



# Y5 Geography — We are Water Supply Engineers



## Key Knowledge

### What I Should Already Know

- The physical features of the water cycle (Year 4 Science)
- The difference between human and physical features (Year 3 and 4)
- What economy activity is (Year 4)
- What trade links are (Year 4)
- What natural resources are (Year 4)
- What climate change is (Year 4)

### What do Water Supply Engineers do?

Water Supply Engineers design, manage and maintain water and sewage services. They need to understand the physical and human features of the water cycle, including how water is treated and distributed in the area they work in.



## Key Vocabulary

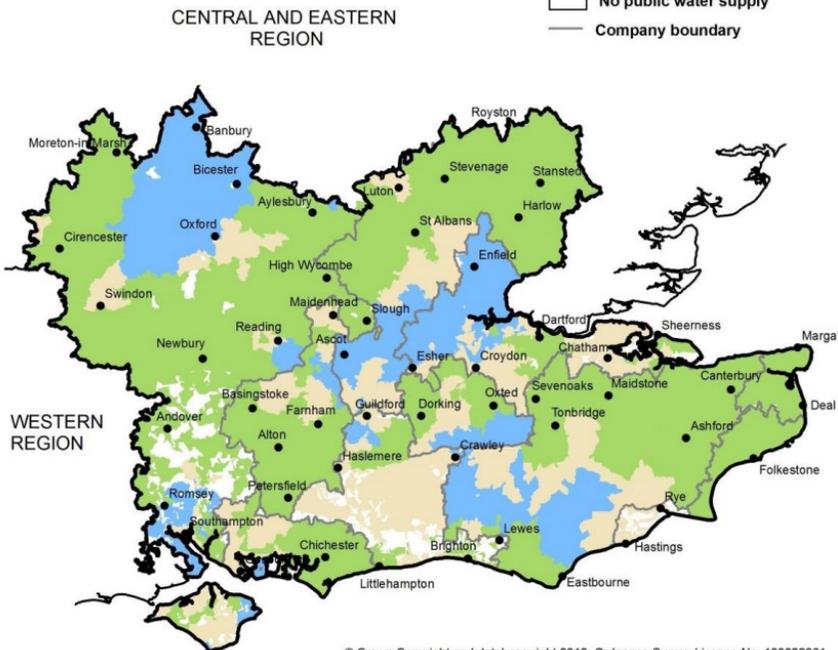
Word	Definition
evaporation	The process of turning from liquid into vapour.
condensation	The process of turning from vapour into liquid.
aquifer	A body of rock which can contain groundwater.
groundwater	Water that is held underground.
surface water	Water that is located on top of the Earth's surface such as rivers.
reservoir	A large natural or man-made lake that is used as a source of water supply.
wastewater	Water that has been used in your home, school or work.
sewage	Water containing waste from a toilet.
utility company	A company that supplies utilities such as water, gas or electricity.
distribution	The action of sharing something out among a number of people.
water treatment	The process of improving the quality of water (so that it is safe to drink, for example).
borehole	A deep, narrow hole made in the ground (to gain access to groundwater, for example).
drought	A long period of abnormally low rainfall, leading to a shortage of water.

## Water Distribution in the South East of England

Water is a natural resource that is collected, treated, distributed and sold to us by utility companies like Southern Water (also see diagram on back).

**Key**

- Green: Groundwater
- Blue: Surface water
- Yellow: Either surface or groundwater
- White: No public water supply
- Black line: Company boundary



### Groundwater

Most tap water in the South East (including in Worthing) comes from groundwater. Groundwater in this region comes from the chalk aquifer in the South Downs. The chalk acts like a giant sponge; it soaks up and stores water.



### Surface water

The rest of the water in the South East comes from surface water, taken mostly from rivers and sometimes from reservoirs. Surface water usually needs treatment to make it safe to drink.

## Sustainability

### Climate Change

Climate change can cause the climate to get drier (meaning there is less rainfall). This can cause drought, which means there is a shortage of water. It is therefore important to save water where you can.

### Saving Water

You can help save water by:

- Taking showers instead of baths.
- Turning the tap off when you brush your teeth.
- Leaving a jug of water in the fridge to avoid running the tap until it turns cold.
- Washing vegetables in a bowl instead of under a tap.



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## Key Knowledge

### The Water Cycle

(Physical features are in red, human features are in blue.)

