



DRINKING WATER QUALITY IN PUBLIC SUPPLIES

2022

ENVIRONMENTAL PROTECTION AGENCY

The EPA is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

The work of the EPA can be divided into three main areas:

Regulation: Implementing regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.

Knowledge: Providing high quality, targeted and timely environmental data, information and assessment to inform decision making.

Advocacy: Working with others to advocate for a clean, productive and well protected environment and for sustainable environmental practices.

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- Urban waste water discharges;
- The contained use and controlled release of Genetically Modified Organisms;
- Sources of ionising radiation;
- Greenhouse gas emissions from industry and aviation through the EU Emissions Trading Scheme.

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- Oversee local authority responsibilities for environmental protection;
- Regulate the quality of public drinking water and enforce urban waste water discharge authorisations;
- Assess and report on public and private drinking water quality;
- Coordinate a network of public service organisations to support action against environmental crime;
- Prosecute those who flout environmental law and damage the environment.

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- Develop and implement the National Waste Prevention Programme;
- Implement and report on legislation on the control of chemicals in the environment.

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- Support National, EU and UN Climate Science and Policy development activities.

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- Coordinate and fund national environmental research activity to identify pressures, inform policy and provide solutions;
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- Monitoring radiation levels and assess public exposure to ionising radiation and electromagnetic fields;
- Assist in developing national plans for emergencies arising from nuclear accidents;
- Monitor developments abroad relating to nuclear installations and radiological safety;
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- Provide independent evidence-based reporting, advice and guidance to Government, industry and the public on environmental and radiological protection topics;
- Promote the link between health and wellbeing, the economy and a clean environment;
- Promote environmental awareness including supporting behaviours for resource efficiency and climate transition;
- Promote radon testing in homes and workplaces and encourage remediation where necessary.

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- Work with international and national agencies, regional and local authorities, non-governmental organisations, representative bodies and government departments to deliver environmental and radiological protection, research coordination and science-based decision making.

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The EPA is managed by a full time Board, consisting of a Director General and five Directors. The work is carried out across five Offices:

- Office of Environmental Sustainability
- Office of Environmental Enforcement
- Office of Evidence and Assessment
- Office of Radiation Protection and Environmental Monitoring
- Office of Communications and Corporate Services

The EPA is assisted by advisory committees who meet regularly to discuss issues of concern and provide advice to the Board.



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ENVIRONMENTAL PROTECTION AGENCY

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Cover photo: *Lee Road Water Treatment Plant – construction completed in 2022.*

Photo courtesy of Uisce Éireann

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EXECUTIVE SUMMARY

Drinking water is sourced from rivers, lakes, springs, and groundwater and must be treated to make it clean and safe to drink before it is supplied to consumers. Compliance with the microbiological and chemical standards for drinking water remains high at greater than 99.7%, which means the water in our public water supplies is safe to drink. A highlight in delivering safer drinking water during 2022, was the construction of a new water treatment plant at Lee Road in Cork City - serving over 97,000¹ people. Strategic progress has been made in other areas such as disinfection and making the lead remediation grant easier for the public to get. However, drinking water treatment in many supplies is still not as robust as it needs to be to ensure all supplies are resilient and safe into the future.

The Remedial Action List (RAL)

The Environmental Protection Agency (EPA) has identified a priority list of “at-risk” drinking water supplies, called the Remedial Action List (RAL), that must be improved to ensure that these water supplies are safe to drink and are also secure in the future. A supply may be placed on the RAL if water treatment at the supply is not adequate. People can become ill from drinking inadequately treated water - especially vulnerable people, such as the young and the elderly.

The number of people served by public water supplies on the EPA’s RAL has increased in 2022 and is now almost 481,000 people. This compares to over 374,000 people at the end of 2021. Supplies were added mainly due to THM (trihalomethanes²) exceedances or inadequate treatment for *Cryptosporidium*. The list includes sizable supplies such as Limerick City (serving almost 115,000 people) and the Barrow supply in Kildare (over 81,000 people). At the end of 2022, 18 supplies on the RAL do not have a plan for upgrade or improvement with a completion date. These supplies must be addressed as a priority for Uisce Éireann.

Drinking Water Priorities and Challenges

Ensure that water is free from bacteria. At the end of 2022 there were three supplies on the RAL for bacterial failure. Uisce Éireann continues to undertake upgrades to disinfection systems across the country to ensure the quality of drinking water is safeguarded and free from bacteria. EPA audits of supplies that received an upgrade under Uisce Éireann’s Disinfection Programme confirmed the systems were satisfactorily upgraded. Uisce Éireann should continue to implement their Disinfection Programme and carry out upgrades where required.

Ensure that water is free of protozoan organisms. At the end of 2022 there were 12 supplies on the RAL for inadequate treatment for protozoa. The number of people supplied (41,000 people), and the number of supplies on the RAL for *Cryptosporidium*/*Giardia* has increased in 2022³. The fact that that protozoan organisms are still being detected in treated water is due

¹ All population figures are rounded as appropriate

² THMs are disinfection by-products caused by the interaction of chlorine and dissolved organic matter

³ The number *Cryptosporidium*/*Giardia* detections in 2022 has reduced from 2021

to the requirement to upgrade the treatment processes or a failure to properly operate existing infrastructure. It is critical that Uisce Éireann put the appropriate control measures in place to address this.

Ensure that water is free of chemical substances. There are 23 supplies serving approx. 235,000 people on the RAL in the trihalomethane (THM) category - up from 19 supplies serving 109,000 people in 2021. This increasing trend in the number of THM supplies on the RAL is unwelcome. The European Commission is progressing infringement proceedings⁴ against Ireland for failure to address THM compliance.

Supplies with pesticide detections reduced from 31 to 17 supplies in 2022 which is very positive. The challenge remains for Uisce Éireann to continue its engagement with multiple stakeholders in the affected catchments to prevent this problem at source.

Ensure that water treatment plants are operated effectively and correctly. At the end of 2022 there were 23 supplies on the RAL for treatment and management control issues (serving 206,000 people). While it is essential to have the required infrastructure in place, a water treatment plant must be managed and operated effectively and correctly, and also be able to adapt and respond to changing conditions and incidents. Essential alarms, monitors and staff training are critical prerequisites for a well-run drinking water treatment plant. Incident reporting, escalation, and response by Uisce Éireann remains a focus of EPA audits.

Protection of Human Health

Boil Water and Water Restriction Notices. Boil Water Notice (BWN) numbers increased to 79 in 2022 (from 70 in 2021) – however fewer people were impacted than in 2021 (approx. 182,000 people affected compared to 211,000 during 2021). Over a third of BWNs were in place for more than 30 days. Assessments and improvements under Uisce Éireann’s National Disinfection Programme are continuing but have yet to eliminate the need for BWNs. While the EPA recognises BWNs are essential to protect public health when supplies are compromised, in the medium to long-term the EPA expects to see the number of BWNs reduce as a consequence of improved infrastructure and management practices.

Reducing Exposure to Lead. During 2023 the government [Lead Remediation Grant Scheme](#)⁵ was made easier for the public to get and this is welcomed by the EPA. Uisce Éireann’s rate of replacement of individual lead connections is still unsatisfactory. It will take over a decade to address the risks posed to public health from lead in drinking water at the rate seen in 2022. This is a significant overrun of Uisce Éireann’s original plan for completion in 2026. As highlighted in previous reports, the Department of Housing, Planning and Local Government (DHPLG) has yet to publish a plan on lead replacement in public buildings, given people using such buildings are unlikely to be aware of the presence of lead pipework. Current regulations mean that in 2036 the level of lead permissible in drinking water will be halved, which increases the challenge to be addressed. Given the cumulative risk to health posed by lead in water supplies and the forthcoming reduced lead limit, leadership at a national level is required to address this urgent matter.

⁴ Infringement case number 2017/4007

⁵ <https://www.gov.ie/en/publication/7fe5d-domestic-lead-remediation-grant-scheme-customer-leaflet/#>

Drinking Water Safety Plans. Uisce Éireann uses Drinking Water Safety Plans (DWSPs) to identify and target the risks to our public water supplies. The new Drinking Water Regulations⁶ have now put the requirement for DWSPs on a statutory footing, including completion deadlines and provision of an EPA role in reviewing these plans. The DWSP approach is a proactive way to avoid supplies ending up on the RAL and provides a robust framework to allow for targeting of investment.

Summary of key actions recommended

- ▲ Uisce Éireann must complete upgrades to resolve issues with the drinking water supplies on the RAL and provide action programmes for the 18 RAL supplies without a planned completion date.
- ▲ Uisce Éireann must direct investment to resolve the most significant risks such as supplies listed on the RAL, THMs, *Cryptosporidium* and Lead.
- ▲ Uisce Éireann must continue to progress the drinking water safety plan approach to proactively identify and address risks, to prevent supplies being added to the RAL in the first place.
- ▲ A concerted effort is needed by the Department of Housing, Planning and Local Government and Uisce Éireann to remove lead from our water supply networks.

6 [European Union Drinking Water Regulations 2023, S.I 99 of 2023](#)

1. INTRODUCTION

This report by the Environmental Protection Agency (EPA) provides a summary of our assessment of drinking water quality in public supplies and public group water schemes in Ireland during 2022. Every day drinking water is supplied to approximately 1.3 million households⁷ from public supplies. Uisce Éireann⁸ is the national water utility responsible for providing this essential service. Uisce Éireann also provides water from its treatment plants to public group schemes. The EPA is the drinking water quality regulator responsible for enforcing the Drinking Water Regulations. The new Drinking Water Directive (EU) 2020/2184⁹ was transposed into Irish law on the 7th of March 2023¹⁰. These Regulations enact new requirements for water suppliers and regulators.

A drinking water supply includes the abstraction, treatment, storage, and distribution of water from the water source to the consumer's tap. The raw water sources, which are rivers, lakes, springs, and groundwater, can be a source of contaminants if the water is not properly managed and treated at all stages of the process. Uisce Éireann must ensure that the drinking water it supplies meets the standards set out in the Drinking Water Regulations and therefore is safe to drink. Failure to meet those standards can put public health at risk. The Health Service Executive must be consulted by Uisce Éireann where there could be a public health risk. In these events, a Boil Water Notice (BWN) or a Water Restriction Notice (WRN) may be imposed.

Drinking water must be **safe** for consumers to drink, not just today, but every day. If a supply is meeting the drinking water standards today and is safe to drink, the supply also needs to be **secure** to prevent the risk of water quality failures in the future. The security of a supply is dependent on the risks to the supply, the adequacy of the water treatment infrastructure, and the management and operational controls in place. The EPA has identified a list of "at-risk" supplies called the Remedial Action List (RAL) (*Appendix A*) where either the safety and/or security of the supply is not acceptable and Uisce Éireann are required to put an action plan with timelines in place to rectify the issues at each of these supplies. Uisce Éireann is also undertaking nationwide programmes on improving disinfection and reducing trihalomethanes (THMs), pesticides, and exposure to lead. Uisce Éireann have committed to the DWSP approach, to identify and mitigate risks at supplies, in order to improve the security of supplies.

7 CSO, Census 2016

8 Irish Water became Uisce Éireann on the 31 December 2022 and is referred to as such in this report.

9 <https://eur-lex.europa.eu/eli/dir/2020/2184/oj>

10 [European Union Drinking Water Regulations 2023, S.I 99 of 2023](#)

2. DRINKING WATER QUALITY

Water quality in public supplies

2022 Sample Compliance Rates (Public Supplies)	
99.96%	Microbiological parameters
99.62%	Chemical parameters
99.25%	Indicator parameters

Uisce Éireann monitors drinking water quality in public supplies to ensure that it meets the standards set out in the Drinking Water Regulations and is safe to drink. Compliance rates¹¹ remain consistently high year to year, with results for 2022 summarised here. This overall compliance rate compares well with the EU-wide historic compliance rate¹² of more than 99.5% for a range of chemical parameters. This is based on over 120,000 regulatory parameter results, from over 9,000 regulatory samples taken.

The results show that water quality from public supplies remains high and consumers can be confident that it is safe to drink. A more detailed summary of the results can be found in *Appendix B*. Uisce Éireann also carry out non-regulatory monitoring (investigative and operational monitoring) and may find failures, which must also be notified to the EPA and investigated by Uisce Éireann.

Uisce Éireann is also required under the Radioactive Substances in Drinking Water Regulations¹³ to monitor for radioactivity parameters.

Water quality in public group schemes

2022 Sample Compliance Rates (Public Group Schemes)	
99.77%	Microbiological parameters
99.35%	Chemical parameters
99.33%	Indicator parameters

¹¹ In this case - sample compliance %

¹² <https://www.eea.europa.eu/publications/zero-pollution/health/water-pollution>

¹³ European Union (Radioactive Substances in Drinking Water) Regulations 2016, S.I. 160 of 2016

Uisce Éireann also provides water to public group schemes. Local authorities regulate these supplies and ensure that monitoring is carried out. Water quality from public group schemes is also high and compliance rates remain consistent year to year, with results for 2022 summarised here.

A more detailed summary of the results can be found in [Appendix C](#).

3. PRIORITIES FOR DRINKING WATER SUPPLIES

The Remedial Action List (RAL)

The EPA's RAL is a priority list of "at-risk" supplies that require significant corrective action, and Uisce Éireann are required to put an action plan in place to rectify the issues at each of these supplies. A supply may be placed on the RAL if it fails to meet any of the four criteria set out in Table 1. RAL supplies are generally identified during audits or based on breaches of standards reported to the EPA. The use of the Drinking Water Safety plan approach in the future will result in a more proactive identification and resolution of issues at at-risk supplies, the prevention of supplies being added to the RAL in the first place, and will guide Uisce Éireann's long-term investment planning. This means more sites will be identified for improvement before breaches of standards occur.

