

Introducing the Kentish Stour

The Kentish Stour is the major river catchment of East Kent. Its largest river is the Great Stour, which has its source near the village of Lenham and flows out to sea at Pegwell Bay, but it encompasses many other watercourses from the smallest streams to major tributaries like the East Stour. The centre pages of this leaflet feature a map of the Catchment and information about individual rivers.

The Kentish Stour is an important river system, of great value to human and natural communities alike. It supplies water for agriculture and industry, provides drainage, recreation and wildlife habitat. Some of its rivers are chalk streams of global significance. Some flow through areas of international importance for conservation. Most pass through settlements; loved and celebrated in some places, flowing underground and forgotten in others. They are part of the history and folklore of this part of Kent and have powered industries in the past.

In an ideal world, all the rivers of the Stour Catchment would be shaped by natural processes, with good water quality and abundant wildlife. In a few places these conditions exist but for the most part, these rivers face many challenges: pollution, low flows due to the demand for water supply, invasive species and the legacy of structures left by old industry.

Despite these pressures, the Stour Catchment's rivers are still great places for walking, recreation and wildlife watching. In many places they have tremendous beauty and natural diversity. They are homes for many well-loved and sometimes declining species.

This leaflet looks at the rivers of the Catchment, the work being done to meet the challenges they face, and the organisations involved. It also highlights what every one of us can do in our daily lives to help look after these rivers that flow through our towns and villages.

The Kentish Stour Countryside Partnership is at the forefront of efforts to improve rivers in the Catchment, working together with a range of other bodies, with landowners and the community.

The Great Stour at Godmersham. Here the Stour is a chalk river. Chalk rivers are very special. There are only about 200 on the planet and the UK is home to 85% of them. They are rich in wildlife, with clear waters and abundant plants but most have been altered by human activity.

WHAT MAKES A HEALTHY RIVER?

Water levels

You have probably noticed the level of water in a river fluctuates naturally. In many rivers this variation will be small, in others more pronounced. Some chalk rivers, known as 'winterbournes', are naturally dry in the summer and will only flow in winter.



Problems arise when demand for water – for domestic use, agriculture and industry – puts pressure on these natural levels. In the Stour Catchment, the same water used by people feeds our rivers. Water companies 'abstract' water from aquifers using bore holes.

We are now seeing some rivers suffering from periods of 'low flow', due to 'over-abstraction' of water. This can be devastating to fish and other aquatic wildlife. Rivers that have always been intermittent, like the Nailbourne, now flow less frequently, with some stretches dry for several years at a time.

A river's shape



A natural river channel will have a varied shape – shallow in some places, deeper in others, varying in width. It will not be straight but meandering. It will be ever changing as the river erodes in some places, deposits material in others. This variety provides habitats for aquatic wildlife of all kinds, including migratory fish.

Humans have been modifying the rivers of the Stour Catchment for centuries. A few parts of the system are still near-natural but many rivers have been artificially straightened and deepened, enclosed by artificial flood banks, with man-made structures obstructing fish movement.

Some of these modifications were intended to prevent flooding, but they can make this problem worse. Flooding is a river's natural response to heavy rain. If we straighten and build banks in one place this often causes flooding elsewhere.

Water quality

A number of things are looked at when assessing the water quality of a river. Monitoring river chemistry can flag up pollutants like ammonia or metaldehyde. Levels of dissolved oxygen are important to support aquatic animal life. Phosphorous and nitrate levels are measured and raised quantities of these nutrients can indicate pollution from agricultural fertilisers, or domestic sewage.



High levels of nutrients adversely affect the whole balance of the river ecosystem and can have a knock on effect on dissolved oxygen. Rivers polluted with phosphates will usually have degraded plant and animal life.

While pollution from fertilisers and pesticides is invisible, the problem with silt is plain to see. Where water is cloudy this is probably down to silt - essentially tiny particles of soil. Problems arise when excess silt, often from cultivated farmland or building sites, enters watercourses. Man-made modifications interfere with natural flow and lead to silt dropping out of the water. It smothers natural habitats like gravel beds where fish spawn, and can also lead to flooding.

