Citizens Advice Scotland: Consultation Response to SEPA's Water Supply and Wastewater Sector Plan

February 2019

Introduction

CAS welcomes the opportunity to respond to SEPA's draft water supply and wastewater sector plan. We recognise the importance of the sector plans, which will guide SEPA's priorities over the next regulatory period. We also recognise that it is essential these reflect appropriate and inclusive measures to address the significant challenges we face in terms of environmental and societal challenges to create an environmentally and financially sustainable water system for future generations.

We share SEPA's ambition of helping Scotland to prosper within the means of 'one planet prosperity'. We also support the creation of a Scotland that aims to use fewer natural resources, such as water, and deliberately acts to protect the natural environment. We welcome SEPA's ambition for businesses to move beyond compliance and focus on delivering wider outcomes that benefit the environment and people.

CAS believes the water industry has an essential role in supporting SEPA's ambitions for our natural environment and its assets. Four factors seem pertinent to the water industry, which are echoed in SEPA's draft plan:

i. To have access to sustainable and resilient water provision which meets Scotland's needs;

ii. To safely and responsibly release wastewater into the natural environment.

iii. To protect and restore the environment;

iv. To create a truly circular economy that delivers environmental and cost benefits for current and future customers.

These factors are interrelated: where possible wastewater should be re-used e.g. heat from sewerage or energy from biogases should be harnessed; re-used wastewater should then be returned to the environment in a way that does not cause harm; the same environment, if restored to its natural state, is more likely to provide improved raw water quality for abstraction; this reduces the pressure and cost of producing safe drinking water.

Embedding a commitment to a circular economy approach in future will help us move towards greater efficiencies and develop broader thinking around compliance-based issues such as reducing leakage. It will also support thinking around human related issues such as reducing the impact on infrastructure and the environment by changing consumer behaviour. However, truly circular thinking and the achievement of wider objectives will require cross sector and collaborative working to maximise benefits for both the environment and people.

We believe that individuals and communities have an important role to play within SEPA's vision for the water supply and wastewater sector, and that this needs to be strengthened within the sector plan. Scotland has a population of nearly 5.3 million and there are 2.5 million households. Human behaviour, in terms of how customers use natural resources such as water and the public wastewater system, can be harmful and inefficient. However, people, if effectively engaged, educated and activated, have an important role to play in supporting the three key points under SEPA's vision:

- Consumers value water and minimise wastage;
- Consumers only use the public wastewater system for the 3 Ps (pee, poo and paper) and will dispose of other household waste appropriately; and
- Consumers understand the value of using waste to support a circular economy.

We believe that SEPA should consider how consumers can be engaged as active participants rather than passive recipients of water and wastewater services to support this vision.

Does the plan identify all the key partners and influencers that might be able help in achieving our vision?

CAS supports SEPA's recognition of the need for whole sectors to move away from a 'silo' way of thinking towards working together to deliver shared outcomes. This is critical if we are to get to beyond compliance and start delivering wider environmental, social and economic benefits. The creation of a truly circular economy that addresses future challenges whilst maintaining and improving environmental standards will require willingness for sectors to work collaboratively. CAS agrees that "no single organisation can deliver this transformation" and that findings effective ways to improve partnership working between businesses and sectors will be a fundamental priority to achieve the ambitions within the draft plan. This will require a shift in organisational thinking and culture from seeking to do the right thing in isolation to proactively looking for opportunities to work with other sectors to achieve wider goals.

In order to support a successful transition, a process or framework is required to help coordinate whole sectors and individual organisations across sectors to work together effectively[1]. We believe that SEPA should take a lead role in establishing clear goals and guidance for collaborative working between sectors to help deliver shared environmental, social and economic outcomes.

<u>The role of Consumers</u>

We believe that consumers have a vital role to play in supporting a shift in societal thinking towards water: using less, wasting less and conserving what we have. However, consumers are largely disconnected from public body decision making. CAS research[2] has shown that consumers are passionate about Scotland's environment and yet do not always recognise that their behaviour can and does negatively impact upon it. There is an opportunity, as

[1] There are resources available to inform the development of partnerships, including the ISO 44001 standard for collaborative business relationships. More information available here: http://www.instituteforcollaborativeworking.com/About/ISO-44001
[2] Untapped Potential, Citizens Advice Scotland, 2017

part of SEPA's 'one planet prosperity', to educate and re-engage domestic consumers and businesses as active and responsible participants who can support SEPA to achieve its aims:

- Appropriate disposal of fat, oil and grease;
- Appropriate disposal of products that block sewers and impact the environment such as sanitary products, wetwipes and cotton buds;
- Identifying and reducing leaks in supply pipes;
- Increasing the use of natural surface water and flood management;
- Reducing water wastage; and
- Strengthening compliance and resilience for private water supplies.