Table 1: Remedial Action List criteria

Drinking Water	
Criteria 1:	<p>Ensure that water is free of bacteria</p> <ul style="list-style-type: none"> ▶ Inadequate disinfection ▶ Failure to meet <i>E. coli</i>/<i>Enterococci</i> standard
Criteria 2:	<p>Ensure that water is free of protozoan organisms</p> <ul style="list-style-type: none"> ▶ Inadequate Treatment for Cryptosporidium ▶ Supply identified by the HSE where further investigation or improvement may be required
Criteria 3:	<p>Ensure that water is free of chemical substances</p> <ul style="list-style-type: none"> ▶ Disinfection by-products (trihalomethanes) ▶ Pesticides
Criteria 4:	<p>Ensure that water treatment plants are operated correctly</p> <ul style="list-style-type: none"> ▶ Excessive levels of aluminium in the treated water ▶ Poor turbidity removal ▶ EPA Audit Observation / Treatment and Management Issues

When Uisce Éireann has shown that the issue has been fixed, a supply can be removed from the list. The RAL is updated biannually, and you can keep up to date with it through the EPA’s website at <https://www.epa.ie/publications/compliance--enforcement/drinking-water/> (see also Figure 2).

Findings for 2022

In 2022 there has been an increase in the number of people served by supplies on the RAL (up to 481,000), along with an increased number of supplies (58 supplies, up from 52). Supplies were added mainly due to THM exceedances or inadequate treatment for *Cryptosporidium*. Details can be seen in [Appendix A](#) and also [here](#) on the EPA website. The EPA welcomes the removal of the Cork City (Lee Road) water supply from the RAL in 2022 – which resulted in a more secure water supply for over 97,000 consumers (See Box 1).

It should be noted that the current number of people impacted by supplies on the RAL is still well under the 2021 peak of over 1 million people. The large decrease was primarily due to the upgrade at the Leixlip water treatment plant.

Population served by supplies on the Remedial Action List

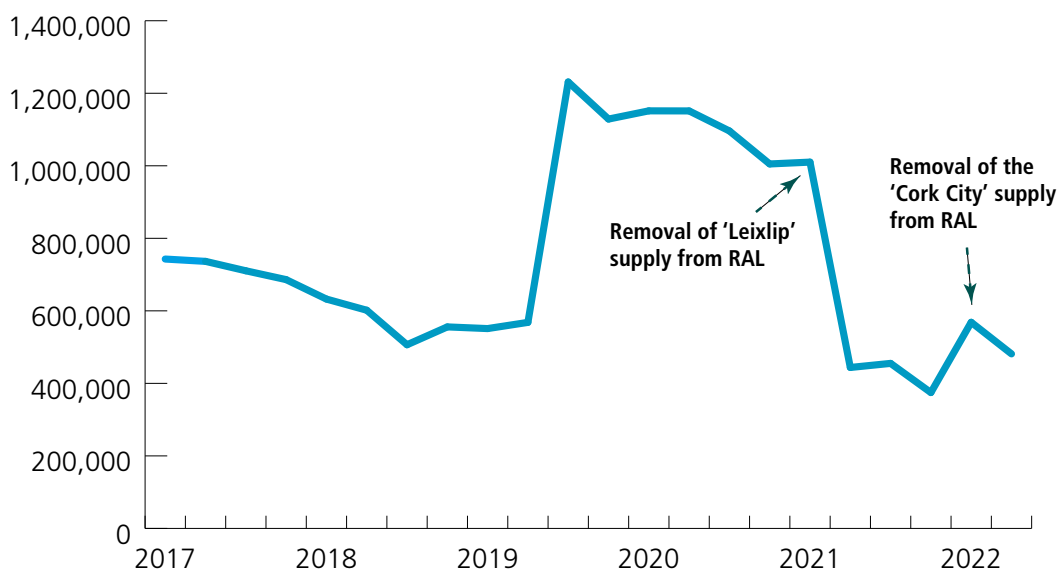


Figure 1: Population served by supplies on the Remedial Action List

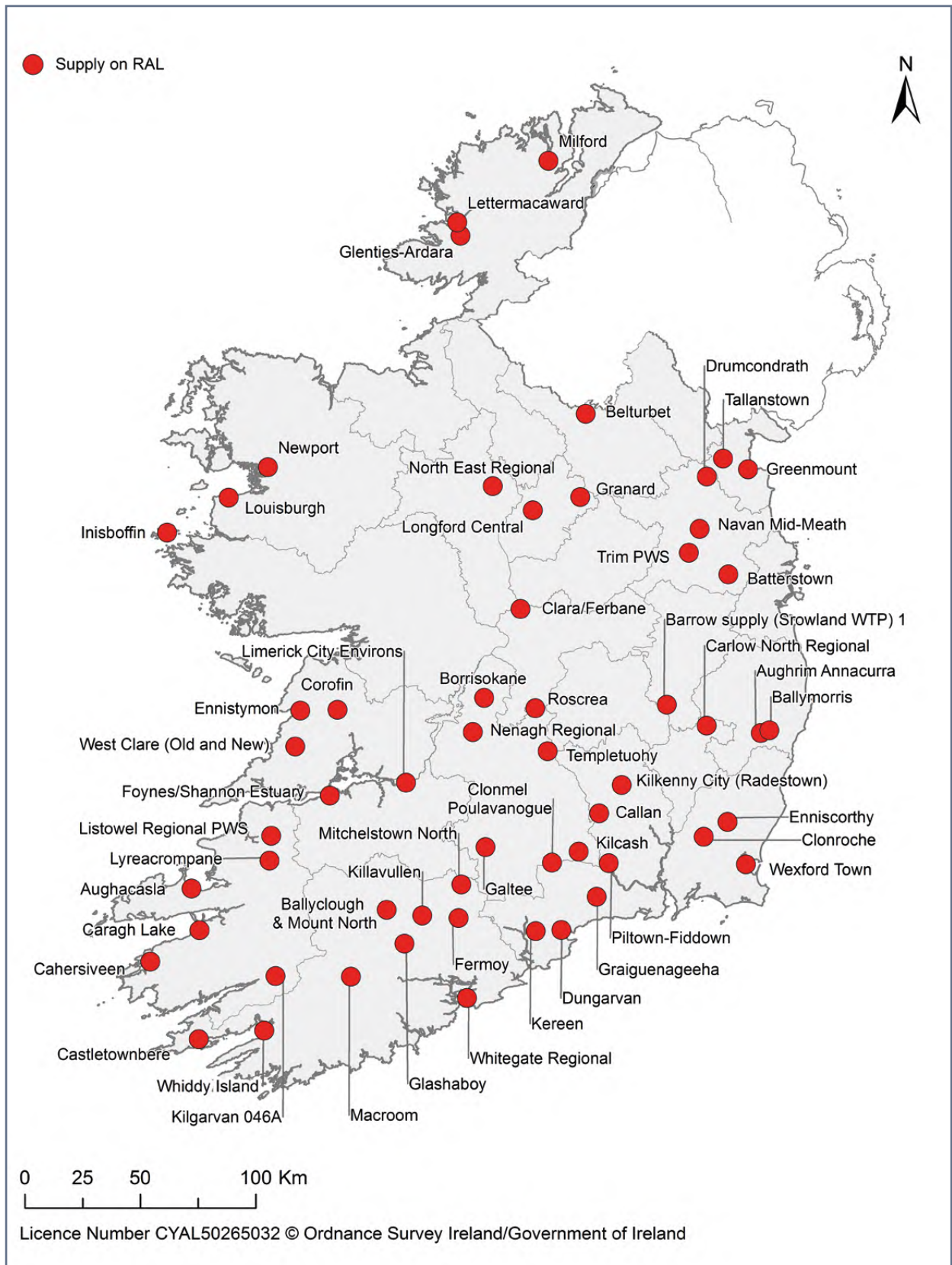


Figure 2: Supplies on RAL at the end of 2022.

At the end of 2022, there were 18 RAL supplies without planned completion dates to improve drinking water quality. Four of these sites are on the RAL longer than 1 year (Aughrim, Foynes, Longford Central and Louisburgh). This is a slight improvement on last year where there were five such supplies. Nevertheless, all supplies on the RAL require action programmes with completion dates as soon as possible.

In 2022, the EPA issued 14 legally binding directions (**Appendix D**) to Uisce Éireann where supplies needed improvements. Ten of these directions were for supplies with persistent THM failures, with the remaining directions related to a mix of issues including plant operation/ treatment and disinfection. All of these directions relate to plants on the RAL.

Actions required

Uisce Éireann must provide plans and completion dates for all supplies on the RAL and take all necessary measures to resolve these issues without delays.

Additionally, Uisce Éireann must prioritise the completion of the Drinking Water Safety Plans. Effective implementation of the Drinking Water Safety Plan approach will serve to prevent supplies being added to the RAL in the first place.

Box 1 - Case study: Lee Road Water Treatment Plant, Cork City



The Lee Road Water Treatment Plant (WTP) provides approximately 70% of Cork City's total treated water – serving over 97,000 people. Water is taken from the river Lee, treated in the plant, and is then pumped to a series of reservoirs in the city. The original plant was constructed in the late 19th century with upgrades added over time, but none in recent decades.

The plant had long term issues that needed to be addressed through the provision of a new treatment plant. Uisce Éireann completed construction of the new water treatment plant on the existing site at Lee Road in 2022.

This upgraded and modernised plant will provide a more secure water supply for the future of Cork City. The final cost of the plant was approx. €40 million. The replacement of this plant is a welcome improvement in the safety and security of a major water supply to citizens in our second largest city.¹⁴

¹⁴ While water from the plant is compliant, colour issues have occurred and must be resolved by Uisce Éireann.

Drinking Water Priority 1: Ensure that water is free of bacteria

Disinfection is the most important step of the water treatment process. It keeps our water supplies safe from pathogens such as bacteria, which can cause illness. Disinfection can be carried out using chlorination and/or ultra-violet light, to kill or deactivate pathogens.

Uisce Éireann are implementing a National Disinfection Programme¹⁵ to ensure that standard specifications for disinfection systems are met at all sites.

A supply may be placed on the RAL if critical disinfection infrastructure is absent or if there is persistent presence of *E. coli* or *Enterococci* in the treated water.

Findings for 2022

There are currently three supplies on the RAL under this criterion - up from one in 2021. Two supplies are small (serving <60 people) and Uisce Éireann's plan for these is to connect to better quality public water supplies in the area. A third supply (Clonmel-Poulavanogue, Co. Tipperary) is larger, serving almost 2,500 people. Inadequate disinfection in part of the supply will be resolved through connection to a new supply.

All other Uisce Éireann plants have some form of disinfection in place before the water is provided to consumers. In some cases, additional infrastructure is required, or the management and control of existing infrastructure is inadequate. During 2022, forty percent of BWN (31 notices) were in place due to disinfection issues, affecting over 27,500 people. This compares to thirty percent of BWNs (21 notices), affecting almost 32,000 people, in 2021.

Disinfection systems have been upgraded and commissioned at a total of 346 sites to date, with 30 of these sites delivered in 2022.

The EPA through its audit programme continues to find issues with inadequate disinfection (e.g., inadequate contact time¹⁶), which were not properly addressed by Uisce Éireann as part of its disinfection programme. During 2022 EPA carried out a targeted audit campaign on supplies where disinfection was upgraded – for details see Box 2.

15 Available at <https://www.water.ie/projects-plans/national-projects/national-disinfection-programme/>

16 Where chlorine is used in disinfection, it needs time (known as contact time) to fully kill any bacteria or viruses, before it reaches the first consumer on the distribution network.

Box 2 - Targeted disinfection audits

During 2022 the EPA carried out an audit campaign targeted specifically at supplies that have received an upgrade of their disinfection processes by Uisce Éireann. This campaign was to determine if the upgrades were carried out as stated, and whether they were sufficient. In total 46 supplies were audited during 2022 and the EPA found that the disinfections systems had been satisfactorily upgraded as indicated in the Uisce Éireann Disinfection Programme.



Main and backup chlorine (hypochlorite) dosing pumps assessed during an audit

Actions required

The National Disinfection Programme is of fundamental importance in identifying and addressing issues with disinfection in water supplies.

- ▲ Uisce Éireann must continue to undertake improvements to disinfection systems across the country to ensure that the quality of drinking water is safeguarded;
- ▲ Where significant issues are found, for example, inadequate contact time, these should be resolved immediately to protect public health.

Drinking Water Priority 2: Ensure that water is free of protozoan organisms

While disinfection deals with many pathogens, chlorination on its own is insufficient to kill or deactivate protozoan organisms such as *Cryptosporidium* and *Giardia* which can cause serious gastro-intestinal illness. The Drinking Water Regulations do not explicitly require monitoring of these organisms, however Uisce Éireann is required to determine if there is a risk that protozoans could be present in raw water sources. If so, then appropriate treatment processes (referred to as a ‘barrier’) must be put in place. *Cryptosporidium* and *Giardia* may be detected in treated water where:

- ▲ there is no treatment barrier in place at the water treatment plant; or
- ▲ the treatment barrier is not being properly operated, or maintained, or is inadequate.

A supply may be placed on the RAL if detections are persistent, or a barrier is not in place.

Findings for 2022

Uisce Éireann detected *Cryptosporidium* or *Giardia* in 19 supplies during 2022, down from 24 in 2021 (see Figure 3). Of the 19 supplies, seven were placed on BWNs. There is a strong clustering of protozoan issues in the south-west of the country. It is considered that this is attributable to the nature and higher number of supplies in this part of the country, along with the much higher intensity of farming practices in the south-west.

At the end of 2022 there were 12 supplies (supplying approx. 41,000 people) on the RAL for detections of (or risk of) *Cryptosporidium* – an increase from eight in 2021. Two supplies were removed from the RAL during 2022, but this progress was eroded as a further six were added. Action plans for dealing with these issues are generally the installation/upgrading of UV-treatment, or provision of alternative supplies. Completion dates for five supplies are during 2023, a further two in 2025 or 2026, and the remaining five have no proposed action date for completion at present.

