

Improving information and signposting for users and managers of private water supplies and private sewerage facilities

Final Report

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Contents

Executive Summary	2
1 Introduction	3
1.1 Aims of this research	4
1.2 Background.....	4
1.3 Structure of this report	5
2 Research method and framework	6
2.1 Overview of research process and scope	6
2.2 A research framework.....	6
2.3 Research method.....	12
3 Findings on information about private water supplies	13
3.1 Availability	13
3.2 Duplication and conflicting information.....	16
3.3 Accessibility	17
3.4 A consumer's perspective: finding the right information (signposting)	19
3.5 A comparison with international examples.....	21
4 Findings on information about private sewerage facilities	25
4.1 Availability	25
4.2 Duplication and conflicting information.....	27
4.3 Accessibility	27
4.4 A consumer's perspective: finding the right information (signposting)	29
4.5 A comparison with international examples.....	29
5 Conclusions and next steps	31
5.1 Private water supplies findings	31
5.2 Private sewerage findings.....	32
5.3 Conclusions	33
5.4 Next steps.....	34
Annex 1 Method.....	36
Annex 2 Comparisons between local authorities' PWS information.....	42

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Executive Summary

The Consumer Futures Unit (CFU) of Citizens Advice Scotland (CAS) commissioned this research into the information available to managers and users of private water supplies and private sewerage in Scotland (described as consumers more widely throughout this report). This research aimed to support the work of the Scottish Government's Rural Provision Working Group (RPWG), which will assess rural services provision in Scotland in terms of statutory compliance.

Health risks associated with private water supplies can be severe and are the responsibility of individuals who manage those supplies. Comprehensive and accessible information is therefore a vital part of ensuring that managers and users of those supplies maintain and treat them properly. Private sewerage can have a detrimental impact on the environment and information has a similarly important role in supporting managers to maintain those facilities appropriately.

This study identified and assessed sources of information aimed at helping Scottish consumers to understand their rights in relation to the management of private water and wastewater supplies, and to meet their responsibilities. Each source was analysed for comprehensiveness and accessibility in terms of how easy it was for consumers to find and to understand. The study examined how well consumers were signposted between different information sources. Stakeholders participated, helping to identify sources of information.

Key findings of this study are outlined below.

- On most aspects of managers' and users' rights and responsibilities in Scotland, comprehensive and accessible **information is available**. The best information is concentrated among a small number of online sources, such as Drinking Water Quality Regulator for Scotland (DWQR), CAS and some local authorities.
- Some **information sources, including a few local authorities, do not provide adequate or substantive information publicly online**. This includes local authorities that have a significant number of private water supplies.
- **Signposting pointing consumers to information is poor in many cases**. This could hinder and in some cases, prevent managers and users from getting the information they need on their rights and their responsibilities. Included in this group are some local authorities, which do not signpost consumers effectively to other more comprehensive, accessible sources.
- **Some simple measures could improve access to the right information** – such as encouraging local authorities to signpost consumers to the best information sources such as DWQR and CAS, or to encourage replication of information from those sources.
- Some **information examples from outside Scotland could support the improvement of existing information in Scotland**, such as the Charter of Rights and Responsibilities (Ireland).

These findings will inform the RPWG's work and Scottish Government policy with respect to private water supplies and sewerage. This could include examining appropriate policy responses from local authorities to ensure essential information is made available to consumers. Options range from collaboration between stakeholders responsible for providing information on private water and wastewater supplies, to developing a minimum information standard, to consideration of mandatory requirements on local authorities.

This study highlighted opportunities for further consumer research to inform future policy on private water supplies and sewerage information. In particular, this could focus on how consumers actually use the information so that improvements are informed by consumers and can be targeted in the most effective areas. For example, to examine which sources consumers use to find information, how easily they can find that information and what other information they need but cannot find.

1 Introduction

Around 164,000 people in Scotland are served by over 20,436 registered private water supplies¹, which range from boreholes to surface water supplies. Most are rural and users range from individual households to seasonal tourists visiting the area. These supplies serve around 3.4% of the Scottish population and many more visitors and tourists.

All water supplied for human consumption in Scotland must be wholesome according to the Water (Scotland) Act 1980, in accordance with the First Drinking Water Quality Directive². In Scotland, these requirements were transposed by the Private Water Supplies (Scotland) regulations 2006.

Private water supplies and private sewerage facilities in Scotland are the responsibility of individuals or the community groups who manage them. This differs from public water and sewerage services provided by Scottish Water, which takes responsibility for services it provides.

The (amended) 1980 Act gives local authorities responsibility for enforcing the private water supplies legislation and the power to do so. Local authorities are responsible for classifying private water supplies and regulations differ according to the type of supply³:

- **Type A supply** is that determined to be above 10m³ per day or 50 persons or more, or supplies to commercial or public activities irrespective of size; and
- **Type B supply** is that determined to be below both these limits and serving only domestic premises.

The Drinking Water Quality Regulator (DWQR) supervises local authorities and can require them to provide information. It also provides technical advice to local authorities and also reports annually on water quality at private water supplies.

Private sewerage are governed by different regulations. In Scotland, the Water Environment (Controlled Activities) (Scotland) Regulations 2011 control a range of rural activities, including discharge from private sewerage⁴. This Act requires that any discharge from private sewerage must be registered with the Scottish Environmental Protection Agency (SEPA) and the sewerage facilities registered with SEPA are maintained in good working order.⁵ SEPA is responsible for enforcing these regulations.

Private water supplies that are not properly managed can pose a severe health risk to those drinking the water. Inadequate management of private wastewater supplies can have a detrimental impact on the environment. The provision of adequate and accessible information for managers and users of private water and wastewater supplies is essential to support appropriate maintenance and treatment.

The Outputs Monitoring Group (OMG) agreed that a Rural Provision Working Group (RPWG) should be set up under the OMG Working Group (OMGWG) to consider a rural communities objective. This is included in the Ministerial Objectives for 2015-

¹ DWQR (September 2016), *Drinking Water Quality 2015, Private Water Supplies*, accessed 10th November 2016 at: <http://dwqr.scot/media/32300/dwqr-pws-ar15.pdf>

² (1980/777/EEC)

³ Local Authorities are responsible for designating this classification.

⁴ This Act transposed the Water Framework Directive (2000) into Scots Law.

⁵ Further background is described at: Scottish Government (September 2012) *Delivering appropriate rural wastewater treatment – policy framework and action plan*, accessed 10th November 2016 at: <http://www.gov.scot/Resource/0040/00402151.pdf>

21⁶. The RPWG was set up to “*assess the present extent of private water and sewerage services, the operational difficulties arising from these arrangements, and options available to improve compliance of water and sewerage services in rural areas with the statutory requirements of the Water Framework Directive and the Drinking Water Directive*”⁷.

The RPWG identified the importance of providing accessible and sufficient information to those managing and using these private services, regarding their rights and responsibilities. The Consumer Futures Unit (CFU) of Citizens Advice Scotland (CAS) is a member of RPWG and commissioned this study to contribute to its ongoing work.

1.1 Aims of this research

This research aimed to inform the RPWG, to support decision making and action to improve the availability, signposting, accessibility and presentation of consumer information on private water and wastewater. It investigated available information for those managing or using private water supplies and private sewerage. It also examined how accessible the information was and whether it described managers’ and users’ rights and responsibilities. This was the first step towards identifying improvements that could help users and managers better understand and meet their responsibilities.

This study examined the following research questions.

- What information is available for people managing private water supplies and responsible for private sewerage?
- To what degree does it set out user rights and responsibilities?
- Where is this information available from?
- Is information duplicated, do any information sources conflict and are there any gaps?
- How accessible is the information?
- How well is the information signposted?
- Where should information be held so that it is most accessible to managers and users of private water supplies and private sewerage?

1.2 Background

The CFU at CAS puts consumers at the heart of policy and regulation in the regulated sectors of energy, post and water. It gathers, develops and acts on evidence. It advocates and empowers consumers to improve their situations and outcomes, by working closely with water industry stakeholders to influence and develop practical policy to inform, engage and protect consumers.

The CFU is a member of the RPWG, which is comprised of the Drinking Water Quality Regulator, Scottish Government, Scottish Environment Protection Agency, Water Industry Commission for Scotland, Scottish Water and CREW (Centre of Expertise for Waters).

RPWG has acknowledged that standardised, informative resources for individuals and communities would support the management of private water supplies and

⁶ Scottish Government (October 2014), *The Scottish Water (Objectives: 2015-2021) Directions 2014*, accessed 10th November 2016 at: <http://www.gov.scot/Resource/0045/00459867.pdf>

⁷ Rural Provision Working Group, Term of Reference May 2014. Not publicly available.

sewerage facilities. It has noted that information should cover consumers' rights and responsibilities regarding access to safe drinking water and responsibilities to maintain sewerage facilities to an acceptable standard.

The CFU is the recognised representative body for water consumers in Scotland. The Scottish Government has asked the CFU to conduct research to inform the RPWG and potentially to inform future communications strategy for consumers.

1.3 Structure of this report

This report is the final report for the study and is structured as follows:

- Section 2 includes an overview of the method and describes the framework used for the study;
- Section 3 describes study findings in relation to information on private water supplies;
- Section 4 describes study findings in relation to information on private sewerage; and
- Section 5 describes study conclusions and proposed next steps.

This report also includes the following additional information in further annexes:

- Annex 1 describes the method for this study in full;
- Annex 2 uses data collected in this study to compare information provided by local authorities;
- Annex 3 identifies links that were found not to be functioning during the research; and
- **Error! Reference source not found.** includes a bibliography of all sources that were reviewed for this study.

2 Research method and framework

This section gives an overview of the way this study was carried out and the research framework that was used to support and interpret its findings.

2.1 Overview of research process and scope

This study was based on publicly available information aimed at consumers using or managing private water supplies and private sewerage. It was also informed by discussions with the CFU and a survey of thirty-four stakeholders in this sector. Each stakeholder was asked to identify any additional relevant sources beyond those identified during the desk-based research. Requests were also sent to stakeholders for any information that was not available online. Annex 1 provides a detailed description of the stakeholder engagement.

The scope and extent of information received was recorded from each of the sources within a framework that reflected the consumer's perspective. A qualitative assessment of accessibility was then completed based on criteria generated for this study. In addition, links between sources were captured and recorded during the study, which was used to analyse signposting between sources. Further details of research methodology are set out below.

Finally, examples of information on private water supplies or private sewerage available outside Scotland were researched and analysed⁸. This aimed to identify examples that might usefully inform future work to improve the information available in Scotland.

This study aimed to identify as much information as possible. Research focussed on information targeting managers and users of private water and wastewater, rather than at informing those considering installing them (which mostly related to planning regulations and requirements). All reasonable steps were taken to find relevant information within the study scope and timescale, but there is no guarantee that all available information has been included in the study.

2.2 A research framework

A research framework was created to capture and assess the different types of information available, with a particular focus on the consumer's (rather than regulatory) perspective.

During study scoping, the CFU agreed that questions should reflect what a consumer (e.g. a user or manager of private water supplies or private sewerage) might ask, rather than starting from the rules or practices that they must or should follow. This approach aimed to maximise the chance of highlighting information gaps from a consumer perspective.