Native flora and fauna

A natural river will be a habitat for abundant wildlife. The foundations of this ecosystem are aquatic invertebrates like mayflies, caddisflies and freshwater shrimp. The presence of these species is monitored as they are a very good barometer



of a river's health. Aquatic plants are also essential as oxygenators and sources of food and shelter.

This is the basis for a complex ecosystem. The presence of diverse native flora and fauna indicates the river is healthy. Conversely the presence of non-native species can be a sign of problems.

The Stour Catchment has serious issues with a number of invasive non-native species. North American mink have devastated the water vole population. The disease carried by the signal crayfish has reduced white-clawed crayfish distribution to just a handful of sites. Himalayan balsam has colonised riverbanks in many places, shading out native plants.



The Water Framework Directive

The Water Framework Directive aims to bring improvements to rivers (as well as lakes and coastal waters). Rivers are assessed in the four areas outlined in this section and given a status of good, moderate, poor or bad. The aim is for all to achieve good status. Currently, none of the rivers in the Stour Catchment are rated good.

There are various reasons they are failing - for example, pollution from phosphates, poor fish populations or lack of dissolved oxygen. The task now is to tackle these problems. Catchment Improvement Partnerships (CIPs) have been set up to work together on making our rivers healthier. Find out more about the East Kent CIP and other organisations improving rivers under Useful Contacts.

USEFUL CONTACTS

Responsible bodies

Kentish Stour Countryside Partnership (KSCP)

We work with landowners and local communities to conserve, enhance, and promote countryside and urban greenspace
4, Javelin Way, Henwood, Ashford TN24 8AD
03000 410900 kentishstour@kent.gov.uk
www.kentishstour.org.uk

East Kent Catchment Improvement Partnership (EKCIP)

Partnership working on catchment based approaches to improve the health of rivers. Includes many of the bodies listed below
Contact via KSCP

Environment Agency (EA)

The main body in charge of the maintenance of the River Stour and other main rivers
Kent, South London and East Sussex Area
0370 8506506 enquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

River Stour (Kent) Internal Drainage Board (RSIDB)

Organisation responsible for land drainage and flood protection in the River Stour area
01227 462377 or 784635 enquiries@riverstouridb.org.uk
www.riverstouridb.org.uk

Kent County Council Flooding and Drainage

Responsible for drainage of roads and for watercourses not managed by EA or RSIDB
To report flooding on roads - 03000 41 81 81 (Mon - Fri, 9am to 5pm) or 03000 41 91 91 (outside of office hours)

South-East Rivers Trust (SERT)

Charity restoring and conserving rivers and their catchments in south-east England
0845 092 0110 info@southeastriverstrust.org
www.southeastriverstrust.org

CaBA (Catchment Based Approach)

Working in partnership with government, local authorities, water companies and businesses to enhance river catchments
info@catchmentbasedapproach.org
catchmentbasedapproach.org

Water companies

Affinity Water

Water supply emergencies 0345 357 2407
www.affinitywater.co.uk

Southern Water

Water supply or sewage emergencies 0330 303 0368
www.southernwater.co.uk

South East Water

Water supply helpline 0333 000 0002
www.southeastwater.co.uk

Recreation

Canoe Wild

07947 835688 info@canoewild.co.uk www.canoewild.co.uk

Grove Ferry River Trips

07985 273070 info@groveterrivertrips.co.uk
www.groveterrivertrips.co.uk

Sandwich River Bus

07958 376183 www.theriverbus.co.uk

Canterbury and District Angling Association

01227 710830 enquiries@cdaa.co.uk www.cdaa.co.uk

Ashford Angling Society

membership@ashfordanglingsociety.com
www.ashfordanglingsociety.com

Mid Kent Fisheries

01227 730668 info@midkentfisheries.co.uk

Floodline 0345 988 1188

Report pollution and fly-tipping 0800 807060



The Kentish Stour

A guide to the rivers and streams of the Kentish Stour Catchment



www.kentishstour.org.uk

Our Stour



Our Stour is the Kentish Stour Countryside Partnership's community project about enjoying and improving the rivers and streams of the Stour Catchment.