In order to establish engaged and active consumers, a better understanding of how to change unhelpful behaviours is needed. There is a wide variety of literature on principles around community and individual engagement[3]. Although regulation can play a role in promoting behaviour change (for example the ban on smoking in public places), it is often difficult to enforce.

Generally, to bring about changes in consumer behaviour, people need to:

- Know what the problem is;
- Feel the problem is worth taking action to solve;
- Feel personally empowered and skilled to take action;
- Be presented with a simple solution that fits into everyday routines and habits;
- Have the facilities/money/support to do it;
- Be recognised as having 'done the right thing'[4]

Additionally, it must be realised that consumers are diverse and learning occurs in many forms within a person's life e.g. school, home and work[5]. In recognising consumers as key partners in achieving 'one planet prosperity', a well-structured and tested series of interventions are required that engage the different groups of consumers that use public water and wastewater services to encourage behavioural change. It should take into account messaging and support mechanisms that can engage with, and influence all generations, such as 'life-wide learning'[6]. Applied to consumers' use of water and wastewater services over a period of time, it could make a significant difference in terms of protecting both public infrastructure and the environment.

[3] This literature includes: the Scottish Executive's National Standards for Community Engagement, 2005; the Christie 'Commission on the future delivery of public services' 2010; and 'Consumer Engagement in Decision Making: Best Practice from Scottish Public Services', Consumer Focus Scotland, 2011
[4] Establishing the behaviour change evidence base to inform community based waste prevention and recycling - Technical Report for DEFRA, 2007 http://randd.defra.gov.uk/Document.aspx?Document=WR0504_5409_FRP.pdf
[5] Untapped Potential, Citizens Advice Scotland, 2018
[6] http://www.lifewideeducation.uk/lifewide-learning.html

CAS research found that for consumers, Scotland's water industry is largely silent or 'below the radar'. However consumers are keen to be engaged by the water industry and to have a greater say over issues that affect their communities[7].

Therefore, CAS would encourage SEPA to consider how it could build a greater awareness of the principles of 'one planet prosperity', and its relevance, amongst members of the public at both a local and national level. During 2019, research will take place, commissioned by CAS but working with the Customer Forum and Scottish Water, to better understand where community engagement has been successful. This will involve process evaluations into different community engagement case studies to identify good practice and inform the development of strategy and practices within the water industry. CAS would be happy to share the findings with SEPA and to support consideration of how citizens may be viewed as equal stakeholders, and how they can participate in supporting achieving the aims of SEPA's water and wastewater sectoral plan, and indeed wider sector planning.

Have we identified the right set of actions to help achieve our vision and further improve the environmental performance of the sector?

i. Resilient water provision

Scotland's water industry will face many challenges to ensure water remains available for consumption in the coming years, including:

- Climate change contributing to longer, dryer summers;
- Population movement and growth placing increased demand on certain areas such as the East Coast of Scotland;
- Increased competition from other sectors such as agriculture for natural resources.

Additionally, ongoing SR21 discussions around reducing leakage will include whether or not to move beyond the economic level of leakage, to address the principle of reducing wastage of a natural resource. Any policy on reducing leakage would need to consider:

- Whether or not the industry targets should move beyond the economic level of leakage, and the impact this may have on customer charges and prioritisation of spending.
- How leakage can be reduced within domestic properties: most customers are unaware of leakage within the home and fixing leaky pipes may be expensive, therefore further consideration needs to be given to how householders can be incentivised to check for leaks and fix them.
- Whether or not customers see leakage as a priority, and, if so, how willing they are to 'trade off' other priority areas like resilience and environment against leakage.

[7] Untapped Potential, Citizens Advice Scotland, 2018

ii. Raw water quality

Levels of organics and bacteria in abstracted raw water in Scotland are increasing. In response, Scottish Water has to spend more to treat water to a safe standard for customers[8]. Additionally, the change in raw water quality may impact the ability of private water supply users to achieve compliance and ensure their water supply is safe to drink.