While the number of supplies with protozoa detections in 2022 has reduced, there was an increased number of supplies on the RAL for protozoal risk in 2022. The failure to properly operate treatment barriers (or insufficiency of those barriers) is causing a risk to public health because of possible breakthrough of parasites into treated water. Uisce Éireann are completing cryptosporidium risk assessments (C-SRAM) on all supplies to determine any treatment deficits.

Actions required

Protozoa detections are due either to barriers not being in place, or because barriers aren’t functioning correctly.

- ▲ It is critical that Uisce Éireann correctly operate their treatment barriers.
- ▲ Deficits identified through cryptosporidium risk assessments must be addressed through better monitoring and/or treatment plant upgrades.

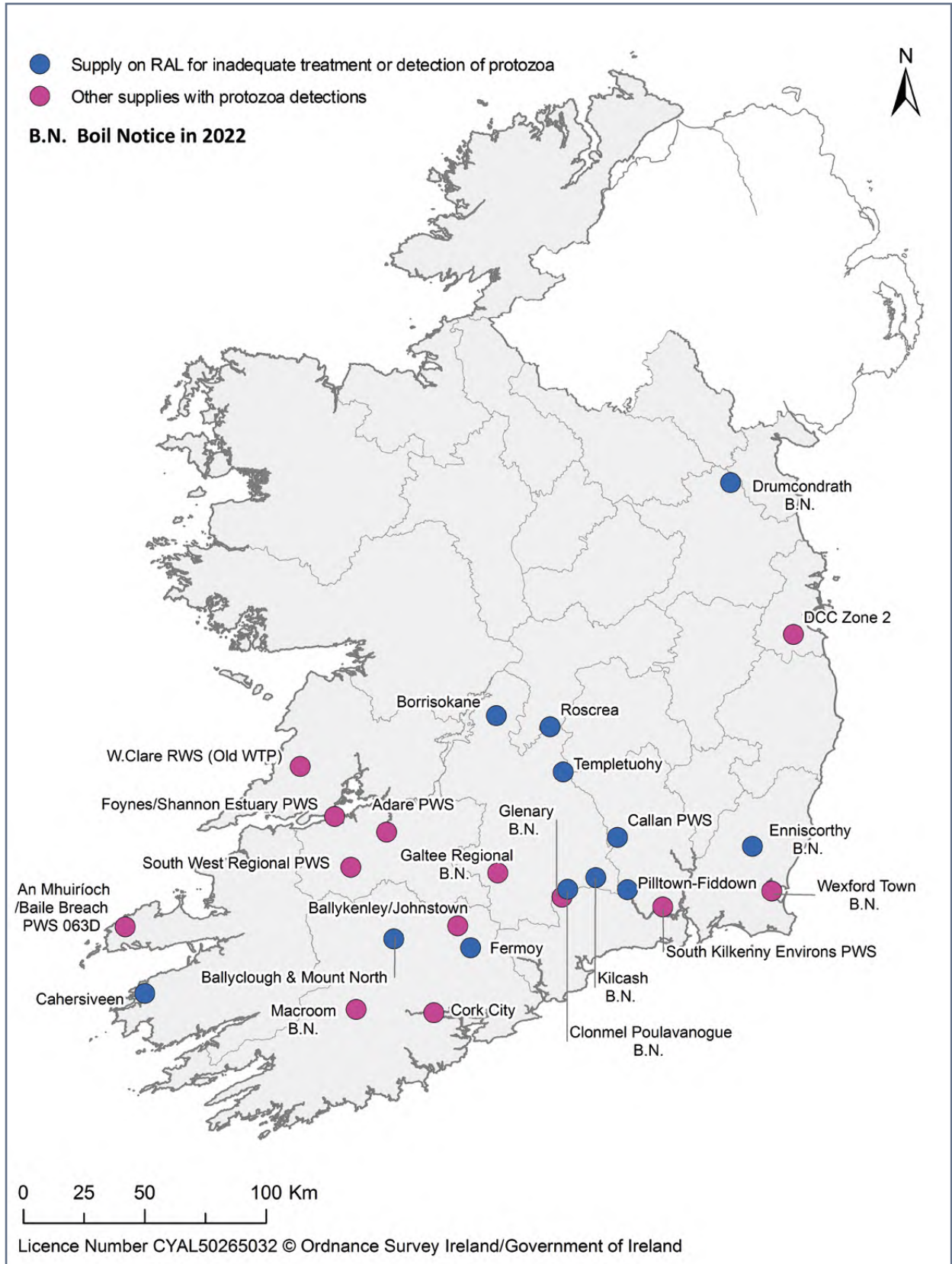


Figure 3: Supplies on RAL for inadequate treatment for protozoa/protozoa failures during 2022.

Drinking Water Priority 3: Ensure that water is free of chemical substances (trihalomethanes and pesticides)

Trihalomethanes (THMs) form when natural organic matter in the water source, such as vegetation, reacts with chlorine used in the disinfection treatment process. For this reason, it is important to remove as much organic matter as possible from the raw water using processes at the water treatment plant. THMs are a particular issue in Ireland where about 80% of our drinking water is abstracted from rivers and lakes, with associated catchments often having peaty soil. A supply may be placed on the RAL if there is a persistent failure to meet the 100µg/l limit and processes are not sufficient to maintain THM levels below that level.

The European Commission started infringement proceedings against Ireland in 2015 for failure to comply with the THM standard in the Drinking Water Directive. In 2020, the Commission escalated its infringement proceedings against Ireland by issuing a Reasoned Opinion¹⁷ stating Ireland had failed to take the measures necessary to ensure THM compliance in 31 public water supplies and 13 private group water schemes. This case has now been submitted to the European Court of Justice. Ireland has responded to all information requests from the European Commission in relation to his case and trihalomethanes remain a national priority.

Pesticides are found in drinking water due to the presence of such products in the catchment of water bodies used for drinking water abstraction where pesticide use is not well managed. The term ‘pesticides’ includes a wide range of products, but in Ireland, herbicides are the most common, in particular MCPA¹⁸ which is used for rush control in grassland. Where pesticide failures are found, monthly monitoring must be carried out during the spraying season of April to November. A supply is considered to have a persistent pesticide problem if failures are found during four or more of the monthly sampling events. A supply may be placed on the RAL if failures are persistent and initial investigations fail to resolve the issue.

¹⁷ Infringement Case No. 2017/4007

¹⁸ 2-methyl-4-chlorophenoxyacetic acid

Findings for 2022

Trihalomethanes

Forty-five public supplies failed to meet the standard for THMs at least once in 2022, a decrease from fifty-eight in 2021. Figure 4 shows THM compliance trend since 2017.

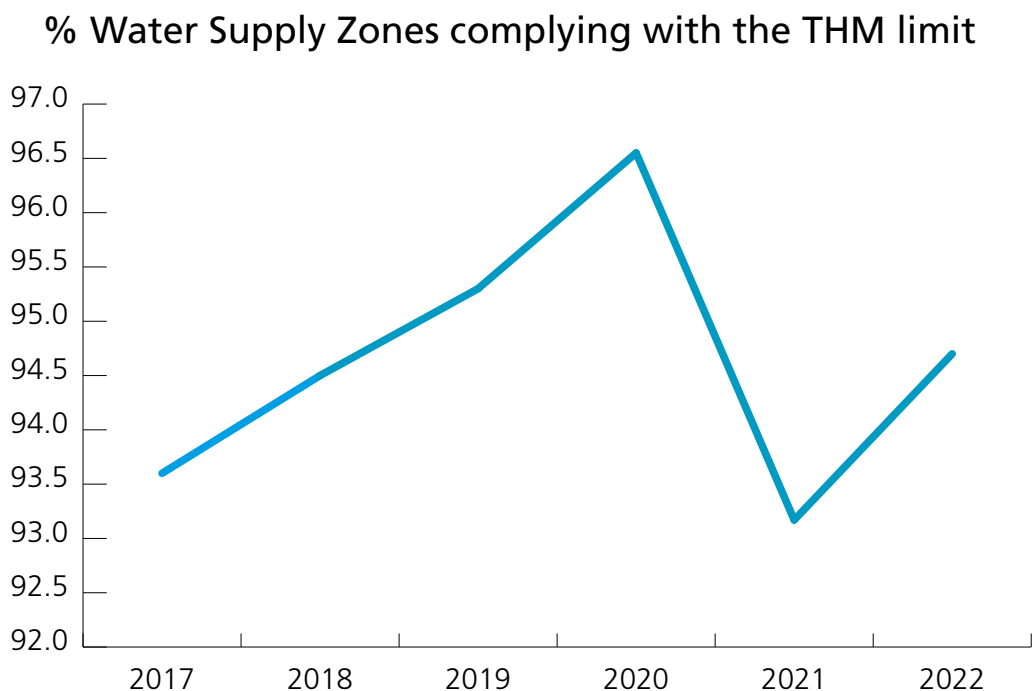


Figure 4: Percentage of water supplies complying with the Trihalomethane limit¹⁹

Persistent or repeated breaches for THMs causes a supply to be placed on the RAL. In 2022, the number of such supplies on the RAL increased to 23 (impacting 235,000 people), in comparison to 19 supplies (impacting 110,00 people) in 2021. Significantly, the Limerick City supply was added in 2022, which supplies almost 115,000 people. Uisce Éireann have proposed optimisation of the treatment plant and network to reduce risk of THM formation in this case.

While two supplies were removed from RAL due to satisfactory compliance, six further supplies were added during 2022. Uisce Éireann must ensure that where supplies are removed from the RAL, e.g. Ballymahon, there is ongoing vigilance and oversight in the operation of water treatment plants to ensure they stay compliant.

During 2022 the number of people affected by persistent THM failures²⁰ (i.e. on the RAL) has increased significantly, despite the fact that the total number of supplies with THM exceedances has reduced. The EPA will continue to target THM compliance as part of their enforcement activities, and progress will be reported to the European Commission as part of the THM Infringement Proceedings against Ireland.

¹⁹ Based on regulatory data only

²⁰ A supply is placed on the RAL for persistent THM exceedances

The EPA can issue legally binding directions to Uisce Éireann under the Drinking Water Regulations. In total there are 10 open directions issued by the EPA relating to THM exceedances (a reduction from 13 at end of 2021). For further details on these open directions see **Appendix D-2**. EPA issued legal proceedings against Uisce Éireann in 2022 for failing to control THMs in the West Clare supply and Uisce Éireann were convicted for these failings in 2023.

Failure to meet the THM standard for a **public group scheme**²¹ may be due to the quality of the water supplied by the parent public supply or it may be that the THMs were formed in the public group scheme network.

In 2022 exceedances of the THM standard were found at 12 public group schemes across five counties – a welcome reduction from 28 schemes in 2021 (see **Appendix E** for the full list). In Clare, a much reduced five schemes (16 in 2021) with exceedances are fed by West Clare Regional Water Supply (WCRS) (Old and New plant). The overall improvement is mainly due to improvements in the WCRS supply. The WCRS is on the EPA RAL for THMs thus affecting the group schemes supplied. The EPA issued a Direction to Uisce Éireann to resolve the THM issue at the WCRS, and the upgrade works were completed in 2022. The supply now has treatment to remove THMs. Its associated Public Group Water Schemes are expected to come into compliance after completion of reservoir cleaning and network flushing and a verification period²².

Actions Required

- ▲ Uisce Éireann must address supplies on the RAL for persistent THM exceedances which have increased from 2021.
- ▲ Uisce Éireann must also address the breaches of the THM limits seen in 2022 in order to protect public health, and to ensure compliance with the THM standard in the Drinking Water Regulations.
- ▲ Uisce Éireann must comply with the requirements of the 10 open THM related directions issued by the EPA within the timeframes outlined.
- ▲ Local authorities must investigate any THM failures in public group schemes to determine whether the cause is the quality of the water from the parent supply or the conditions in the group scheme network, so that the appropriate corrective action is taken.

21 A public group scheme, set up by the local community, manages the distribution of treated water to users. UE manages the abstraction and treatment of the water.