The National Lottery Heritage Fund along with other sponsors supported a three year programme of activities (see below). Thanks to the support of the Environment Agency, Kent County Council, Southern Water and Affinity Water, the good work will continue with educational and volunteering activities.

RIVER CONSERVATION TASKS

Local people getting hands on with conservation that makes a real difference to river environments.



RIVER WARDENS

River Wardens play an important role in improving local rivers, reporting problems and recording wildlife.

AQUALAB Our mobile classroom for schools and community groups to use for fun, river-based, educational activities.

LAND MANAGEMENT WORKSHOPS Events to advise farmers and other land managers on how to protect rivers.

RIVERS IN FOCUS A programme of events and guided walks that involved film, photography and rivers.

FLOWFILM A community project where people used film-making to explore rivers on their doorstep.



To see the films made during the project go to YouTube and search 'Kentish Stour Countryside Partnership'.

River Restoration

The Kentish Stour Countryside Partnership has been carrying out river restoration projects for many years. The aim of these projects is to return rivers to a more natural state. Some projects involve large-scale reshaping of rivers, but in many cases relatively small changes can kick-start the river's natural processes.



Some of the methods used are shown in the photographs.

Others include:

- 'Deflectors' used to alter flow
- 'Revetments' protect eroding banks with natural material
- Shallow 'bays' in river banks provide sheltered habitat
- Dead wood fixed into the river channel creates diversity of flow and enhances habitat for fish
- Weirs are modified to permit fish movement



Habitat creation along hard river banks with sacks containing aquatic plant seed

Machinery being used to move material in the river to increase diversity.



New channel being created at Buxford to allow fish to migrate freely

'Berms' create meanders on rivers that have been straightened



What you can do

Everyone can play a part in helping the rivers of the Stour Catchment. Making relatively small, simple changes in everyday life can make a world of difference!

SAVE WATER

Using less water is perhaps the biggest thing we can all do to help rivers. There are so many simple things you can do from taking a shower instead of a bath, to using a watering can instead of a hose to water the garden. For a full list of tips go to waterwise.org.uk.



CHECK YOUR PLUMBING

If your house has a 'separate' sewage system, waste pipes from appliances, sinks or toilets connected to surface water sewers could be polluting local rivers. Go to connectright.org.uk to find out more.

LAUNDRY LESSONS

Microplastics from artificial fibres are getting into rivers and oceans every time we wash them. Try to use more natural fibres like organic cotton. You can also buy washing bags that filter out the micro fibres. Only wash a full load to reduce friction and be more water efficient (and use your machine's eco setting if it has one).

SHOP RESPONSIBLY

So many things we buy can have an effect on the health of rivers. Avoid cleaning products with chlorine bleach and phosphates, cosmetics with plastic microbeads and single use products like wet wipes. Buying local organic food will lead to less agricultural pollution. The Friends of the Earth website has a wealth of information.



Upper and Middle Great Stour

The Great Stour starts its journey as a number of small springs near the village of Lenham. From here it travels in a roughly south-easterly direction. Despite flowing over the rocks of the Greensand Belt, it has many of the characteristics and species of a chalk stream.

The river is rural and the channel is quite natural in many parts and good for wildlife, although surrounding agriculture does impact on water quality. It flows through attractive settlements like Little Chart, and through scenic Godinton Park. It then enters it's first major town – Ashford – running through the Ashford Green Corridor. It changes direction, now heading north-east, before being joined by a major tributary, the East Stour.

Wildlife

The rivers and streams of the Catchment are habitats for a great diversity of wildlife. These include some of our most threatened species, such as the water vole. Numbers of this much-loved mammal have declined dramatically.

One iconic river mammal whose numbers are recovering is the otter, although the population on the Stour is still small. Beavers have also made a comeback in some areas, after an absence of centuries. A small colony of harbour seals is doing well in the estuary near Pegwell Bay.

The Catchment has good numbers of riverine birds such as kingfisher, grey heron and grey wagtail. In the Lower Stour species like Cetti's warbler can be heard in riverside scrub, while barn owls and marsh harriers hunt over the wide flood-plains, and waders such as redshank feed on tidal mud.

