Our sewer network
If you would like to connect a drain from your home to the public sewer or to see plans of the public sewer network, please contact our Customer Helpline on 0800 0778778 for more information.

The environment
European legislation has set high standards for protecting the environment especially with regards to the discharge of waste water into rivers and coastal waters.
We are committed to this cause and as a result we are continuing to improve our waste water treatment works, helping to protect rivers, lochs and beaches across the country.

Blockages
Every year there are over 40,000 blocked drains and sewers across Scotland, which can cause flooding which affects you and your neighbours and poisons rivers and burns in your local area.
Around 80% of these blockages that clog up the cycle are caused by either inappropriate items being put down the toilet, or fat, oil and grease being put down the sink.
We believe the best way to tackle blocked drains and sewer flooding is to work together with you to help prevent blockages that can clog up the cycle in the first place. Further information can be found on our website: www.scottishwater.co.uk

We want to make it easy to contact us – here’s how:
We always have someone here to take your call, you can write to us or alternatively you can contact us through our website.

Alternative formats of this leaflet can be made available free of charge. For information on Braille, large print, audio and a variety of languages, please call our Customer Helpline.

If you have a disability, medical condition or other reason where you may need additional assistance from Scottish Water then please contact us and we can add your name, address and requirements to our confidential Additional Support Register.

We record all calls for quality and training purposes.

The facts
We are responsible for just over 32,000 miles of sewer pipes across the whole of Scotland.

Customer Helpline 0800 0778778
www.scottishwater.co.uk/gem or call our Customer Helpline on 0800 0778778 to make your nomination.
What is waste water?

Every day you use water in your home, from washing the dishes to taking a bath. This used water is known as waste water and must be safely removed from your home for treatment before it can be re-used.

Waste water even includes the rainwater from your roof and gutters.

Your waste water services

At Scottish Water we collect more than a billion litres of waste water every day from your homes. Your waste water passes down your drains into the main public sewer network and from here our vast network transports it to our waste water treatment works. Here we then reduce any contamination in the water to environmentally acceptable levels before returning the treated water into rivers and the sea.

We are responsible for the provision, operation and maintenance of the public sewer network, whilst private drains on your property remain your responsibility.

For more detailed information on understanding who owns and is responsible for the water and waste water pipes in and around your home visit [www.scottishwater.co.uk/responsibility](http://www.scottishwater.co.uk/responsibility) or call our Customer Helpline on 0800 0778778 and ask for a copy of our ‘your pipework responsibilities’ leaflet.

The facts

We currently operate just over 1800 waste water treatment works across the whole of Scotland.

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The environment

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All waste water which is returned to rivers and coastal waters must comply with quality standards set by the Scottish Environment Protection Agency (SEPA). You can contact SEPA directly for guidance, data, regulations and reports on environmental issues at info@sepa.org.uk or [www.sepa.org.uk](http://www.sepa.org.uk)

Blockages

Every year there are over 40,000 blocked drains and sewers across Scotland, which can cause flooding which affects you and your neighbours and pollutes rivers and burns in your local area.

Around 80% of these blockages that clog up the cycle are caused by either inappropriate items being put down the toilet, or fat, oil and grease being put down the sink.

We believe the best way to tackle blocked drains and sewer flooding is to work together with you to help prevent blockages that can clog up the cycle in the first place. Further information can be found on our website: [www.scottishwater.co.uk](http://www.scottishwater.co.uk)

The facts

We are responsible for just over 32,000 miles of sewer pipes across the whole of Scotland.
Before we treat your waste water, we undertake both of the following processes to remove any debris from it:

**Screening**
Your waste water is passed through screens to remove any large items and debris. We then take these away and bury them in approved landfill sites or burn them in incinerators.

**Grit removal**
Next, your waste water is passed through specially designed channels or tanks to remove any grit and sand that it may contain from the rain washed into the sewers from the roads. The grit and sand falls to the bottom of these tanks and is then removed and disposed of in approved landfill sites.

In the first stage of actually treating your waste water, it is passed through sedimentation tanks to remove suspended solid matter.

The waste water is retained in these large circular or rectangular tanks for about six hours during which time the solid particles settle to the bottom and form a sludge. This sludge is collected and passed for further treatment prior to disposal or recycling.

In the next stage of treating your waste water, we usually use one of the following main processes:

1. **Biological filtration**, or
2. **Activated sludge**.

Both of these processes use naturally occurring bacteria to break down organic substances and, if necessary, remove ammonia from the waste water.

**a) Biological filtration**
In round tanks, the settled waste water is sprayed by moving distributor arms over a deep bed of small stones called a percolating filter. Bacteria, fungi and other organisms living in the gaps between the stones, feed on the waste water as it passes through the bed. This helps to purify the water as it trickles down to the bottom of the filter.

**b) Activated sludge**
In this alternative process, the settled waste water is sprayed by moving distributor arms over a deep bed of small stones called a percolating filter. Bacteria, fungi and other organisms living in the gaps between the stones, feed on the waste water as it passes through the bed. This helps to purify the water as it trickles down to the bottom of the filter.

Finally, in the last stage of treating your waste water, the water is passed into settlement tanks, called humus tanks. These tanks allow any suspended matter produced in the previous stage to settle out.

Now, the treatment process is complete and your waste water is clean and ready to be returned safely back into the environment.

Your waste water services
At Scottish Water we collect more than a billion litres of waste water every day from your homes. Your waste water passes down your drains into the main public sewer network, and from here our vast network transports it to our waste water treatment works. Here we reduce any contamination in the water to environmentally acceptable levels before returning the treated water into rivers and the sea.

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The facts
We currently operate just over 1800 waste water treatment works across the whole of Scotland.

Waste water treatment diagram

1. **Before treatment starts**
2. **In the first stage of actually treating your waste water, it is passed through sedimentation tanks to remove suspended solid matter.**
3. **In the next stage of treating your waste water we usually use one of the following main processes:**
   a. **Biological filtration**, or
   b. **Activated sludge**.

Both of these processes use naturally occurring bacteria to break down organic substances and, if necessary, remove ammonia from the waste water.

4. **a) Biological filtration**
   In round tanks, the settled waste water is sprayed by moving distributor arms over a deep bed of small stones called a percolating filter. Bacteria, fungi and other organisms living in the gaps between the stones, feed on the waste water as it passes through the bed. This helps to purify the water as it trickles down to the bottom of the filter.

5. **b) Activated sludge**
   In this alternative process, the settled waste water goes into tanks which contain activated sludge. Activated sludge contains the right type of microorganisms (bacteria) in it, which feed on the waste particles. This bacteria needs a supply of oxygen to function properly, so air is fed into the tanks.

6. **Finally, in the last stage of treating your waste water, the water is passed into settlement tanks, called humus tanks.** These tanks allow any suspended matter produced in the previous stage to settle out.

Now, the treatment process is complete and your waste water is clean and ready to be returned safely back into the environment.

The facts
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