As stated in our introduction, CAS believes that a circular economy approach is fundamental to SEPA's sector plan. This relates to restoring and protecting the natural environment, which would then improve raw water quality for abstraction, and would cost less and use less energy for the industry to treat.

CAS believes that stronger links should be made between reinstating wetlands and their role in filtering and improving raw water quality. This process will become increasingly important as climate change produces heavier and shorter spells of rainfall.

Reinstating wetlands will deliver environmental benefits for consumers, such as reducing flood risks by better absorbing heavier and more intensive rainfall in future years. CAS recognises the need to conduct further research to identify the most effective forms of filtering raw water and how these could be implemented.

Many consumers in Scotland are proud of the taste, clarity and odour of Scotland's water and there have been instances when communities have objected to a change in the taste of their drinking water caused by changing the chemical processing of the raw water used to serve them. Improving the raw water quality may reduce the levels and types of chemicals needed to treat raw water.

Importantly, reinstating wetlands will require close partnership working across different sectors and key stakeholders, for example Scottish Water and Scottish Natural Heritage. CAS believes that to achieve this, SEPA has a clear role in leading partnerships from across sectors to achieve mutually beneficial outcomes.

iii. Water usage by households and businesses

CAS supports SEPA's plan to develop, with partners, a strategy to reduce household and businesses water use. Any intervention should educate consumers and make it easy for people to be more water efficient. CAS would be happy to work with SEPA and other stakeholders to develop consumer-focused messaging, and believe that current research into community engagement will provide insight into how this could be undertaken.

CAS supports SEPA's ambitions around encouraging developers and businesses to move to low water usage designs for buildings, such as rainwater management strategies and sustainable urban drainage systems. This will have multiple benefits, including reducing flood risk and using water more sustainably. However, it is important that this work also includes encouraging the retro-fitting of existing buildings to reduce their water usage.

Generally, CAS believes there is a need to encourage developers, businesses, and households to move towards greater water efficiency. There should be a push from all sectors of society to waste less water and use our resources more efficiently. Targeted interventions for how to achieve this could be piloted in water stressed areas.

[8] Bacto and organics Deep Dive workshop, (part of the SR21 process), Scottish Water, 2019

iv. Sewer networks and flooding

Sewer flooding and network management represents a significant cost to the water industry every year. Much of the efforts in this area are as a consequence of misuse of the public wastewater service by consumers. We urgently need to identify effective interventions to encourage consumers to change their current behaviours in how they dispose of domestic and non-domestic waste to avoid sewer blockages, sewerage flooding and sewerage debris in the environment.

As mentioned above, consumers care about the environment but don't always link their behaviour with any impact upon the environment[9]. More is required to help consumers to engage with the consequences of their behaviour and understand what they need to do to protect the environment.

We fully support measures that put pressure on manufacturers to produce dissolvable wetwipe products. Indeed if informed consumers stop buying brands with a higher plastic content, it is more likely that manufacturers will change the composition of their products and move towards products that are less harmful to the environment.

Any intervention should aim to make it easy for people to change their behaviour. Consumers need to have access to the means of doing things differently, for example, supplying grease traps to households to discourage inappropriate disposal of fats, oils and grease.

A good example of cross sectoral collaboration is the work that Scottish Water and local authorities are undertaking on catchment management to reduce the volume of surface water running into sewers and the risk of local flooding. Often, Scottish Water finds itself responsible for managing the outcomes of public body decision making around for example, planning, as well as human behaviour in how they use wastewater services, but has limited direct influence. Again, and as part of joint working, there is an opportunity to strengthen relations between Scottish Water, those that use its services and other sectors, to produce more favourable and beneficial outcomes for all. This could include a combination of consumer education and local authority enforcement to reduce the number of impervious surfaces laid with properties to slow down the rate at which surface water enters the wastewater network.

