Maritime Medway
How the River Medway made history
About this book

This book is an introduction to the history of the River Medway. It takes the main themes of that history and tries to highlight how they have distinctively affected the lives of Medway people, past and present. Some of these themes have been covered in depth over the years by specialist books. However, a general, approachable and reliable publication has long been lacking.

Who is this book for?

This book will be valuable:
- to the pupils and students of north Kent needing to set their studies in context;
- to visitors to the area who want know what makes it special;
- to local people wanting a summary of the Medway's story;
- to the general reader looking for a stepping stone to further discoveries.

Cover image: The Brunswick prison hulk painted by a French prisoner c1800.

Image de couverture : Le « hulk » Brunswick, un ponton-prison peint par un prisonnier français, vers 1800.

Omslagillustratie: Het gevangenisschip Brunswick, geschilderd door een Franse krijgsgevangene, ±1800.
Medway’s location
1 Introduction

What is the River Medway?

The Medway is the longest river in Kent. No one is sure how it got its name, but it is probably taken from the Anglo-Saxon words for ‘middle way’, because the river seems to cut the north of the county in two. Without the Medway the history of Kent would be quite different.

This book introduces some of the ways the river has affected the lives of people who have lived in Kent, from the very earliest times up to the present day. It looks mainly at the final 15 miles of the Medway before it meets the Thames and then the sea. Here the river is wider, deeper, saltier and busier, and it is here that it has given its name to a historic but fast-growing community of people: Medway.

Where does the River Medway begin?

Most rivers in the world do the same thing; they begin on high ground and flow to the sea. The Medway appears out of a spring in the village of Turner’s Hill in West Sussex, where it is more than 170 metres above sea level. It then follows its course through Kent for 113 kilometres (70 miles) before meeting the Thames at Sheerness.

Why is the River Medway important?

The river follows the shape of the land. People, in their turn, have for many thousands of years followed the river and made their home by or near its banks. Tonbridge, Maidstone, Rochester and many other smaller places are found where they are today because of the Medway.

• It has given people water, for themselves, their animals and their crops.
• It has provided food, both fish and shellfish.
• It has helped people to defend themselves from attack.
• It is a transport system, which is especially useful for moving heavy things.
• It has been a runway for launching huge aeroplanes.
• It has supplied the raw material for heavy industry.
• It has been a home to the English navy.
• It is an important habitat for many unusual animals and birds.

Living by a river does mean that people’s homes are more likely to flood, although this has not been such a problem in recent years in the lower reaches of the river, between Maidstone and the sea. The mouth of the river has also been a useful way into Kent for many possible invaders, from the Vikings in the ninth century to the Dutch in the seventeenth century.
How have people crossed the River Medway?

Road bridges at Rochester

Boats can take small numbers of people, animals and even cars or buses across rivers at special crossing points. Ferries are still used in this way today. A busy route, though, may need something more. When the Romans invaded Britain in AD 43, their historian, Cassius Dio, described the army swimming across a river to defeat the Britons in a great battle. No one knows for sure that this was the Medway, but what is certain is that some time afterwards the victorious Romans built the first bridge across the river, at Rochester. This bridge was important because it helped to complete the main Roman road in Kent between Dover and London. In fact the bridge gave its name to the town. In Roman times, Rochester was called Durobrivae, or ‘the strong place by the bridge’.

The Roman armies left Britain in about AD 410. Their bridge over the Medway was patched up and continued to carry traffic for many hundreds of years. It finally started to fall down in the fourteenth century. Two men paid for a new bridge, Sir Robert Knolles and Sir John de Cobham, but it did not join with the high street like the old one. Instead it was built a little upstream, further towards Rochester Castle. It was made out of stone and opened in 1391. It had many arches, which squeezed the water into fast-flowing channels and taking a boat through could be difficult. Nevertheless it lasted for more than 450 years.

In 1856 a new bridge was built where the Roman bridge had been. This one was made of cast iron. Its three arches came low over the water at high tide and boats often had trouble passing underneath. The bridge was severely damaged after a number of accidents and in 1914 it was rebuilt with new arches on top instead of underneath. It is this version that still stands today and carries the traffic from Rochester to Strood. Yet another bridge, opened in 1970, handles road traffic going in the other direction.

The course of the Medway

It is no accident that the River Medway takes a sharp turn to the north as it reaches the Maidstone area. It runs into the North Downs, a row of hills which stretch for 190 kilometres (120 miles) from Surrey, across Kent, to the coast at Dover. As the river cannot flow uphill, it turns and flows through the gap in the downs between Woudham and Halling. This takes it along a valley to Rochester. The same flatter landscape that allowed the river through made it much easier to build and to use the main road (A228) and the railway line that run alongside the river during this stretch.

In 1816 a young man called Thomas Gilbert decided to celebrate his twenty-first birthday with a trip on the River Medway and a picnic at Halling. He invited four members of his family and nine girls from his father’s boarding school in Chatham. A local waterman was hired to provide and take care of the boat. The trip up the river and the picnic went well and everyone got back into the boat at about 7pm, to travel downstream to Chatham. No one realised that repairs to Rochester Bridge had left some planks of wood fixed just below the surface of the water under one of the arches. The boat hit the wood, overturned and everybody on board was drowned, with only the waterman’s pet dog able to swim ashore. A large memorial stone to all fifteen people who lost their lives was placed in the Baptist Church in Chatham. Today it is on display in the Guildhall Museum.

The Rochester Bridge disaster

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Rail bridges at Rochester
The London, Chatham and Dover Railway built the first rail bridge at Rochester, to link their station at Chatham with Strood. It opened in 1858. A second rail crossing was added in 1892 and this is the one still in use.

Other crossings
Today, near the village of Cuxton, upstream from Rochester, there are three bridges. Two carry the M2 motorway. The third was built for the high speed rail link between the Channel Tunnel and St Pancras International.

A different sort of crossing was opened, downstream from Rochester, in 1996. This is the Medway Tunnel, which runs from Chatham Maritime to Frindsbury. It was made by sinking a huge tube into the river in sections and was the first tunnel to be built in this way in England. Although no bikes are allowed normally, in 2007 the tunnel was closed to allow nearly 200 cyclists through as part of the first stage of the Tour de France.

How has the river changed the way the area has grown?

Defence
The Romans were interested in the place where Rochester is now because it was a good place to cross the River Medway, whether by boat or by a bridge. Once they had built a bridge, it had to be protected. There was probably a group of soldiers always living next to it, in the town of Durobrivae. A wall was built around the town to help the soldiers do their job.

This wall was still standing many hundreds of years later when the Vikings came up the Medway but it was now a part of the Anglo-Saxon town of Rochester. The wall helped keep the Vikings out until King Alfred arrived and chased them off. Then, when William of Normandy invaded England in 1066, he sent his knights all over the country to build castles to help him keep control of his new kingdom. Many of these knights chose the old Roman towns, like Rochester, because they already had fortifications. So the River Medway gained another form of defence, in the shape of the huge Norman castle that still stands by it today.

Chatham Dockyard
By the time Queen Elizabeth I came to the throne in 1558, the Medway was already becoming the main base of England’s navy. Most of the important ships were anchored in the river below Rochester when they were not in use. Warehouses and stores had been built nearby to provide the ships and their sailors with what they needed. Soon those ships were being repaired and new ones built, in a dockyard at Chatham. The dockyard grew steadily over many years and it provided many thousands of jobs for local people. It finally closed in 1984.

Transport
Before the railway, boats were the only way of moving lots of heavy things cheaply. But rivers need to be looked after if boats are to use them safely. In 1746 the Medway was opened to large boats as far as Tonbridge. As a result Rochester and Chatham, where the river was wide and deep, became places where people could unload their goods and send them to other parts of Kent by road. Many companies came to these towns because the river made it easy to bring in raw material and send out the things that they made.
Upnor Castle and the Dutch Raid

Upnor Castle was planned to protect the river approach to Chatham Dockyard and the large numbers of ships moored there. It was built in two stages. In 1559 a great triangular bastion, or gun platform, was set up on the bank of the Medway. A fortified block for soldiers to live in was built behind it, with space for more guns on the roof. In 1599 new walls and towers were added, complete with a ditch, drawbridge and gatehouse on the landward side.

In 1667, a Dutch fleet, under the command of Michiel de Ruyter, attacked and burnt the new fort at Sheerness, at the mouth of the Medway. The leading Dutch ships then headed upstream. They broke through the chain that stretched across the water between Gillingham and Hoo Ness, and sailed off with the English flagship, the Royal Charles. Other ships were burnt and sunk.

After a night spent at anchor, more Dutch ships pressed on towards Chatham. On 13 June they fought with the castle at Upnor, and were forced to turn back, although not before they had damaged a number of English ships. Even though the castle prevented an attack on the Dockyard, the Dutch Raid was a terrible defeat for the English navy. The writer John Evelyn visited Chatham shortly afterwards to see the burnt out ships lying in the river and wrote that they were a dreadful spectacle as ever any English men saw and a dishonour never to be wiped off.

The Thames and Medway canal

A canal looks like a river but it is planned and dug by people, then filled with water. Many canals were built in the eighteenth century, to move heavy things through places where there were no rivers. In 1824 a private company built a canal to link the River Medway with the River Thames. It ran from Strood, through a long tunnel to Higham and then on to Gravesend. This cut down the journey time to London by many hours. But the canal was very expensive to build and the company never made a profit from the boats that paid to use it. The canal was open only a few years before the tunnel was sold and a railway was built through it instead. This is the line that still runs between Strood and Higham today.
What is ecology?

Ecology is the study of how living things relate to each other and their surroundings. Everything that exists in a particular place, including plants and animals but also resources like air and water, can be described as an ecosystem. An ecosystem can be any size - as small as a garden or as large as the whole earth.

The River Medway and its estuary, which is where the river widens before it meets the sea, form a complicated ecosystem. It is made up of a wide range of different habitats.

Over many, many years, plants and animals have evolved or adapted to fit their habitat, which is the environment in which they live. Sometimes, habitats can change quickly so that plants and animals do not fit in anymore, which means they can die or disappear. People, especially large numbers of people, can often change habitats without even realising it.

Why is the River Medway’s ecology important?

River estuaries are important because they are unusual ecosystems and they are home to many special animals and plants. As the River Medway turns east, after passing Rochester, Chatham, Brompton and Upnor, it suddenly gets very much wider. The tide flows over large areas of mud as it rises and falls. Islands appear in the middle of the stream. The water becomes almost as salty as the sea. The estuary is continually changing, through each day and from year to year.

High levels of food in the river mud and water produce an environment that is able to support large numbers of animals. Particularly important are the invertebrates. These are animals without backbones, which include whelks, shrimps, crabs and worms. These in turn become a source of food for other animals that come to the estuary to feed.