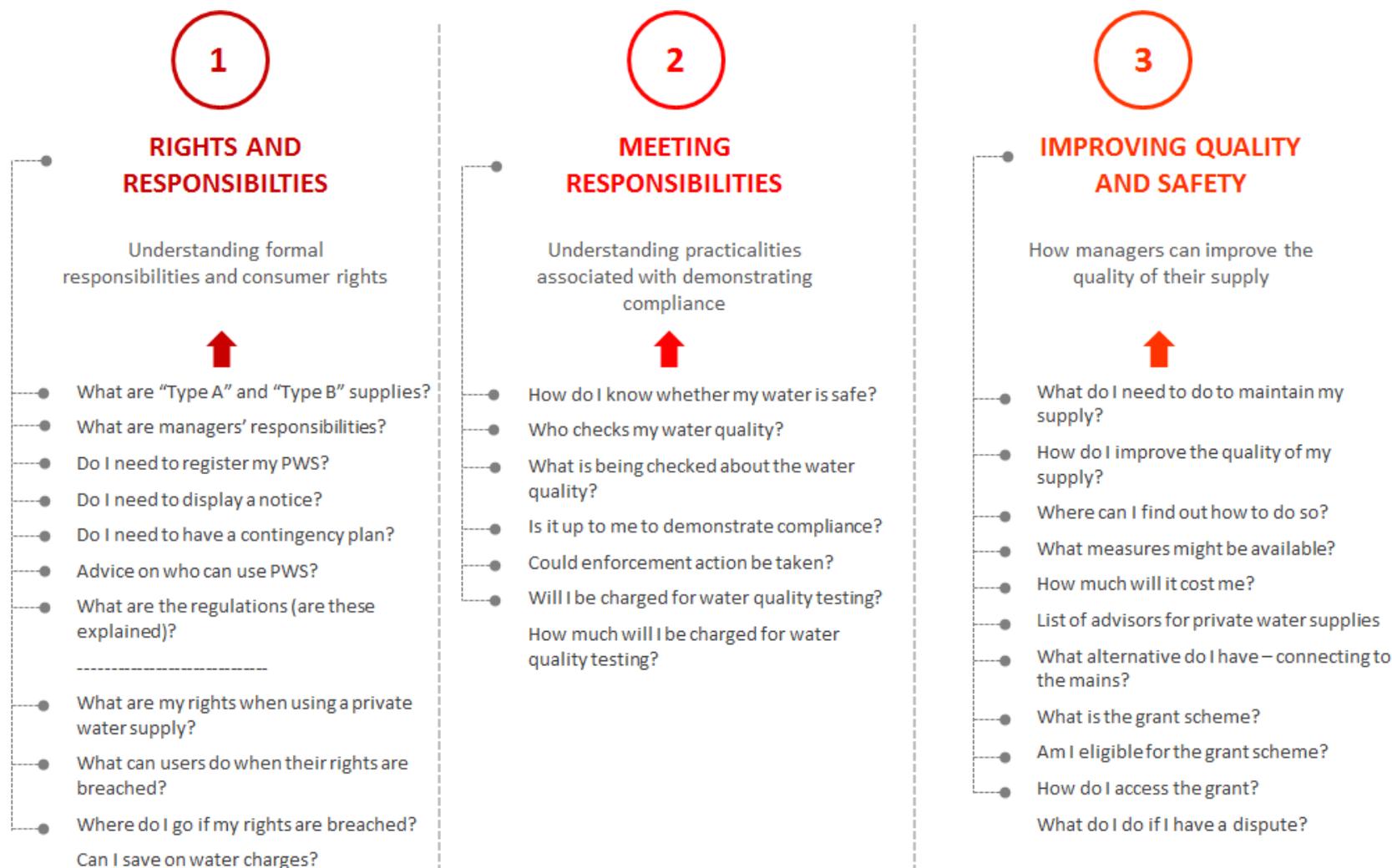
Three types of information were identified and included within the framework. In each of these areas, a list of consumer questions was identified, reflecting what they might need to know or what they might need to do. The list of questions was created at the beginning of the study, then refined as the study progressed, to capture all relevant information found during the research. It separated these questions into different categories:

⁸ This included online searches for information in relation to private water supplies and private sewerage internationally. Searches were conducted with keywords relating to each for Ireland, New Zealand, Austria, Germany, the Netherlands, Iceland, Finland and Switzerland.

- rights and responsibilities: consumer questions about their responsibilities and rights as managers and users of private water supplies/sewerage facilities, or generally as consumers;
- meeting responsibilities: how managers might go about making sure they meet their responsibilities; and
- improving water quality / safety: practical aspects of maintaining and/or improving the quality of private water supplies or maintaining the integrity and/or safety of private sewerage facilities.

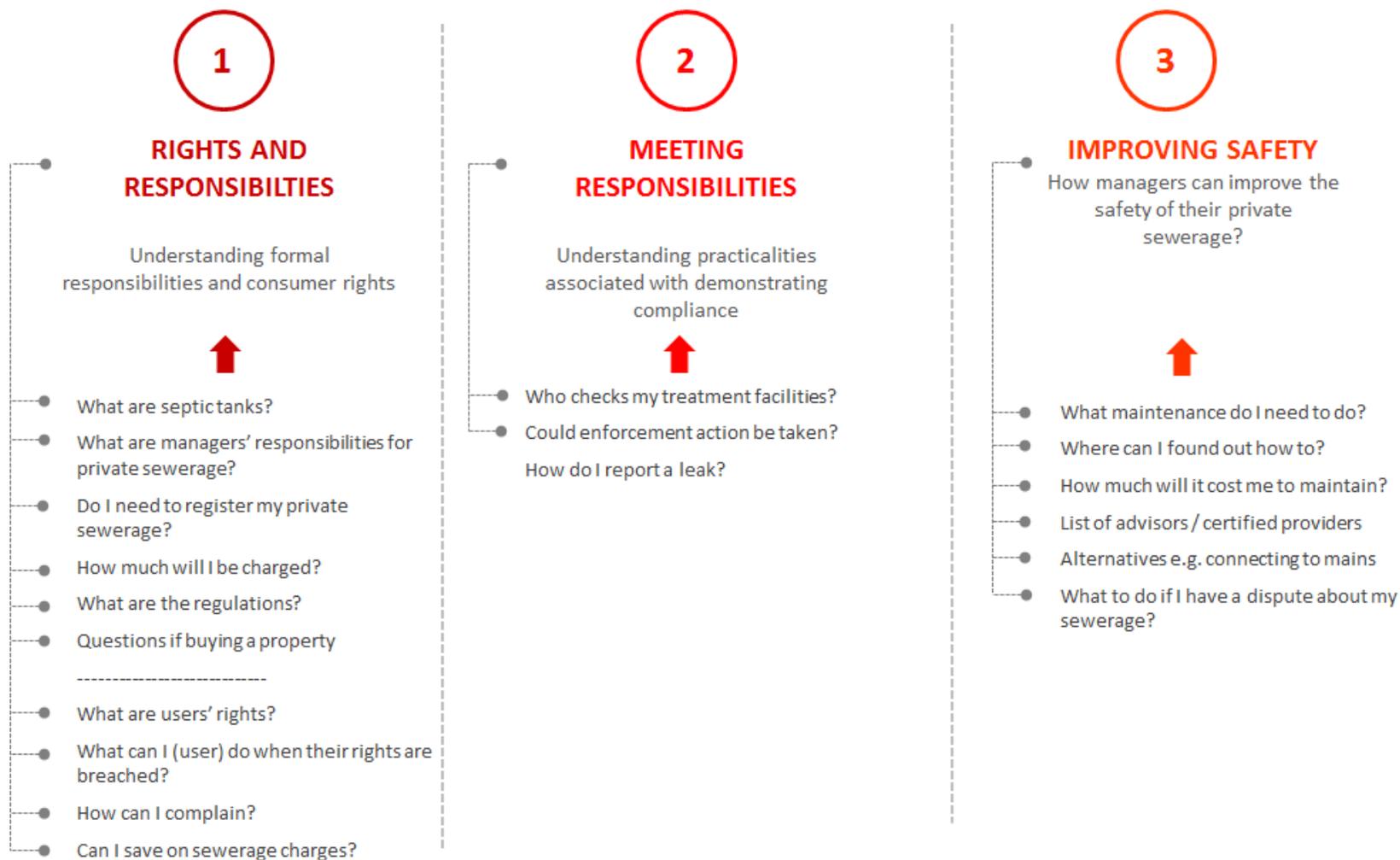
Some questions differ between private water supplies and private sewerage, reflecting the differing nature of individuals' responsibilities and possible information requirements. The final framework is summarised below in Figure 2.1 and Figure 2.2.

Figure 2.1 Types of information for users and managers of private water supplies



Source: RDF Consulting research and analysis

Figure 2.2 Types of information for users and managers of private sewerage



Source: RDF Consulting research and analysis

This study has been conducted with reference to CFU's Consumer Principles, which were used to support the development of this framework, to set the context for capturing whether or not each type of information found could support positive consumer outcomes.

Consumer principles

The CFU uses consumer principles to assess the consumer interest. The principles form an integral and essential part of the framework that the CFU uses to develop and communicate policy and practice. They are generic and can be applied across all consumer interfaces / outcomes, whether as part of service delivery or regulation. They allow organisations to champion consistent and transparent policy positions across a diverse range of subject areas, helping staff and management to operate confidently and effectively when new or unfamiliar issues arise. They provide a straightforward framework for explaining to stakeholders how consumer issues can be identified and analysed.

The consumer principles also support the CFU's consistent approach to advocacy work across subject areas, extend previous thinking to new topics and are not driven by individual preference.

- **Access** – can people get the goods and services they need or want?
- **Choice** – is there any?
- **Safety** – are the goods or services dangerous to health or welfare?
- **Information** – is it available, accurate and useful?
- **Fairness** – are some or all consumers unfairly discriminated against?
- **Representation** – do consumer have a say in how goods or services are provided?
- **Redress** – if things go wrong, is there a system for putting them right?

Table 2.1 describes how consumers could use each type of information (columns) and each of the CFU Consumer principles (rows). For example, providing consumers with information on their rights and responsibilities (second column) can help consumers to achieve good outcomes across all aspects of the framework.

