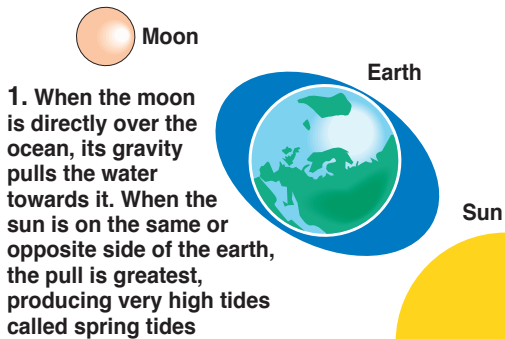


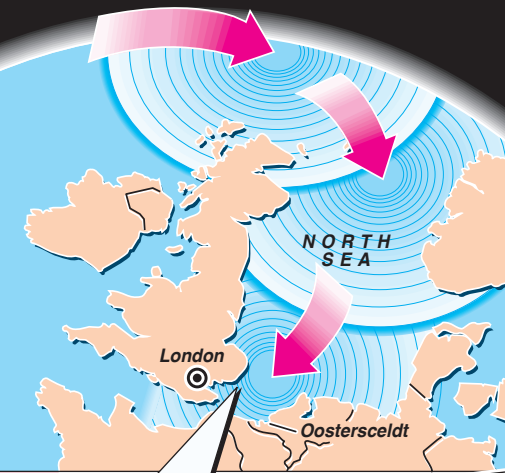
# FLOOD ALERT

## Spring tide raises flood fear

The London Weather Centre has warned of possible record tidal levels next week when the moon – which controls the tides – orbits closer than usual to the Earth. The moon, Earth and the sun will all be in line, increasing the gravitational pull, resulting in higher tides



**2. In the event of strong northerly winds a surge of water would be forced down the North Sea**



**3. Storm winds would push tidal surge into bottleneck between UK and Holland**

Thames Barrier: four main gates each span 200 feet

Barrier can be raised within 30 minutes

Should the tides coincide with high winds from the north, not uncommon around the time of the vernal equinox, there is a risk of flooding along the east coast and in the Thames estuary. Current forecasts suggest that water levels will remain some 20in below the top of the Thames barrier but precautions are in place should the barrier need to be raised.

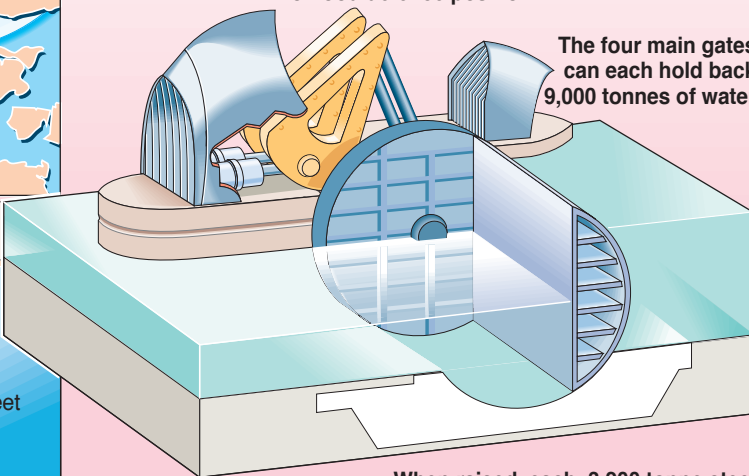
Flooding is most likely to occur when a deep Atlantic depression creates a surge of water which is then forced down the wedge-shaped North Sea by storm winds. As it reaches the bottleneck of south-east England, low-lying areas are susceptible to flooding. By contrast, southerly winds have the opposite effect, flattening any surge.

The worst flooding of recent times killed 300 people along the east coast in 1953 and London itself came within just three inches of disaster. The Thames barrier was finally opened in 1982 in an effort to ensure that the 45 square-mile Thames flood plain, home to more than a million people and central to the country's economic well-being, was adequately protected from danger.

The 1953 floods devastated Holland, where more than 2,000 died. The Dutch have since constructed extensive flood defences along some 40 miles of coastline. Much of this is in the form of solid dams, designed to resist the sort of flooding that occurs once on average every 4,000 years, but a flexible barrier, over five miles wide, straddles the Oosterschelde. Normally open to maintain the salt water environment, the barrier is raised whenever tides reach three metres above mean sea level.

Hydraulic arms rotate gate into flood defence position

The four main gates can each hold back 9,000 tonnes of water



When raised, each 3,200 tonne steel gate stands 50 feet above the river bed.

When not in use the gate lies flat in its concrete base