People too, have used the estuary for hundreds of years. Their behaviour has affected the ecosystem. They have fished in the waters with great skill. They have dredged the river by scooping up mud to keep river channels clear and free flowing. They have built forts on the islands and sea walls to keep the water away from towns and villages. They have fed their farm animals by allowing them to graze on the marshes by the river. They have used the river to carry away all kinds of rubbish and pollution.
What are the main habitats of the Medway estuary?

Inter-tidal mudflats
The mudflats are long stretches of mud that exist between high and low tide. They form an inter-tidal habitat and are covered completely by water twice a day as the tide rises and falls. They do not generally support any plants except for eelgrass, which can grow on some of the more sheltered mud banks. However, the mud itself is packed full of invertebrate life. This is why the mudflats are so important. It has been said that a square metre of mud contains the same amount of energy that a person would get from eating 16 chocolate bars.

Saltmarsh
Saltmarshes are a little higher than the river mud. They are not inter-tidal and are only flooded occasionally. However, they still form a habitat which supports only special plants that are able to cope with being often covered by salt water. The plants themselves help to preserve the habitat because their roots and stems bind the muddy marsh together and stop it being washed away by the movement of the river.

The most common plants on the saltmarsh include sea aster, sea lavender, cordgrass and saltmarsh grass. A rare species called golden samphire is also found in the area. The Medway estuary is one of the best places in Britain for the study of a group of plants known as ‘glassworts’.

Grazing marsh
Grazing marsh is an area of pasture, or land, where farm animals are released to feed. It is drier than saltmarsh. The water collects in ponds and channels that can be used by people to help manage the wetness of the marsh. They build sluice gates, which are moveable barriers sunk into the streams. These can be opened and closed to direct the water around the grazing areas. The flooded ditches also stop animals from escaping.

The plant life of the grazing marsh is made up of several species of grass, but also many other plants including sea barley, oak-leaved goose foot and sea clover.

Sea walls
The land of the estuary is protected in many areas by sea walls, which are wide, steep banks designed to keep the river in its place, or limit its flooding to the saltmarsh. Many of these were built hundreds of years ago out of mud, earth and clay. After a while, large areas of grassland began to form on the sea walls themselves and today many interesting plants can be found growing on them beside the River Medway.

The clay used for the walls was usually dug straight out of the ground by the river. The deep pits and ditches that were left afterwards became new habitats themselves as they filled with water. Today they support many Medway reed beds.
**Unusual visitors**

Surprising creatures have been discovered in the waters of the Medway. Seals are occasionally spotted in the estuary. In 2008 a seal swam up the River Medway as far as Allington lock near Maidstone.

Sightings of dolphins are uncommon, but are known. One was trapped in a shallow pool at Otterham Quay in June 2010. As the tide went out, the water became more and more shallow and an attempt was made to rescue it. The dolphin died just as two men reached it to try to lift it into the river. When the body was examined later, it became clear that the dolphin was very ill and would not have survived for long, even in open water. Single animals that become stranded in this way are often dying.

One of the most unusual species of fish to be found in the Medway estuary in recent years was a sea lamprey. It looked like a giant eel and was a full metre long. Lampreys are sometimes known as vampire fish because they have a sucker-like mouth with two sets of teeth that they use to cling on to other fish.

This lamprey was found in February 2004 by staff at Kingsnorth after it had been taken in with the water supply for the power station. It was alive and healthy. At the time the Environment Agency commented that the fish was one of the first of its kind to be found in the Medway estuary. The nature warden at the time said that it gave him quite a shock when he pulled it out of the water.

**What lives in the estuary waters?**

Water found in the estuary is not river water or sea water, but a changing mixture of the two. Salt content in the water can be as high as 30 per cent. The special nature of the habitat means that river estuaries are important in the lifecycle of many types of fish. The sheltered environment provides a useful habitat for them to feed, breed and grow. For sea fish like salmon they act as gateways to the migration routes that lead to safe breeding grounds upstream.

Particularly large numbers of young fish spend the winter months in the Medway estuary but the river has always been home to many different species. A survey in 2006 found dace, stickleback, perch, sand spelt, roach, bleak, sand goby, bass, brown trout, eel, flounder, mullet and sprat by sampling the river at three points in its lower reaches. However, the two species that made Medway fishing famous, the smelt and the oyster, have now all but disappeared from the river.

**Which birds live on or near the River Medway?**

The Medway estuary is a very important habitat for birds. Some of the birds spend the winter there; others use the estuary as a breeding area. Many birds pass through the area each year as they migrate to and from other countries.
More than 130,000 water birds visit the estuaries of the River Medway and the River Swale each year. So many different species appear in such large numbers that the area is of worldwide importance for the following types of birds:

- Shelduck
- Brent goose
- Grey plover
- Ringed plover
- Pintail
- Dunlin
- Redshank

There are also large enough numbers to make the Medway estuary one of the most important British sites for seeing these species:

- Turnstone
- Black-tailed godwit
- Curlew
- Great crested grebe
- Shoveler
- Teal
- Wigeon
- White-fronted goose

What are the main local wildlife reserves close to the river?

There are some spectacular bird watching sites in or very close to Medway. These include the Royal Society for the Protection of Birds (RSPB) Reserve at Northward Hill, which is the site of Britain’s largest population of herons. About 150 pairs of them live there. These big birds can often be spotted making slow flights across the marshes. Cliffe Pools, between Medway and Gravesend, is an important site for wading birds, which fly there to breed. The RSPB is developing a new reserve on the site and manages eight reserves across the North Kent Marshes, including Nor Marshes and Motney Hill in Medway. At the moment these sites cannot take visitors but they can be seen from footpaths at Riverside Country Park.

The Nor Marsh Reserve is a series of saltmarsh islands that provide an ideal habitat for birds and other wildlife. In spring, redshanks and ringed plovers breed there, and in winter the area is popular with brent geese, Mediterranean gulls and goldeneyes. The reedbeds at Motney Hill are extremely important.

Migration

Some birds migrate. This means they travel each year to a new habitat, either to find food, to breed, or in response to changes in the weather. Many species gather in flocks before starting on their journey. For larger birds, flying in large groups can save energy.

The timing of migration is probably linked to changes in the length of the daytime as the seasons pass. Once they start, birds can cover enormous distances every year. They usually follow the same route and some species can be relied on to appear annually in a certain place at a certain time. It is, however, still possible for birds to get lost, especially if they are confused by unusual weather patterns.

Migration is not just about flying. Most types of penguin can travel hundreds of miles through the sea during their migratory season. Other animals, such as wildebeest, migrate too.
Riverside Country Park, near Gillingham, covers 100 hectares of the Medway estuary. There are a number of habitats within the park, including mudflats and saltmarsh, ponds and reedbeds, grassland and scrub, which provide a home for wildlife.

**What are the dangers to the River Medway’s ecosystem and how can it be protected?**

The natural habitats in and around the River Medway form a precious resource that needs to be managed properly and conserved, or looked after, for the future. Despite the long list of bird species that live in and around the North Kent Marshes and the Medway estuary, many of them are now on a danger list. This list is marked with an amber traffic light, to show that although numbers are good at the moment, they are likely to be under threat in the future. If bird species are added to this amber list, it means their numbers are steadily decreasing or that their habitats are becoming scarce.

Industries can damage the natural environment. The Medway estuary joins the Thames estuary between the Isle of Grain and Sheerness on the Isle of Sheppey. There are major dockyards around the estuary, as well as two power stations and two old oil refineries. The growth of a busy port for large ships in the estuary has led to the loss of some natural habitat.

All sorts of people like to use the River Medway – fishermen, boat owners, the army, hunters and jet ski users among them. Enjoying the river in this way affects the environment and can create new dangers for its habitats. Rules and regulations help to make sure the river is used properly and that the level of damage is kept as low as possible.

The Medway estuary is close to London and right in the middle of a part of the country that has been named by the government as one ready for change. The people who plan this change are supposed to take great care to make sure that new developments do not harm the river environment or the animals and plants that live there.

Protection, conservation and improvement of the environment is a challenge as Medway begins to change very quickly and new houses and businesses are built. Much of the land around the river is a Site of Nature Conservation Interest (SNCI). This means the local authority in charge of it has named it as a special area that needs to be included in all future development plans. Green spaces, such as parks, and features that will attract wildlife, are built into designs for local housing estates.

The Environment Agency and other organisations try to make sure that the River Medway does not suffer from pollution. Clean water is very important for making sure that many species of fish continue to live in the river. However, people need protection too and new sea walls and drains keep them safe from flooding.
Why has animal life in the river changed?

Fish are very sensitive to changes in the water that they live in. River water may change for a number of reasons: because of the weather, because of new plant species, because of pollution, or because of a mixture of all three. Fishing itself can also damage particular species forever, if too many fish are killed before they can breed. People have long been aware of these problems, which is why fishing is controlled by a number of local rules and laws, some of them very old.

Who do the fish in the river belong to?

Hundreds of years ago, more-or-less everything was thought of as belonging to the Crown – that is, the reigning king. The king made money by selling or renting his land. He might also give it away to people to persuade them to be his friends. In the same way the animals that lived in the forests and the fish that swam in the rivers belonged to him too. Anyone who wanted to hunt those animals or catch those fish had to have his permission. It was simpler to give that permission to groups of people rather than one person at a time. So fishermen began to form societies or companies that organised all fishing activity and made sure only company members caught any fish.

This system of running the Medway fishery was extremely important because it meant that the number of fish taken out of the river could be controlled. At certain times of the year some types of fishing were banned to give the fish a chance to breed. Anyone caught breaking the rules would be fined.

Laws to control fishing in the Medway probably go back at least to Norman times. However, the first piece of evidence for the rules and regulations themselves dates to 1446. This is a charter, a kind of written order, given by Henry VI. In it Henry says that anyone who joined the official society of the citizens of Rochester could use whatever was living in the River Medway between Sheerness and Hawkwood (near the village of Burham). He also allowed the citizens to control the Medway and organise what happened on it, without interference from anyone else, no matter how important they were.

Henry’s charter means that any mayor of Rochester (now any mayor of Medway) becomes the ‘admiral’ of the river and has to hold a court every year to appoint new fishermen and punish anyone who breaks the rules. This court still takes place in the Guildhall in
Rochester. In 1748, as a sign of this part of the mayor’s job, a silver oar was made and given to the city. It is still kept on display in the Guildhall Museum.

What sort of boats did Medway fishermen use?

Boats come in many different shapes and sizes. Each type of boat is designed to do best one job in one place. A boat built to take road traffic across a river will not look the same as one designed to carry coal along a canal.

Fishing boats going up and down the estuary need to be easy to handle. The crew will have to concentrate on getting the fish out of the water without worrying about where the boat is going all the time. It has to be stable, because nets are heavy. It needs to have room for the catch when it comes aboard. It might need to work in shallow water. It has to be strong, as fishing in all weathers is hard upon men and their equipment.