Table 2.1 How each type of information supports outcomes described under consumer principles used by CFU

Consumer principle	Type of information for users and managers of private water supplies		
	Rights and responsibilities	Meeting responsibilities	Improving water quality/safety
<p>Access – Can people get the goods and services they need or want?</p>	<p>✓ Information about rights could help consumers to identify which services they should expect to have access to and whether they have choices with respect to using private water supply and/or sewerage facilities.</p>	<p>✗ <i>Not directly applicable, as meeting responsibilities is about demonstrating compliance with mandatory responsibilities.</i></p>	<p>✓ Information about how to improve safety could help consumers to access the goods and services that they need or want, while explaining the choices available to them, including support available, such as grants.</p>
<p>Choice – Is there any?</p>	<p>Information about rights could help consumers to identify which services they should expect to have access to and whether they have choices with respect to using private water supply and/or sewerage facilities.</p>	<p><i>Not directly applicable, as meeting responsibilities is about demonstrating compliance with mandatory responsibilities.</i></p>	<p>Information about how to improve safety could help consumers to access the goods and services that they need or want, while explaining the choices available to them, including support available, such as grants.</p>
<p>Safety – Are the goods or services dangerous to health or welfare?</p>	<p>✓ Access to information on rights and responsibilities could help consumers to understand how they can best protect their health and safety within available services.</p>	<p>✓ Information on how to meet responsibilities and/or improve quality and safety could help consumers to understand risks around private water supplies, how to reduce those and when they are acceptable.</p>	
<p>Information – Is it available, accurate and useful?</p>	<p>✓ This principle underlies the key research objectives for this study.</p>		
<p>Fairness – Are some or all consumers unfairly discriminated against?</p>	<p>✓ Information about meeting responsibilities could help consumers to understand whether/how the rules are fair. I.e. Does everyone has the same rights and responsibilities? Is anyone unfairly discriminated against? Are high-risk individuals being warned of the risks?</p>		<p>✓ Information about the grant could help consumers with fewer means to understand support available to help them meet their responsibilities.</p>
<p>Representation – Do consumers have a say in how goods or services are provided?</p>	<p>✓ This information could help consumers to understand when they have a say in how their water supply is managed or on any disputes about their private water supply or sewerage facilities.</p>	<p>✓ This information helps consumers to understand aspects of private water supply or sewerage facility around which they have a say (e.g. when their sites are tested).</p>	
<p>Redress – If things go wrong, is there a system for putting them right?</p>	<p>✓ Information about consumer rights could help them to understand when their rights have been breached, and if so, where can they find out more information or where can they go next to ask for help.</p>	<p>✓ This information could help consumers understand possible measures for redress if there is a dispute about their responsibilities.</p>	<p>✓ This information could help consumers understand how to put water quality issues right, when a problem has been identified.</p>

2.3 Research method

The study also assessed **accessibility of information**, based on four measures:

- ease of finding web pages - based on how many key-word searches were required to find the information and how far down search results the information was found;
- ease of finding information within web pages – based on how clearly labelled information was within sources;
- comprehension – based on how much technical language (requiring prior knowledge) was used; and
- scope and extent of information; based on the depth of information available.

Each was scored between 0-3, with zero being the lowest score and three being the highest. This analysis necessarily involved a degree of judgement because of its qualitative nature. The description of scores on each scale was developed so as to retain transparency of the scoring process and consistency between sources. Annex 1 provides a detailed description of scoring criteria.

Finally, the study examined **signposting of information** to determine the extent to which consumers are guided to the right information. A simple measure of the extent of signposting was created – the number of other sources that included a link to any one source. This was then used to assess which sources were referred to most, but also which sources included the most links to other sources. Each was subsequently compared with the quality of the source, to give a picture of whether each source adequately met consumers' needs and, if not, whether it adequately signposted consumers to another more comprehensive, accessible source.

3 Findings on information about private water supplies

This section describes study findings in relation to information on private water supplies.

Summary of findings on private water and wastewater supplies information

In summary, some descriptive information (what private water supplies are, who checks them and the existence of a grant scheme) is common to many sources. Information on managers' and users' rights and responsibilities is less widely available. Information on the nature and outcome of risks associated with private water supplies is even scarcer.

Comparing between sources of information, a small number of highly comprehensive and accessible sources were identified. Other sources vary considerably and some include little information and/or lack accessibility to information.

Signposting directing consumers to good sources could be improved considerably to make the best use of sources that already exist. This is particularly important for the many sources that include little information. In principle, this could be a relatively straightforward step that would improve the chances of consumers accessing the information they need. However, it would be dependent on local authorities' willingness to link consumers to other sources. In addition, the outcome of improved signposting will only be understood with further evidence of how consumers use the information examined in this study.

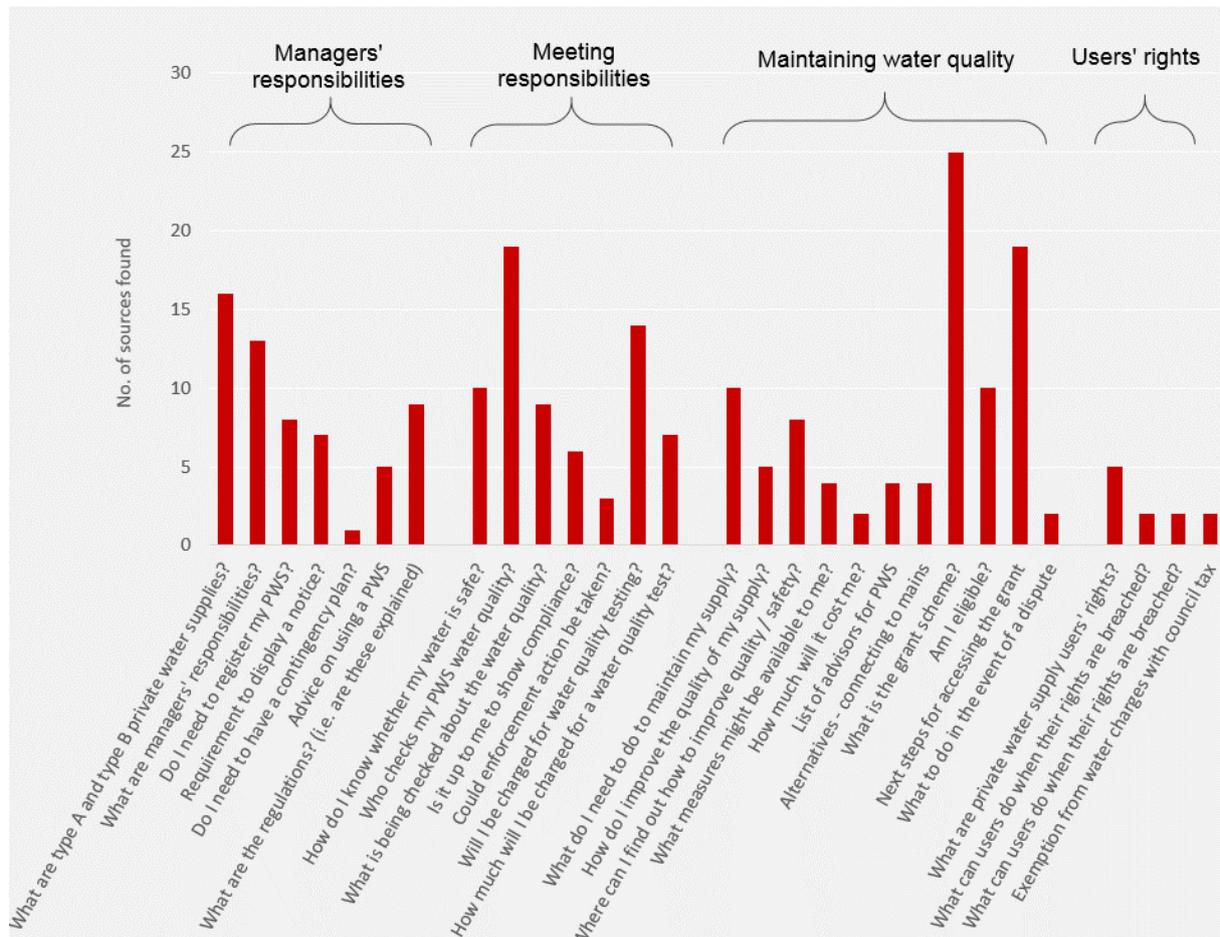
In total, 47 different sources were identified and examined. Of these, 39 organisations were found to publish consumer-oriented information and among these 88 separate web pages were reviewed. The majority of this information was aimed at consumers and related to using or managing private water supplies. However some sources included information relating to planning and installing private water supplies (for example at new properties).

3.1 Availability

Across the consumer perspectives set out within the research framework (Figure 3.1), the extent of information available varied markedly. In summary:

- basic descriptive information was widely available; including on the nature of private water supply, classification (Type A and Type B supplies) and the Scottish Government scheme for providing grants to improve supply;
- few sources described all managers' responsibilities, or how managers can meet those responsibilities, practically speaking;
- information on how to maintain water supplies was available at some sources, but not widely;
- information about risks to those consuming water from PWS was sparse, particularly related to circumstances that could put individuals at a higher risk of being affected; and
- information about consumers' rights when using private water supplies was generally sparse.

Figure 3.1 Number of information sources for each consumer question



Source: RDF Consulting research and analysis

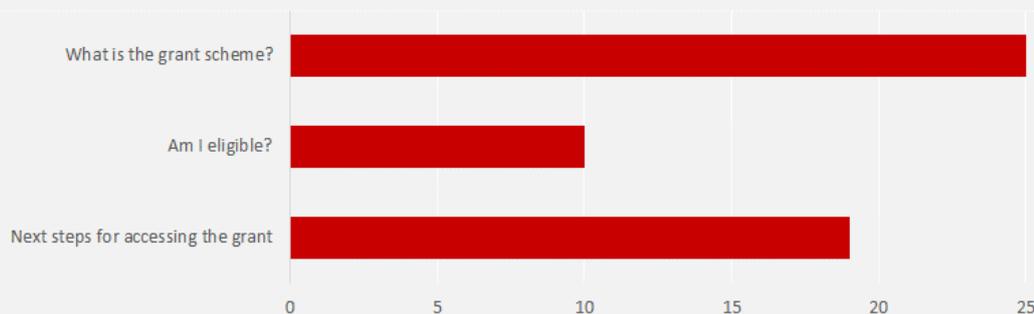
The study examined where information for private water supplies was located and found that:

- many local authorities included very little or no information about private water supplies on their websites (17 of 32 local authorities provided information relating to five or fewer of the consumer questions set out above);
- the DWQR website contained more information than any other source; and
- a small number of local authorities and CAS set out relatively comprehensive information.

Information on grant schemes and eligibility

Most sources noted the existence of the grant scheme and most set out next steps for finding out more information. However many of those simply directed readers to contact their local authority for more information and did not provide any information about consumers' eligibility criteria.

Many local authorities provided basic information only, though most included contact details. There may be a trade-off for local authorities, whereby time-consuming contacts (for both local authorities and for consumers) could be reduced, while providing more comprehensive information to consumers, by signposting them towards good information.

