Solent Water Quality Conference 2010

CSOs, Water Quality and the Future

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MCS' origins lie in the experience of Tony and Daphne Wakefield whose daughter Caroline died of polio contracted after swimming in the sewage contaminated sea off Gosport in 1957. In response to this tragedy, the Wakefields started the Coastal Anti-Pollution League. They campaigned against raw sewage discharge to the sea and published a regular 'Golden List' of beaches, describing coastal sites with good water quality which were also free of raw sewage outfalls.

In 1983, the Coastal Anti-Pollution League merged with the Marine Conservation Society and the Wakefield's 'Golden List' of Beaches became MCS' Good Beach Guide, now in its 23rd edition and published online at www.goodbeachguide.co.uk.

The success of a £10 billion investment programme by the UK water industry, following privatisation in 1989, has largely cleaned up continuous sewage discharge at the coast and latterly revealed the extent to which diffuse pollution and intermittent discharges, particularly combined sewer overflows, are also affecting bathing water quality.

There are about 22,000 combined sewer overflows (CSOs) in the UK. Five hundred bathing beaches have at least one, including almost 300 designated bathing sites. Since 2006, 25% fewer beaches have met the 'MCS Recommended' water quality standard. About 14% (83) of the UK's designated bathing sites would fail the revised Bathing Water Directive's 'sufficient' standard. The focus of MCS' current campaign work is to understand the degree to which CSOs are to blame for these bathing water quality problems and what can be done about it.

Our campaign has involved action to force determination of the 4,200 CSOs in England and Wales (a quarter of the network) still operating under 'deemed consents' (temporary licences to operate) since the water industry was privatised in 1989.

We've analysed the ten year data set collected by volunteers from our BeachWatch beach litter survey and clean up programme and determined from this a list of about 40 UK beaches suffering entrenched problems with sewage debris from CSOs. This is not an exhaustive survey of the coast, simply the long term data from the few hundred beaches covered by our own BeachWatch programme.

MCS made series of Freedom of Information requests to statutory agencies, government departments and councils for information relating to CSO discharge. We've also met with statutory agencies across the UK on a number of occasions to resolve questions about the UK's CSO infrastructure.

MCS has also been following the infraction proceedings instigated by the European Commission for breaches of the Urban Waste Water Treatment Directive relating to intermittent discharges at Whitburn, the Thames, Torquay, Kilbarchan, Campbeltown Loch, Oban and the Burry estuary. We've contributed evidence for the case at Whitburn, with which MCS has been involved since 1998, and discussed wider policy implications with the Commission regarding setting a limit on CSO spill frequency.

In June 2009, MCS launched the 'Raise A Stink' campaign in association with the Sunday Times, asking the public to report high spilling CSOs to us via the Good Beach Guide website. We also contributed to BBC investigative programmes by Panorama and Week In Week Out.

MCS has so far concluded that about a quarter of the UK's CSO network is monitored, including 260 out of the 1,100 coastal sites listed in our Good Beach Guide. This monitoring data is not shared by the water industry with the statutory agencies on a systematic basis.

CSO investigations in England & Wales seem largely to be initiated on a self reported or reactive basis with no systematic oversight of discharge consent compliance. There's been an average of about six CSO prosecutions per year since 2000 in England and Wales, the same number in Scotland, and just three since 1991 in Northern Ireland.

Public complaints about high spilling CSOs from our 'Raise A Stink' campaign have pinpointed pollution 'hot spots'

along the south coasts of England and Wales and the south west coast of Scotland. Again, this is not an exhaustive study but simply the areas so far revealed by our work with the Sunday Times.

Our conclusions, thus far, are that the degree to which CSOs are causing bathing water pollution is not known. Bathing water standards were marginally better in 2009 and the biggest forcing factors are climate change, population growth and European statutory drivers (Water Framework Directive and revised Bathing Water Directive).

A reasoned opinion from the European Commission suggests the Commission believes that CSO spill frequency should be limited to no more than 20 or 30 times per year, except where the receiving water is designated as 'sensitive'. This would be difficult to instigate in the United Kingdom where the generic design of a CSO dictates that it spills whenever the volume of effluent in the sewer exceeds the dry flow rate by a factor of six or more. Spill frequency would also be very difficult to regulate when just 25% of the network is monitored.

There is a growing sentiment of opposition, both in the media and amongst the general public, over a CSO infrastructure that appears on parts of the coast to have become a regular means of sewage disposal. The European Commission has now instigated proceedings against the UK Government in the European Court of Justice to determine in case law the conditions for CSO use. If the European Commission is successful in court and a limit on spill frequency is introduced, then it could require an additional investment of £100 millions in the UK CSO network.