There are good examples of how sewer networks have been used to supply heat. We believe that this has considerable potential benefits to consumers, in terms in cheaper fuel, as an income stream for Scottish Water, and in helping meet carbon reduction targets. We believe it is in the long-term interests of consumers for SEPA to promote the use of such techniques, with the objective that they become the normal way of doing things, whenever practical.

v. Wastewater

CAS believes that there is an opportunity for the water industry to create a circular economy in the area of wastewater. This is not a short term ambition but one that could be achieved in 25 – 30 years and have long lasting benefits. A circular approach to wastewater would include investing in technology to harness heat and energy from wastewater treatment plants. The benefits for consumer would be twofold:

[9] Untapped Potential, Citizens Advice Scotland, 2018

- Firstly, Scottish Water could harness a huge amount of energy. Scottish Water is the largest consumer of energy in Scotland and the energy harnessed from wastewater could be used to power Scottish Water's sites. Additionally, energy could be sold back into the grid, generating an additional revenue stream. This revenue could be used to cover costs in the network in future, having a positive net impact on funding for the industry and alleviating the pressure to fund future infrastructure costs through customer charging.

- Secondly, clear environmental benefits would be delivered for consumers. Creating a circular economy would reduce dependency on fossil fuels and create a sustainable source of energy. Additionally, the capturing of methane produced at wastewater sites would prevent it being released into the atmosphere. These environmental benefits would be long lasting and leave a legacy for future customers.

CAS supports SEPA's vision of a move towards wastewater treatment and sludge works becoming "resource recovery centres". However, any strategy to roll this out must consider the potential impact that increased odour may have on communities within the immediate vicinity of slurry spreading, in particular during summer months. An embedded circular economy model for waste management will only succeed if communities are fully engaged and SEPA's environmental priorities are informed by communities and consumers' experience of how the water and wastewater sector impacts on their everyday lives (e.g. consumers care about the circular economy but their threshold for odour caused by sludge being used in agriculture is low) [10].

Improving the quality of wastewater entering into the natural environment will reduce any negative impact on the environmental quality of bathing water and rivers. CAS supports SEPA's proposal to work with Scottish Water, operators of private wastewater discharges and others to increase compliance standards for wastewater entering the environment.

There has been increased media and political interest in the prevention of plastics from entering into the environment. We would welcome improvements to wastewater treatment to reduce micro-plastics from passing through wastewater treatment systems and into the environment.

vi. Private water supplies

As discussed, private water supplies are likely to become increasingly vulnerable due to climate change bringing hotter, dryer weather to Scotland. The summer of 2018 brought problems to many private water supplies, which ran dry and had to be supplied with bottled water from their local authority (funded by Scottish Government)[11]. Private water supplies are often below compliance. In 2017, E. coli was detected in 23% of regulated and 11% of exempt private water supplies samples in Scotland. However there are many barriers to improving private water supplies. We support moving towards a more permanent and sustainable solution for private water communities where all consumers across Scotland have access to safe and reliable drinking water.

Replacing boreholes and choosing technology to improve the safety of the private water supplies can be complex and expensive, and may not guarantee compliant water. Additionally many private water supplies users think their supply is of good quality. CAS has

[10] PE01563: Sewage sludge spreading,
[11] https://news.gov.scot/news/private-water-supplies

also found that local authorities' dual role of support and enforcement can result in private water communities keeping 'below the radar' as they are wary of the cost and resource implications[12].

CAS supports SEPA's commitment to work with the Scottish Government, local authorities and Scottish Water to support improved forward planning for, and design and future maintenance of, private water supply and wastewater services for growing communities that are not on the public system.

Do you agree with our proposals on where we should focus our work initially?

CAS broadly agrees with SEPA's proposals. However we also believe that the following should be considered as priority areas:

- Improving raw water quality;
- Creating a role for individuals and communities as equal partners in achieving 'one planet prosperity'; and
- A role for SEPA in developing and supporting a framework for whole and cross-sector sector partnership working to achieve shared outcomes.

Do you agree with our proposals for streamlining and strengthening the way we regulate private wastewater systems for new houses or extensions to existing houses?

We fully support the provision of clear, accurate and accessible information and guidance for those responsible for private wastewater systems. In response to CAS research, the Scottish Government (with Drinking Water Quality Regulator) launched an Information Hub[13] in 2018 for private water supply users. A similar resource for private wastewater users could be considered by SEPA. We would be happy to support this work.

Water Policy Team

Citizens Advice Scotland

[12] Testing the Waters (yet to be published), Ipsos Mori, 2018/19
[13] https://www.mygov.scot/housing-local-services/water-supplies-sewerage/private-water-supplies/

Appendix 1: Consumer Principles