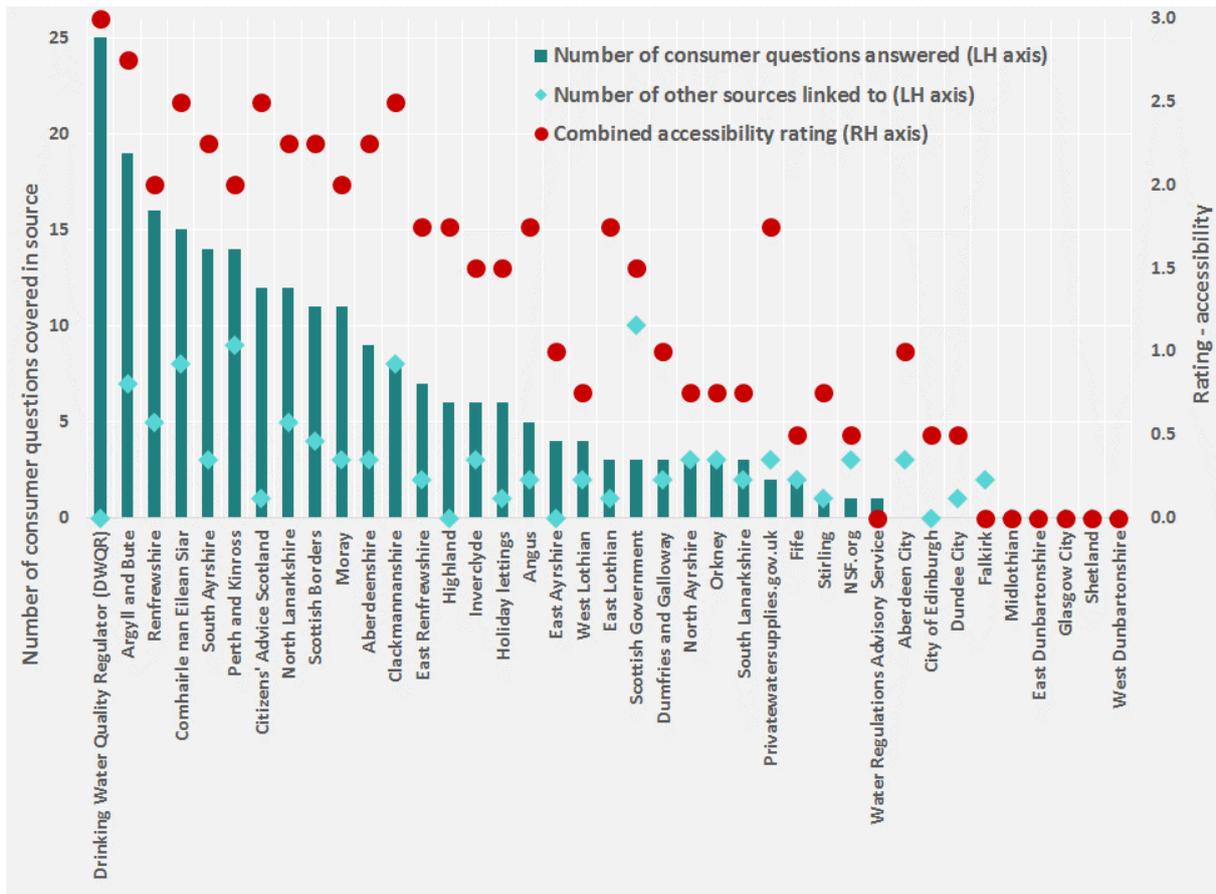


Source: RDF Consulting research and analysis

Findings are set out in Figure 3.2 alongside analysis of the accessibility and scope of information available. This illustrates the following points:

- the DWQR website is the most comprehensive source by a considerable margin (bars in Figure 3.2 indicate the number of consumer questions addressed at each source indicated on the left-hand axis);
- there is some correlation between the comprehensiveness and accessibility of sources (accessibility is indicated by red dots on a scale of 0-3 on the right-hand access, with zero being the worst score in this study, three being the best); and
- sources that are less comprehensive (to the right on the 'x' axis) and are (generally) less accessible and do not tend to compensate by providing better signposting to other sources (the blue diamond on Figure 3.2, indicates how many other sources each source links to, against the left-hand axis).

Figure 3.2 Scope of information on private water supplies available at each source⁹



Source: RDF Consulting research and analysis

3.2 Duplication and conflicting information

Information is available at many sources, which could indicate unnecessary duplication. However, it may also be beneficial for consumers to access the same information from more than one source, as each person may have a different starting point for their search. Duplication could therefore create further opportunities for consumers to access the information they are looking for.

Information should be easy to find if it is to effectively support consumers to manage their water and wastewater supplies. It may not be reasonable to expect consumers to search for this information in the comprehensive manner of this study. Consumers' chances of finding information will increase if there are more comprehensive sources available, or if there is better signposting¹⁰ to appropriate sources. Information being available at multiple sources introduces the possibility of duplication. This study revealed no incorrect nor conflicting information among the sources found¹¹.

⁹ Some Local Authorities have very small numbers of private water supplies in their areas, which may explain some of the low scores to the right-hand side of this figure. This is explored further in Annex 2.

¹⁰ The duplication that was observed may be an appropriate way to maximise the chances that consumers find what they are looking for, but it may be unnecessary if stakeholders decide that consumers would be better directed toward one single source of information.

¹¹ Although this did not extend to a detailed audit of information against the private water supplies and grants regulations, as this was not the focus of this study.

3.3 Accessibility

Information on private water supplies needs to be helpful, accurate and useful. Consumers must be able to find and understand the correct information they need. To assess how easy it would be for consumers to find and understand their rights and responsibilities, this study examined the following:

- accessibility of information, qualitatively assessed against the criteria outlined Section 2.3; and
- links that exist between the sources of information and the relationship between the number of links to a source and the completeness of information provided at that source.

Analysing accessibility of information on private water supplies indicates that (shown in Figure 3.2 above):

- most sources present information from a consumer perspective, organising the information by ‘frequently asked questions’ and not using technical language that requires prior knowledge of the area. For example:
 - some present information under headings such as “*Why should I get my drinking water tested and what does this involve?*”¹², while other less-accessible sources present information from the perspective of the regulations under headings such as “*We provide a water quality assessment services for a wide variety of water types. Chemical and microbiological testing is carried out according to national accreditation standards*”¹³; and
- more generally, sources that were found to more comprehensively cover consumer questions examined in this study were also rated as being more accessible to consumers. Clear positive correlation was found between these two measures, as explained above¹⁴.

Consumers may start their search for information, which could include hard-copy information, online information at different points, or by contacting organisations directly by email or telephone. Stakeholders were contacted to request information on hard-copy information that was not available online, but no such information was provided.

This suggested that online resources are seen as the major source of information for consumers by professionals across the sector. Nonetheless, there may be hard-copy availability of sources that were not identified during this study.

Many organisations that provided website information on private water supplies also provided an email/online form and telephone contact details (22 and 14 respectively of 44 organisations researched). It appeared that direct contact is seen as an alternative way for consumers to source information specific to their situation. However it has not been possible within the scope of this study to test organisations’ responsiveness to enquiries, nor to test the accessibility or comprehensiveness of information that is provided through these means. This contact method should not be ignored however, as it may be an important way for consumers to source information, particularly if it is not available on the local authority’s website. The

¹² For example, North Lanarkshire Council website accessed 10th November 2016 at: <http://www.northlanarkshire.gov.uk/index.aspx?articleid=16247>

¹³ The City of Edinburgh Council website, accessed 10th November 2016 at: http://www.edinburgh.gov.uk/info/20025/scientific_services/751/water_quality_assessment

¹⁴ Measurement criteria are not independent, because one element of ‘accessibility’ is a qualitative measure of the depth of information provided.

quality of information available via email or telephone remains unknown, as does its value to consumers.

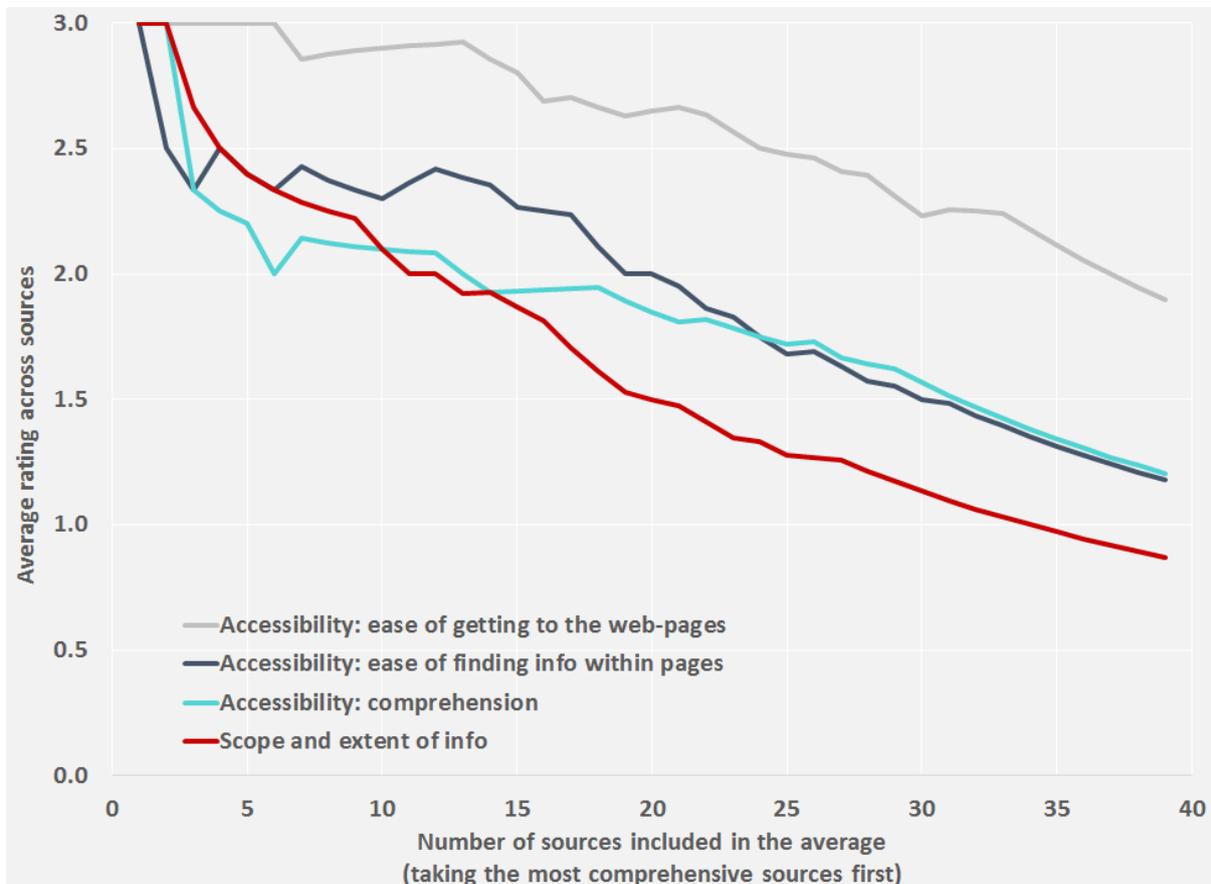
The study assessed the relative information accessibility across the four different measures of accessibility that comprised the overall rating, described above (Section 2.3). To recap, these were:

- the ease of finding website pages with relevant information;
- the ease of finding information within website pages;
- the ease of understanding each source (simple vs. technical language); and
- the scope and extent of information that was provided (simple description vs. complex detail).

Figure 3.3 gives a visual indication of the 'depth' of information across sources examined in this study, in each of the four areas outlined above. It shows how the average accessibility score changes as more sources are included in the average. It starts with the most comprehensive source (*at the left of the figure*) and adds the next most comprehensive source to the average for each rightward step (*towards the right of the figure*). This shows how quickly average accessibility rating (*measured on the left-hand axis*) drops off as more sources are included in the average (*moving to the right*) and that:

- many sources are relatively easy to find (*the grey line falls slowly from left to right*);
- similarly many sources are easy to navigate within the source (*the dark blue line falls slowly from left to right*); but
- few sources are as comprehensive as the most comprehensive source (DWQR) (*the red line falls quickly from left to right*).

Figure 3.3 Comparing accessibility ratings (average accessibility vs. number of sources in the average, taking most comprehensive sources first)



Source: RDF Consulting research and analysis

In conclusion, across the evidence base as a whole, the information that is available and easily accessible was concentrated among a relatively small number of sources (DWQR, CAS and several local authorities, as shown in Figure 3.2). This may simply reflect the smaller number of organisations involved in ensuring the safety and integrity of private sewerage facilities, compared with private water supplies where local authorities play a role. Its significance for consumer outcomes could be revealed further by research into consumers’ preferred information sources.

3.4 A consumer’s perspective: finding the right information (signposting)

The ease with which consumers can find the right information depends in part on the extent and quality of signposting between sources. This study therefore identified which online sources are linked to other online sources. Hard copy information was requested but no sources were provided (although some online sources also appeared to be intended for print).

Identifying website links established the level of signposting, measured by the number of links between sources. For each source, links to the source and links to other sources were examined. The overall impact on the ease with which consumers can find information depends on where consumers look and how they search. Primary research is therefore needed to identify the practical effect that signposting has, in terms of informing consumers.