Fishing in a doble

The small size of a Medway doble made it an affordable way to set up as a fisherman. Dobles were so useful, however, that many men used them all their lives.

Often the best fishing could only be had at night. For this, every doble would have been equipped with a special lamp, or flare. This was like a cast-iron teapot or kettle, filled with colza oil. A thick piece of rope was stuffed into the spout to act as a wick. This soaked up the oil and would burn for many hours. The lamp was extremely heavy and so would not be affected by the movement of the boat.

Most importantly, the dobles were fitted with a wet well. This was a box in the middle of the boat that sat over some holes in the hull. These holes let in enough water to keep alive, or at least keep fresh, any fish that were put inside. Today, many fish are frozen on big boats almost as soon as they are brought out of the water. However, Medway fishermen had no way of keeping their catch very cold. The wet well meant they could continue fishing for further catches without the first going stale. At the end of the trip they would lift the fish out of the well with a lade net, a net with an iron frame shaped to reach the whole catch.

Fishing in a bawley

In place of the wet well, the larger Medway bawley boat had a boiler. This was for shrimps, a very important catch in the Medway, especially in the late nineteenth and early twentieth centuries. In fact the word ‘bawley’ is probably a way of saying ‘boiler’.

This boiler was made of copper and it lay down in the hold, at the bottom of the boat. Bawleys were fitted with boilers as shrimps began to replace oysters as the main catch on the Medway. The shrimps were tipped into the boiler as soon as they were caught and cooked in seawater with extra salt added. After a few moments they would be lifted out, dried carefully with warm air and stored. In this way they would remain fresh.

Boundary stones

In medieval times there were very few maps. This made it difficult to be sure where one person’s land ended and another’s began. Towns and villages often used to mark their boundaries with large stones stuck in the ground, sometimes carved with writing. Tall stones that could be seen from the river also identified the limits of fisheries, which marked where certain groups of people were allowed to fish. These stones were replaced as they were damaged or fell down. Some survive in place today. There is still a stone marker at Hawkwood, to show the furthest limit upstream that Medway fishermen were allowed to work.

The stones visible at Lower Upnor today are another boundary. Fishermen from London were allowed to catch only certain kinds of fish from the water near the north bank of the Medway up to this point. The smaller stone at Upnor is the older of the two, although it may not be as old as the date of 1204 that is carved on it.
Owners were proud of their bawley boats and liked to race against each other when returning from a fishing trip. Sometimes official races were organised, either on the Medway or elsewhere around the Kent coast. Two models of bawley boats are on display at the Guildhall Museum in Rochester.

**How were the fish caught?**

Different types of fish display different kinds of behaviour and enjoy different habitats. This means that anyone fishing has to plan carefully and use the correct equipment to catch the fish that are wanted. Some Medway bawley boats could be refitted halfway through the year to switch to another species of fish, as the numbers in the river changed.

**Dredging for oysters**

Oysters are molluscs, like snails, and they live inside a hard double-sided shell. People have eaten them, cooked and raw, for many hundreds of years. There is evidence that oysters from north Kent were good enough to be shipped all the way to Rome in the first century AD.

The problem with oysters is that they are so easy to catch. They are also very sensitive to water quality and temperature. Many years of over-fishing, pollution and cold winters has meant that oysters are no longer found in the Medway estuary. Up until the middle of the nineteenth century, however, they were perhaps the most important catch for anyone working on the Medway fishery. They were hugely popular and very cheap, an essential part of the diet of many poorer people.

Organisation is important in oyster fishing because it is very easy to destroy the crop completely. The Medway oyster beds were often seeded with young oysters bought from elsewhere. The oysters were then allowed to grow and fishing could not begin until they had reached a good size. All Medway fishermen

**Treasure!**

Sometimes natural beds of oysters were found that had lain undiscovered for many years. For Medway fishermen, this was like finding buried treasure. In 1916, a man called Charles Hill was given special permission to dredge outside the season, after coming across a hidden oyster bed in Cookham Wood Reach. Between May and December he took 1.4 million oysters. Unfortunately he cleared the river so well that no oysters ever grew there again.

In 1922 the Hill family found an oyster bed in Half Acre Creek that had been growing undisturbed during the First World War. They tried to keep it a secret and worked at night, dredging the creek in the darkness and then putting way out to sea in the morning to sort the catch. This worked for a while but even after the secret was out, there were still enough oysters for a number of boats to do well. Some crews were earning £80 a week at this time – more than £2,000 in today’s money.
paid money regularly to the Rochester Oyster Fishery, which managed the business of oyster fishing and tried to settle any arguments over use of the beds.

When the oysters were ready, at the start of the season in November, they were dredged. A dredge was a net tied to a rectangular frame that had to be dragged across the beds, scooping up piles of oysters. It was punishingly hard work and done in all kinds of weather. The dredgemen would suffer badly from cracked hands and split skin at the base of their fingers, where they hauled on the ropes joined to the dredges. During the First World War, as many younger men enlisted in the army, women worked the oyster beds too. They were a common sight on the private oyster grounds off Motney Hill, downstream from Gillingham.

The Rochester Oyster Fishery fell into debt in the late nineteenth century, after it borrowed money to seed the beds with new oysters. Hard winters followed and the oyster crop did not appear. To make back some of the money, the fishery hired out some of its beds to private fishermen, which led to further over-fishing. There was also a typhoid scare. Typhus was a disease linked to polluted water and the oysters in the Medway near the towns were tested and found to be contaminated. The final straw was the bad winter of 1939/40 that killed off all remaining oysters in the Lower Medway. Although the river seems cleaner today than in the days when the river was full of oysters, it looks as though they have gone for good.

**Dragging for smelt**

The smelt is a streamlined green and silver fish from the salmon family. It grows to about 25-30 cm long and has rows of sharp teeth that it uses to prey on smaller fish. It spends half the year in the sea. Then in the early days of autumn large shoals of smelt appear in river estuaries, making their way slowly upstream to lay eggs, or spawn. This was the high season of Medway fishing.

In the late nineteenth and early twentieth centuries the smelt was a much-prized fish for eating. Medway smelt were thought to be especially good and there was plenty of money to be made for fishermen on the river during this period. However, it was often difficult to guess when the fish would appear and some years they didn’t come at all. Even today, no one is really sure why they have stopped visiting the Medway.

As usual, catching the fish needed lots of careful planning. The first few smelt would appear in the lower estuary in August and by February thousands of fish would be spread out right up to the Hawkwood stone. Then they would make their way back down again, after spawning. Autumn and winter would see crews fishing between Chatham and Strood; for the early spring, the boats would move above Rochester Bridge.

Smelt could be caught only where the water was still, in an angle of the riverbank, or where an obstruction created a calm pool. These spots were known as shoots and each one had its own name. The state of the tide was also very important and usually fishing could only begin within two hours of the turn. Before the correct time, fishing crews would line up in their dobles, waiting to take turns at dragging the shoot.

Dragging needed two men, one in the doble and one ashore. The boatman rowed out into the stream,
The river at any time can be dangerous. However, fishing all year round, especially at night, could be very risky. Accidents did happen and sometimes men were killed.

A man called John Hill had a lucky escape on 31 July 1896. He was fishing in his bawley boat, Jubilee, with his son Ernest, in deep water at Sheerness. They had just let the heavy trawl net run over the side and it was sinking fast as it stretched out towards the bottom. A moment of carelessness meant that suddenly John found his foot caught in the line and he was pulled over the side and dragged under the water. Ernest had a choice. Should he stop the net and begin to take it in? This would pull his father back to the surface, but it would take a long time. Or should he leave the net running and hope that once it hit the bottom, his father would be able to free himself and swim away? Ernest decided to wait. Meanwhile, another son, Charles, had seen the accident and was rowing over from another bawley. At last John managed to get free and he rose to the surface. Immediately Charles jumped in to help his exhausted father stay afloat until both men were rescued. John made a full recovery but he never fished again. Charles not only continued as a fisherman, he even carried on rescuing people. He received a medal in 1903 for saving the life of a man called Richard Newington who had fallen into the Medway.

Danger!

Up until very recently fishing in the River Medway was mainly a job for men. This was because only men could join the official organisation, which meant becoming a freeman of the fishery and having the right to take fish out of the river. Private companies, when they were allowed to fish, did sometimes employ women.

For at least the last two centuries, the only route to becoming a freeman has been to serve an apprenticeship for seven years in the company of someone who is already a member of the fishery. Apprentices did not get paid but they were fed, given somewhere to live and would learn all they needed to set up in business on their own. Sometimes masters would give their apprentices pocket money, or allow them to collect and sell the crabs that turned up in the catch. If he could, a good master would do his best to help the apprentice buy a doble and net at the end of his service.

Who were the fishermen?

The fishing community on the Medway was not a large one and many local families knew each other well. They would do their best to help when children were born, or family members were ill, or the catch was poor, or equipment broke down. The fishermen themselves usually did away with proper names and knew each other by nickname only. So, in Medway in the early 1900s, you might have bumped into Squeaker, Whistler, Toggie, Tomato Joe, Curly, Bluey, or Scratch; or even Deerfoot, Beeswing or Bear.

There was no pension before the Second World War and fishing was a hard job. A pension fund was set up from the money paid to the fishery by the cement factories, when their workers began digging up the riverbanks. This fund was used to support older fishermen or their widows, especially at Christmas, when the Rochester Fishery would meet to decide how to give it out.
Bringing oysters ashore: 1822
Déchargement des huîtres sur la grève : 1822
De oestervangst wordt aan wal gebracht: 1822
What kind of ships and boats were built on the River Medway?

Most of the vessels built on the River Medway can be divided into four types:

• ships built in the Royal Dockyard at Chatham;
• ships built by private companies;
• barges;
• fishing boats.

All of this work depended heavily on what was happening in the rest of the world. Countries need lots of warships if they are involved in a war, or need to look like they are ready for a war. Barges are only required if there are products nearby, like bricks and cement, that have to be delivered. Fishing boats are no use if the river is not full of fish.

Linked to shipbuilding was the business of repairing and refitting ships, which can be almost as much work as building one, especially if the ship has been damaged by battle or heavy use at sea.

How did shipbuilding begin on the River Medway?

During the reign of Henry VIII the navy began to keep its large warships in the River Medway near Gillingham, because it was a fairly safe place to anchor them when they were not needed. This was where they could be checked over and repaired, loaded with stores and generally made ready for the sea. Buildings in Gillingham were rented to store everything that was necessary to keep the ships in good order. In 1550, King Henry ordered that all his warships that were not in the harbour at Portsmouth should be kept in the Medway off Gillingham.