The chalk streams of the Catchment are known for their brown trout and there is an important population of European eel on the Great Stour. Salmon and brook lamprey are seen occasionally.

Dragonflies and damselflies brighten any riverside walk. The banded demoiselle is the main species of rivers, but large red damselfly, brown hawkweed and common darter can all be found. Mayflies can be seen flying in huge numbers in spring. Together with other aquatic invertebrates, such as caddisfly, they form the basis of river ecosystems.

Just as key are riverine plants. Water crowfoot flowers in spectacular white rafts on chalk rivers in spring, while the showy yellow blooms of flag iris and the colourful spikes of purple loosestrife brighten riverbanks.



Aylesford Stream

This little-known river starts its journey as a number of small springs near the village of Brabourne, and flows through a rural landscape before entering urban Ashford. Here it forms an integral part of the Ashford Green Corridor. Surprisingly, some urban stretches of the Aylesford Stream are more natural than the rural ones. This is because riverside habitats have often been lost to intensive agriculture in the countryside, and some forms of agriculture are known to be impacting on water quality.



The Great Stour leaves Ashford then flows into a breach in the North Downs called the Wye Gap. From this point, it becomes a true chalk stream, flowing through the Downs in a wide valley. Beautiful riverside spots include Olantigh Park, Godmersham, and Chilham Mill. Running past Chartham and several flooded gravel workings, the Great Stour flows into the historic cathedral city of Canterbury, passing Hambrook Marshes and the Westgate Parks on the way.



THE STOUR CATCHMENT

KEY

- River
- Tidal river
- River, seasonal flow
- River, intermittent flow
- Long distance path
- SVW Stour Valley Walk
- SSW Saxon Shore Way
- ECP England Coast Path
- GSW Great Stour Way
- EVW Elham Valley Way
- Riverside Greenspace
- Settlement

ASHFORD GREEN CORRIDOR
The Ashford Green Corridor is made up of parks, recreation grounds and other green spaces alongside the rivers that flow through Ashford. They provide a pleasant environment for people and valuable habitats for wildlife. They are linked by a network of foot/cycle paths.



CANTERBURY RIVERSIDE
As it runs through the heart of this historic city, the Great Stour is accessible via a network of footpaths that link up parks, gardens and other greenspaces. The Westgate Parks, combining formal gardens, play parks and nature reserves, are a highlight.



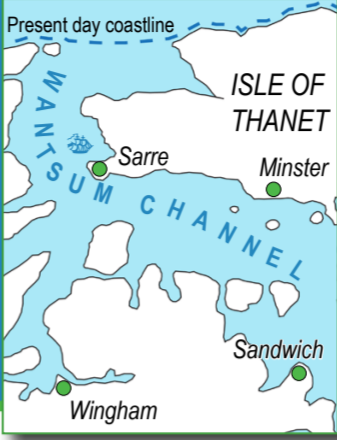
Oyster Coast Brooks

The Oyster Coast Brooks is a collective name given to the small rivers that flow into the Thames Estuary between Seasalter and Reculver. This is a built-up coastline, so all the Brooks flow partly through towns, often encased in underground 'culverts'. Even where they are not underground, they often flow in hidden, hard to access channels and people are sometimes unaware of their existence. But these hidden rivers need our help – there are problems with low water levels and pollution from a number of sources.



River Wantsum

The River Wantsum is all that remains of the wide sea channel that separated the Isle of Thanet from Kent during the Roman and Early Medieval periods. The Wantsum Channel was an important shipping route, two and a half miles across at its widest point. From the 13th century, the channel began to silt up. This was probably caused by a shingle bar which altered the way water flowed, although land was also being reclaimed from the sea. The last ships are thought to have used the Channel in the 1500s.



Lower Stour

Upon leaving Canterbury the river flows on to Fordwich, Britain's smallest town, where it becomes tidal. It then enters the Lower Stour, a marshland landscape where intensive agriculture contrasts with important wildlife areas. At Stodmarsh National Nature Reserve, superb wetland habitats support internationally important communities of birds, plants and invertebrates. The Lower Stour as a whole is a stronghold for the declining water vole and has seen the return of otters and beavers.

