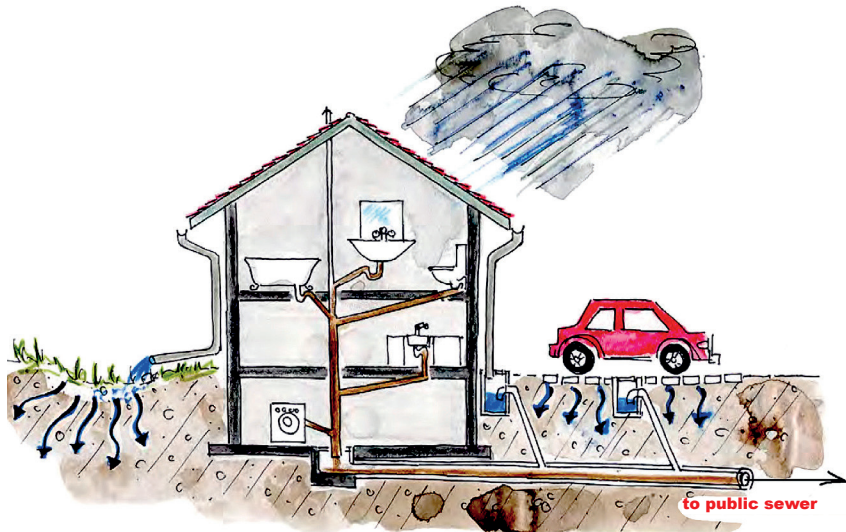


Information leaflet for private homeowners

## My home sewage system

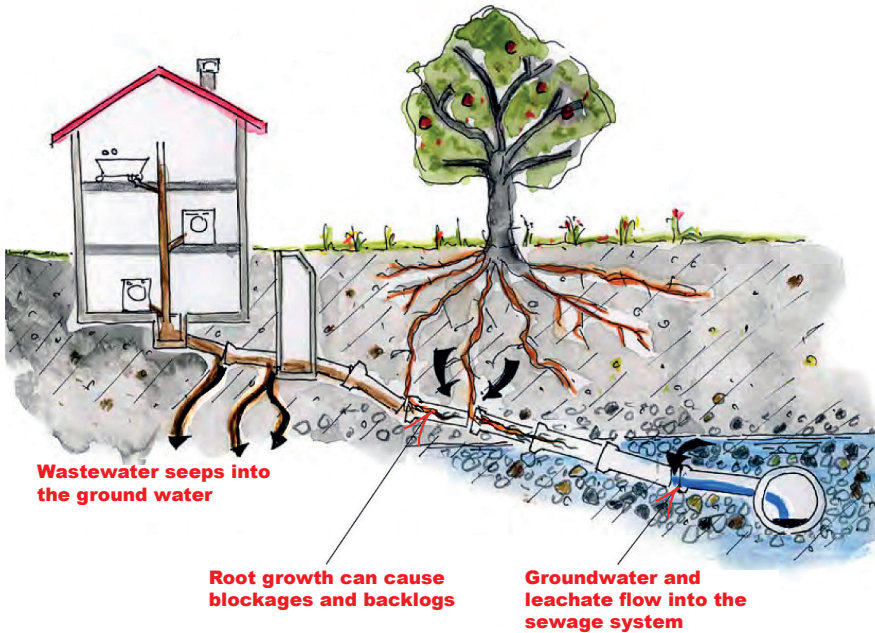


### Wastewater from my property – what is it?

Wastewater is all water that is diverted from a plot of land, regardless of whether it is dirty or not dirty. Wastewater thus includes all water from the kitchen, bathroom, WC and utility room, as well as rainwater from roofs, paths and fields. Not all the wastewater from a property must be fed into a waste water treatment plant. Clean rainwater from roofs, forecourts and paths, as well as leachate and well water should – if possible – seep away onto the plot of land or flow into a separate body of water.

## Defective drainage systems

Damaged wastewater pipes can result in contamination of the ground and groundwater. Damaged drainage systems can also lead to groundwater flowing into the sewer as external water, which strongly compromises the performance of the sewer and drainage system and can have significant financial repercussions.