22 See relevant EPA audit report - [https://www.epa.ie/publications/compliance--enforcement/drinking-water/audit-reports/clare/West-Clare-RWS-\(new-WTP\)-Audit-Report.pdf](https://www.epa.ie/publications/compliance--enforcement/drinking-water/audit-reports/clare/West-Clare-RWS-(new-WTP)-Audit-Report.pdf)

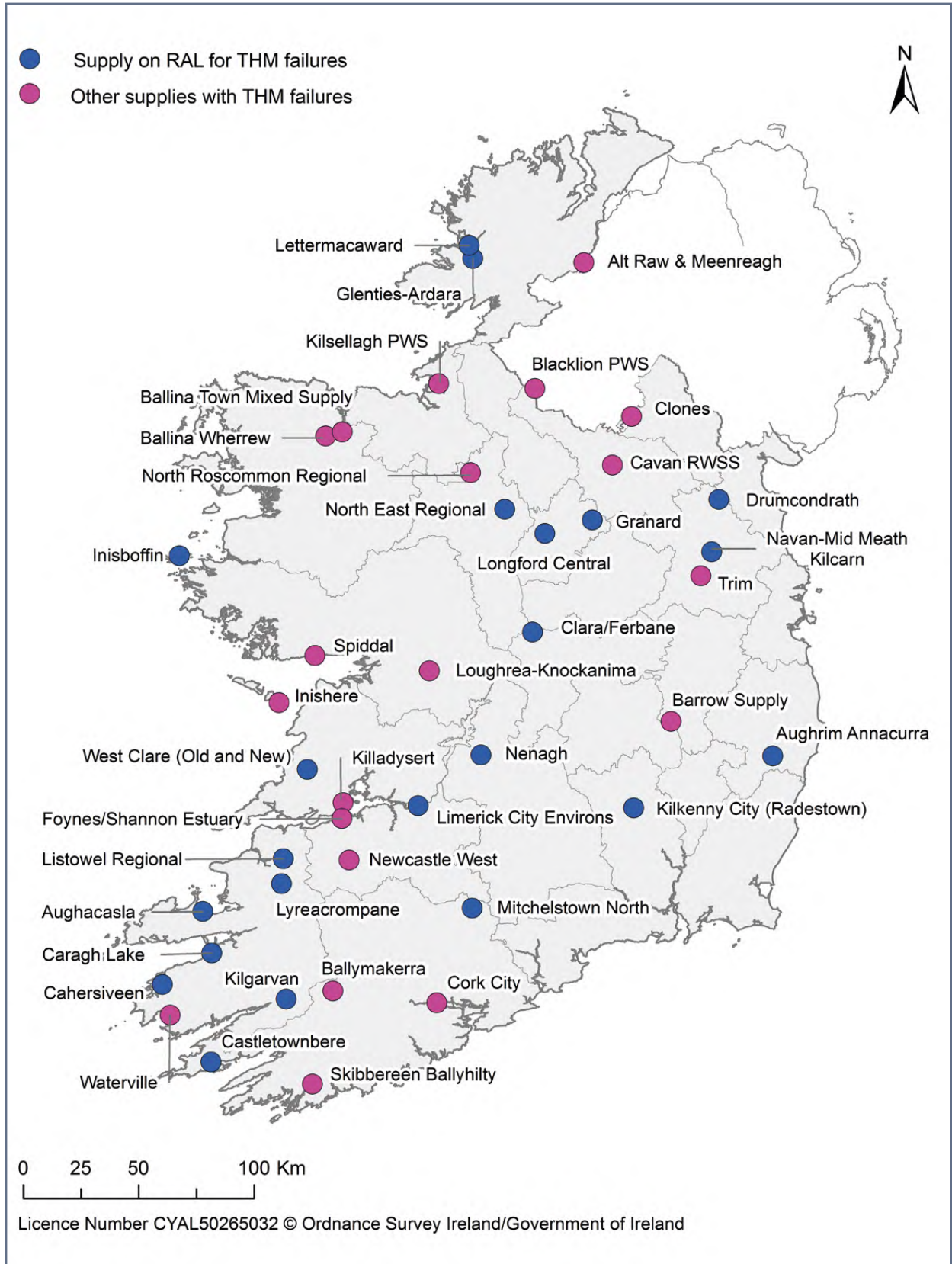


Figure 5: Public supplies on RAL for THM or with THM failures during 2022.

Pesticides

There were seventeen water supplies²³ that failed to meet the pesticide standard in 2022, a welcome decrease from the thirty-one supplies in 2021 (33 in 2020). The herbicide MCPA continues to dominate. There are four supplies on the RAL for pesticides at the end of 2022 down from six in 2021. All supplies on the RAL for pesticide exceedances have Catchment Focus Groups²⁴ in place, and it is positive that 2 supplies were removed from the RAL under this category in 2022.

The primary strategic approach to reducing the risk of pesticides by Uisce Éireann is through catchment management. The catchment focus group brings relevant stakeholders together to promote responsible pesticide use within those catchments – with the ultimate aim of resolving the issues at source before they reach the water supply.

One element of this strategy, is communication by the focus groups, and during 2022 examples of such communication included:

- ▲ Radio interviews - highlighting particular pesticide issues in an area
- ▲ Localised social media campaigns such as '*Spray with care*' – to consider the environment and alternatives to pesticides when gardening, farming, and maintaining sports grounds
- ▲ Educational school visits and provision of a tree for planting/beebees with the '*Plant a tree and be pesticide free*' campaign

23 47 individual exceedances notified

24 Catchment Focus Groups bring relevant stakeholders together to promote responsible pesticide use within the catchment

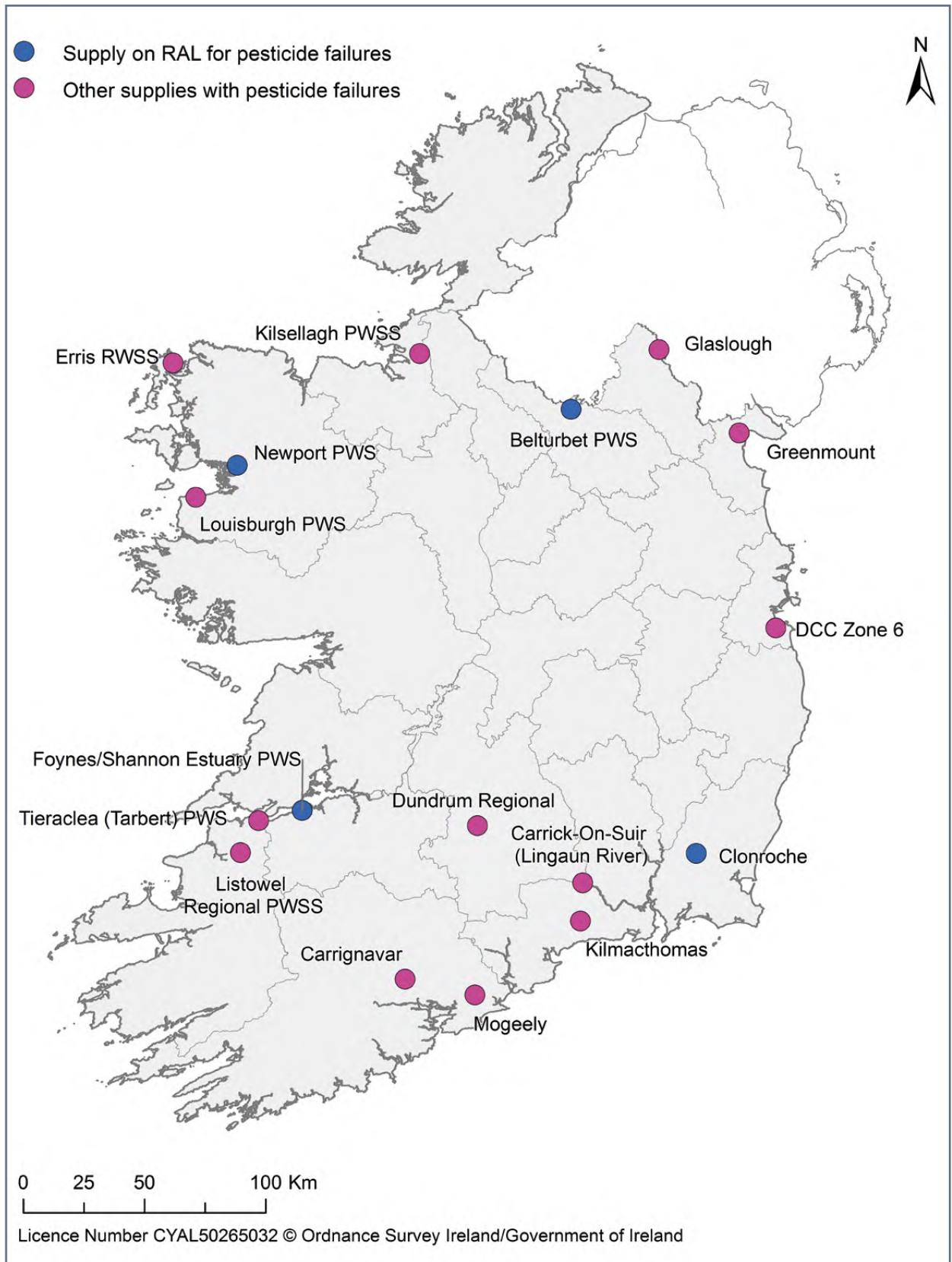


Figure 6: Supplies on RAL for pesticides or with pesticides failures during 2022.

Actions required

It is crucial that Uisce Éireann implement the catchment management approach, and where the catchment focus groups fail to achieve compliance, consider water treatment options.

Drinking Water Priority 4: Ensure that water treatment plants are operated correctly

Persistent aluminium and turbidity failures indicate poor control over treatment processes. Control and management issues at supplies, such as issues with critical alarms and monitors, can result in situations where disinfection, protozoal removal/deactivation, or other processes are not optimised.

A supply may be placed on the RAL if aluminium or turbidity failures are persistent or if an EPA audit finds that treatment control or management issues pose a risk to the reliable treatment of the water.



Figure 7: Water clarification tank – solids settle to the bottom and clarified water runs out in the channels

Findings for 2022

During 2022, four supplies were added to the RAL due to aluminium/turbidity issues or because of audit observations - and five supplies were removed. At the end of 2022 there were 23 supplies on the RAL for treatment and management control issues, serving 206,000 people (compared to 24 supplies in 2021) - with most of these issues being identified through audits.

The overall number of sites on the RAL for these reasons has shown little improvement – as sites are removed, more are detected to take their place. EPA audits continued to identify issues at water treatment plants that need to be addressed.

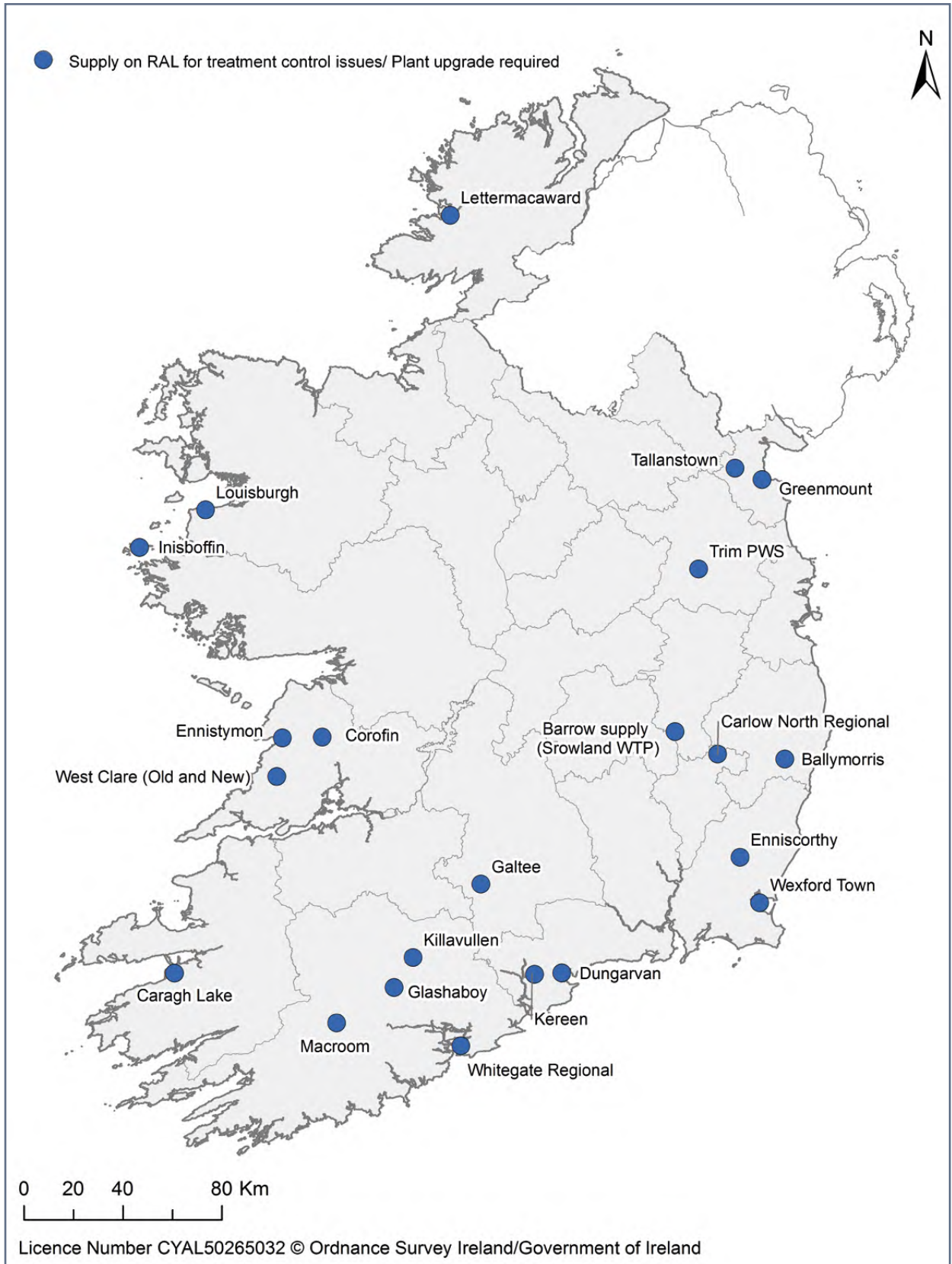


Figure 8: Supplies on RAL during 2022 for treatment control issues/plant upgrade required.

Actions required

Uisce Éireann must ensure that consistent and documented operational control and management measures are in place at all supplies, including;

- ▲ Monitors and alarms with appropriate triggers in place and operational at all times;
- ▲ Staff trained and available to respond to alarms and incidents;
- ▲ Operational monitoring to assess plant performance on an ongoing basis.

4. PROTECTION OF HUMAN HEALTH

Boil water and water restriction notices

A failure or incident at a supply can put the water quality at risk. The Health Service Executive is responsible for public health and must be consulted by Uisce Éireann where a water quality failure or incident could result in a public health risk. In these events, a BWN or a WRN may be imposed. It is critical that such failures or incidents are responded to promptly. Failure to adequately respond and take the appropriate actions up to and including the imposing BWNs or WRNs can have a significant impact on public health. The consequences of consuming inadequately treated water can be very severe, particularly in vulnerable people, such as the young, the elderly, and those with underlying conditions.