At Pluck's Gutter, the Great Stour is joined by the Little Stour, and becomes The Stour. From here it flows across a landscape that was once the sea – the Wantsum Channel separated Kent from the Isle of Thanet during the Roman and Early Medieval period. The Richborough and Ebbsfleet area is particularly significant

in our history – the landing place of the Romans, the Anglo-Saxons and St Augustine. Sandwich is a well-preserved medieval town rich in heritage.

Beyond Sandwich, the Stour is near the end of its journey, and what a finale! Here the river and its associated habitats are protected as part of much larger conservation areas. The bird life is second to none and diverse habitats supports a rich variety of plants and insects. At Pegwell Bay, the Stour finally completes its journey to the sea.

The tidal Stour downstream of Sandwich



Recreation

Walking

The Stour Valley Walk, Saxon Shore Way, Great Stour Way, Elham Valley Way and England Coast Path all provide some access for riverside walking in the Catchment (see map).



Away from major routes, some public footpaths run along rivers, for example, along the Little Stour downstream from Littlebourne. Ordnance Survey maps are the best way to find these routes.

There are many footpaths and public spaces along rivers in urban areas – see the green boxes on the map.

Canoeing and boating

A 'right of navigation' exists on the tidal Stour, however unless you have a mooring or own riverside land you will need landowner permission to launch a boat. There is no right of navigation upstream of Fordwich.



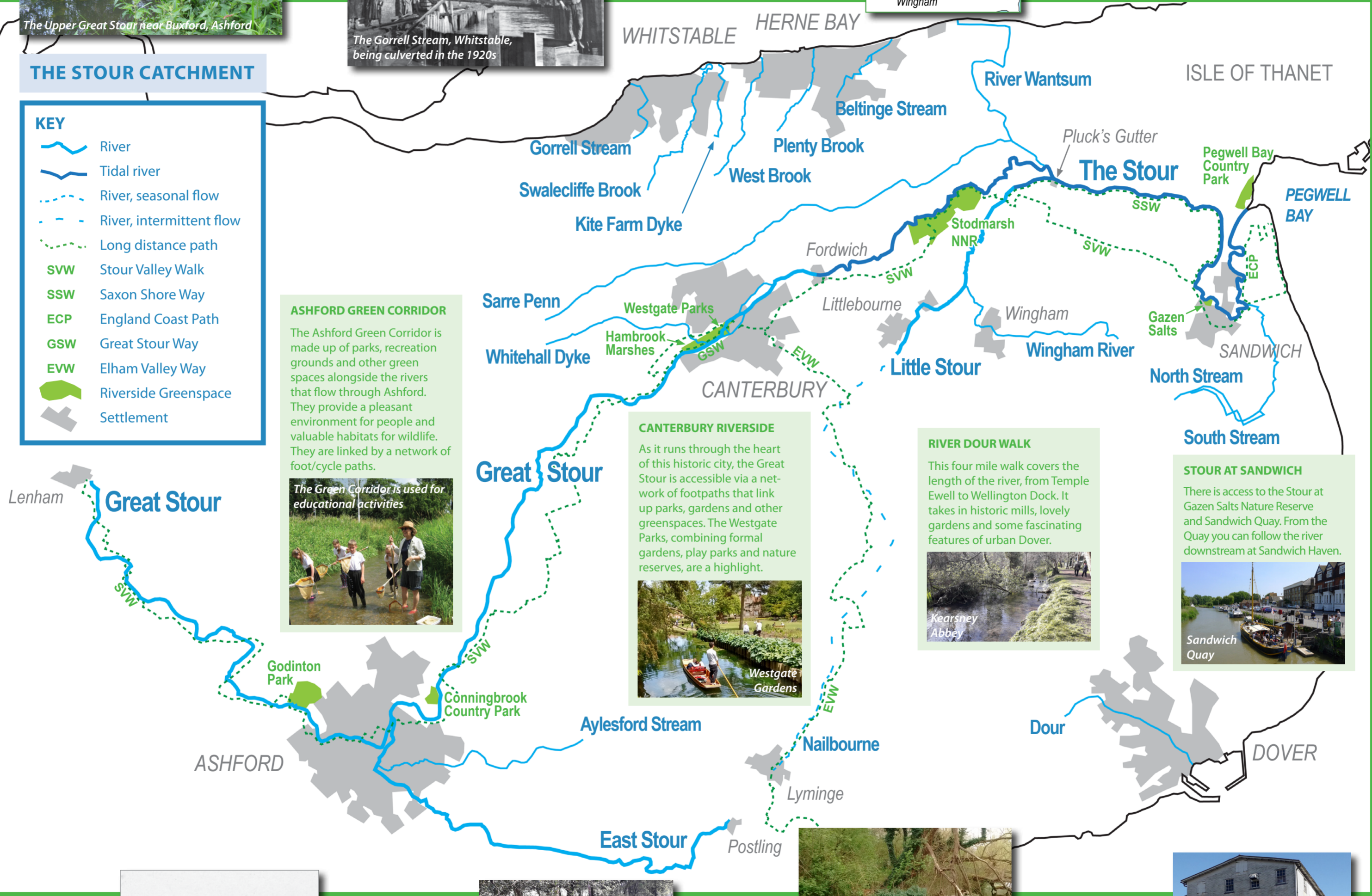
Canoe Wild operate from Grove Ferry, providing canoe hire, courses and guided tours. Grove Ferry River Trips run regular tours along the Great Stour with their 12 seat electric boat. The Sandwich River Bus operates from Sandwich Quay and runs scheduled tours including trips to see the harbour seal colony at Pegwell Bay.