## Causes and consequences

Damage to the drainage system can be caused by various things. The main causes of defects are natural ageing, unreliable wastewater disposal, acids and alkalis, inadequate planning and execution, and a poor subsoil. Damage to pipes, defective pipe connections and burst pipes result in wastewater seeping into the groundwater. If the groundwater level is high, groundwater can also penetrate the sewage system. Burst pipes and pipe contusions increase the risk of blockages and can create a backlog into the building. So that you can identify and rectify damage early, your drainage system must be regularly inspected – just like your car or heating system.

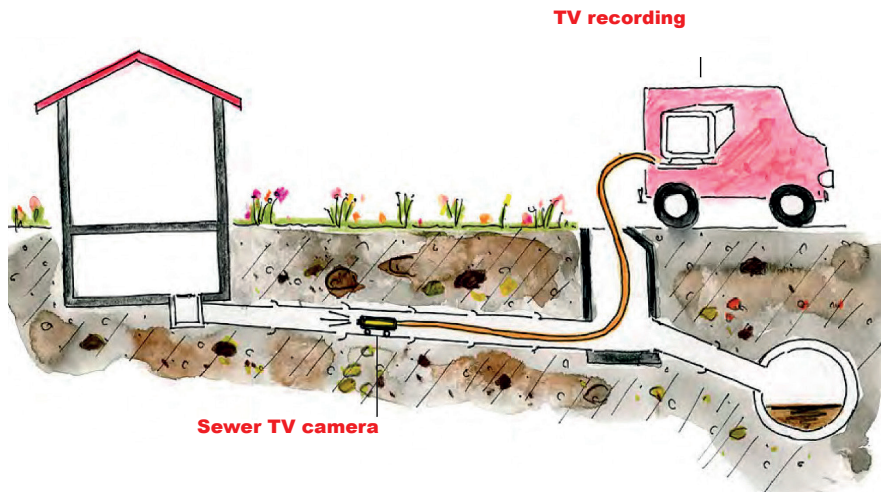
## Tips

A well-functioning and intact drainage system requires periodic controls and regular maintenance. This includes the following work:

- Rinsing of the ground pipes, property pipes and subsoil drains
- Investigation of the ground pipes, property pipes and subsoil drains every 15-20 years
- Emptying of separating equipment such as sludge collectors, oil separators
- Maintenance of wastewater pumps
- Function check of the non-return flap

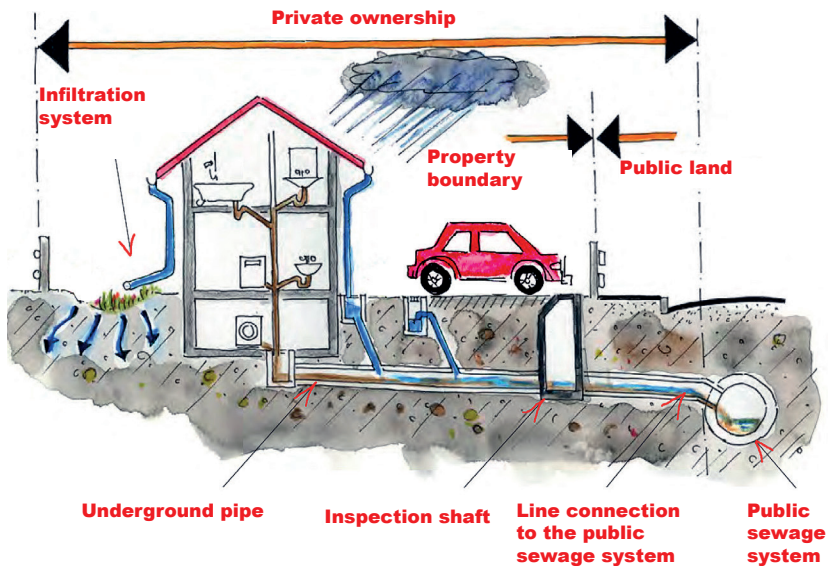
## Operation and maintenance

We often think about the wastewater pipes last – until they suddenly stop working because of a blockage. Regularly maintaining the pipes can easily prevent such damage. If their diameter is reduced by as little as 10 percent, this reduces the amount of wastewater they can take away by up to a quarter. In many cases, a simple check is sufficient to determine the precise condition of private wastewater pipes. We have the necessary vehicles and technical equipment to do this. However, it is much better, and significantly cheaper in the long term, to regularly inspect, rinse and clean the subsoil drains and wastewater pipes on a property.