While a BWNs or WRNs causes inconvenience to consumers, they are necessary to ensure that members of the public do not consume water that could be contaminated and make them ill. Uisce Éireann must also take prompt action to ensure that the duration of the notice period is as short as possible.

Boil water notices - During 2022, 79 BWNs were in place at 67 supplies affecting over 182,000²⁵ consumers - up from 70 in 2021 and 43 in 2020. (**Appendix F, Table 1**).

- ▲ 25 BWNs were in place for more than 30 days, with 11 in place for more than one year;
- ▲ Short duration BWNs, i.e., less than one month, were up from 21 to 36;
- ▲ Eleven supplies had two or more BWNs issued within 2022 (nine supplies had two or more in 2021).
- ▲ Looking at historic data, the 2015-2018 period saw an average of 40 BWNs issued annually – compared to 79 BWNs in 2022.
- ▲ Over the past five years, approx. 22% of supplies where BWNs have issued have been subject to repeat BWNs.

Even though drinking water quality has remained consistently very good in recent years, Table 2 shows that there has been no overall reduction in BWNs despite the Uisce Éireann Disinfection Programme having commenced in 2016.

²⁵ Note that where multiple notices are issued for the same supply during 2022 – the population affected is counted only once in 'total population affected' figures to avoid duplication.

Year	Number of notices in place	In place for 31 days-1 year ²⁶	Total population affected during year
2018	44	18	97,200
2019	68	59	696,900 ²⁷
2020	43	27	75,000
2021	70	29	211,000
2022	79	25	182,000 ²⁸

Table 2: Boil Water Notices from 2017 to 2022

The EPA sought significant improvement in Uisce Éireann’s management of incidents following the issues at Gorey and Ballymore Eustace in 2021. Uisce Éireann’s improved incident awareness, escalation and management has contributed to the increased number of BWNs. While the EPA do not want to see the number of BWNs increasing, they are essential to protect public health when supplies are compromised. This is considered a positive development, as increased vigilance, better awareness of escalation procedures, and more targeted monitoring by Uisce Éireann will result in a safer water supply for all consumers.

However, it is important to note that in the medium to long-term the EPA expects to see the number of BWNs reduce. This is expected as a result of the progression of Uisce Éireann’s disinfection programme, and improved incident detection and management. The DWSP approach will serve Uisce Éireann in directing investment where it will deal with the most significant risks such as supplies listed on the RAL and supplies subject to BWNs and WRNs.

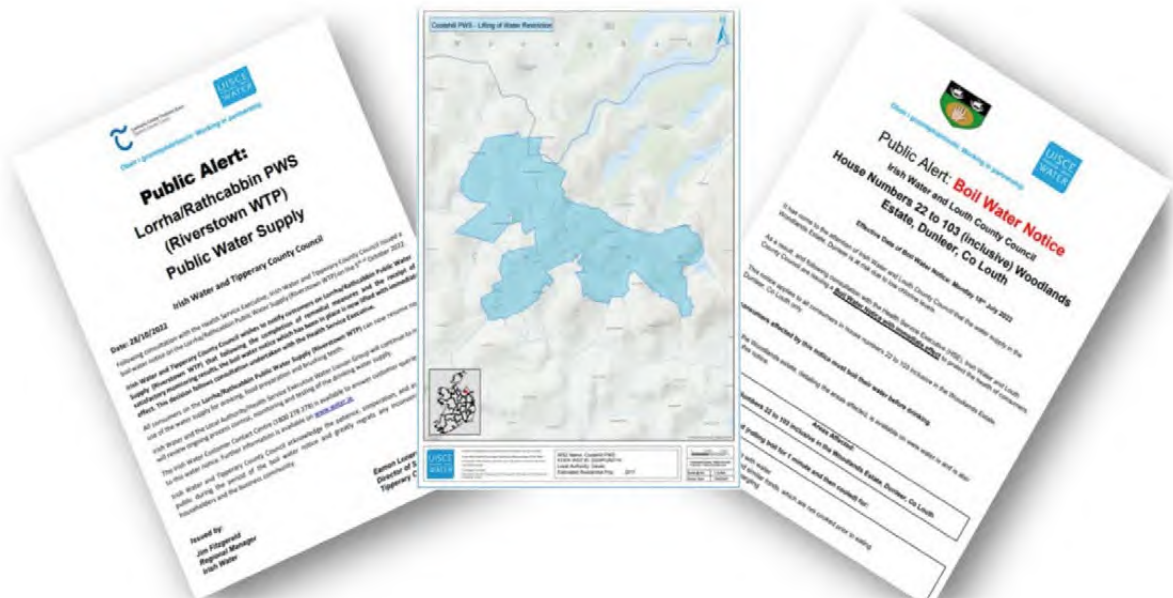


Figure 9: Examples of boil water notices issued

26 As of 31/12/22.

27 This includes the 657,000 people supplied by Leixlip water treatment plant, affected by two notices in 2019.

28 Note that where multiple notices are issued for the same supply during 2022 – the population affected is counted only once in ‘total population affected’ figures to avoid duplication.

Water restriction notices - During 2022, 10 **WRNs** were in place on 10 supplies across six counties, affecting over 8,700 people (**Appendix F, Table 2**). Seven of these notices were in place for more than 30 days.

Year	Number of notices	In place for > 30 days ²⁹	Total population affected during year
2018	15	7	14,600
2019	8	4	9,200
2020	17	10	4,200
2021	26	9	17,900
2022	10	7	8,700

Table 3: Water Restriction Notices from 2017 to 2022

Reasons for these notices include:

- ▲ Manganese issues in six supplies.
- ▲ A mix of nitrate, and turbidity/water quality in others.

At the end of 2022, two WRNs were still in place affecting 43 people- along with the water restriction in Ballydermody, Co. Waterford which is a disputed supply between Uisce Éireann and the local authority.

Actions required

- ▲ Uisce Éireann must continue to progress its disinfection programme.
- ▲ Uisce Éireann must continue to improve its incident detection and management.
- ▲ Uisce Éireann must better understand the factors leading to the issuing of BWNs generally and repeat BWNs in particular.
- ▲ Uisce Éireann should use the outputs of the DWSP approach to prevent the imposition of BWNs and WRNs.

²⁹ As of 31/12/22.

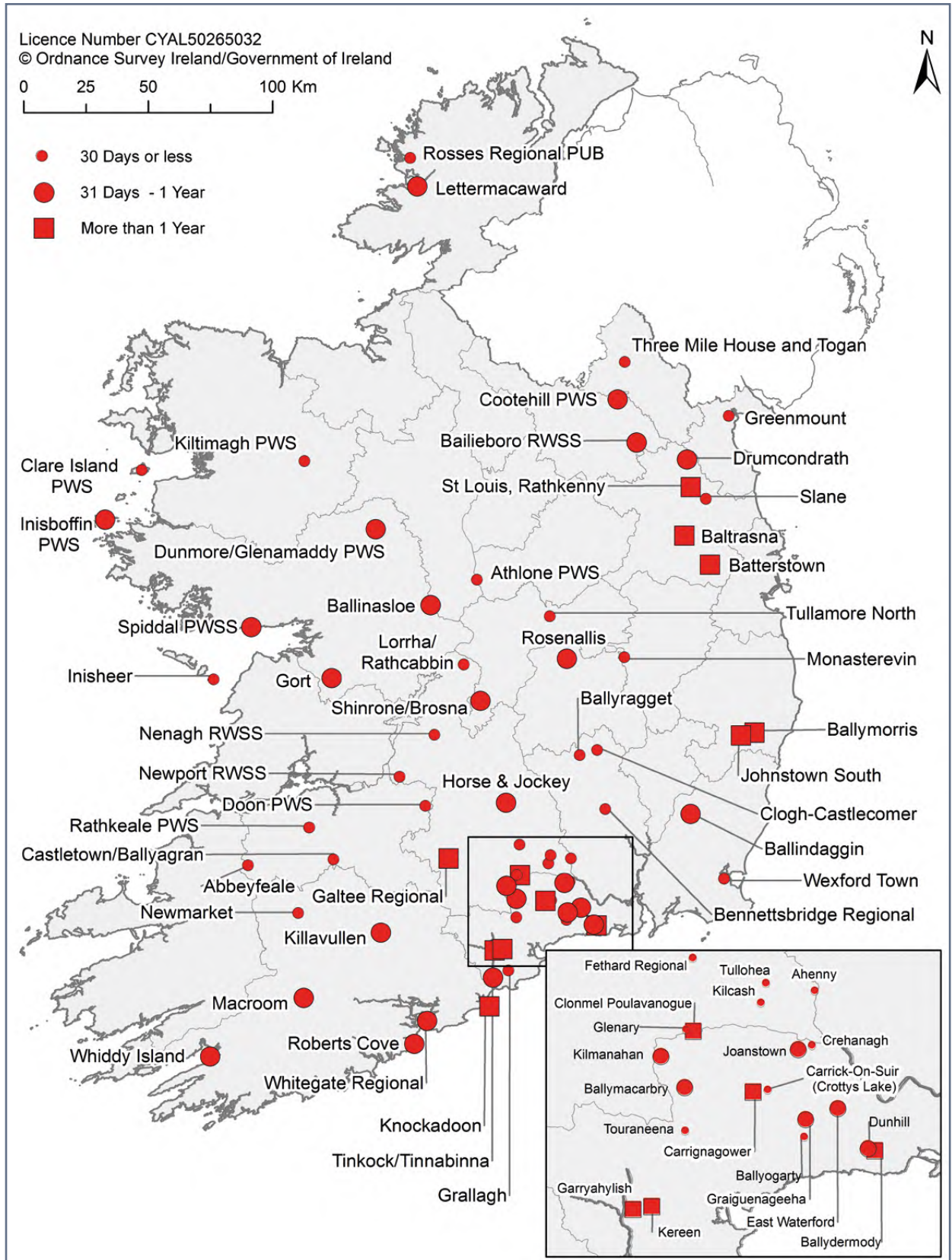


Figure 10: Supplies (incl. duration) with notices (Boil Water/Water Restriction) in place in 2022

Reducing exposure to lead

The Irish Government published a [National Lead Strategy](#)³⁰ in June 2015. The strategy sets out actions to reduce people's exposure to lead from lead piping or connections in buildings and homes, and these actions are reported on by the Department of Housing, Planning and Local Government.

In May 2017 Uisce Éireann published its [Lead in Drinking Water Mitigation Plan](#)³¹ which set out Uisce Éireann's plan to achieve the removal of all public side lead pipework by 2026. Uisce Éireann estimated that there were 180,000 lead service connections, comprising of 140,000 connections from water mains and 40,000 backyard service connections.

The new Drinking Water Directive (EU) 2020/2184 was transposed into Irish law in 2023³² and includes a reduction in the lead limit from 10 µg/l to 5 µg/l; to be achieved by January 2036. Compliance with this limit will most likely not be achieved without the replacement of all lead connections.

Findings for 2022

The Department of Housing, Planning and Local Government has not yet published a report on progress with the National Lead Strategy, so the number and location of public buildings affected, the number of people exposed, and plans to remove lead are still not known. The necessity to finalise and publish this report has been highlighted in previous EPA reports.

The [Lead Remediation Grant Scheme](#)³³ was changed during 2023 to make it easier for the public to get, and this is welcomed by the EPA (See Box 3 for further details).

30 Available at <https://www.gov.ie/en/publication/f76ee-national-lead-strategy-june-2015/>

31 Available at <https://www.water.ie/projects-plans/our-plans/lead-mitigation-plan/>

32 [European Union Drinking Water Regulations 2023, S.I 99 of 2023](#)

33 <https://www.gov.ie/en/publication/7fe5d-domestic-lead-remediation-grant-scheme-customer-leaflet/#>

Box 3 – Lead Remediation Grant Scheme

Any level of lead in drinking water causes a cumulative risk to human health. Lead was used for pipework and plumbing in some houses built up to the 1970s. There has been a Lead Remediation Grant Scheme in place for a number of years with the aim of providing financial assistance to the public to replace lead pipes in their properties.



LEAD



COPPER



BRASS

The Lead Remediation Grant Scheme has been made less restrictive. The scheme no longer requires means testing and now provides up to 100% of the cost of plumbing replacement by the public. Homeowners can take action, supported by this grant, when they are informed by Uisce Éireann that they have lead in their water. This welcome change to the grant is expected to result in more uptake of the scheme and removal of domestic lead pipes. The EPA also encourages homeowners who share a backyard connection that contains lead to allow such works to take place, as removing lead pipework is the best way to protect consumers from the health risks associated with lead.

Uisce Éireann removed over 10,100 lead connections in the public network during 2022. The total number of replacements completed now stands at over 51,600. This is approx. 29% of the estimated 180,000 connections targeted to be replaced by Uisce Éireann. The replacement rate is improving but at this rate, Uisce Éireann will not meet its commitment to remove all public side lead pipework by 2026. If Uisce Éireann continue to replace lead connections at the 2022 rate, it will take well over a decade to address the risks posed to public health from lead in drinking water - which is too slow.

Orthophosphate (OP) dosing to reduce the solubility of lead from pipework is in place at three supplies (Limerick, Hacketstown and Lough Talt), serving almost 60,000 properties. There are 15 additional plants where OP-dosing is installed and Uisce Éireann have highlighted these as a priority to commission in 2023. A dedicated Uisce Éireann team has been assigned to drive the commencement of operation of these plants in 2023.

The forthcoming reduced lead limit from the Drinking Water Directive, the slow rate of lead replacement, and the lack of updates under the National Lead Strategy, emphasises the need for more leadership at a national level. It is not acceptable that these works are being delayed – as they are the only sustainable way to reduce people’s exposure to lead in drinking water.

Actions required

Progress to remove lead from drinking water networks by Uisce Éireann under their Mitigation Plan is too slow and must be accelerated.

