. Compliance with THM standards in 2021 was 93.3% of private group supplies (PGS) (21 supplies with failures - compared with 22 in 2020), serving approx. 26,000 people – see Figure 3).

1 Through the Multi-Annual Rural Water Programme (MARWP)

2 <https://eparesearch.epa.ie/safer/>



**FIGURE 3:** Private group schemes with THM failures in 2021

### Compliance in Small Private Supplies

95.4% of SPSs monitored were compliant with *E. coli* standards (59 supplies failed serving over 2,000 people) and 97.3% were compliant with THM standards. In 2020 & 2021, COVID restrictions meant that many premises were closed, preventing sampling. Approx. a quarter (444) of SPSs were not monitored, which means that there is no information on the quality of drinking water from these supplies. The EPA acknowledges the efforts made to carry out sampling once COVID-19 restrictions eased and premises re-opened. However, drinking water quality at small private supplies is below where it needs to be - and is less than that of water provided to the majority of Ireland through public water supplies. This needs to be addressed by the water suppliers in the first instance.

### Department of Housing, Local Government and Heritage

The **Department of Housing, Local Government and Heritage (DHLGH)** is responsible for water policy and for providing supports to the rural water sector. It makes funding available to group water schemes and household well owners for improvements to their supplies (see Fig. 4). Local authorities distribute the funding through the Multi-Annual Rural Water Programme (MARWP). There was significant underspend in the 2019-2021 MARWP period. Less than 40% of the €59m allocated was drawn down, which is disappointing considering the need to improve compliance. Additionally, local authorities and private group water schemes need to deliver on the specific projects where funding has already been allocated to protect public health and safeguard rural water supplies.

The following shortcomings highlight the necessity for the DHLGH to implement a revised governance framework to improve water quality from private supplies;

- consistent poor compliance over several years and the need for better drinking water infrastructure in private group water supplies,
- the THMs EU infringement proceedings against Ireland, and;
- the underspend of money allocated to the sector highlighted above.



**FIGURE 4.** 2021 upgrade of Feigh East & West Private Group Scheme with a new chlorine contact tank

### Improving practices in private water schemes

The NFGWS works with schemes to protect and improve drinking water quality through a diverse range of activities. It recently hosted a first-time source protection training course. This serves to detail targeted actions by a range of stakeholders (including communities) that can reverse or avert pollution in a drinking water source catchment area (see Figs. 5 & 6).

The training addresses evaluation of raw water quality, delineation and characterisation of catchment areas and protection/mitigation strategies. This approach is welcomed by the EPA and is being implemented in a number of supplies around the country.



**FIGURE 5.** Private Group Scheme manager examining a pollutant-impact potential map on a catchment walk (Glinsk-Creggs)



**FIGURE 6.** Sampling during a best practice demonstration of flushing of a group water scheme network.

## What needs to be done

#### Water suppliers must:

- ◆ Carry out infrastructural upgrades where required, to comply with drinking water quality standards;
- ◆ Protect the water source, register the supply with the local authority and address problems as they arise.

#### Local authorities must:

- ◆ Make sure that all private drinking water supplies are registered and monitored;
- ◆ Investigate supplies that fail to meet drinking water quality standards and take necessary enforcement action.

#### Department of Housing, Local Government & Heritage must:

- ◆ Ensure works are supported for all group schemes on the priority list to protect public health;
- ◆ Finalise the review and progress the governance and funding model for the delivery of rural water services.