Queen Elizabeth I named the nearby Chatham yard as a Royal Dockyard in 1567. Its first recorded ship was the Sunne, launched in 1586. This Dockyard began at a place now known as Gun Wharf but in 1619 moved to its present site. In a short space of time dry docks, a ropery, officers’ houses, a sail loft and stores were also built. In a few years it was the busiest in the country and one of the wonders of industrial Britain. When the writer Daniel Defoe saw it, he thought it was monstrously great and extensive.
The building-yards, docks, timber-yards, deal yard, mast yard, gun yard, rope walks, and all other yards and places set apart for the works belonging to the navy, are like a well-ordered city.

Among the many vessels built at Chatham Dockyard were Nelson’s flagship HMS Victory, which still survives at Portsmouth, and HMS Unicorn, launched in 1824, which can be seen in Dundee.

Between 1862 and 1885, the British government decided to concentrate its resources on Chatham and closed the yards at Deptford and Woolwich. As a result the Chatham Dockyard grew very quickly. Enormous basins were built to deal with the new Victorian iron-built battleships. The basins can still be seen between Chatham and St Mary’s Island.

During the twentieth century a new type of boat was built at Chatham. This was the submarine. In fact the final complete vessel built for the Royal Navy at the Dockyard was a submarine, the Ocelot, which was launched in 1962. Shortly afterwards the yard opened a special refitting centre for submarines powered by nuclear reactors. The Ocelot, though, returned, and welcomes thousands of people on board each year in her old home, as Chatham Dockyard is now a popular visitor attraction.

Where were the private shipyards?

Gillingham

There was a shipyard in Gillingham at the beginning of the seventeenth century, owned by a man called David Duck. Phineas Pett, Assistant Master Shipwright at Chatham in 1604, mentions it in his autobiography.

Pett used it privately to build his own ship, the Resistance, which he then hired out to the king as a transport. Pett, though, got himself into trouble because he used material meant for the Chatham yard for his own private business. Being caught did not do him much harm and he ended his career as Commissioner of the Navy at Chatham.

The Muddle family set up a yard at Gillingham in the eighteenth century. They were involved in building and

The Bellerophon

Edward Greaves built the Bellerophon at Frindsbury in 1786. She carried 74 guns and was designed by the same man who had drawn up the Victory, Admiral Nelson’s flagship at the Battle of Trafalgar. Nicknamed the Billy Ruffian by her crews, she had one of the most amazing histories of any ship of the time.

The Bellerophon took three years to build and needed 3,000 tons of oak, which was brought by water from the Weald, a large forest that used to cover much of Kent. She survived a number of enemy actions, including the Battle of the Nile, before being involved at Trafalgar. Here her crew fought off a boarding attack from the French ship L’Aigle (The Eagle), during which her captain was killed. Then in 1815, when the French Emperor Napoleon surrendered, the Bellerophon was responsible for bringing him back to Britain. She ended her days by returning to the River Medway, fitted out as a prison hulk and moored off Sheerness.
repairing ships there until the 1850s. In 1808 the Muddle yard took on its biggest challenge with a commission to build the Opossum for the navy, a ten-gun vessel known as a brig. The family completed the work on time and, once launched, she was towed to Chatham to be completed in the Royal Dockyard.

Frindsbury

Britain was involved in a series of wars from the middle of the eighteenth century up until 1815. This gave a great boost to the shipbuilding industry on the Medway. So many warships were needed that the government dockyards could not build enough. A number of new private companies set up in business along the river at Frindsbury, to provide the navy with the ships it needed. The contract for payment and delivery was agreed before the work began.

The Frindsbury yards built almost all sizes of warship, apart from the very largest. Josiah and Thomas Brindley established a yard at Frindsbury and launched their first naval ship in 1794. They grew quickly as the orders came in for more. In the end they ran three separate yards, making them the largest private shipbuilders on the Medway. They employed over 50 shipwrights and apprentices.

Mrs Mary Ross, shipbuilder

Charles Ross built his first ship for the navy at his yard on Acorn Wharf, Rochester, in 1791. He went on to build several others very successfully. In 1808 he died, leaving behind his wife Mary, seven children and a business under agreement with the Royal Navy to produce two large warships.

Normally at this time Mary would have been expected either to see that the control of the yard was handed over to her eldest son, or to employ another man to run it for her, or to sell the business outright. Because her sons were still only children, she decided to keep the whole thing going herself. This she did, very successfully. Running a yard was not a simple matter. An owner needed to employ large numbers of people for a long period of time before receiving final payment. Buying the right amount of materials at the right time was tricky. But under Mary’s control, the yard finished the two warships already underway and built five others for the navy before the war ended.

Mary and her family lived on Acorn Wharf, next to the yard. As her sons grew up, the war came to an end and they looked for work elsewhere. One became a farmer and one a brewer in London. Mary eventually closed the yard and moved to London too, where she died in 1847.

Mary Ross

Second prize trophy for the 1875 barge sailing match
Trophée du second prix de la course de péniches à voiles de 1875
Beker voor de tweede prijs in de zeilwedstrijd in 1875
However, Brindley’s was not alone. In just one year, 1808, the private yards on the Medway were responsible for launching 10 warships along the short stretch of the river from Frindsbury to Upnor. In total the private yards built 70 ships for the Royal Navy between 1793 and 1815, a time when Chatham Dockyard built only 14. This was probably because the government yards were in charge of repairing and refitting warships, which took up most of their time. After the end of the war the navy stopped paying for ships and the private yards could not survive. Brindley’s launched their last ship in 1814 and by 1820 they too had closed.

Barge building
This was an industry that relied almost entirely on the work done in the brick fields and the cement factories. The owners of these companies would only make money if they could get their products to places where people wanted them. Medway barges were the answer. They were specially designed to move up and down the river safely, using the free power provided by the wind. In the 1880s and 1890s more than 100 barges a day were coming and going along the Medway estuary on every tide.

There were barge builders all along the Lower Medway. Most simply worked directly on the bank as it sloped down to the river. There would be a sawpit where the timbers would be cut. Stem and stern posts, spars and masts would be shaped with an adze. A water boiler was essential to make steam that would soften the planks of wood so that they could be shaped. Barge builders rarely used plans or drawings. The shipwrights were very skilled and usually worked by eye – just with guesses made accurate through practice.

Curel’s yard
Curel’s was one of the oldest of the local barge-building firms. They launched their first barge, John, in 1841 and grew quickly along the river bank at Strood and Frindsbury. By 1890 they had launched over 100 barges. A business directory from 1894 describes the scene:

All in and around Rochester beautiful scenery abounds… and especially in this district is the home industry of barge building actively sustained. Mr Curel’s yard is one of the river points at which great activity prevails in this line. A large stock of sound, well seasoned English timber is always to hand, and to give a vague idea of the magnitude of the work and the size of the spars used, it may be stated that we saw one which measured three feet in circumference at the butt, was ninety-two feet in length, and two feet square at the top. Then too… a large number of experienced men are employed, so that orders can at all times be promptly taken in hand and completed without delay. All the hands in the yard appeared to be occupied with their work to the fullest extent, but although exceedingly busy laying down the keel of a new barge, the organising arrangements of the place are so good that perfect order reigns supreme, and nothing like confusion can be noticed in any department.
**Medway barges** were built mainly for local owners. Some of those owners would be single captains who would hire out their services. Some would be the big factories that soon built up large fleets and employed men to sail them.

A good Medway barge was flat-bottomed with a hold large enough to carry 100 tons of mud or cement. It was narrow with rounded bows. It would have a mast and rigging that could fold down so that the whole craft could squeeze under Rochester Bridge.

This process was called huffling and the barge captain would pick up a huffler as he approached the bridge. This was an extra crew member specially taken on just to help lower and raise the mast. Some barges were built to compete in popular races that were held every year for expensive silver trophies.

Many Medway barges were so well built that they lasted for 40 or 50 years. This meant that the barge builders relied on the cement industry to keep getting bigger for them to carry on working. Once the factories began to close in the early years of the twentieth century, the barge-building firms quickly followed. Very few Medway barges are left today.

**Fishing boats**

Two kinds of fishing boats were popular on the River Medway up until the Second World War; dobles and bawleys. They were first made with sails, although many later had engines added. Very few are left today.

Doubles are easy to recognise because they are usually pointed at both ends, at the bow and at the stern. The word doble probably comes from the fact that the boat is double-ended. Dobles were never more than about 5 or 6 meters long and 2 metres wide. They were built of oak planks (sometimes elm) fixed over heavy ‘ribs’ that gave the boat its shape. They could be fitted with a mast and sails, although were more often seen being rowed about the fishing grounds. This gave the fishermen fine control over the boat’s movements, especially when the wind was not right.

Albert Lemon built the last Medway doble at his boatyard in Strood in 1920. The boat cost £60 complete with all its rigging and sails. It was called Fosh. The only doble left in Medway today is called May. It belongs to the Guildhall Museum but is on display at the Historic Dockyard in Chatham.

The fishing boats known as bawleys were also built on the River Medway. The bawley was a type of smack (traditional fishing boat), with special features added for fishing in the Medway. It was bigger than a doble with a much deeper hull. It had larger, more complicated sails. Its tall masts could be lowered to pass under Rochester Bridge as the boat made its way upriver in search of smelt.
Industry

Why are rivers important to industry?

Industry is the general name given to what people do to earn a living. It often means making things. There are several reasons why people have chosen to make things by rivers.

1. Rivers are a source of power

The best kind of river for turning a water wheel to power a mill is a small one that flows quickly. The Lower Medway is big and slow. This is why most of the mills there either:

- used streams that flowed into it (Snodland);
- used the tide (Strood);
- or used steam engines, such as many later mills.

2. Rivers are a good way of moving materials

Even after the railways were built in Victorian times, moving anything heavy a long way was very hard. The cheapest way was often by water. The Medway Towns were easy to get to by boat and special barges were designed and built to do the job. Because the Medway linked with the Thames, London was only a few miles away and in London were lots of people with money ready to buy things from the Medway factories – things like paper and bricks.

3. Rivers are full of water

Some industries use huge amounts of water for cleaning, boiling and cooling. It was often cheaper for these companies to move to where the water was, rather than try to pipe the water in.

What is a mill?

A mill is a building that provides power to make or do things. The type of power might be wind, water, steam or electricity. The product made might be flour, paper, oil, cotton, glue or fertiliser. The River Medway has been home to many mills but almost all of them have now gone.

The tide mill

For many years there was a water mill in Strood. It stood where the railway bridge now meets the Strood riverbank. Behind it was a huge pond. When the tide came in, this pond filled up and a gate was shut to keep the water in after the tide had gone down again. Then the water was released through a
special channel that took it under a large wooden wheel. As the water rushed back into the river, it turned the wheel. The wheel was connected to a pair of millstones that ground wheat into flour.

The pond was dangerous. There were no street lights in those days and the small wooden bridge across the water channel would have been pitch black at night. At least two people are known to have drowned in it. In Victorian times new mills were built nearby that used steam engines, which could run all day and all night if necessary. The tide could only be used twice a day. These new mills were used to grind seeds to make linseed oil for paint and feed for farm animals. Long after the water mill had gone, its site was used for loading and unloading barges and it was called Watermill Wharf.