Leadership is required at a national level by the Department of Housing, Local Government and Heritage/Department of Health under the National Lead Strategy to address lead replacement. A report on progress towards carrying out the actions within the National Lead Strategy and more specifically on assessments of lead pipework in public buildings and plans for removal is long overdue.

Homeowners should identify and replace any lead pipes in their properties. The Lead Remediation Grant Scheme to remove lead piping - has been made easier to access and the financial support improved in order to assist with this.

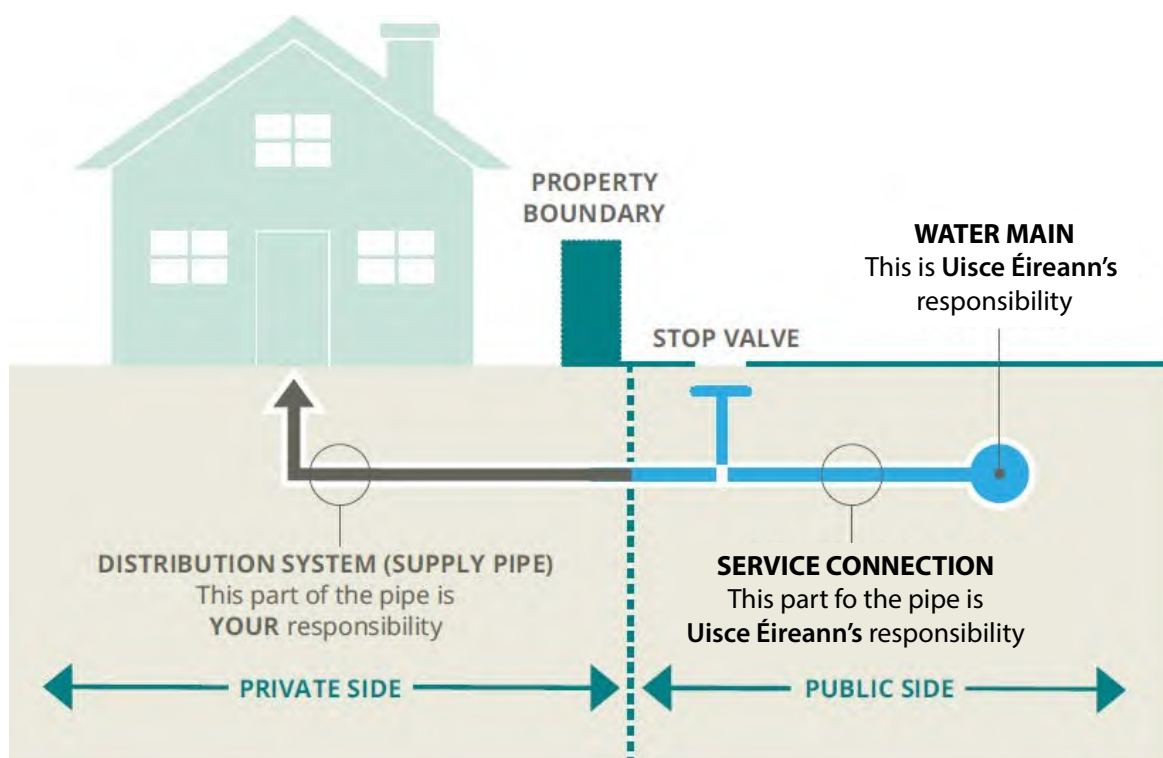


Figure 11: Responsibility for water distribution systems (graphic courtesy of Uisce Éireann)

Drinking Water Safety Plans

Uisce Éireann are undertaking a comprehensive review, known as a Drinking Water Safety Plan, of all public supplies. Drinking Water Safety Plans (DWSPs) are a proactive approach to ensuring that a water supply is not only **safe**, but also **secure**, thus providing greater certainty for the consumer that their drinking water supply will remain safe to drink. A DWSP identifies:

- ▲ all the things that could go wrong (hazards);
- ▲ how serious it would be if it did go wrong (severity); and
- ▲ how likely it is that it could go wrong (likelihood).

This assessment is made at each step in the water supply process, from the water's source all the way to the consumer's tap. The aim is to identify, manage and mitigate risk. Uisce Éireann is assessing all public water supplies. Once risks are identified, actions must be taken to mitigate those risks. A national overview ensures the highest risks are dealt with first, under the relevant Uisce Éireann programmes.

The new Drinking Water Directive (EU) 2020/2184 was transposed into Irish law in 2023 and these regulations put the requirement for DWSPs on a statutory footing. Requirements include putting a full water safety plan approach in place for supplies by January 2029. The plans are required to cover the whole water supply chain from source to tap.

The DWSPs produced by Uisce Éireann must, as a minimum, meet the standards set. Implementation of the DWSP approach is a proactive way to reduce or eliminate the risk of supplies ending up on the RAL. It also provides a robust structure to direct investment towards dealing with the highest risks in terms of the protection of public health.

Findings for 2022

Uisce Éireann is committed to the Drinking Water Safety Plan approach. Uisce Éireann latest report shows they have substantially completed DWSPs for 212 water supply zones (from 148 in 2021) which supply 85% of consumers (almost 3 million people). EPA welcomes this progress by Uisce Éireann in rolling out the Drinking Water Safety Plan approach in advance of it becoming a legal requirement.

Actions required

Uisce Éireann needs to continue to progress Drinking Water Safety Plan assessments to identify risks at drinking water supplies and to safeguard the long-term security of water supplies. Where assessments have been completed, Uisce Éireann must ensure the highest risks identified are prioritised for action so that they can be addressed in a timely manner.

5. CONCLUDING REMARKS

The quality of drinking water in public supplies and public group water schemes remained very high in 2022. Construction of a new plant at Lee Road (Cork City) is significant progress. This is welcomed by the EPA.

The overall number of people served by public water supplies on the EPA's RAL however has increased in 2022. Uisce Éireann must address the increased number of supplies on the RAL and submit action programmes with completion dates for all RAL supplies.

Better vigilance and improved incident management by Uisce Éireann in 2021 has carried over into 2022 - resulting in continued increased detection of problems. These problems have been managed by the temporary imposition of an increased number of protective BWNs. This is considered a positive development, and this vigilance will result in a safer water supply for all consumers. In the medium to long-term the EPA expects to see the number of BWNs reduce due to improved investment and management.

Easier access for the public to the lead remediation grant has been provided by the DHLGH. This is welcomed by the EPA and will contribute to progress in this area. However, people will continue to be exposed to lead in their drinking water, until the estimated 130,000 remaining connections are replaced. At Uisce Éireann's current replacement rate, it will be over a decade before this issue is resolved. Similarly, the DHLGH has yet to publish a plan to address lead piping in public buildings. The EPA is therefore calling for stronger leadership at a national level on the Lead Strategy, especially given that higher standards will come into effect in 2036. Significant improvement in the collective efforts of all stakeholders is required.

The overall number of supplies on the RAL for THM exceedances has increased again in 2022. Progress on improving these supplies must be made.

Uisce Éireann must continue to progress the use of DWSPs across their entire portfolio of water treatment infrastructure to determine the highest risks and to better direct investment. This is essential to mediate those risks and to ensure a resilient public water supply. While the quality of our water is safe to drink today, for it to be secure into the future Uisce Éireann must resolve the priority supplies on the RAL and focus on the risks identified through the drinking water safety plan approach to protect public health.

APPENDIX A REMEDIAL ACTION LIST AT THE END OF 2022

County	Supply	Population	Date supply put on the RAL	Completion date for action plan	Reason/Action proposed
Carlow	Carlow North Regional	7,866	Q2 2021	June 2024	Upgrade of water treatment plant
Cavan	Belturbet	1,726	Q4 2018	EPA Direction required compliance by December 2020. Monitoring underway to verify effectiveness of the action programme.	Complete catchment-focussed engagement actions involving Uisce Éireann and the relevant stakeholders to achieve compliance with the limits for pesticides
Clare	Corofin	1,310	Q4 2015	Complete and awaiting verification of the effectiveness of the action programme	Upgrade of water treatment plant
Clare	Ennistymon RWS	6,703	Q4 2015	December 2023	Upgrade of water treatment plant
Clare	West Clare RWS (New WTP)	10,093	Q3 2017	EPA Direction required compliance by December 2021. Upgrade of Water Treatment Plant completed. Reservoir cleaning/pipe flushing ongoing.	Upgrade of water treatment plant
Clare	West Clare RWS (Old WTP)	4,028	Q2 2021	December 2026	Existing plant to be replaced with new package plant.
Cork	Ballyclough & Mount North	1,977	Q4 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Cork	Castletownbere	2,424	Q4 2021	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Cork	Fermoy	7,447	Q4 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Cork	Glashaboy	22,771	Q1 2020	June 2025	Upgrade of water treatment plant
Cork	Killavullen	810	Q2 2022	December 2024	Rationalisation of supply
Cork	Macroom	4,218	Q4 2022	June 2025	Upgrade water treatment plant
Cork	Mitchelstown North	2,389	Q4 2021	June 2025	Installation of GAC system for removal of organics to minimise THM formation
Cork	Whiddy Island	45	Q2 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann

County	Supply	Population	Date supply put on the RAL	Completion date for action plan	Reason/Action proposed
Cork	Whitegate Regional	9,011	Q1 2021	December 2025	Upgrade of water treatment plant
Donegal	Glenties-Ardara	3,518	2008	September 2024	Installation of membrane filtration system to address the raw water colour and organic content, and minimise THM formation.
Donegal	Lettermacaward	2,266	Q2 2022	December 2024	Upgrade of water treatment plant.
Donegal	Milford	2,560	Q4 2021	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Galway	Inisboffin	165	Q2 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Kerry	Aughacasla	338	Q4 2021	Complete and awaiting verification of the effectiveness of the action programme	Installation of GAC post slow sand filtration.
Kerry	Cahersiveen	1,699	Q4 2019	Crypto risk: June 2023. THM risk: EPA Direction requires compliance by December 2023. IW proposed completion date is June 2024.	Crypto risk: Installation of UV disinfection. THM risk: Installation of GAC post slow sand filtration.
Kerry	Caragh Lake	1,886	2008	Complete and awaiting verification of the effectiveness of the action programme.	Upgrade of pressure filtration and installation of GAC
Kerry	Kilgarvan	630	Q1 2021	December 2024	Installation of GAC post slow sand filters
Kerry	Listowel Regional Public Water Supply	14464	Q2 2022	To be submitted by Uisce Éireann	Develop supplementary groundwater source
Kerry	Lyreacrompane	2,561	Q2 2022	To be submitted by Uisce Éireann	Develop supplementary groundwater source
Kildare	Barrow supply (Srowland WTP) ¹	81,553	Q2 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Kilkenny	Callan	2763	Q3 2021	March 2023	Installation of UV disinfection
Kilkenny	Kilkenny City (Radestown) WS	14,483	2008	EPA Direction requires compliance by 30th June 2022. Uisce Éireann has now provided a completion date of March 2024.	Abandon source of water supply and replace with Troyswood PWS
Kilkenny	Pilltown-Fiddown	2,973	Q2 2019	March 2023	Develop new groundwater source

County	Supply	Population	Date supply put on the RAL	Completion date for action plan	Reason/Action proposed
Limerick	Foynes/Shannon Estuary PWS	7,215	Q4 2020	EPA Direction requires compliance by April 2023	To be submitted by Uisce Éireann
Limerick	Limerick City Environs	114,864	Q2 2022	December 2023	Optimisation of plant and network to reduce risk of THM formation.
Longford	Granard	2,447	Q2 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Longford	Longford Central	15,979	Q1 2020	Uisce Éireann to provide a date for compliance with the THM parametric value of 100 ug/L.	Upgrade of water treatment plant.
Louth	Greenmount	3,955	Q2 2019	September 2026	Upgrade of treatment facilities.
Louth	Tallanstown	1,932	Q3 2019	EPA Direction required compliance by December 2020. Uisce Éireann has provided a completion date of October 2023.	Replacement of supply with Cavanhill PWS
Mayo	Louisburgh	885	Q3 2021	To be submitted by Uisce Éireann	Abandon source and connect to Westport PWS (via Murrisk Group Water Scheme)
Mayo	Newport PWS	684	Q3 2019	EPA Direction required compliance by December 2021. Monitoring underway to verify effectiveness of the action programme.	Complete catchment-focussed engagement actions involving Uisce Éireann and the relevant stakeholders to achieve compliance with the limits for pesticides
Meath	Batterstown	96	Q3 2021	June 2023	Replace source and connect to Dunshaughlin PWS to address bromate exceedances
Meath	Drumcondrath	1,227	Q3 2015	EPA Direction requires compliance by June 2023. Uisce Éireann has provided a proposed completion date of June 2026.	Develop new groundwater sources and upgrade water treatment plant
Meath	Navan - Mid Meath Kilcarn PWS	6,412	2008	June 2026	Replace DAFF with new CFC and filtration.
Meath	Trim PWS	11,187	Q4 2021	December 2025	Upgrade of water treatment plant
Offaly	Clara/Ferbane RWSS	7,341	Q2 2019	June 2024	Upgrade of water treatment plant
Roscommon	North East Regional	7,803	Q4 2021	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann

County	Supply	Population	Date supply put on the RAL	Completion date for action plan	Reason/Action proposed
Tipperary	Borrisokane	1,841	Q2 2021	June 2023	Installation of UV disinfection
Tipperary	Clonmel Poulavanogue	2,435	2008	Inadequate contact time risk: June 2023. Cryptosporidium risk: December 2026	Connection of affected properties to new water main/Rationalisation of WTP
Tipperary	Galtee Regional	11,379	Q3 2019	December 2026	Further upgrade of water treatment plant
Tipperary	Kilcash	207	Q4 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Tipperary	Nenagh Regional	14,005	Q2 2021	January 2023	Installation of pH correction to optimise coagulation stage
Tipperary	Roscrea	6,223	Q4 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Tipperary	Templetuohy	808	Q4 2022	To be submitted by Uisce Éireann	To be submitted by Uisce Éireann
Waterford	Dungarvan	12,893	Q3 2020	September 2026	Construction of new water treatment plant
Waterford	Graiguenageeha	43	Q2 2022	December 2024	Abandon source and connect to Stradbally PWS
Waterford	Kereen	28	Q2 2021	March 2023	Abandon source and connect to Cappoquin PWS
Wexford	Clonroche	588	Q4 2018	EPA Direction required compliance by January 2021. Monitoring underway to verify the effectiveness of the action programme.	Complete catchment-focussed engagement actions involving Uisce Éireann and the relevant stakeholders to achieve compliance with the limits for pesticides.
Wexford	Enniscorthy	11,288	Q2 2022	June 2025	Upgrade of water treatment plant
Wexford	Wexford Town	20,791	Q4 2021	December 2024	Upgrade of water treatment plant
Wicklow	Aughrim / Annacurra	1,588	2008	EPA Direction requires compliance by December 2023	Abandon source and connect to Arklow water treatment plant
Wicklow	Ballymorris	17	Q1 2021	December 2023	Abandon source and connect to Arklow water treatment plant

APPENDIX B MONITORING AND COMPLIANCE SUMMARY FOR PUBLIC WATER SUPPLIES IN 2022

Parameter	No. of Zones Monitored	No of Zones with Exceedances	% of Zones Complying	No. of Samples Analysed	No. of Samples Exceeding	% of Samples Complying
Microbiological						
E. coli	734	1	99.86	8,259	1	99.99
Enterococci	608	3	99.51	1,011	3	99.7
Chemical						
1,2-dichloroethane	608	0	100.00	1,005	0	100.00
Antimony	608	0	100.00	1,009	0	100.00
Arsenic	608	0	100.00	1,013	0	100.00
Benzene	608	0	100.00	1,005	0	100.00
Benzo(a)pyrene	608	0	100.00	1,009	0	100.00
Boron	608	0	100.00	1,009	0	100.00
Bromate	608	0	100.00	1,009	0	100.00
Cadmium	608	0	100.00	1,009	0	100.00
Chromium	608	0	100.00	1,009	0	100.00
Copper	611	1	99.84	1,016	3	99.70
Cyanide	608	0	100.00	1,033	0	100.00
Fluoride	605	16	97.36	1,007	20	98.01
Lead	611	11	98.20	1,016	13	98.72
Mercury	608	0	100.00	1,009	0	100.00
Nickel	611	2	99.67	1,016	2	99.80
Nitrate	619	0	100.00	1,059	0	100.00
Nitrite (at tap)	619	0	100.00	1,078	0	100.00
PAH	608	0	100.00	1,007	0	100.00
Pesticides - Total	607	2	99.67	1,009	2	99.80
Selenium	608	0	100.00	1,009	0	100.00
Tetrachloroethene & Trichloroethene	608	0	100.00	1,005	0	100.00
Trihalomethanes(Total)	608	32	94.74	1,009	44	95.64
Indicator						
Aluminium	630	23	96.35	6,525	32	99.51
Ammonium	619	2	99.68	1,094	2	99.82
Chloride	607	1	99.84	1,007	1	99.90
Clostridium Perfringens	607	0	100.00	1,010	0	100.00
Coliform Bacteria	734	55	92.51	8,256	60	99.27

Parameter	No. of Zones Monitored	No of Zones with Exceedances	% of Zones Complying	No. of Samples Analysed	No. of Samples Exceeding	% of Samples Complying
Colony Count @ 22°C	734	101	86.24	7,043	137	98.05
Colour	734	45	93.87	8,237	71	99.14
Conductivity	734	0	100.00	8,249	0	100.00
Iron	734	45	93.87	8,250	62	99.25
Manganese	619	14	97.74	1,079	17	98.42
Odour	734	0	100.00	7,428	0	100.00
pH	734	120	83.65	8,233	231	97.19
Sodium	608	3	99.51	1,008	4	99.60
Sulphate	608	1	99.84	1,012	1	99.90
Taste	734	1	99.86	7,393	1	99.99
Total Organic Carbon	608	1	99.84	1,009	1	99.90
Turbidity (at tap)	734	16	97.82	8,252	17	99.79

APPENDIX C MONITORING AND COMPLIANCE SUMMARY FOR PUBLIC GROUP WATER SUPPLIES IN 2022

Parameter	No. of Zones Monitored	No of Zones with Exceedances	% of Zones Complying	No. of Samples Analysed	No. of Samples Exceeding	% of Samples Complying
Microbiological						
E. coli	348	0	100.00	731	0	100.00
Enterococci	148	2	98.65	152	2	98.68
Chemical						
1,2-dichloroethane	110	0	100.00	113	0	100.00
Antimony	112	0	100.00	115	0	100.00
Arsenic	118	0	100.00	121	0	100.00
Benzene	110	0	100.00	113	0	100.00
Benzo(a)pyrene	110	0	100.00	113	0	100.00
Boron	112	0	100.00	115	0	100.00
Bromate	116	0	100.00	119	0	100.00
Cadmium	112	0	100.00	115	0	100.00
Chromium	112	0	100.00	115	0	100.00
Copper	117	0	100.00	120	0	100.00
Cyanide	116	0	100.00	118	0	100.00
Fluoride	133	6	95.49	147	6	95.92
Lead	134	0	100.00	149	0	100.00
Mercury	110	0	100.00	113	0	100.00
Nickel	118	0	100.00	121	0	100.00
Nitrate	167	0	100.00	189	0	100.00
Nitrite (at tap)	191	0	100.00	317	0	100.00
PAH	110	0	100.00	113	0	100.00
Pesticides - Total	111	1	99.10	114	1	99.12
Selenium	112	0	100.00	115	0	100.00
Tetrachloroethene & Trichloroethene	110	0	100.00	113	0	100.00
Trihalomethanes(Total)	148	12	91.89	155	12	92.26
Indicator						
Aluminium	302	6	98.01	602	6	99.00
Ammonium	174	1	99.43	286	2	99.30
Chloride	116	0	100.00	122	0	100.00
Clostridium Perfringens	147	1	99.32	150	1	99.33

Parameter	No. of Zones Monitored	No of Zones with Exceedances	% of Zones Complying	No. of Samples Analysed	No. of Samples Exceeding	% of Samples Complying
Coliform Bacteria	348	10	97.13	731	13	98.22
Colony Count @ 22Â°C	348	7	97.99	708	7	99.01
Colour	347	7	97.98	729	7	99.04
Conductivity	348	0	100.00	731	0	100.00
Iron	329	9	97.26	652	9	98.62
Manganese	166	4	97.59	185	4	97.84
Odour	345	0	100.00	728	0	100.00
pH	348	1	99.71	731	1	99.86
Sodium	134	3	97.76	153	3	98.04
Sulphate	116	0	100.00	122	0	100.00
Taste	342	0	100.00	711	0	100.00
Total Organic Carbon	116	2	98.28	119	2	98.32
Turbidity (at tap)	348	0	100.00	731	0	100.00

APPENDIX D-1 DIRECTIONS ISSUED IN 2022

Water Supply Zone Name	WSZ County	Direction Issued	Direction Deadline	Issue	Direction Status at end 2022
Mitchelstown North	Cork	29/03/2022	30/06/2022	Trihalomethanes	Direction complied with
Castletownbere	Cork	29/03/2022	30/06/2022	Trihalomethanes	Deadline passed - further enforcement action not currently being pursued because trials are being undertaken to determine the preferred solution.
Whitegate Regional	Cork	29/03/2022	30/06/2022	Upgrade of water treatment plant required	Direction complied with
Milford	Donegal	29/03/2022	30/06/2022	Trihalomethanes	Direction complied with
Caragh Lake	Kerry	29/03/2022	30/06/2022	Trihalomethanes	Direction compliance under assessment. Upgrade works completed and verification monitoring to demonstrate THM compliance ongoing.
Aughacasla	Kerry	29/03/2022	30/06/2022	Trihalomethanes	Direction complied with.
Kilgarvan	Kerry	29/03/2022	30/06/2022	Trihalomethanes	Direction complied with.
Cahersiveen	Kerry	29/03/2022	31/12/2023	Trihalomethanes	Date in the direction has not yet been reached
Greenmount	Louth	29/03/2022	30/06/2022	Upgrade of water treatment plant required.	Direction complied with
Clara/Ferbane	Offaly	29/03/2022	30/06/2024	Trihalomethanes	Date in the direction has not yet been reached
North East Regional	Roscommon	29/03/2022	30/06/2022	Trihalomethanes	Direction complied with.
Nenagh	Tipperary	29/03/2022	30/06/2022	Trihalomethanes	Deadline passed-further enforcement action not currently being pursued as works are currently being undertaken and being validated.
Clonmel Poulavanogue	Tipperary	29/03/2022	30/06/2022	Inadequate disinfection.	Direction complied with
Clonmel Poulavanogue	Tipperary	29/03/2022	30/06/2022	Cryptosporidium risk.	Direction complied with

APPENDIX D-1 DIRECTIONS OPEN RELATING TO TMH COMPLIANCE

Water Supply Zone Name	County	Date for Compliance with Direction
West Clare RWS (New WTP)	Clare	31/12/2021 (Work completed and being validated.)
Kilkenny City (Radestown) PWS	Kilkenny	30/06/2022 (Decommissioning expected 2024 – Uisce Éireann to update EPA)
Drumcondrath	Meath	30/06/2023 (Deadline not reached as of 31/12/22)
Aughrim Annacurra Public Supply	Wicklow	31/12/2023 (Deadline not reached as of 31/12/22)
Castletownbere	Cork	30/06/2022 (Trials underway)
Caragh Lake PWS 022A	Kerry	30/06/2022 (Upgrade works completed and verification monitoring to demonstrate THM compliance ongoing)
Cahersiveen PWS 017H	Kerry	31/12/2023 (Deadline not reached as of 31/12/22)
Clara/Ferbane PWS	Offaly	30/06/2024 (Deadline not reached as of 31/12/22)
North East Regional PWS	Roscommon	30/06/2022 (Direction now complied with)
Nenagh RWSS	Tipperary	30/06/2022 (Works are currently being undertaken and being validated)

APPENDIX E PUBLIC GROUP SCHEMES TRIHALOMETHANE FAILURES IN 2022

County	Public group scheme name	Supplied by public scheme
Cavan County Council	Derryvoney	Belturbet
Clare County Council	Coolmeen	Kiladysert
Clare County Council	Moyasta	West Clare - New Doolough
Clare County Council	Querrin	West Clare - New Doolough
Clare County Council	Cross, Kilbaha	West Clare - New Doolough
Clare County Council	Rahone	West Clare - New Doolough
Clare County Council	Killimer	West Clare - New Doolough
Clare County Council	Manusmore	Ennis PWS
Clare County Council	Silverhill/Glendine	Miltown Malbay PWS
Donegal County Council	Crownalaghey/Meenreagh	N.I. Water Services
Mayo County Council	Cloonislaun	Ballina RWSS
Tipperary County Council	ElmHill /Ballymackey	Nenagh RWSS

APPENDIX F BOIL WATER AND WATER RESTRICTION NOTICES IN PLACE DURING 2022

Table 1: Boil Water Notices in place during 2022

County	Scheme Name	Reason	Date Notice Issued	Date Notice Lifted (N/L means not lifted as of 1/1/23)	Population Affected by Notice ³⁴
Cavan	Cootehill PWS	Property specific issue	08/12/2021	25/04/2022	10
Cavan	Bailieboro RWSS	Coliform bacteria	17/06/2022	19/10/2022	5
Cork	Killavullen	Turbidity	28/02/2022	24/03/2022	810
Cork	Killavullen	Turbidity	02/05/2022	N/L	-
Cork	Knockadoon	Inadequate disinfection	31/07/2019	20/01/2022	27
Cork	Macroon	Raw water turbidity	13/11/2022	N/L	4,237
Cork	Newmarket	Turbidity	18/02/2022	02/03/2022	9,529
Cork	Whiddy Island	Inadequate treatment	15/02/2022	21/06/2022	30
Cork	Whitegate Regional	Turbidity	25/12/2021	03/06/2022	9,011
Cork	Whitegate Regional	Turbidity	29/10/2022	N/L	-
Donegal	Lettermacaward	Inadequate treatment	12/08/2022	24/10/2022	2,266
Donegal	Rosses Regional PUB	Mechanical failure at the water treatment plant	15/12/2022	22/12/2022	9,350
Galway	Dunmore/Glenamaddy PWS	Lack of raw water treatment	17/02/2022	N/L	1
Galway	Gort	Mechanical failure at the water treatment plant	02/02/2022	24/06/2022	2,776
Galway	Gort	Mechanical failure at the water treatment plant	12/12/2022	N/L	-
Galway	Inisboffin PWS	Inadequate treatment and supply	25/08/2022	03/09/2022	165
Galway	Spiddal PWSS	Inadequate disinfection	24/10/2022	N/L	250
Galway	Ballinasloe Public Supply	Coliform bacteria	25/02/2022	05/10/2022	350

³⁴ Note that where multiple notices are issued for the same supply – the population affected is counted only once in total population affected figures to avoid duplication.