Fishing

River fishing requires a rod license. On private land, you also require landowner permission. In many places, fishing rights are held by clubs. Canterbury and District Angling Association provides fishing from Fordwich to Pluck's Gutter. Tonford Fly Fishing Club have fishing rights for two miles west of the city. In the Ashford area, Ashford Angling Society have rights to the river through Willesborough and Conningbrook. There are also many lakes for coarse fishing in the Catchment.

Wingham River

The Wingham River rises near the village of Ash and flows through a landscape of rich soils and intensive agriculture. The section through Wingham is the most pleasant, with a gravelly bottom and good habitat for wildlife. West of the village, a tributary fed by springs at Wingham Well, swells the waters. Beyond this point, the river takes on a more marshland character, before flowing into the Little Stour at Wenderton Hoath. The names of features here, like Port Rill and Snake Island, hint at a time when the river was navigable and Wingham was an important port.



Nailbourne

The Nailbourne is different to other rivers in the Catchment because it doesn't flow all the time. Parts of it run annually, usually in winter, while others flow only in the wettest years. This type of river is known as a 'winterbourne'. Nailbourne is a local word for a winterbourne. 'Bourne' means stream, and 'nail' may have derived from the old English 'nahl' for intermittent, or 'ail' meaning trouble, reflecting purely superstitious traditions about the appearance of the stream being a bad omen. It's source is St Ethelburga's Well in Lyminge. The Nailbourne joins the Silver Dyke near Littlebourne, and becomes the Little Stour.



Little Stour

The Little Stour is a major tributary of the Great Stour. In its upper reaches it is a chalk stream, and one of the loveliest rivers in the Catchment. The stretch between Littlebourne and Preston is particularly attractive. The presence of lakes, ancient woodland and fens together with the river make this a wildlife hotspot. However, the Little Stour has been affected by human activity. Its history of milling has left a legacy of straightened river channels and weirs, which prevent fish migration. The river ceases to be a chalk stream after its confluence with the Wingham River. It's very lowest reaches are tidal and it flows into the Great Stour at Pluck's Gutter.



The Dour

Flowing from Temple Ewell through Kearsney and the heart of Dover, the River Dour is a lovely chalk stream. Known for its brown trout, it is also a habitat for other wildlife including kingfishers and herons. The Dour is the subject of a three-year community project called 'Our Finest Dour'. Run along similar lines to Our Stour, it features community events, educational activities and a volunteer River Rangers programme, all aimed at raising awareness of the Dour and its value.