This study analysed the relationship between comprehensiveness and accessibility of information, and the number of links to each source¹⁵. This is shown in Figure 3.4, which plots the comprehensiveness (green diamond against the left-hand axis) and accessibility (red dot, against the right-hand axis) of each source against the number of links to each source (along the 'x' axis, more links from left to right). This analysis found that (Figure 3.4):

- sources that were linked to a greater number of websites (*right-hand side of the figure*) were not always the most accessible (*not always further to the top*)¹⁶;
 - privatewatersupplies.gov.uk was by some margin the source that had most links to it from other sources, but was found to contain little information, albeit scoring moderately for accessibility;
- sources that were rated highest for accessibility and comprehensiveness of information (*towards the top of the figure*) were generally not those with most links to them;
 - the DWQR website and CAS public-advice website¹⁷ both rate highly for accessibility and comprehensiveness of information, but few links were found to these sources (four and one respectively) among the information sources reviewed;
 - the Scottish Government private water supplies web page has five links to it, but although accessible, is not comprehensive in terms of the breadth of information it offers consumers;
- no links were found to any local authority websites, even though some of these rated highly for comprehensiveness and accessibility and could therefore be useful to consumers or could provide useful templates for other sources (examples include Argyll and Bute, Renfrewshire, Comhairle nan Eilean Siar, Perth and Kinross, South Ayrshire and Aberdeenshire councils); and
- other sources included in this analysis were nsf.org, the Water Regulations Advisory Service, Water Safe, Health Protection Scotland and Health Scotland. However, these sources were not signposted widely (only one link was found to each), nor did they include comprehensive or highly accessible information. These two factors suggest that they are not key sources of information about private water supplies and private sewerage (and are not considered to be by other organisations).

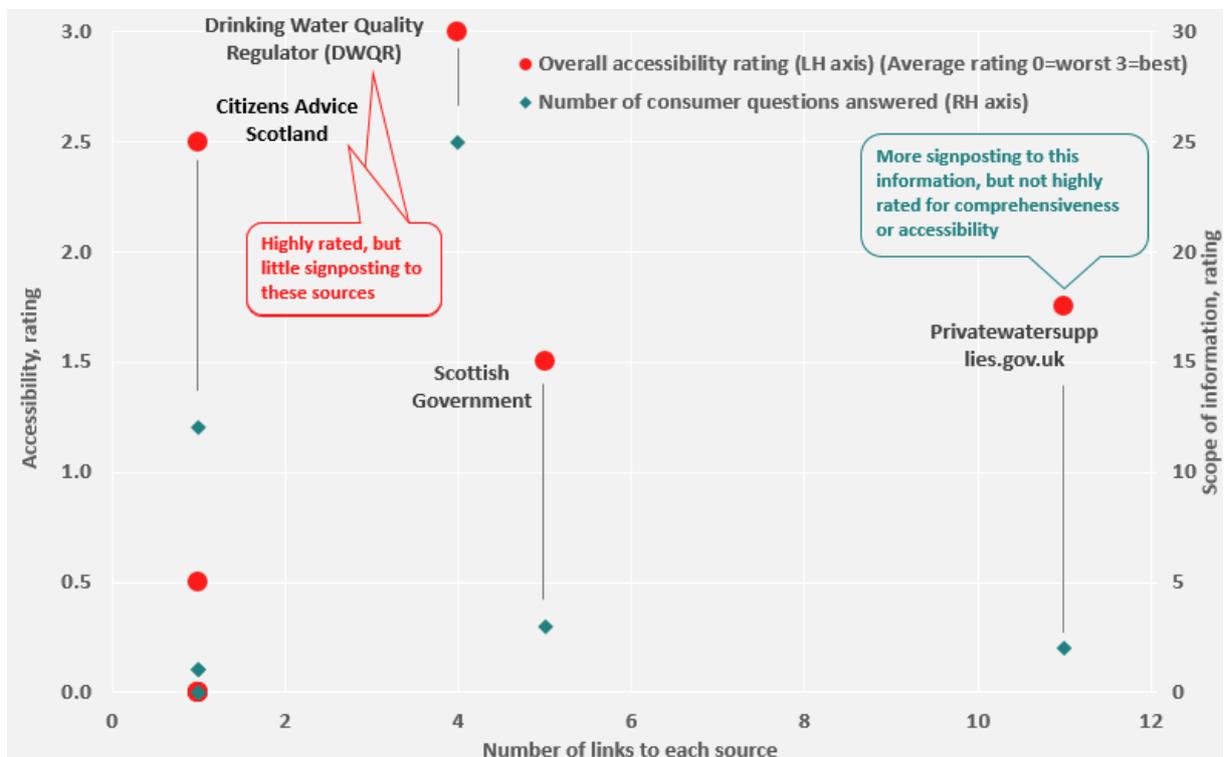
Overall, the above results potentially indicate a missed opportunity: the best information was not necessarily the most likely to be found by consumers. For example, the DWQR website is the most highly-rated in this study for accessibility and scope of information, but only signposted by four other sources found in this research. More signposting could lead more private water supplies managers and users to find the information they are looking for or need. The DWQR website is easily found with the right web-search, but there is no evidence available to establish whether consumers are sufficiently aware to carry out that search.

¹⁵ The analysis was only completed for non-local authority sources, because no links to local authority websites on private water supplies were found.

¹⁶ As illustrated above, more accessible sources were also generally found to be more comprehensive (Figure 3.1).

¹⁷ This is the CAS consumer-facing website, available at: <https://www.citizensadvice.org.uk/scotland/>

Figure 3.4 A missed opportunity? Consumers are not being directed to the best available information



Source: RDF Consulting research and analysis

This study also investigated whether comprehensiveness or accessibility of local authority information was linked to the number of private water supplies in their areas. Although some correlation was found, some local authorities with many supplies were nonetheless rated poorly. Some local authorities provided highly comprehensive and accessible information, but not always those with the most registered private water supplies.

Caution should be applied to policy responses to this finding. The RPWG has identified that some centralisation of information may be a better way of providing consumers with a clear route to accessible and comprehensive information on private water supplies and sewerage. There is clear scope for additional improvement in the information that local authorities provided. But there is also scope for better signposting to improve consumer outcomes, particularly where local authorities with a large number of supplies have neither good information on their own websites, nor good signposting to other existing sources.

3.5 A comparison with international examples

This section sets out the findings from a review of examples of consumer information on private water supplies provided outside Scotland.

3.5.1 Searching for information

In total, 45 relevant pieces of information were identified and examined, across 17 different organisations¹⁸. Of these, 11 organisations were found to publish consumer-oriented information in English and were reviewed in detail. Not all

¹⁸ The search included looking for information from Ireland, New Zealand, Austria, Germany, the Netherlands, Iceland, Finland, Switzerland and Spain. However, this study reviewed only English-language information targeted specifically at consumers.

information related specifically to private water supplies, as the nature of small water supplies differs in some countries. For example, in Ireland many small suppliers are operated through 'group water schemes', which facilitate group-management of small supplies that serve multiple consumers. These information sources perform a similar function to equivalent sources aimed at individual consumers in Scotland, so were nonetheless included in this research.

3.5.2 Findings

This analysis found the following:

- information for private water supplies managers varied considerably between countries and in some cases several sources were found; and
- generally the accessibility and comprehensiveness of information did not exceed that available for Scotland.

Information from **Ireland** was found to be particularly comprehensive, including information provided by Cork City Council, Limerick Council, and the National Federation of Group Water Schemes. One particularly strong example is the Charter of Rights and Responsibilities¹⁹, which provides a very clear breakdown of information across the majority of consumer perspectives examined in this study. In some cases, though, it was not easy to find or to navigate comparison to information available in Scotland. Furthermore, presentation was often not engaging (few colours, diagrams and/or infographics were found). However, within the scope of this study it was not possible to compare the real effect of different types of information on consumer engagement and understanding.

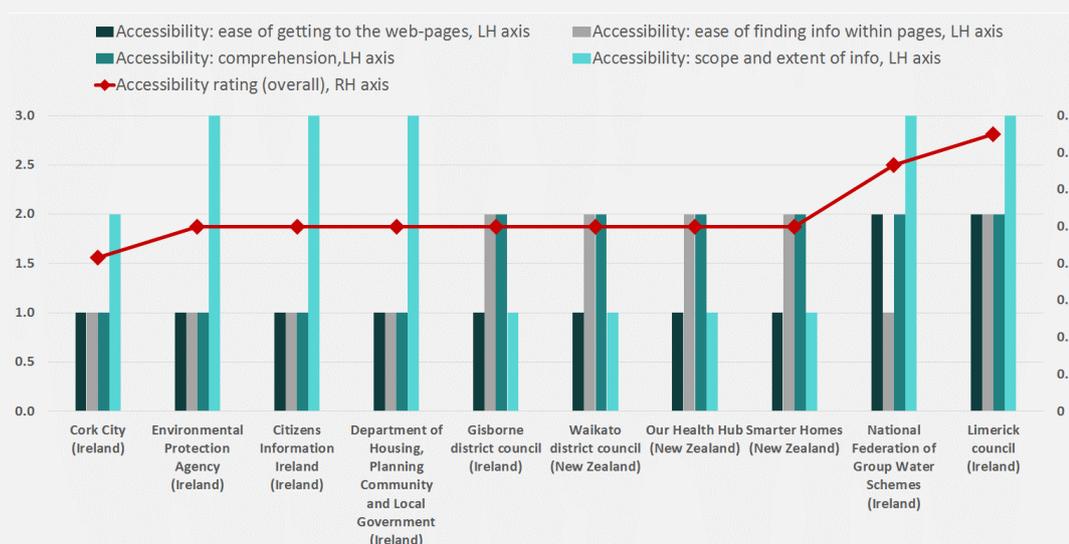
Information from one other major English-language source identified in this study, **New Zealand**, appeared mixed, with few examples from which lessons could be drawn. Generally information from New Zealand appears relatively comprehensive and is organised well, but across many sources appears relatively technical, with perhaps less consideration for the consumer's perspective than the best sources available in Scotland. These findings are summarised below across sources identified for Ireland and New Zealand (Figure 3.5).

¹⁹ Accessed 9th November 2016 at:
[http://www.nfgws.ie/kfmgetfull/fckeditor/File/Charter%20of%20Rights%20\(revised%202010\).pdf](http://www.nfgws.ie/kfmgetfull/fckeditor/File/Charter%20of%20Rights%20(revised%202010).pdf)

Comparing international sources for accessibility

Figure 3.5 illustrates the relative strengths and weaknesses of information sources from Ireland and New Zealand. In each case, ratings for accessibility and scope of information are scaled with 0% being the minimum value (zero) and 100% being the maximum value (three).

Figure 3.5 Accessibility and scope of information at example sources of information outside Scotland



Source: RDF Consulting research and analysis

International sources were not examined for comprehensiveness within the scope of this study. As private water supplies regulation and responsibilities differ in each country, this could not be established without extensive further research.

This information offered some learning that could be applied to information about private water supplies in Scotland, as set out below.

- **Charter of Rights and Responsibilities, National Federation of Group Water Schemes²⁰**. This document provides a comprehensive description of rights and responsibilities and is organised in a clear manner that explains information from a consumer's perspective, notably including a range of rights with respect to charging, water quality and appeal.
- **The Environmental Protection Agency's (EPA) (Ireland) website 'householder information on private wells'²¹** is an online resource that sets out information clearly with FAQ from a consumer's perspective, including information about how to make complaints to the EPA if concerned about the quality of water from a private source.
- **Hawkes Bay District Health Board leaflet²² for private drinking water supply managers** in Hawke's Bay (New Zealand), which first combines basic practical information with some advice on how to maintain supplies, but also includes helpful signposting to other sources of information, that to some extent explains what a consumer may expect to find at each link.