The Snodland paper mill

There have been mills in Snodland for a very long time. There are three recorded in the Domesday Book, which was written almost 1,000 years ago. In the middle of the eighteenth century one of these mills was being used to make paper and there is still a mill in Snodland today.

Up until the end of Victorian times paper was made out of old rags. A good supply of water was also needed. In the Snodland mill a stream ran a water wheel which helped to chop up the rags. The same water was used to clean the pulp before it was pressed into sheets of paper; and the water in the Medway was important because boats were used to bring in huge amounts of rags. In the early 1800s steam engines were added to the mill because a single water wheel could not provide enough power.

As the paper mill grew, Snodland grew with it, very quickly. Today very little paper is made in the UK and the papermaking department at Snodland closed in 2006. In 2010 the mill was still producing packaging materials and board.

What were the first important industries to use the river Medway?

Salt

Before fridges and freezers were invented, salt was very important because meat and fish packed in it could last for a long time. During the winter, or on a long trip by sea, heavily salted food is all many people would have to eat. Before the middle of the eighteenth century most salt made in Britain came from boiled seawater. Huge pans were filled with water and heated up. The water boiled off and the salt remained.

There were two salt works on the Isle of Grain and they gave their name to this part of the river, which was known as Saltpan Reach. These works were in a good position to take salt water out of the Medway and to receive the fuel needed to heat it up. This fuel was wood at first but later changed to coal that came down by sea from the north of England.

By the 1700s most sea salt makers were going out of business. Salt had been discovered in the ground in Cheshire and mining it was much cheaper than paying for the coal to boil the salt pans.

Copperas

Copperas was used as a dye in making clothes, hats and ink. It was made from iron pyrites, which are shiny coloured stones. They could be picked up off many beaches in Kent, especially on the Isle of Sheppey. The stones were collected and stored. The liquid that ran off the stones was boiled until only crystals of copperas were left.

There were two copperas works on the River Medway, one at Queenborough on Sheppey and one at Gillingham, which was in those days just a small village. The works at Gillingham have nevertheless left their mark on the area. The stretch of mud and reeds near the Strand is still known as Copperhouse Marshes and can be found on the Ordnance Survey map.

The copperas industry on the River Medway was not able to compete with other works that were set up
Gillingham

Gillingham followed close behind London in the race to grow bigger. As London slowed down in later Victorian times, Gillingham speeded up. By the time Queen Victoria died in 1901, the old village had grown to 10 times its original size. It swallowed up Brompton, all the farms and fields around it and officially became a town in 1903, when the Borough of Gillingham was formed.

Gillingham grew so quickly because the Dockyard needed workers and the workers needed houses. There was also plenty of brick earth around. Local men and women found new work as they joined the brick making gangs working for the companies who had bought the land. The old farms were dug up to make the bricks and then the brick fields themselves disappeared under new houses. The farm names can still be found on any street map of Gillingham today: Barnsole, Westcourt, Britton and Upbury.

Gillingham brick making team
Equipe de fabrication de briques de Gillingham
Een groep steenbakkers in Gillingham

Lyme

There is lots of chalk in north Kent. So much has been dug out of the ground for various uses that the shape of many parts of the county has been completely changed. Bluewater, one of the largest indoor shopping centres in Europe, sits in a huge old chalk pit.

Lime

Lime is made from chalk by heating it up in a special oven called a kiln. For hundreds of years farmers have used lime as a fertiliser to make crops grow better. It is also useful for the mortar that helps bricks stick...
together, and in whitewash. The lime-burning industry came to the River Medway for the same reasons as the copperas makers and the salt pan workers: The raw material was there (the chalk) and the river was there to bring in the coal and take out the finished product (the lime).

By the beginning of the 1800s there were lime kilns at Chatham, Frindsbury, Borstal, Wouldham, Burham, Cuxton and Halling. At this time these businesses would have been fairly small, employing just a few people to dig out the chalk and watch over the kiln, which burnt night and day.

Why did industries on the Medway change?

The Industrial Revolution brought a new way of life to people in Britain. This is the name given to a number of changes that started to take place at the beginning of the nineteenth century. These changes were mostly brought about by new technology based on the invention and improvement of the steam engine. Steam-powered machines were made that could do the job of dozens, or even hundreds of people, in farming, weaving, printing and other industries. As factories got bigger, people moved their families from the countryside to the towns to get jobs. Towns and cities grew very fast. This meant more demand for some of the things that the Medway industries could provide.

The Industrial Revolution did not affect all industries in the same way. Some, like the copperas works and salt pans, disappeared. Some, like brick making, grew incredibly fast. Others, like cement production, were new.

Brick making

Bricks are a building material moulded out of a special kind of clay known as brick earth. There is lots of brick earth in north Kent. There is so much in fact, that anyone building a house in the area could usually start their own brickfield nearby and make all the bricks they needed there and then. This was a good idea, as bricks were heavy and awkward to move very far.

Once moulded the bricks were baked in heaps by using coal mixed with ash and rubbish to stop the fire getting too hot. Medway bricks were usually yellow once ready for use. In the eighteenth century the area near the river began to be covered with brickfields to supply local builders. Some companies also sent their bricks down the river to Chatham Dockyard, which began to grow at this time.

The real change for brick making in Medway came with the sudden growth of London in the early nineteenth century. In 1801 about a million people lived in the city. By 1851, there were more than two-and-a-half million. This meant huge numbers of new buildings and enormous numbers of bricks – not just for homes but for docks, warehouses, railway bridges and factories. The Medway brick makers suddenly found themselves on the doorstep of a huge market for their products.
The muddies

One of the strange things about the cement industry is that, although in some ways it was very modern, it relied on old-fashioned ways of working. The new businesses would have got nowhere without the gangs of local men, out in all weathers, who dug up raw materials with simple hand tools. Chalk was struck out straight from the cliff face. Men would tie themselves to a post at the top with a long line, and let themselves down over the edge, digging away at the hill as they went. The chalk slid down to the bottom of the cliff where it was collected and run into the factory on carts or trucks. Collecting the mud was more difficult. This was the job of the muddies.

The best mud was found in the wider estuary, between Gillingham and the sea. Each cement factory would employ teams of muddies from the villages near the mud holes at Hoo and Stoke. The holes were carefully chosen by the muddies in charge, who were known to taste the mud to check it was the best quality.

Each team of muddies would meet the cement barges at the mud hole, as the tide was going out. The barge would be moored close to the bank. As the water fell away the barge would sit on the mud. The muddies then began to work as fast as they could, to load it up with blocks of mud before the tide came in again and floated the barge off.

They stood on the bank beside the barge and cut into the mud with a special iron-tipped spade called a fly tool. They would then throw the block up and over the side of the barge so that it landed down in the hold. The very best teams could fill two barges per tide and would be paid about 35 shillings for each one. This would give each man about twice the wage of a farm worker at the same time. Altogether the muddies were responsible for digging out an incredible four million tons of mud over the life of the cement industry on the Medway.

Cement

If brick making was the busiest industry in the first half of the nineteenth century, then cement production took over in the second. By 1900, more people were working in the cement industry in Medway than in any other.

At the start of Victorian times engineers realised they needed a new kind of cement. This would be a powder that could be mixed with water to become very hard, and be immensely strong and completely waterproof when set. A number of manufacturers came up with an answer, which was soon called Portland cement because it was so smooth and hard it looked just like the best Portland stone for building.

The first Portland cement factory appeared on the River Medway in 1851, at Frindsbury. Many others followed. They all came for the secret ingredient.
needed for this new cement – Medway mud. When this was mixed with chalk and heated up in huge kilns it would dry into lumps that could then be ground into powder. In the 1850s and 1860s, before similar mud was found elsewhere, the River Medway was supplying the whole world with Portland cement.

The lime-burning companies already working in the chalk pits saw that going into the cement business would make them more money and they started to build their own factories. Some were very big indeed. By 1899 Wickham Cement Works in Strood had grown to become one of the largest on the river. The factory employed about 800 men and produced 2,000 tons of cement every week. Its wharves, where boats could be loaded, were half a mile long. Sometimes as many as 25 barges could be spotted there at one time, loading and unloading.

What were the most well-known companies on the River Medway?

Two Medway businesses became world famous: Aveling and Porter and Short Brothers. Thomas Aveling set up a repair shop in Rochester in 1851, to help local farmers maintain the new machines that were starting to become popular. In 1860 he moved to the banks of the river in Strood. He started to produce road-going steam engines that could move themselves from place to place instead of having to be dragged by horses. With his partner, Richard Porter, he built his business up until it had become the largest traction engine factory the world had ever seen.

Short Brothers were one of the very first aircraft manufacturers. They moved to Rochester in 1913 because they were interested in building seaplanes and wanted to use the River Medway as a runway. For more than 30 years their flying boats were a familiar sight, tearing up and down the river between Rochester Bridge and what is today the site of the M2 motorway.

During the 1920s and 1930s, as more and more people began to travel round the world, Short’s aeroplanes were bought by airlines because they could land in countries where there were no airports.

Each one was built in the factory on the esplanade and launched down a slipway into the river. Later the company also started to build land planes at Rochester airport. During the Second World War the Short Sunderland became one of the Royal Air Force's best-known large aircraft, sinking enemy submarines and landing on the sea to rescue survivors.

Short Brothers closed their Rochester factory and moved to Belfast in 1948.

Where have all the Medway industries gone?

The world has changed since the River Medway was home to so many industries.

Growth

The biggest Medway industries relied on London and the demand created by the huge number of houses built there in the Victorian period. The River Medway was nearby at a time when moving large amounts of heavy materials was difficult and expensive. So the
Famous Medway

The cement industry on the Medway became famous. A travel book, written in 1905, describes the scene at Strood:

Wherever chalk appears near the water there will be found the tall chimneys and jetties and tramways of the cement works; but the biggest quarries of all are on the Medway where men are rapidly changing the surface of the country, boring great gaps and tunnels into the Downs, carrying away hills, and covering the neighbourhood with an impalpable white powder. Through the smoke rises the Norman Keep of Rochester.

At intervals cement works have driven cuttings into the Downs, leaving tall white cliffs. The still air is heavy with the suspended smoke belched from countless chimneys.

The noise is deafening. Along the shore are barge-builders, slipways and engineers; and there is a forest of chimneys on the north bank... Grey men are loading barges with grey bags. The throb of machinery is everywhere.

Medway companies had a big advantage. After this time there were long periods of quiet in the building industry and a low demand for materials. Although lots of homes are once again being built in the southeast of England, today the world's fastest-growing areas are no longer in the UK.

