

Factsheet No.3 in the Environment Agency educational series

Holding back the sea

- Flooding
- Sea Defences
- Flood Warning



ENVIRONMENT
AGENCY

There is a famous story about King Canute, who lived more than 900 years ago.



He wanted to show the people how powerful he was by stopping the tide from coming in. He sat in his throne on the

beach near where Westminster Abbey is today at low tide and commanded the sea to stop. The tide came in and he ended up with very wet feet! Today, we are still trying to stop the sea from flooding the land and it is still just as difficult.

FLOODING

The Environment Agency must try to stop the sea from flooding the land, sometimes this is very difficult because of the very big storms in the North Sea. When there are very strong winds and high tides,



it can make very big waves, and raise sea levels. This raised sea level and large waves could cause a lot of damage as they are funnelled into the Thames Estuary. This is called a **surge**. The water could cover

large parts of central London, damaging homes, businesses and their contents. Transport would be badly affected because trains cannot travel through water and, if there is a lot of water on the roads, it will stop cars, not to mention stopping the whole underground system from working.

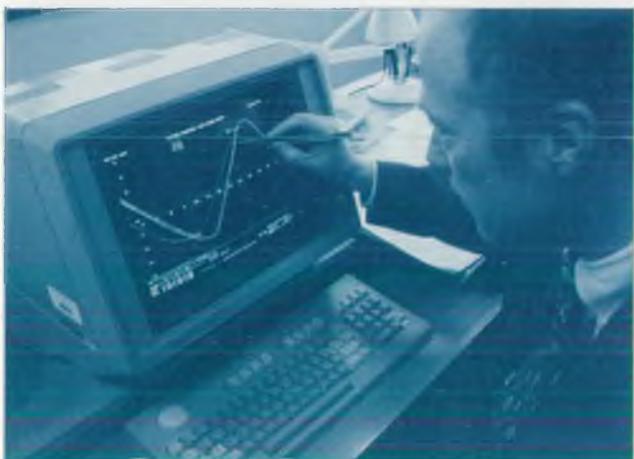
SEA DEFENCES

The Environment Agency build **sea defences** that try to stop the sea from flooding the land. Locally, these are called the Thames Tidal Defences. The banks of the river have been raised above the maximum height of a high tide for 32 kilometres as far upstream as the Thames Barrier. This stops the flood water from spilling over and out of the river channel, flooding the flat land in central London.

The Thames Barrier was completed in 1982. It is 520 metres wide, made up of 10 separate steel gates that can be closed if there is any risk of a surge. Dangerous conditions can be predicted 12 hours in advance, with the gates closing approximately four hours before the danger. The gates take thirty minutes to close fully. A total of 65 staff operate the Barrier at an annual cost of £3.3 million. The Barrier helps stop water from reaching the 110 sq. kms of central London at risk from a major flood. Since the Barrier began operating, it has been closed 30 times. More information on the Barrier can be obtained from the Thames Barrier Visitors Centre.

FLOOD WARNING

These actions might still not prevent flooding. Staff at the Agency constantly check the weather and tidal levels, on the lookout for possible flooding. If it looks like a flood is possible, they give warnings to the general public. This will give people time to make arrangements or, if it is dangerous, move out of the area.



THE ENVIRONMENT AGENCY

The Environment Agency was formed by a merger of the National Rivers Authority with Her Majesty's Inspectorate of Pollution and the Waste Regulation Authorities. This new organisation began operating on 1 April 1996, and has responsibilities for the environmental protection of water, land and air.

ENVIRONMENT AGENCY



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MANAGEMENT AND CONTACTS:

The Environment Agency delivers a service to its customers, with the emphasis on authority and accountability at the most local level possible. It aims to be cost-effective and efficient and to offer the best service and value for money.

Head Office is responsible for overall policy and relationships with national bodies including Government.

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For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

**ENVIRONMENT AGENCY
GENERAL ENQUIRY LINE**

0645 333 111

The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.

**ENVIRONMENT AGENCY
EMERGENCY HOTLINE**

0800 80 70 60



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