## Ownership and area of responsibility

As the owner, you are responsible for all devices that divert wastewater from your plot of land via the connection line into the public sewage system. These include all wastewater bearing systems from the roof gutter to the toilet and washing machine and through to the wastewater pump. Manholes, subsoil drains, infiltration systems and non-return flaps fall under private ownership. These all need to be regularly maintained. The importance of your drainage system only becomes clear when it stops working as it should. For example, if wastewater is not drained because of a blockage or, even worse, the basement is flooded. As the owner of the plot of land and thus the drainage system, you are responsible for maintaining it.

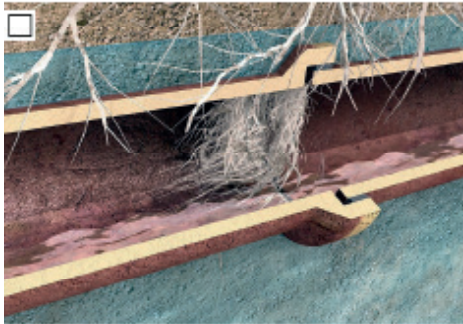


## Legal matters

As per Article 13 GSchV, the owner of drainage systems must operate them correctly. This means that the owner must keep the systems in a well-functioning condition, identify deviations from normal operations, establish their cause and rectify them without delay and, during their operation, take all appropriate measures to reduce the volume of substances to be drained away.

- Federal Law on the Protection of Water (Water Protection Act)
- Regulation on Water Protection (GSchV)

More precise information can be found in the VSA guideline, 2016 edition.

**Damage**

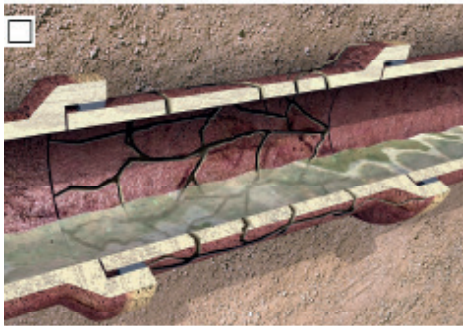
In-growing roots, protruding connection, object in the pipe

**Consequences**

Reduction in the cross section, backlog, blockage, flooding, drainage hindrance

**Clean-up options**

Rinsing, milling, trenchless clean-up with part liners, Silago flooding system, inliner, collars

**Damage**

Cracks, holes, burst pipe, deformation, missing section of wall, spalling

**Consequences**

Blockages, water penetration, water discharge, wet and damp basement rooms

**Clean-up options**

Inliners, part liners, robot clean-up, collars, spray liners

**Damage**

Adhesive substances, deposits, limescale, concrete

**Consequences**

Reduction in the cross section, backlog, blockage, flooding, drainage hindrance

**Clean-up options**

Rinsing, milling, high pressure rinsing, decalcification stones, robot milling

**Damage**

Displaced pipe connection, damaged seal, infiltration, abrasion

**Consequences**

Line break, backwash, collapse, wet and damp basement rooms

**Clean-up options**

Manual replacement, inliners, collars

**For questions and further information**

**Sewer cleaning / sewer clean-up**

Marquis AG Kanalservice  
 Wölferstrasse 15  
 4414 Füllinsdorf  
 T 061 717 17 17  
 F 061 717 17 18  
 info@marquis.ch  
 www.marquis.ch

Subsidiary:  
 4055 Basel, Kembserweg 1



**Freephone number: 0800 321 222**

**Overview of the four clean-up stages**

Analysis of need	Preliminary condition check	Performance of clean-up	Completion and quality check
<ul style="list-style-type: none"> <li>Roots</li> <li>Blockage</li> <li>Sewer TV</li> <li>Statutory leakage inspection</li> </ul>	<ul style="list-style-type: none"> <li>Sewer rinsers</li> <li>TV recording</li> <li>Calibration</li> <li>Measurement</li> <li>Water drainage</li> </ul>	<ul style="list-style-type: none"> <li>Robots</li> <li>Rinsing and milling</li> <li>inliners, part liners, cap</li> <li>Milling of side inlets</li> <li>Binding</li> </ul>	<ul style="list-style-type: none"> <li>TV recording</li> <li>leakage inspection</li> <li>protocol</li> <li>certificate</li> </ul>