²⁰ Accessed 9th November 2016 at:

[http://www.nfgws.ie/kfmgetfull/fckeditor/File/Charter%20of%20Rights%20\(revised%202010\).pdf](http://www.nfgws.ie/kfmgetfull/fckeditor/File/Charter%20of%20Rights%20(revised%202010).pdf)

²¹ Accessed 9th November 2016 at: <https://www.epa.ie/water/dw/hhinfo/>

²² Accessed 9th November 2016 at: <http://www.ourhealthhb.nz/assets/News-and-Event-files/Information-for-private-supply-owners-Aug-16-FINAL.pdf>

- HealthEd (New Zealand), a government catalogue of health resources, **leaflet on how to keep water tanks safe from contamination**²³. This leaflet combines useful practical information that could help households to keep their rainwater supplies safe, presented in a relatively accessible manner, with verbal material presented alongside diagrams.

²³ Accessed 9th November 2016 at: https://www.healthed.govt.nz/system/files/resource-files/HE10148-Water%20Tanks-WEB_0.pdf

4 Findings on information about private sewerage facilities

This section describes study findings in relation to information for users and managers of private sewerage facilities and other consumers affected by private sewerage facilities. It also explains where this information is stored.

Summary of findings on private sewerage information

In summary, some basic information about septic tanks was available across various sources, including SEPA, CAS, a small number of local authorities and Scottish Water. Information at these sources comprehensively and accessibly described responsibilities for maintaining facilities and how to maintain private sewerage facilities.

However, some consumer perspectives were not widely addressed by the available information. These included: potential exemptions from public sewerage charges; responsibilities with respect to pollution, enforcement of those responsibilities; and what to do in the event of a sewerage leak.

Signposting to the more informative sources was found to be mixed. The SEPA and Scottish Water websites were relatively well signposted by links from other sources. But CAS and Fife Coast and Countryside Trust websites were not well signposted, with few links to them, despite including more comprehensive and accessible information than other sources.

Few local authorities included relevant information, or signposted consumers to other sources, likely reflecting their lack of formal role or responsibility with respect to private sewerage facilities. The smaller number of sources may therefore simply reflect the small number of stakeholders with a vested interest or official responsibility.

Improving signposting to existing information may improve the effectiveness of the information base, as consumers may search for information at a range of sources. Further primary research would be required to identify which primary sources would be most useful to consumers and therefore to conclude how signposting could be improved most effectively.

In total, 39 independent sources were examined. Of these, 20 were found to publish consumer-oriented information and among these, 35 separate web pages were reviewed in detail. The majority of this information was aimed at consumers and related to private sewerage facilities. Some sources included information relating to planning and installing private water sewerage (for example at new properties), but this information was not included within the scope of this study.

4.1 Availability

As with private water supplies, the amount of information available on private sewerage varied considerably across consumer questions examined in this study (Figure 4.1). In summary:

- even basic descriptive information was relatively sparse, when compared to the number of sources of information available on private water supplies;
- information was generally limited and did not cover the majority of questions set out in the research framework; and
- no information was found on individuals' rights when using private sewerage facilities or in relation to pollution caused by private sewerage facilities.

Local authorities have no formal role in regulating private sewerage. The smaller number of sources may reflect this (although some local authorities do provide a little information or signpost other sources). Signposting to the information that is available may therefore be particularly important in the case of private sewerage.

Figure 4.1 Number of information sources on private sewerage

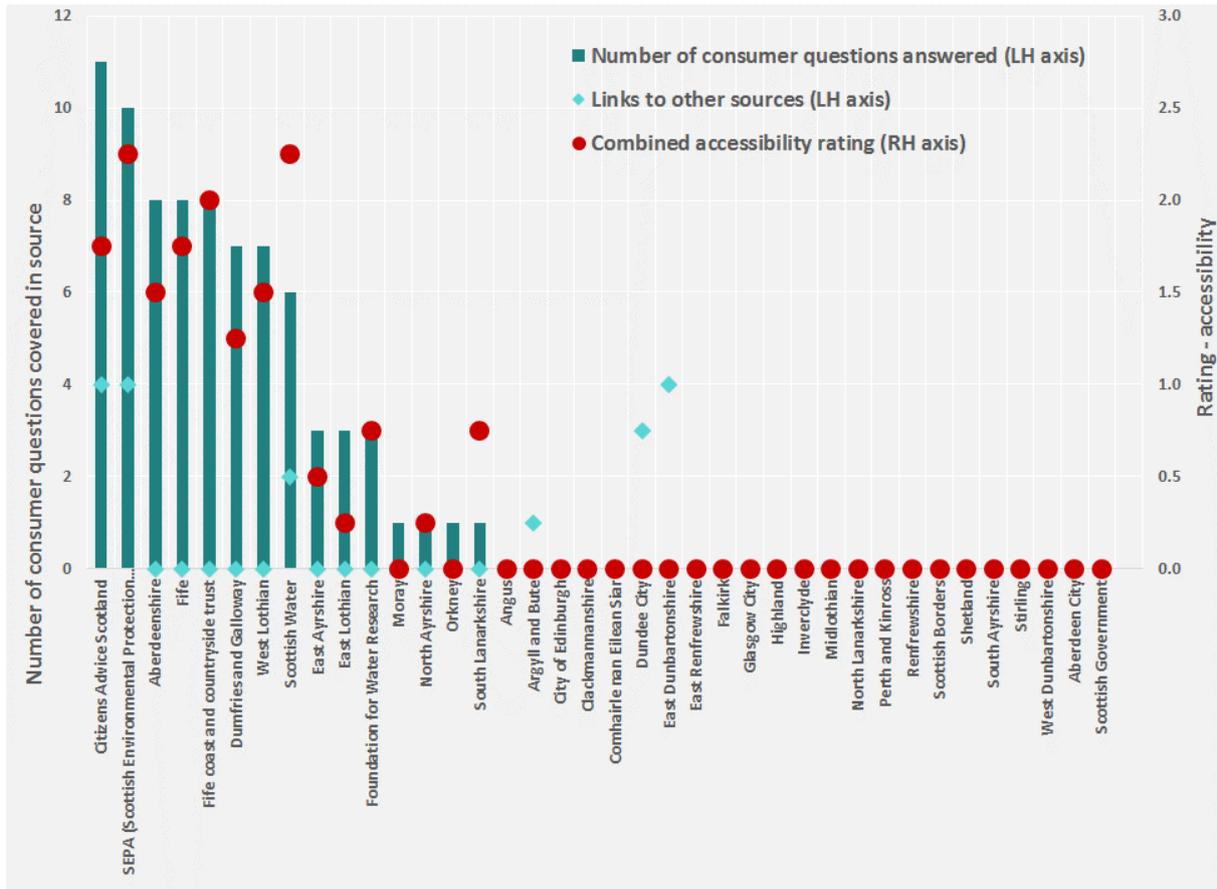


Source: RDF Consulting research and analysis

Analysis of the scope and accessibility of information that was available on private water supplies indicates that (Figure 4.2):

- generally information on private sewerage services was less widely available than for private water supplies;
- the SEPA website, CAS public-advice website and the Fife Coast and Countryside Trust website had the most information, followed by a small number of other local authorities that had some information coverage; but
- most local authority websites had very little, if any, information available about private sewerage.

Figure 4.2 Scope of information on private sewerage available at each source



Source: RDF Consulting research and analysis

4.2 Duplication and conflicting information

Similarly to information on private water supplies, duplication is clear but likely necessary given the multitude of potential starting points for consumers. No clear instances were found of incorrect information being provided, nor of individual sources providing conflicting information.

4.3 Accessibility

For information to be effective, consumers must be able to find and understand the right information. This study analysed accessibility against the criteria set out above and links that were found between sources. It found that (Figure 4.2):

- as with private water supplies information, sources that were more comprehensive tended also to be rated as more accessible using the framework applied in this study; and
- sources that were less comprehensive did not generally compensate by providing more links to other sources. Similarly consumers may reach a dead-end; not finding any further leads for further information at those sources.

Findings in relation to hard-copy information mirror those for private water supplies, with no information being highlighted by stakeholders or found during the search. No online sources of information on private sewerage were identified as also being provided as hard-copy information. Again, this suggests that online resources are

seen as the major source of information for consumers among the relevant professionals across the sector.

Fewer organisations provided email/online contacts or telephone contacts for more information on private sewerage (7 and 6 respectively, of 22 organisations researched). Again it has not been possible within the scope of this study to test organisations' responsiveness to enquiries, nor to test the accessibility or comprehensiveness of information that is provided through these means. Similarly the quality and accessibility of information available in this manner remains unknown, as do consumer perceptions of its value.

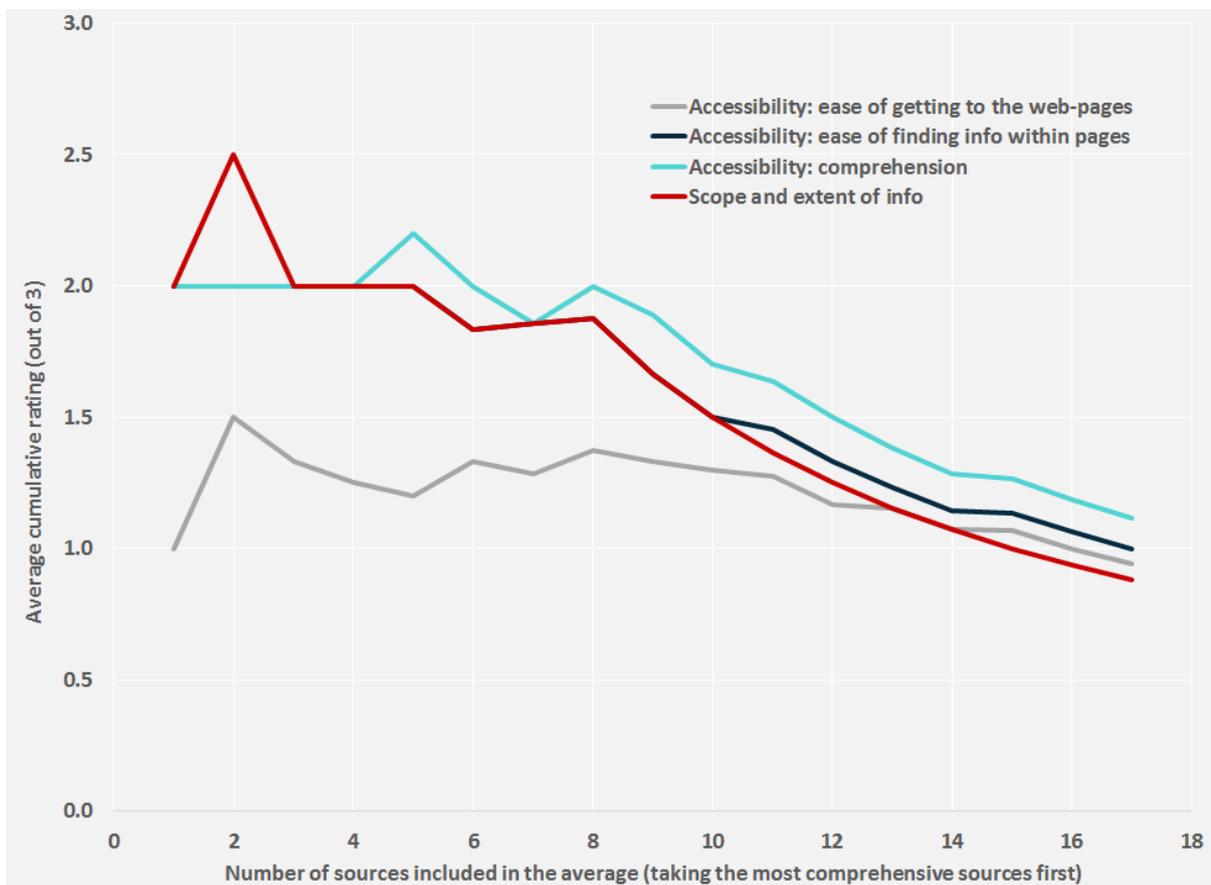
When assessing accessibility of information for private sewerage, a different picture was apparent when compared with private water supplies information. Even the highest accessibility ratings were lower than for private water supplies information. Most sources did not offer comprehensive information (in terms of covering consumer questions outlined in the framework above).