Competition

Today, bricks, cement and all kinds of other things can be moved around the world relatively cheaply. No one thinks twice about buying something from Taiwan and expecting it to arrive at their house a week later. This kind of shopping would have surprised the Victorians. The days when a factory owner would work with another business just because they were based down the road are long gone. Some Medway industries found that they could not produce their goods cheaply enough to compete with other companies elsewhere.

Raw materials

Many Medway industries were based on using up large amounts of local materials: chalk, mud, brick earth and timber. As these were used up they became harder and more expensive to find. By the beginning of the twentieth century, Medway was starting to get quite crowded and there was not the same room to cut holes and dig away at the cliffs. Raw materials from other places, and even other countries, were used instead.

Cement factories, Frindsbury by Irwin Bevan
Cimenteries à Frindsbury par Irwin Bevan
Cementfabrieken in Frindsbury, door Irwin Bevan

Stroud dock workers, 1905
Dockers à Stroud, 1905
Dokwerkers in Stroud, 1905
Pastel drawing of a Short Sunderland flying over Rochester by A Rogers

Pastel signé A Rogers représentant un avion « Sunderland » des frères Short survolant Rochester

Pasteltekening van een “Short Sunderland”, vliegend over Rochester, door A Rogers
The hulks

What were the hulks?

‘Hulk’ is a word often used to describe any broken-down ship that is no longer used. ‘The hulks’ was the general name given to prison ships that could be found, especially in England, from the end of the eighteenth century to the middle of the nineteenth. They were moored on rivers and in harbours like those at Plymouth and Portsmouth, and on the Medway off Chatham and Sheerness. There were two kinds: those used for prisoners of war (POWs) and those used for criminals.

Why were hulks used?

The government in Britain used prison hulks because they were supposed to be cheap. It was much faster and simpler to get an old ship ready to take prisoners on board than to build a brand new prison. Two things meant that there was a sudden growth in the number of people put in prison in Britain.

1. War

Britain fought a war with France and other countries between 1793 and 1815. There were also wars with America and Denmark around this time. Many foreign soldiers were captured and brought to Britain. Some French officers were trusted not to return to their own country and lived with local people in their own houses. Most ordinary soldiers were kept in prison camps or on prison hulks.

2. American independence

For hundreds of years, most of North America was a British colony. This meant that the law courts in Britain were able to send criminals to work in labour camps or on huge farms in what is now the United States of America. This punishment was called transportation. In 1776 people in America fought against the British, won their independence, formed their own government and transportation there came to an end. The courts in Britain began to sentence more and more people to prison instead and soon extra space was needed. The first convict hulks were set up at Woolwich on the River Thames.

In 1787 transportation started again, this time to another British colony: Australia. The hulks were still used to hold prisoners while they waited for a ship to
take them on the seven-month journey to the other side of the world. In the early 1800s the first convict prison ships appeared on the River Medway, at Sheerness and then at Chatham.

**What did the hulks look like?**

**Prisoners of war hulks**

Fighting ships, often called men o’ war, were usually brightly painted so that sailors could tell friendly ships from enemy ones in the middle of a battle. Prison hulks were dull and dirty. After the war a French captain, Charles Dupin, wrote a report for his government in which he said that they looked like the remains of vessels blackened by a recent fire.

If a ship was retired from fighting it might be used as a prison hulk. Everything that might get in the way of squeezing in more prisoners was removed. Guns, anchors, cables, masts, rigging and many bulkheads, or walls, were taken away. Huts were added for guards on the top deck. Bars were nailed across the gun ports. A walkway was usually built around the outside of the ship, just above the water, to allow patrols to inspect.

**Escape!**

Wherever there were prison hulks, there were escapes. Thanks to an American POW called Benjamin Waterhouse, who had been captured by the British in the war of 1812, we know about some at Chatham. Benjamin published his memories of life on the Crown Prince hulk in 1816. He wrote that during one escape 16 men managed to get away through a hole dug straight through the hull of the ship, just above the waterline. But perhaps the most daring escape attempt he ever heard about was by four Americans on the Irresistible. They noticed that only one soldier guarded the jolly boat, which was used for going backwards and forwards from the hulk to the shore. They overpowered him and began to row for the mud bank, while musket fire poured down at them from all sides. One prisoner was injured, but the other three made it to the shore and ran for it, chased by British soldiers, and soon half the population of Chatham. They were caught one-by-one, the final prisoner breaking his ankle when jumping a fence and so forced to surrender. They were taken back to the Irresistible amid rousing cheers from hulks up and down the River Medway.
Work

The prison ships had been set up in the first place at Woolwich, so that convicts were near places where a cheap workforce was needed. Throughout their history the hulks were often linked to hard labour, whether that was clearing the riverbanks, working in the dockyards or unpicking old rope on board. The convicts’ work was often designed to be as pointless and dull as possible. POWs, on the other hand, were able to try all sorts of ways to make money. They taught dancing, languages, mathematics and navigation; and they made things. Many POWs discovered that there was a new demand in England for the attractive things they could build out of the simplest materials such as bone, straw and hair. They made boxes, gaming counters and dominoes; toys and moving figures; bonnets and paintings. The POW camps on land had workshops and large market places where these products could be sold to the local population. Even the hulks would have seen traders come on board to buy and sell or exchange items with the prisoners. Many of the objects bought were so valued that they were kept for many years and have ended up in museum collections.
the prisoners without going inside. Seven hundred or more prisoners might live on the ship, on all the lower decks, sleeping in hammocks that were packed away during the day. Between 1793 and 1815, 23 ships were used as POW prison hulks at Chatham.

**Convict Hulks**

Although the Medway hulks for criminals would have looked much the same as the POW hulks from the outside, inside they were rather different. The first hulks at Woolwich had put all prisoners together without separating them according to the seriousness of their crimes. By the time the convict hulks appeared on the Medway in the early 1800s, most had been divided into a number of smaller rooms or wards. Prisoners were split up according to their crimes and how well they behaved. There were workshops on board, sick rooms and on some hulks even a school to teach prisoners how to read and write.

**Going on board**

All POWs were given a prison uniform when they were first taken on board. It was usually a mustard yellow colour and was marked with the arrow which stood for government property. Each man was given a hat of rough wool and shoes made of canvas with wooden soles. Most prisoners hated this uniform and would, if they could, wear something else that they had either made themselves or paid another prisoner to make. The yellow material was always carefully saved and either given to the poorest inmates or sold back to the guards who had given it to them. This money could be spent to buy a better bed in the hulk from another prisoner, perhaps one nearer the fresh air.

In 1825, many years after his release as a POW, Jorgen Jorgensen was sentenced by an English court to be transported to Tasmania for life. This meant he had to return to the hulks – as a convict. Once on board, his own clothes were removed, he was scrubbed clean with a stiff brush, and given a prison uniform, like his old POW clothes, but half yellow, half blue or black. All his hair was cut off. He was then taken to a blacksmith who fixed irons on his legs. These were chains that joined his ankles together, leaving him enough room to walk but not to stretch out his legs and run. The chain was attached to a leather strap that hung around his waist so that it did not drag on the

**What was it like living on a hulk?**

Life on a hulk was cramped, filthy and dangerous. Prisoners were unhealthy, miserable, bored, often starving and sometimes abused by their guards. Their bodies might be covered with lice and fleas. Despite being in sight and almost within reach of thousands of people going about their business in the Medway Towns, most prisoners were almost completely cut off from the outside world. Just how uncomfortable life might be varied. Money could buy better living conditions.

At least one man was unlucky enough to be held in both a POW and a convict hulk. This was Jorgen Jorgensen, a Danish sailor who had been taken prisoner because of a war between Britain and Denmark that began in 1801. He was held for a time in a hulk at Chatham. Danish prisoners, especially, were known for organising themselves into small communities and doing their best to improve their conditions. They ran their own law courts (with punishments), schools and clubs. They had newspapers delivered, told each other stories and made things to sell.

**The memorial**

Large numbers of POWs died while on board the hulks at Chatham. They were quickly buried nearby, on the marshes at St Mary’s Island. Some time after the end of the war, a memorial was built and set up to mark the place where their bodies lay. In 1904, when plans to extend Chatham Dockyard outlined the need to build over the graveyard, the prisoners’ bodies were dug up and removed to a site next to St George’s Church. The memorial was moved too and it still stands there today. In 1991, during preparations for the building of large numbers of houses on St Mary’s Island, yet more bodies were discovered. They were also taken and re-buried at St George’s.
ground. Jorgen had to hand over everything that he owned. It was up to the Captain of the Hulk to decide whether he got any of it back. When writing his memories down many years later Jorgen noted that whenever a government inspector came to visit the hulk the ship was carefully prepared and prisoners were warned not to complain.

**Who was in charge?**

The first hulks were managed by a businessman, Duncan Campbell, who was paid a certain amount of money for every convict on board. The less money he spent on the prisoners, the more he had for himself. By 1802, both POW and convict hulks were looked after by men appointed by the British Government. The captains of the POW hulks were officers from the Royal Navy. They had to have served at least ten years with a good record to be considered for the appointment. The post was very popular among older sailors who might have been injured in battle and were looking for a safer job within the Navy, which would pay them about 50 shillings a week. There was a long waiting list. Some captains did their best to treat POWs with kindness but there were many others who were lazy or bad.

At Chatham there was a Captain Milne in charge of the Bahama who was known to be especially brutal. He was usually drunk and would invite his friends to come on board for parties. Once, one of these parties caused a small fire. While his soldiers were fighting the blaze, Captain Milne gave orders that if any prisoners saw the fire and tried to escape, they would be shot. Luckily it was soon brought under control.

Captain Milne thought that keeping the prisoners hungry would keep them quiet. He was always cutting back on the food that was provided for them. This idea had the opposite effect and in 1808 there was a rebellion on board the Bahama. All the prisoners, most of them French, got together on the top deck and refused to go below until they were properly fed. Captain Milne was furious and ordered his soldiers to fire into the crowd. Because he was drunk, his soldiers ignored the order and some of the French officers persuaded him that he could not win against so many men.

The men in charge of the convict hulks were called overseers. It was easy for them to trick the inspectors and many used government money for themselves instead of spending it on the convicts. In 1832 there was an investigation into crime and punishment and some men who had been prisoners were interviewed. One man, who was just known as A.B., had been on a

**Great Expectations**

The writer Charles Dickens lived in Chatham when he was a boy. His father worked in the dockyard. He would have seen the hulks on the River Medway. Perhaps he also saw gangs of convicts being marched off the ships to their place of work. Many years later he moved back to the area and bought a big house in Higham. By this time he was a very famous man and the hulks had long gone. But in 1860 he started writing a story that begins with a man who escapes from a Medway prison ship. He is re-captured and taken back to the hulk to be transported to Australia. This story was called *Great Expectations* and it is still one of Dickens’s most popular books.
Medway hulk – the Retribution, at Sheerness. A.B. said that John Henry Capper, who was in charge of all the hulks, had an agreement with a local butcher to buy bad meat for a very low price to give to the prisoners. A few good pieces would be bought at the same time and these would be hung up for inspection, while the rotten meat was cooked. He also said that while a few good loaves of bread were shown off to interested visitors, the convicts’ bread was so bad that you could throw it at the wall and it would stick there like clay.

