CSOs Q and A

- **What is a CSO?**

A Combined Sewer Overflow (CSO) is the term used for an overflow pipe which is legally allowed to operate during wet weather.

CSOs can be directly connected to sewers and/or sewage pumping stations. In both cases, they are designed to operate at times of heavy rainfall, when flows have been substantially diluted, to release pressure in the system and reduce the risk of flooding from sewers into people's property and land.

In order to legally operate, all discharges to water require consents that are regulated by the Environment Agency

- **Will you be investing in CSOs to reduce the amount of times they spill?**

Our investment plans for the future are focused on maintaining our existing infrastructure.

We are working closely with the Environment Agency to look at how we can mitigate the impact of climate change on our assets and where we need to invest further to meet the standards in the relevant EU directives.

South West Water has a long-term commitment to protecting bathing waters and ensuring residents and tourists experience the benefits of our 'Clean Sweep' programme for generations to come.

- **What is Clean Sweep?**

When the water industry was privatised in 1989, South West Water inherited a legacy of under-investment and nowhere more so than in coastal sewage treatment and disposal. Raw sewage was being discharged straight into the seas around the region. We have now nearly finished one of the biggest environmental improvement programmes of its kind in Europe - the £2 billion Clean Sweep.

Clean Sweep has seen over 200 raw sewage discharges stopped and modern sewage treatment provided in over 40 major projects. This will ensure that every public sewage system in the region will benefit from greatly improved levels of sewage treatment - a major achievement, delivered with the help and co-operation of our customers for the benefit of the local communities affected and the region as a whole.

As a result of Clean Sweep, the region is now able to boast some of the finest bathing waters and beaches in the whole of Europe, attracting record levels of tourists and investment in the region.

- **Do you monitor CSOs / How do you know how often CSOs operate?**

The only CSOs that are monitored to tell us when a spill starts and stops are those that discharge to designated shellfish waters, as per Environment Agency guidelines.

For CSOs to bathing waters, there is no current requirement for monitoring under the consents, although we can use our alarm and level sensor technology to assess any spills on request from the Environment Agency.

Monitoring the volume of discharge is not required to be recorded at any site, regionally or nationally.

However, in our current five-year investment period, we will be installing more monitoring equipment at an extra 300 sites across the region in line with new regulatory requirements to help better inform the public about bathing water quality.

All other CSOs that do not discharge to bathing or shellfish waters have no monitoring, except to notify us of an operational or power failure for those connected to pumping stations.

- **How can debris get through if CSOs have filter screens?**

The screens can only filter debris from a finite flow, so under certain wet weather events they may be overtopped, but this would be a relatively rare occurrence.

For this reason, there is a clean up clause on the consent which requires us to remove debris from the watercourse if reported to us by a member of the public, once it is safe to do so.

- **What is the environmental impact of the CSOs operating?**

The discharge consent, regulated by the Environment Agency, permits the overflow to operate under certain conditions.

The consent determines how much storage might be required and the frequency with which the overflow can operate.

Storm discharges normally occur during wet weather, when flows in the receiving environment are high enough to accommodate the discharge without significant adverse effect.

- **Is South West Water responsible for notifying the public if a CSO spills? If not, who does South West Water notify?**

South West Water is not required to notify the public or other regulators in the event of the operation of a CSO to bathing waters.

Discharges to shellfish waters are reported annually to the Environment Agency.

In the event of an emergency (blockage or power failure) we will notify the EA and Local Environmental Health Team.

South West Water is not qualified to provide recommendations on public health issues.

Any public health notification in response to an overflow event would be the responsibility of the local public health team.

Under the new bathing water directive, 2012, closer liaison between all parties is required.

- **Do CSOs operate when they are not supposed to?**

Discharges can also occur unexpectedly from CSOs if there are blockages in the sewer system or if there is a major mechanical breakdown, in a pumping station for example. However, we have procedures in place for these to be dealt with promptly. A CSO discharge in these circumstances will only occur to prevent sewage building up and flooding through a manhole or into a property.

- **What is South West Water doing in the future to improve bathing waters?**

We will be investing at least £250 million in waste water services over the next five years. This includes £10 million on improving CSOs in 10 areas, as well work dealing with multiple CSOs in Exeter, Teignmouth, Falmouth, Hayle and Port Isaac.

The Flood and Water Management Bill will focus on reducing the amount of surface water and highway run-off that enters sewers thereby reducing the frequency CSOs operate, through Integrated Urban Drainage initiatives.

In order to help the region prepare for the new Bathing Waters Directive, South West Water sponsors and chairs a regional Bathing Waters Liaison Group. This forum is designed to help manage and co-ordinate all parties involved to achieve a high standard of bathing water quality. It has been recognised as a leading example for the rest of the country by the Blue Flag organisation.

- **Do you have any plans to remove all the CSOs or stop using them altogether?**

Combined sewers, and especially their CSOs, are now regarded as being outdated and unsustainable. Since 2006 our policy has been that no additional surface water should connect to them. However, removal of CSOs from these older sewer systems is neither practical nor affordable, especially here in the South West, at the present time.

Removal of CSOs would entail separating surface water from the combined sewers and constructing a combination of sustainable drainage systems, surface water sewers, storage tanks, pumping stations and other drainage systems.

Apart from the enormous cost, there would be a tremendous impact on our towns, villages and the countryside. Most of the capacity created would also be unused most of the time.