Compared with private water supplies information, information on private sewerage facilities appeared to be more difficult to find. This applied both to searching for the information and to finding the relevant information within each source.

Figure 4.3 gives a visual indication of the depth of information across sources in each of the four measures of accessibility assessed in this study. It shows how quickly average accessibility ratings (*measured on the left-hand axis*), starting with one source – the most comprehensive, reduces as more sources are included in the average (*moving to the right*):

- the average score across each measure is lower than for private water supplies information, even among the most highly-rated sources shown to the left of Figure 4.3);
 - this finding was consistent with, and perhaps explained by, the relative lack of information. The finding suggests that there is a potential not only to improve signposting within the current evidence base, but also to improve the scope and accessibility of information that is available; and
- even the sources scoring most highly for accessibility were not as easy to find as those for private sewerage information (the grey line starts lower on the left-hand side compared the same measure for private water supplies).

Figure 4.3 Comparing accessibility ratings (average accessibility vs. number of sources in the average, taking most comprehensive sources first)



Source: RDF Consulting research and analysis

4.4 A consumer’s perspective: finding the right information (signposting)

Similarly to information on private water supplies, this study analysed signposting between information sources. Key findings were that:

- private sewerage sources that were not comprehensive generally also signposted poorly to other sources, or not at all;
- signposting was generally sparse, with few links between sources, indicating that consumers may be less likely to find the relevant information than compared with private water supplies information;
- in particular, signposting from local authority websites was scarce, and did not direct consumers towards the more accessible and comprehensive information sources that do exist. As with comprehensiveness of information, this may reflect the lack of formal role or responsibility for local authorities; and
- in particular the CAS and Fife Coast and Countryside Trust were found to be accessible and relatively comprehensive sources but have little signposting from other sources.

4.5 A comparison with international examples

The search for evidence outside Scotland found few significant sources of information on private sewerage facilities. Evidence from international sources primarily focused on private water supplies, which are covered above (Section 3.5).

One good example of information from elsewhere was identified: a leaflet published by the United States Environmental Protection Agency '*Homeowners Guide to Septic Systems*'²⁴. This leaflet is published online but also available in hard-copy form (though from where is unclear). It provides extensive information on how to maintain private sewerage facilities, set out in an accessible format based on the consumer's perspective.

Generally though, as in Scotland, information on private sewerage facilities appeared more sparsely available than for private water supplies.

²⁴ Accessed 9th November 2016 at: https://www3.epa.gov/npdes/pubs/homeowner_guide_long.pdf

5 Conclusions and next steps

The section sets out conclusions of this study and identifies potential next steps for RPWG.

5.1 Private water supplies findings

Conclusions are set out below, summarised in relation to each of the research objectives set out above (Table 5.1).

Table 5.1 Summary findings in relation to private water supplies information

Research objective	Conclusion
Information availability	Centralised reference points already exist that cover most relevant information that consumers may look for. However these are not always widely signposted by other less informative sources, thereby potentially limiting consumer access to the information they need (see 'signposting' below).
Information location	Information is generally available online or directly from local authorities (but this study did not examine local authorities' direct provision of information). Consumers' preferred point of accessing information is unknown.
Comprehensiveness	In some areas information is scarce, particularly in relation to what consumers should do when they experience difficulties, and what their rights are, under normal circumstances or in the case of disputes. There remain areas where even the best information is not fully comprehensive, such as in relation to users' rights when a breach of responsibilities occurs and potential exemptions from water charges.
Duplication/gaps	Much of the basic information is duplicated at multiple sources. This may be appropriate if consumers search for this information through a wide range of starting points (e.g. local authorities, government websites, search engines) and it has not resulted in conflicting information across different sources.
Accessibility	Accessibility in terms of language varies considerably across sources. Some websites are written from a consumer's perspective and seek to simplify technical language. Others are written in technical language that mirrors the regulations, impairing the accessibility for managers and users.
Signposting	There is significant scope for signposting to be improved. In many instances sources that include brief information do not signpost the most relevant other sources. In most cases, signposting is limited to including links, rather than explaining to consumers the information that can be found at each website. Even the most comprehensive online sources are generally not well-signposted from other sources. In particular, the DWQR and CAS public-advice websites could be signposted more effectively (and/or other sources if information is improved at those sources). Improving signposting could provide a simple way to increase the chances that consumers find the information that they are looking for, without requiring further effort to replicate information across multiple sources.

5.2 Private sewerage findings

This study concluded the following in relation to information for managers of private sewerage and those potentially affected, summarised in relation to each of the research objectives set out above (Table 5.2).

Table 5.2 Summary of findings in relation to private sewerage information

Research objective	Conclusion
Information availability	Information is available at some centralised sources, though many potential starting points for managers and users contain little or no relevant information.
Information location	Information is generally available online (but this study did not examine organisations' direct provision of information).
Comprehensiveness	Information is available covering most issues for which consumers may look. However, even the best sources do not comprehensively include information on all questions covered in the framework used for this study. More generally, information coverage is poor in some areas such as reporting leaks, improving facilities and consumers' rights in the event of a pollution incident from private sewerage.
Duplication/gaps	Similarly to private water supplies, basic information is duplicated across many sources, but this may help consumers to find the relevant information, as they may begin from a wide range of starting points.
Accessibility	Accessibility varies considerably. Some sources offer simple, clear advice written from a consumer's perspective, others less so.
Signposting	Signposting was less prevalent than for private water supplies information. CAS and SEPA offer the most comprehensive and accessible sources of information and although CAS and SEPA websites were reasonably signposted, this could be improved.

5.3 Conclusions

This study concluded the following:

- on most aspects of managers' and users' rights and responsibilities regarding private water supplies in Scotland, comprehensive and accessible information is available. The best information is concentrated among a small number of online sources, such as DWQR, Citizens Advice Scotland and some local authorities. However, signposting could be improved to ensure that consumers can find this information;
- several natural points of information for private water supplies, including some local authorities, do not provide adequate or substantive information publicly online. This includes a small number of local authorities that have a high number of private water supplies (see Annex 2);
 - this may impair consumers' understanding of their rights and responsibilities with respect to private water supplies, such as displaying notices at Type A supplies and information around the enforcement process; but
 - it may not be necessary for all potential consumer access points to include comprehensive information, but there is significant scope to look at options to improve the accessibility of information;
- information on private sewerage is more concentrated among few sources, but relatively comprehensive and accessible information is available, primarily at the SEPA website;
- signposting is poor at many sources of information on private water supplies and private sewerage, which likely hinders and could prevent some consumers from

accessing the information that they need to manager their private water supplies or sewerage facilities. This includes some local authorities, which do not signpost consumers effectively to other sources that do provide the requisite information; and

- in the event that organisations choose not to provide information themselves, these potential consumer access points should clearly signpost individuals and communities to better sources that do exist. In this regard there is great scope for improvement with little resource required to do so.

These conclusions highlight potential improvements that could be made to the information available to consumers to help them understand and meet their responsibilities and to understand their rights as users. This applies to information on private water supplies and to information on private sewerage. It could also help improve consumers' understanding and better manage the health risks associated with private waters supply and sewerage facilities.

5.4 Next steps

This research examined the availability and accessibility of information in relation to private water supplies and private sewerage. It found that good consumer information is available, but that there is scope for more comprehensive information to be provided at more sources. It also found that better signposting to consumer information on these important issues could make better use of the information that already exists.

These findings, however, are based only on research and analysis of the information itself. Next steps building on this study could therefore include:

- using the information in this study to **review and improve the content** of particular sources (for comprehensiveness and accessibility), with reference to the best sources identified in this study, focussing on those that are already most comprehensive and accessible, to establish whether they could be improved to the benefit of consumers;
 - for private water supplies this could include (but should not be limited to) the DWQR and CAS public-advice websites;
 - for private sewerage this could include (but should not be limited to) the SEPA and CAS public-advice websites;
- **improving access to these 'reference sources through comprehensive signposting** – the RPWG could make recommendations to organisations responsible for the sources examined in this study, to provide clear links for consumers to key reference sources alongside short descriptions of the information that could be found at each source (both for private water supplies and private sewerage facilities);
- **further research** targeted at managers and users of private water supplies and private sewerage, could provide valuable evidence on how best to target efforts to improve information by asking consumers what information they need and which access points they are more likely to choose;
 - this study has generated evidence that indicates the merits of the information that is available and the signposting that it contains;
 - these findings would be more valuable alongside information about how consumers actually use this information. This would help to ensure that improvements to content and signposting would support improvements in the maintenance and quality of water supplies and wastewater management; and

- further work could also help to examine the role of online information alongside other information sources that it was not possible to include in this study – principally direct contacts with local authorities or other organisations.

The measures described here provide clear next steps for the RPWG and its stakeholders. This study also emphasises that further primary research could inform RPWG views on the most effective and efficient ways in which to improve consumer outcomes.

Annex 1 Method

This annex describes the method that was applied in carrying out this study.

A1.1 Overview of method

This study consisted of the following key steps:

- identifying information sources;
- assessing coverage,
- assessing accessibility; and
- assessing signposting.

Each step is described in detail below.

A1.2 Identifying information sources

Sources were identified through the following steps:

- sources were identified through desk research at proposal stage and in discussion with CAS at the project kick-off;
- stakeholders were asked for suggestions on possible sources of consumer information (in addition to those already identified at that stage), including being asked to identify hard-copy information and to send that information to the study author (in electronic or hard-copy form);
- an online search for additional sources using keywords as set out in the table below (Table A1.1);
- an additional online search for keywords (“private water supplies” and “sewerage”) in conjunction with each Scottish local authority’s name; and
- a search within each local authority’s website for pages using the same keywords.