Who were the convicts?

There were a maximum number of nine convict hulks on the Medway at any one time. Three were at Sheerness:
- the Bellerophon
- the Retribution
- the Zealand

There were six at Chatham:
- the Canada
- the Cumberland
- the Dolphin
- the Euryalus
- the Fortitude
- the Wye

Most convicts on the Medway hulks were waiting to be transported to Australia but they could wait for years for a ship to take them there. Many men sent to court during this period feared the time spent on the hulks more than a life spent working on the other side of the world. Women who broke the law could be transported too but there is no record of any being sent to the hulks on the Medway. Prisoners were sometimes moved from hulk to hulk; the Canada and the Wye were hospital ships, positioned nearby to take convicts with contagious diseases. There was also always a slight chance of being granted a pardon and let off the punishment. The government knew that this could be a way of encouraging good behaviour. It was also used when the hulks were too overcrowded, to get rid of a number of prisoners very quickly.

Many of the registers and records kept by hulks overseers are still stored in the National Archives in London. The men on each hulk were regularly lined up and counted to keep these registers up-to-date. Names, crimes and the date on which each man left the hulk were carefully recorded. On board the Cumberland in the 1830s were men sentenced to transportation for crimes such as: Disease

The POW hulks were so crowded that diseases spread very quickly. In 1813 smallpox broke out on the Crown Prince at Chatham. As soon as it appeared, the ship’s doctor called everyone together and offered them a vaccination. This is when a harmless type of the same disease is given to a patient on purpose to help his body fight off the danger. Many prisoners were scared of the vaccination and many caught the disease. The hulk was closed and no one was allowed on or off. The hospital ships were full anyway and the captains were worried about spreading the smallpox. Unfortunately, the extra overcrowding meant that another disease, typhus, spread very quickly. By the beginning of 1814 it had broken out on most of the hulk fleet at Chatham. The Bahama was especially bad: 361 American prisoners had been taken on board in January; by April, 84 of them were dead.
• stealing ducks;
• stealing flat irons;
• poaching (catching or killing animals on someone else’s land);
• bigamy (being married twice at the same time);
• assault (attacking someone);
• scribbling on a church register.

**Boys**

There were a lot of children in prison in the early 1800s. It was not until the middle of Victorian times that special schools and homes were set up for young people who broke the law. Boys who were caught more than once could be transported, which meant being sent to the hulks. At first they were mixed in with adult prisoners, some of them guilty of serious crimes. In 1824, 350 convicts under the age of 14 were brought together on one Medway hulk, the Bellerophon, at Sheerness. This ship was divided up into forty rooms, each of which could house eight or nine boys. In the Bellerophon they were at least protected from the most dangerous adult criminals but there were no workshops to give them something to do. So a year later all the boys were moved to another ship, called the Euryalus, at Chatham. This had the workshops but it was smaller and more crowded.

Life on the Euryalus was extremely harsh. The boys were beaten regularly. Any unusual misbehaviour was further punished by being shut up alone and put on bread and water. Unlike adult convicts, the boys never left the hulk but were given the most grindingly boring and painful work to do on board. They ate mostly weak porridge, with occasional meals of boiled beef.

Perhaps most serious of all, the Euryalus had no small wards or cells and all boys were kept together. There was no control over the most brutal bullying and violence.

In 1835, a special government investigation was launched into prison life in England. The officers on the investigating team interviewed a man who had been on the Medway hulks. He was called Thomas Dexter and had been a shoemaker before being convicted of stealing and sent to the Dolphin hulk at Chatham. The team was interested in Thomas because while he was a prisoner he had got a job on the Euryalus to work as a nurse to the sick boys.

One of the officers asked him if he thought the hulk had changed any of the boys’ behaviour for the better. He replied:

*I should most certainly say not; and frequently when I have seen it in a newspaper that a judge has sentenced a boy… to the hulks, I have made the observation that was it a child of mine I would rather see him dead at my feet than see him sent to that place.*

**Why did the hulks come to an end?**

The POWs were sent home at the end of the war. Some POW hulks, like the Canada, were re-used for convicts. Others were broken up. By the 1830s, the British government realised that the convict hulks had not proved as cheap to set up and run as many people had hoped. The ships were old. They needed repairs. Fitting them out with proper wards in the first place was expensive. John Henry Capper’s accounts show that whole system, including preparing the ships, paying staff, moving prisoners and guarding them, keeping them fed and clothed and (sometimes) providing them with work, cost more than £70,000 in 1831. This was almost the price of building a brand new prison on land.

Many men and women were also beginning to work to change the British prison system. They wanted to try out new ideas about how to stop people from breaking the law. Nearly all these ideas needed new buildings to make them work. As many as 90 prisons were built or extended in Britain during the middle years of the Victorian period. These included one at Chatham that was opened in 1852. Prison ships had probably disappeared from the River Medway long before this. The last hulk of all went up in flames at Woolwich on 14 July 1857.
The story of the River Medway is not just about work and wildlife and the serious business of conservation. The river has also been important for many years in the way it gives people a chance to enjoy themselves. It is part of an environment that is ideal for many leisure activities.

These activities include organised events and sport but are also part of the free time spent by, or on, the river by single people and families. It all needs managing, to make sure that groups of people are able to share the same environment and facilities. Sometimes the demands of these different activities can come into conflict. Bird watchers and fishermen generally like to have quiet and peaceful surroundings. Power boat racers, or hunters with guns, make noise.

Some river-based leisure activities can contribute towards the pollution of the river. Fuel, litter and even lost or broken fishing line and weights can damage the environment and wildlife. The more popular an activity is, the more carefully it has to be managed. Rivers can be extremely busy features of the landscape. Boats passing quickly, up and down, can cause parts of the river bank to break up and be washed away. Speed limits are very important.

The River Medway may have a future as one of Britain’s most useful waters for leisure activities. The estuary contains several creeks that offer calm and sheltered sailing waters, which are supported by a large number of boatyards and marinas. Most sailing boats are unable to pass under the bridge at Rochester. However, smaller craft can reach the non-tidal water of the river between Allington Lock and Tonbridge.
What are the main leisure activities people have enjoyed on the Medway?

There are many ways to enjoy any river but much will depend on the particular features of the stretch of water used. For the last two hundred years or so, the most important leisure activities on the Medway have been:

- swimming, both organised and general;
- racing, for rowing boats and sailing barges;
- fishing for fun, rather than profit;
- pleasure boating.

New technologies and new fashions will produce other water-based leisure activities in the future.

Swimming

It is highly likely that people have swum and bathed in the River Medway since the very earliest times. But it was always far from ideal. It has strong currents, big tides, treacherous mud, lots of traffic and often floating debris, making it a challenge to even the strongest swimmer.

These dangers were probably why a businessman set up the Rochester Bathing Establishment in June 1836. He built a pool out in the river where people could swim in the natural water without risking the current, the mud or the fishing boats. He also made sure that comfortable rooms were available for changing and relaxing. At this time bathing, a mixture of taking a bath and going for a swim, was seen as both healthy and very fashionable. It had brought huge numbers of rich people to seaside towns like Brighton and had been encouraged at Gravesend on the Thames. Unfortunately, the Rochester plan was not very successful and the place had closed down by the mid-1860s.

Medway swimming clubs used the waters of the river as a race course. Local men and women were challenged to swim from Rochester Bridge to the Strand at Gillingham in the fastest possible time. Trophies, medals, certificates and sometimes cash prizes were awarded to the winners.

Even among families and occasional swimmers, the natural waters of the river remained attractive into the early years of the twentieth century. Diving rafts and platforms were available for public use along the river front at Strood Pier.

In fact, there was something of a tradition of local beach holidays in the area. Many residents could not afford a holiday away from the Medway Towns. Families would spend a day on the beach at Upnor or at Gillingham instead of travelling to a seaside resort such as Margate, Ramsgate or Broadstairs. Both adults and children swam in the river from the beach, despite the fact that it could be very dangerous. People drowned trying to swim from one side of the river to the other. The water could seem safe when it was anything but.

Safe bathing facilities for all ages became more widely available in the Victorian period. Mr. Cucknow, a local baker, built the Strand Baths in Gillingham in 1894. The pool was known locally as Mr Cuckoo’s Sea Water Swimming Baths. It was 274 feet, or over 80 metres, long. The Leisure Park that is now at the Strand has been a favourite outdoor attraction for Medway families for many years.
Rowing

Rowing began simply as a way of getting about. A rowing boat relies only on muscle power. It does not need to wait for the wind and so can travel in any direction in all kinds of weather. It is cheap and easy to use.

In Britain rowing boats became widely used as water taxis and ferries. Two hundred years ago the bridges that now cross our big rivers were much less common and river travel was convenient and relatively quick. The first modern rowing races developed as a form of competition between the men who ran these taxi services – the watermen. On the Thames the City of London Guilds and Livery Companies offered prizes for the winners.

Racing for fun, rather than money, is known as amateur sport. Amateur rowing became popular at English universities towards the end of the eighteenth century. The first Boat Race between Oxford and Cambridge university students took place in 1829 and it is still held annually.

A River Medway university race was first held in 2007 between students of the University of Kent, the University of Greenwich and Canterbury Christ Church University. This race is now an important event in the Medway sporting year. The three teams battle it out for the right to call themselves Head of the River. The course is 2.6 kilometres long and runs between Cuxton and the esplanade in Rochester. River conditions can sometimes be difficult with strong tidal currents and the occasional whirlpool.

A number of amateur rowing clubs for the general public were set up in Medway during the Victorian period. These all joined together in 1958, to form the Medway Towns Rowing Club, which aims to provide facilities for everyone, whatever their age or ability. The club still has a boathouse on Rochester Esplanade.

Being a good waterman was one the many skills needed by the soldiers of the Corps of Royal Engineers, who made Brompton their headquarters in 1812. They set up a number of rowing teams in the late nineteenth century. These teams used cutters, which were medium-sized open boats rowed by pairs of men sitting side-by-side on benches. Annual rowing races were held on the River Medway with the Royal Engineers challenging the Royal Navy cutter teams. A separate Royal Engineers Rowing Club was founded in 1950.

Barge racing

The Medway was thick with barges in the nineteenth century. They were the delivery lorries of the time, taking hundreds of tons of bricks and cement up to London and bringing back waste materials to burn in the brick fields and the factory furnaces. There was always competition, with barge captains challenging each other to races along the estuary.

