

# Chalk River Characteristics



Flowing  
Nailbourne  
at Bridge

## Winterbournes

Also referred to as bournes, winterbournes are located in the headwaters of chalk rivers and often run dry or partially dry during the summer. This is due to lack of groundwater feeding into the springs.

The Little Stour's bourne is the Nailbourne, which has its source in Lyminge. The Nailbourne is said to flow once in every four winters but climate change may increase the flow regularity.

Little Stour  
at  
Liitlebourne



## Crystal Clear Water

As rain falls and seeps into the ground it makes its way down to the chalk layer. As the water passes through the chalk it is purified and filtered before it emerges from the aquifer into streams.

Percolation through the chalk also cools the water which results in chalk streams having a relatively stable temperature- a useful characteristic to support aquatic wildlife.



Little Stour  
at  
Bokesbourne

## Clean Gravel Beds

Gravel beds are a characteristic feature of chalk rivers. Gravel beds are formed over millions of years and provide a vital habitat for some river invertebrates to shelter in. They also form excellent spawning grounds for salmonidae fish species such as brown trout.

Water  
crowfoot



## Diversity of Flora

As the water is filtered through chalk it is enriched with minerals which support plant growth. This mineral enrichment, alongside the relatively stable year-round temperature of the water, creates ideal conditions for a diversity of flora. Iconic chalk river flora includes water starwort and water crowfoot, the latter often creating rafts on the water's surface in the peak of summer.