Table A1.1 Key word searches conducted to identify additional study sources²⁵

Research area	User / manager question	Possible keywords
Formal rights and responsibilities	What are my formal responsibilities as a manager of private water supplies / private sewerage facilities?	“private water supplies”, “regulations”, “demonstrate”, “user”, “manager”, “manager”, “rights”, “rights”, “support”, “help”, “information”, “recourse”, “appeal”
	What are my formal rights?	
	What happens when my rights are breached?	
	Where do I go for help?	
	What recourse do I have?	
Meeting responsibilities	Who will be checking my compliance?	“council”, “checks”, “compliance”, “standards”, “quality”, etc.
	What information will they need?	“information”, “demonstrate”, “checks”, etc.
	What is my role in demonstrating compliance?	“how to”, “site visits”, “compliance”, “local-environmental health officer / EHO”, etc.
	Where can I find help?	“help”, “contact”, “regulation”, “advice”, “support”, etc.
Improving the quality / safety of PWS or sewerage	Where can I find out how to improve quality / safety?	“standards”, “quality”, “repairs”, “help”, “advice”, “suppliers”, “authorised”
	What standards do I need to meet?	“standards”, “requirements”
	How much will it cost me?	“cost”, “expense”
	What choices do I have?	“how to improve”, “where”, “technologies”, “treatment”
	How to I demonstrate compliance with responsibilities and regulations?	Question expected to be answered through the searches carried out above.

For all search-engine searches, results for the first three pages were investigated. This includes links that did not obviously appear to contain information on private water supplies, where they appeared to be general pages on the websites of relevant organisations. Some of these speculative source investigations resulted in additional sources being added to the bibliography, but most did not.

Across all information collected, sources have only been reviewed where information is specifically aimed at consumers (whereas sources aimed at industry professionals have not been reviewed, as their purpose is different and they were observed to be understandably more technical).

In addition, further desk research was carried out to identify international examples of information provided for users and managers of private water supplies and sewerage. This search included hard copies of the following documents provided by CAS at the outset of the study:

- United Nations Economic Commission for Europe & World Health Organisation Regional Office for Europe (1999), Protocol on Water and Health;

²⁵ There is expected to be overlap in the information found across all the word searches identified in this table.

- United Nations Economic Commission for Europe & World Health Organisation Regional Office for Europe (2011), Small-scale water supplies in the pan-European region: Background, Challenges, Improvements; and
- World Health Organisation Regional Office for Europe (2014), Water safety plan: a field guide to improving drinking-water safety in small communities.

It also included online searches for information in relation to private water supplies and private sewerage internationally, searches were conducted with keywords relating to each for Ireland, New Zealand, Austria, Germany, the Netherlands, Iceland, Finland and Switzerland.

In total, one day of time was spent searching for this information. Diminishing returns anticipated at the outset of the study were observed as this search progressed. A number of potential sources were identified but could not be reviewed because they were not available in English language.

A1.2.2 Stakeholder engagement

The process of finding information included contacting stakeholders, requesting information on:

- any additional sources of information that could be accessed electronically; and
- any additional sources of information that were only available in non-electronic formats.

Stakeholders were requested to provide additional sources of information, over and above a list identified at the initial stages of the study, so as to maximise the chances of identifying more obscure or less obvious sources of information.

Requests were tailored in some cases to individual circumstances, but the main body of text remained similar to that outlined below:

Stakeholder request

Request for sources of information to people who use and look after private water supplies and sewerage services in Scotland to understand their rights and responsibilities.

You may remember that I was previously involved in an evaluation of private water supplies regulation in Scotland for the Scottish Government. As set out in the attached letter, I have been commissioned by Citizens Advice Scotland to research information available to those using and looking after private water and sewerage services in Scotland. I'm getting in touch to ask for your input with respect to potential sources of information available for people who use and look after private water supplies and private sewerage. This research aims to be as comprehensive as possible in identifying and mapping the information. The study will largely comprise desk research to identify and review sources of information and to analyse the information available for accessibility, completeness and duplication.

To help ensure this study is comprehensive, I am contacting you to ask whether you are aware of any further sources that have not already been identified. Please find below a list of potential sources of information that have already been identified:

- *local authorities' websites (for each Scottish local authority);*
- *the Scottish Environmental Protection Agency (in particular for information relating to private sewerage);*
- *the Scottish Government website;*
- *the Drinking Water Quality Regulator website;*
- *Consumers bodies' websites;*
- *Water Regulations Advisory Service;*
- *Water Fittings and Materials Directory; and*
- *Health Protection Scotland.*

I would be very grateful if you could reply with any further sources of information not included above by close Friday 28 October if possible. Please complete the following table, where you can, to indicate what additional information is available and how it can be obtained. The study seeks to identify digital information and information that is and that is not available digitally, so please include all such information in your response in the table below. For any information provided by your organisation that is only available in hard copy, please forward a copy of the information to the address above if possible.

Table 1: Additional sources of information for users and managers of private water supplies and sewerage treatment facilities

Source title	Short description	Availability format	Online link if applicable	How can hard copies be obtained?	If only hard copy is available, have you sent a hard copy?
Your sources...	Please include one or two sentences describing what information is contained and how it is for.	Please indicate whether available online, or in hard copy, or both	Please paste in a link to the online source of information.	For information available <i>only</i> in hard copy, please indicate how this can be obtained	For any information that your organisation provides only in hard copy, please send a hard copy to the address in my signature below.
Your sources...					
Your sources...					

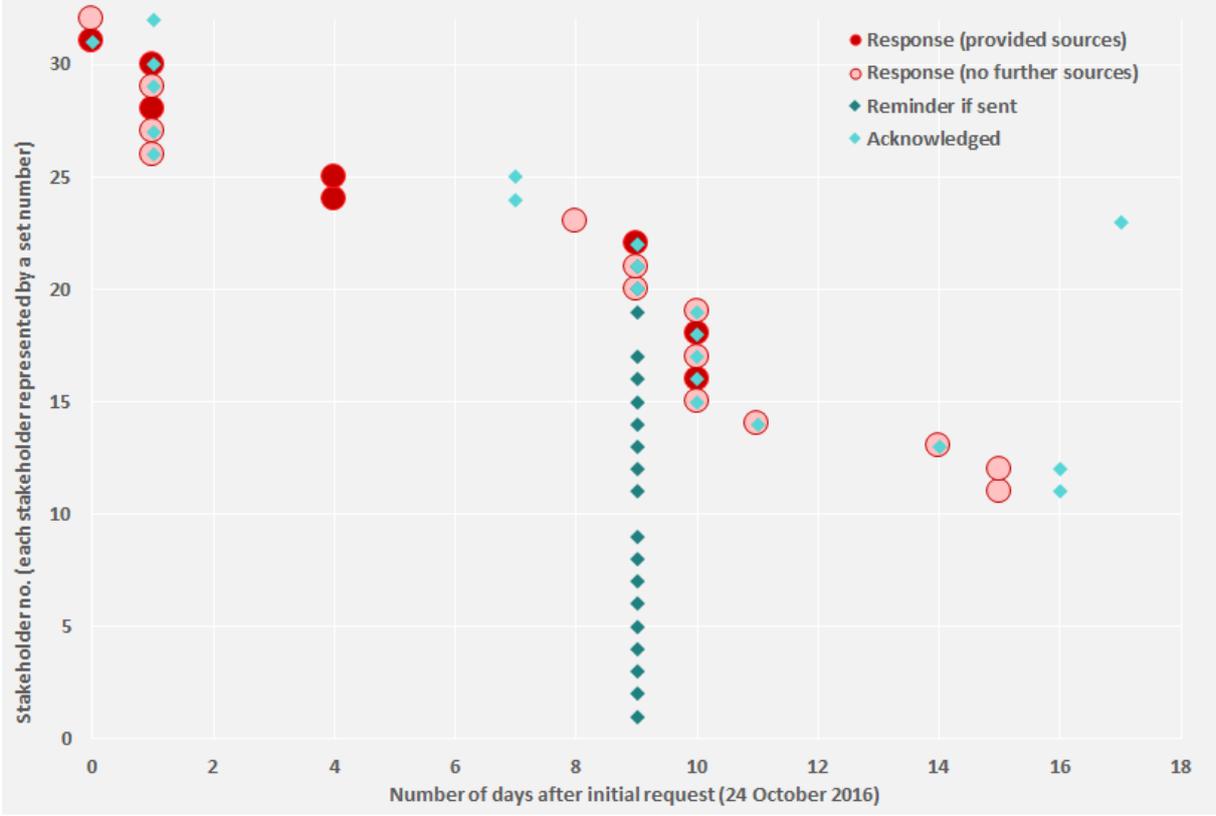
Please contact me if you have any further questions. Many thanks for your consideration and input. This study aims to make a real difference to help individuals and communities understand how to look after private water supplies and private sewerage facilities.

In total:

- 32 individual organisations were contacted (multiple individuals at some organisations);
- 25 stakeholders responded to the enquiry; and
- 9 provided suggestions for additional materials; but
- no additional non-electronic sources.

The timing of stakeholder engagement is represented below, including when responses were received from stakeholders, reminders sent and acknowledgement of responses Figure A1.1. Each organisation is represented by a value on the 'y' axis, with time since the original contact (24 October 2016) represented on the 'x' axis. Most responses were received shortly after the original email or the reminder sent 9 days after the original contact.

Figure A1.1 Stakeholder response summary



Source: RDF Consulting records of stakeholder engagement

A1.3 Assessing coverage

As each source was reviewed, it was recorded whether it included information relevant to each of the consumer questions set out in the study framework above.

For each source, a record was made against each of the questions, indicating whether information as included that answered that question, or informed the reader how they could find out that information. Instances where sources provided only a link to further information at another source were not recorded as including that information (albeit these links were recorded separately under the signposting assessment).

Some variation was observed in the extent of information on each source, but this was captured within the qualitative ratings of information accessibility (within the category for 'scope of information').

A1.4 Assessing accessibility

This section provides more detail on the scale used to assess accessibility (Table A1.2), described in the main report.

Table A1.2 Classifying accessibility of information

Description	Score	Assessment criteria
Easy of finding web pages	0	No links found to the source
	1	Revealed through google search, not easy to find information from consumers' perspective, and/or little signposting of information within the source
	2	Accessible through google search, with information organised from a consumer perspective, or some good signposting of information within the source
	3	Accessible through google search, information organised from a consumer perspective and good signposting of information within the source
Ease of finding information within pages	0	Little or no signposting within pages
	1	Some signposting within pages but information still difficult to find / uses technical language
	2	Signposting within pages and information relatively easy to find but still some difficulty / not arranged from a consumer perspective
	3	Excellent signposting within pages in non-technical language providing clear directions to the relevant information
Comprehension	0	Contains only reference to technical documentation, such as the Technical Guidance or Private Water Supplies Regulations
	1	Contains some basic explanation of rights / responsibilities, summarising technical information into simple information
	2	Contains comprehensive explanation of rights / responsibilities, all in simple, non-technical language.
	3	All of the above, plus contact details for next steps
Scope and extent of info	0	Little information at this source
	1	Limited information, without links to further info
	2	Limited information, with links to further info
	3	Good information about responsibilities / rights, with extensive links to further info

The same framework has been applied to information sources for private water supplies and for sewerage and applied consistently to each area. This exercise is necessarily qualitative and subjective. It is therefore not intended as an exact science, nor as a method for making comparisons between individual sources per se. The strengths and weaknesses of each source are various, so this is intended as framework for identifying good practice and the extent to which the accessibility of information varies across the information base as a whole.

A1.5 Assessing signposting

Signposting was assessed by recording the links between sources and observing the nature of signposting when links are provided.

For each source that was examined, all links to other sources were recorded. This allowed the total number of links included on each source to be recorded, as well as cross-referencing which sources were referred to the most.

This data was then used to assess:

- which sources were the most referred to; and
- for each source, the number of other sources referred to.

Figure A2.1 shows that a small number local authorities with many private water supplies did not rate well relative to others. In particular Highland Council (2,428 private water supplies) and Dumfries and Galloway (1,417 private water supplies) did not score highly, despite having large numbers of supplies.