Organised barge races began on the River Thames in 1863. They were set up by a man called Henry Dodd,

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**Rescuer drowned!**

There is a plaque on the wall facing the river below Rochester Castle, next to the esplanade. This is a memorial to a very brave man who died in 1912, saving the life of a little girl.

His name was Percy Gordon and he was visiting Rochester from London. He was with friends by the river when they heard a group of children screaming on the pier. A girl called Dorothy Foster had fallen into the Medway after trying to walk along a rope by the water’s edge. Percy dived in and held her up until a boat was able to get across and take her. Unfortunately, during the rescue, Percy had an attack of cramp, was carried away by the current and drowned. His body was found about an hour later.

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Rescue the life of a little girl.
who had made a fortune out of rubbish collection and brick making. He thought that the design of barges could be improved if they were made to win races, as well as carry lots of cargo. He also wanted to encourage the barge captains to be proud of what they did. In fact, these events were so popular that within a few years barge builders were launching barges specially designed only to win races.

All this attracted lots of interest from people working on the River Medway. Some of the big brick and cement companies owned large numbers of barges, and they began to arrange their own races. Out of these grew the first official open barge match on the Medway, which took place in 1880. The usual course was between Gillingham and Sun Pier, in Chatham. Racing continued until the outbreak of war in 1914 and then, after a pause, fairly regularly until competition was again stopped, this time by the Second World War in 1939.

The fastest barges became quite well known and the owners were very proud of them. Competition was fierce, with Sara, built by Everard’s on the Thames, winning races throughout the 1930s on the Medway. In 1955, the London and Rochester Trading Company’s barge, Sirdar, appeared to have finally got the better of Sara and Everard’s began refitting an old barge, Veronica, to make it faster and take the title back. All this cost money. In 1963, the owners had finally had enough and withdrew their support for racing. Most of the company barges were scrapped.

Luckily, a number of private owners decided to continue the tradition of barge racing on the River Medway. Today an annual Medway Barge Match attracts about twelve barges each year competing in three different classes. The race covers almost thirty miles, from Gillingham out into the estuary and back again. Races also take place on the River Thames at Gravesend, the River Blackwater at Maldon, Essex and on the River Swale at Faversham.

**Fishing**

The Medway and its estuary offers plenty of challenging fishing. Its changing habitats produce a wide variety of species that can be caught at different times of the year. Flounders, rockling and pouting are landed during the late winter and early spring. Pouting are usually used as bait for hunting larger fish such as bass. Eels, sole and mullet can be caught as early as the end of April, when the weather is warm.

Autumn is a quiet season for local fishing until the shoals of whiting appear off the north Kent coast and then move up into the rivers. The main target for all sea anglers in the winter months is cod, although these large fish are more often caught in the Thames, rather than the Medway, estuary.

**Pleasure boating**

There are a large number of sailing and cruising clubs based on the Medway. Many different kinds of boats can be seen on the river in spring and summer. Local marinas provide safe areas for keeping them and moorings for house boats are also available on or alongside the river.

The Medway is a valuable resource for teaching people to enjoy water-based activities safely. The Arethusa Venture Centre at Upnor, for instance, welcomes six thousand children a year, to try out a
A range of sporting activities including dinghy sailing, canoeing and kayaking.

It has long been possible to enjoy life on the river without buying a boat. Steamers began running up and down the Thames and Medway in the early 19th century. These boats allowed people to travel easily and cheaply from built-up areas to the seaside for day trips, or just to go along for the ride. A favourite local day out was from the Medway Towns to Southend in Essex.

The New Medway Steam Packet Company introduced its own range of steamers when it was formed in 1919. The most famous was the Medway Queen, built a few years later on the river Clyde in Scotland. She ran from Strood right up until the Second World War, when she was rebuilt and used to search for mines, or floating explosives, off the English coast. Her most famous adventures took place in 1940, when the British Army was struggling to get back from France as it was being invaded. She made seven crossings of the English Channel to Dunkirk, in dangerous conditions, to rescue around 7,000 men.

The Medway Queen returned to passenger duties until 1963, when she was moved to the Isle of Wight. By the time she was towed back to the Medway in 1984, she needed a very expensive programme of repair and reconstruction. After lots of work by the Medway Queen Preservation Society, the money was finally won in a grant from the Heritage Lottery Fund in 2006.

**The Kingswear Castle**

One of the most spectacular sights on the River Medway today is the Kingswear Castle, a coal-fired paddle steamer that was built in 1924 in Dartmouth for use on the River Dart.

During the Second World War, Kingswear Castle was used by the American Navy for ferrying stores around at Dartmouth. She was bought by the Paddle Steamer Preservation Society in 1967 moved to the Isle of Wight. In 1971 she was towed to the River Medway and restored.

The Kingswear Castle returned to passenger service in 1985 and now works up and down the River Medway. Since then over 200,000 passengers have been on board and enjoyed a trip on this historic steamboat.
The River Medway and its environment will change a great deal in the near future. The river may take on a new importance in a number of areas:

• Regeneration
• Business
• the Environment

What is Regeneration?

Regeneration is the name given to the way in which certain parts of the country get extra attention and money to help them grow and get busy again after years of quiet. In Medway, during the second half of the twentieth century, a number of big companies closed down or moved away from the area. This meant that there were fewer jobs. If people cannot find work, they cannot spend money. Shops and other businesses find it difficult to survive. They can close too, and things can get steadily worse. Regeneration is an attempt to stop this process by making an area attractive again – in all sorts of ways.

Regeneration will also make the most of the river running through the area. A number of important sites have been set aside as places ready for redevelopment.

These sites will be designed to have a mixture of buildings and will make the most of the fact that living next to the water has become very popular over the past few years. As well as attracting new people to the area, these redevelopments will make Medway a nicer place to be for those who already live there. Most of them are sites that have before been used by industry. They are often called brownfield sites to show they are different from greenfield sites, where the natural environment is destroyed by new building.

Rochester Riverside

The riverside site in Rochester includes most of the land between Corporation Street, the lower high street and the river. For most of Rochester’s history this was just marshland and no good for building. In the early years of the twenty first century a great deal of work has been put into getting the site ready for hundreds of homes. The ground level has been raised with tonnes and tonnes of earth to make sure that the new buildings are not affected by possible flooding.
The plans include a number of green spaces and special attention has been paid to the riverfront. It has been many years since people were able to get to this part of the Medway. Now a new walkway and cycle path allows residents and visitors to enjoy the river close-up.

**Chatham Historic Dockyard and Chatham Maritime**

The Chatham Dockyard closed as a business in 1984. By 2010, £850 million had been spent to turn it into a popular visitor attraction and a busy new community. It has already seen more than 1,000 new homes, and offices for over 5,000 staff. Universities and colleges have moved into the fast-developing area known as Chatham Maritime. New facilities have been built on the Victorian dockyard site, including a marina for 300 boats and 20 acres of parkland and riverside walks.

**St Mary’s Island**

St Mary’s Island has spent most of its history as an empty marsh and a place to dump rubbish. At the end of the Victorian period a number of huge basins were dug at its edge so that Chatham Dockyard could deal with the larger ships that were being built at that time. After the Dockyard closed, the area became a dirty wasteland.

Now St Mary’s Island is a busy community, complete with a primary school, a doctor’s surgery and a community centre, as well as hundreds of homes. Before any of this building could take place, over 1.2 million cubic metres of soil were taken away and replaced, to make sure the site was clean.

**Temple Waterfront**

This site lies at the edge of Strood, opposite Rochester Castle. A new £100 million development will bring a mix of new homes, shops and space for businesses. As well as being able to enjoy the river, everyone who moves to the Temple Waterfront will have a special opportunity to get to know Strood’s oldest building, Temple Manor. This thirteenth century hall lies on the edge of the regeneration site and will be one of its most exciting attractions.

**Gillingham Waterfront**

The riverside at Gillingham is being developed with new houses and other buildings. Its place next to the river but near the Medway Tunnel will make it attractive for anyone needing to travel by road to work every day. The area stretches from St Mary’s Island to Danes Hill. It includes what used to be Gillingham Pier and so offers the possibility of improved public use of the river.

**What does the future hold for the River Medway’s businesses?**

The river has always been a highway. Until the railways were built it really had no competition in the business of moving heavy things around. Although local industries, such as brick and cement making, do not exist anymore, other companies still make use of the

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*The Historic Dockyard, Chatham*  
*Le chantier naval historique, Chatham*  
*De historische scheepswerf van Chatham*
Britain used to get a lot of its natural gas from reserves it owned under the North Sea. Those have now run out and so Britain needs to buy gas from other countries. A port for Liquid Natural Gas has been built next to the River Medway on the Isle of Grain. Ships carrying the gas unload it into a pipeline that leads to giant storage tanks. From here millions of tonnes of gas can be pumped into the network that supplies the whole country.

**Chatham Docks**

Chatham has a dock system that uses three basins, or places where ships can stop and unload. Over five hundred ships use the dock each year, loading or unloading 1.2 million tonnes of cargo.

**London Thamesport Container Terminal**

The Isle of Grain lies at the end of the Hoo Peninsula, right at the mouth of the River Medway. In 1989 part of the old oil refinery here was converted into the London Thamesport Container Terminal. Thamesport is one of the largest and busiest ports in the United Kingdom. It is the country’s only fully automatic container terminal. This means that its 655 metres of quayside are equipped with driverless cranes to move the containers around the port. The position of each container is tracked by the very latest computer systems.

Thamesport has its own railway station. Daily rail services connect the port to the rest of the rail system. This means that anything that arrives in Kent this way can be quickly moved anywhere in the country.

**What will happen to the environment?**

As the number of people living around the lower reaches of the River Medway grew, the environment suffered. Over-fishing, river pollution, and large-scale industries like cement have changed the area forever. However, with many of those industries gone and the river getting cleaner, there is an opportunity to encourage people to enjoy and look after the Medway for its own sake.

There is also a challenge. Regeneration will itself bring large numbers of people to the area to live in the new homes that are built. These people will need shops and schools and hospitals and other community facilities. They will put more cars on roads that are already crowded. Better planning will help because it will provide space as well as houses where before there was only wasteland. New housing designs will use fewer resources and encourage people to produce fewer greenhouse gases. Better access to the river may mean than people are more likely to look after it. The natural environment is a resource that needs to be managed carefully if it is to be enjoyed by Medway residents in the future.

There are also worries that concern the whole world. Global warming is likely to produce a rise in water levels in Britain. Nobody knows for sure how big this will be or how quickly it will happen. However, there could hardly be a more important issue for anyone who lives within walking distance of a major river like the Medway. Action needs to be taken now, in case the very feature that for centuries has made the area such an attractive place to live and work may itself bring danger and destruction in the future.
Looking across the River Medway towards the container terminal

Vue d’une rive à l’autre de la rivière Medway en direction du terminal à conteneurs

Uitzicht over de rivier de Medway, richting de containerterminal
Acknowledgements

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