County	Scheme Name	Reason	Date Notice Issued	Date Notice Lifted (N/L means not lifted as of 1/1/23)	Population Affected by Notice ³⁴
Kildare	Monasterevin	Inadequate disinfection	08/01/2022	19/01/2022	5,797
Kilkenny	Ballyragget PWS	Turbidity	30/10/2022	07/11/2022	1,391
Kilkenny	Bennettsbridge Regional PWS	Turbidity	29/10/2022	07/11/2022	4,273
Kilkenny	Clogh-Castlecomer PWS	Turbidity	28/10/2022	07/11/2022	3,298
Kilkenny	Clogh-Castlecomer PWS	Turbidity	16/12/2022	N/L	-
Laois	Rosenallis PWS	Turbidity	04/11/2022	09/12/2022	202
Limerick	Abbeyfeale PWS	Inadequate disinfection	25/06/2022	01/07/2022	6,886
Limerick	Castletown/Ballyagran PWS	UV system problems	19/05/2022	01/06/2022	1,276
Limerick	Doon PWS	UV system problems	24/02/2022	23/03/2022	700
Limerick	Rathkeale PWS	Turbidity	13/04/2022	20/04/2022	6,633
Louth	Greenmount	Enterococci bacteria	18/07/2022	28/07/2022	278
Louth	Greenmount	Enterococci bacteria	28/07/2022	12/08/2022	-
Mayo	Clare Island PWS	Inadequate disinfection	11/09/2022	16/09/2022	165
Mayo	Kiltimagh PWS	Inadequate disinfection	02/02/2022	04/02/2022	1,796
Meath	Baltrasna	E. coli bacteria & Manganese	22/12/2014	N/L	9
Meath	Batterstown	Bromate	13/12/2021	N/L	96
Meath	Drumcondrath	Turbidity	28/12/2021	08/02/2022	1,227
Meath	Slane	Inadequate disinfection	03/08/2022	08/08/2022	2,200
Meath	St Louis, National School, Rathkenny	UV system problems	05/02/2021	12/12/2022	48
Offaly	Tullamore North PWS	Enterococci bacteria	23/05/2022	01/06/2022	4
Offaly	Shinrone/Brosna PWS	Coliform bacteria	30/09/2022	14/12/2022	4

County	Scheme Name	Reason	Date Notice Issued	Date Notice Lifted (N/L means not lifted as of 1/1/23)	Population Affected by Notice ³⁴
Tipperary	Carrick-On-Suir (Crottys Lake)	Turbidity	13/05/2022	01/06/2022	2,322
Tipperary	Clonmel Poulavanogue	Turbidity & Cryptosporidium	11/10/2018	NL	96
Tipperary	Galtee Regional	Turbidity	05/09/2022	23/09/2022	-
Tipperary	Fethard Regional PWSS	Inadequate disinfection	29/06/2022	07/07/2022	-
Tipperary	Fethard Regional PWSS	Inadequate treatment and disinfection	24/12/2022	NL	6,744
Tipperary	Galtee Regional	Iron	30/10/2019	11/02/2022	307
Tipperary	Galtee Regional	Turbidity	25/06/2022	08/07/2022	15,795
Tipperary	Glenary	Turbidity	13/09/2022	07/10/2022	10,564
Tipperary	Horse & Jockey PWS	Turbidity	13/08/2022	22/08/2022	648
Tipperary	Horse & Jockey PWS	Turbidity	03/09/2022	22/12/2022	-
Tipperary	Nenagh RWSS	Inadequate supply	20/07/2022	27/07/2022	592
Tipperary	Newport RWSS	Turbidity	12/06/2022	17/06/2022	7,321
Tipperary	Ahenny	Turbidity	04/11/2022	16/11/2022	77
Tipperary	Lorrha/Rathcabbin (Zone 3 - Mix)	UV system problems	04/01/2022	26/01/2022	50
Tipperary	Tullohea	Turbidity	11/08/2022	24/08/2022	406
Tipperary	Kilcash	Turbidity	11/08/2022	24/08/2022	207
Tipperary	Carrick-On-Suir (Lingaun River)	Turbidity	26/12/2021	19/01/2022	3,954
Tipperary	Lorrha/Rathcabbin (Zone 3 - Mix)	UV system problems	05/10/2022	28/10/2022	20
Waterford	Ballymacarbry	Turbidity	13/05/2022	21/06/2022	642
Waterford	Carrignagower	Inadequate disinfection	22/12/2021	NL	35
Waterford	Ballyogarty	Inadequate disinfection	14/02/2022	18/02/2022	572

County	Scheme Name	Reason	Date Notice Issued	Date Notice Lifted (N/L means not lifted as of 1/1/23)	Population Affected by Notice ³⁴
Waterford	Crehanagh	Inadequate disinfection	10/09/2022	22/09/2022	19
Waterford	Dunhill	Turbidity	14/07/2022	23/08/2022	122
Waterford	Garryahylish	Inadequate disinfection	22/12/2021	N/L	2
Waterford	Graiguenageeha	Inadequate disinfection	07/01/2022	N/L	40
Waterford	Grallagh	Inadequate disinfection	07/07/2022	15/07/2022	48
Waterford	Grallagh	Turbidity	29/10/2022	15/11/2022	-
Waterford	East Waterford Water Supply Scheme	Iron	17/02/2022	02/12/2022	189
Waterford	Joanstown	Inadequate disinfection	07/01/2022	05/04/2022	112
Waterford	Kereen	Turbidity	19/02/2021	N/L	28
Waterford	Kilmanahan	Inadequate disinfection	07/01/2022	20/12/2022	11
Waterford	Tinkock/Tinnabinna	Inadequate disinfection	22/12/2021	20/12/2022	43
Waterford	Touraneena	Turbidity	07/09/2022	22/09/2022	343
Westmeath	Athlone PWS	Inadequate treatment	10/03/2022	11/03/2022	19,013
Wexford	Enniscorthy	Cryptosporidium	23/05/2022	03/06/2022	11,288
Wexford	Ballindaggin	Flooding at treatment plant.	09/03/2022	09/05/2022	198
Wexford	Wexford Town	Giardia	02/11/2022	25/11/2022	25,196
Wexford	Wexford Town	Turbidity	11/03/2022	22/03/2022	-
Wicklow	Ballymorris Public Supply	Turbidity, Iron & Manganese	18/07/2019	N/L	17
Wicklow	Johnstown South (Arklow) Public Supply ³⁵	Coliform bacteria	04/06/2015	N/L	6

³⁵ This is a disputed supply

Table 2: Water Restriction Notices in place during 2022

County	Supply Name	Reason	Issued	Rescinded (N/L means not lifted as of 1/1/23)	Population Affected by Notice
Cavan	Cootehill PWS	Manganese	04/07/2022	14/07/2022	2,191
Cork	Roberts Cove	Sodium	31/08/2022	05/10/2022	65
Cork	Whiddy Island	Turbidity	06/09/2021	15/02/2022	-
Cork	Whiddy Island	Turbidity	19/08/2022	N/L	40
Galway	Inisboffin PWS	Manganese	03/09/2022	21/12/2022	156
Galway	Inisheer	Manganese	16/09/2022	19/09/2022	257
Galway	Spiddal PWSS	Manganese	16/09/2022	24/10/2022	5,676
Monaghan	Three Mile House and Togan	Manganese	02/09/2022	09/09/2022	319
Waterford	Ballydermody	Nitrate	12/12/2013	N/L	2
Waterford	East Waterford Water Supply Scheme	Manganese	22/12/2022	N/L	3

AN GHNÍOMHAIREACTH UM CHAOMHNÚ COMHSHAOIL

Tá an GCC freagrach as an gcomhshaol a chosaint agus a fheabhsú, mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaol a chosaint ar thionchar díobhálach na radaíochta agus an truailithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

Rialáil: Rialáil agus córais chomhlíonta comhshaoil éifeachtacha a chur i bhfeidhm, chun dea-thorthaí comhshaoil a bhaint amach agus díriú orthu siúd nach mbíonn ag cloí leo.

Eolas: Sonraí, eolas agus measúnú ardchaighdeán, spriocdhírthe agus tráthúil a chur ar fáil i leith an chomhshaoil chun bonn eolais a chur faoin gcinnteoireacht.

Ahbcóideacht: Ag obair le daoine eile ar son timpeallachta glaine, táirgiúla agus dea-chosanta agus ar son cleachtas inbhuanaithe i dtaobh an chomhshaoil.

I measc ár gcuid freagrachtaí tá:

Ceadúnú

- Gníomhaíochtaí tionscail, dramhaíola agus stórála peitрил ar scála mór;
- Sceitheadh fuíolluisce uirbhig;
- Úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe;
- Foinsí radaíochta ianúcháin;
- Astaíochtaí gás ceaptha teasa ó thionscal agus ón eitlíocht trí Scéim an AE um Thrádáil Astaíochtaí.

Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Iniúchadh agus cigireacht ar shaoráidí a bhfuil ceadúnas acu ón GCC;
- Cur i bhfeidhm an dea-chleachtais a stiúradh i ngníomhaíochtaí agus i saoráidí rialáilte;
- Maoirseacht a dhéanamh ar fhreagrachtaí an údaráis áitiúil as cosaint an chomhshaoil;
- Caighdeán an uisce óil phoiblí a rialáil agus údaruithe um sceitheadh fuíolluisce uirbhig a fhorfheidhmiú
- Caighdeán an uisce óil phoiblí agus phríobháidigh a mheasúnú agus tuairisciú air;
- Comhordú a dhéanamh ar líonra d'eagraíochtaí seirbhíse poiblí chun tacú le gníomhú i gcoinne coireachta comhshaoil;
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaol.

Bainistíocht Dramhaíola agus Ceimiceáin sa Chomhshaol

- Rialacháin dramhaíola a chur i bhfeidhm agus a fhorfheidhmiú lena n-áirítear saincheisteanna forfheidhmithe náisiúnta;
- Staitisticí dramhaíola náisiúnta a ullmhú agus a fhoilsiú chomh maith leis an bPlean Náisiúnta um Bainistíocht Dramhaíola Guaisí;
- An Clár Náisiúnta um Chosc Dramhaíola a

fhorbairt agus a chur i bhfeidhm;

- Reachtaíocht ar rialú ceimiceán sa timpeallacht a chur i bhfeidhm agus tuairisciú ar an reachtaíocht sin.

Bainistíocht Uisce

- Plé le struchtúir náisiúnta agus réigiúnacha rialachais agus oibriúcháin chun an Chreat-treoir Uisce a chur i bhfeidhm;
- Monatóireacht, measúnú agus tuairisciú a dhéanamh ar chaighdeán aibhneacha, lochanna, uisce idirchreasa agus cósta, uisce snámha agus screamhuisce chomh maith le tomhas ar leibhéil uisce agus sreabhadh abhann.

Eolaíocht Aeráide & Athrú Aeráide

- Fardail agus réamh-mheastacháin a fhoilsiú um astaíochtaí gás ceaptha teasa na hÉireann;
- Rúnaíocht a chur ar fáil don Chomhairle Chomhairleach ar Athrú Aeráide agus tacaíocht a thabhairt don Idirphlé Náisiúnta ar Ghníomhú ar son na hAeráide;
- Tacú le gníomhaíochtaí forbartha Náisiúnta, AE agus NA um Eolaíocht agus Beartas Aeráide.

Monatóireacht & Measúnú ar an gComhshaol

- Córais náisiúnta um monatóireacht an chomhshaoil a cheapadh agus a chur i bhfeidhm: teicneolaíocht, bainistíocht sonraí, anailís agus réamhaisnéisiú;
- Tuairiscí ar Staid Timpeallacht na hÉireann agus ar Tháscairí a chur ar fáil;
- Monatóireacht a dhéanamh ar chaighdeán an aeir agus Treoir an AE i leith Aeir Ghlain don Eoraip a chur i bhfeidhm chomh maith leis an gCoinbhinsiún ar Aerthruaillíú Fadraoin Trasteorann, agus an Treoir i leith na Teorann Náisiúnta Astaíochtaí;
- Maoirseacht a dhéanamh ar chur i bhfeidhm na Teorach i leith Toráinn Timpeallachta;
- Measúnú a dhéanamh ar thionchar pleananna agus clár beartaithe ar chomhshaol na hÉireann.
- Taighde agus Forbairt Comhshaoil
- Comhordú a dhéanamh ar ghníomhaíochtaí taighde comhshaoil agus iad a mhaoiniú chun brú a aithint, bonn eolais a chur faoin mbeartas agus réitigh a chur ar fáil;
- Comhoibriú le gníomhaíocht náisiúnta agus AE um thaighde comhshaoil.

Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéil radaíochta agus nochtadh an phobail do radaíocht ianúcháin agus do réimsí leictreamaighnéadacha a mheas;
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as taismí núicléacha;
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta;
- Sainseirbhísí um chosaint ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

Treoir, Ardú Feasachta agus Faisnéis Inrochtana

- Tuairisciú, comhairle agus treoir neamhspleách, fianaise-bhunaithe a chur ar fáil don Rialtas, don tionscal agus don phobal ar ábhair maidir le cosaint comhshaoil agus raideolaíoch;
- An nasc idir sláinte agus folláine, an geilleagar agus timpeallacht ghlan a chur chun cinn;
- Feasacht comhshaoil a chur chun cinn lena n-áirítear tacú le hiompraíocht um éifeachtúlacht acmhainní agus aistriú aeráide;
- Tástáil radóin a chur chun cinn i dtithe agus in ionaid oibre agus feabhsúchán a mholadh áit is gá.

Comhpháirtíocht agus líonrú

- Oibriú le gníomhaireachtaí idirnáisiúnta agus náisiúnta, údaráis réigiúnacha agus áitiúla, eagraíochtaí neamhrialtais, comhlachtaí ionadaíochta agus ranna rialtais chun cosaint comhshaoil agus raideolaíoch a chur ar fáil, chomh maith le taighde, comhordú agus cinnteoireacht bunaithe ar an eolaíocht.

Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an GCC á bhainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóir. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig um Inbhuanaitheacht i leith Cúrsaí Comhshaoil
- An Oifig Forfheidhmithe i leith Cúrsaí Comhshaoil
- An Oifig um Fhianaise agus Measúnú
- An Oifig um Chosaint ar Radaíocht agus Monatóireacht Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tugann coistí comhairleacha cabhair don Ghníomhaireacht agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair inní agus le comhairle a chur ar an mBord.



Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

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