**Final NEP (February 2010)**

## Annex 3: Water Quality - Summary of Number of Actions for each Water Company

| | Improvement actions[1] | Investigation[2] | Event Duration Monitoring[3] | Catchment Management[4] (Improvement actions & Investigations) | Sludge and Environmental Permitting Regulations[5] | TOTAL |
|---|---|---|---|---|---|---|
| **Anglian** | 108 | 77 | 0 | 1 | 0 | **186** |
| **Dwr Cymru** | 65 | 33 | 11 | 0 | 0 | **109** |
| **Severn Trent** | 89 | 66 | 0 | 45 | 0 | **200** |
| **Northumbrian** | 15 | 11 | 0 | 1 | 0 | **27** |
| **Yorkshire** | 62 | 68 | 21 | 0 | 17 | **168** |
| **United Utilities** | 113 | 33 | 38 | 2 | 0 | **186** |
| **Southern** | 147 | 44 | 79 | 0 | 13 | **283** |
| **Thames** | 86 | 65 | 0 | 1 | 13 | **165** |
| **South West** | 32 | 48 | 284 | 12 | 1 | **377** |
| **South Staffs** | 0 | 0 | 0 | 2 | 0 | **2** |
| **Wessex** | 80 | 20 | 53 | 3 | 2 | **158** |
| **TOTAL** | **797** | **465** | **486** | **67** | **46** | **1861** |

[1] This is where we have evidence that there is a problem and we want water companies to act to address it.
[2] This is where we think there may be a problem and would like water companies to investigate the issue further.
[3] This is where water companies can measure whether storm sewage has gone into the water and for how long.
[4] This is where water companies can improve the quality of water by changing how the land that is near water is used or where the conservation site is owned by the water company. The measures here can be either improvement actions or investigations.
[5] This where water companies are required to undertake work to meet the requirements of the Sludge Directive and the Environmental Permitting Regulations.

## Final NEP (December 2009)

**Water Quality - Summary of Number of Actions for each Water Company broken down by environmental driver.** An explanation of each driver is given below.

| | UWW TD | Ground Water | | | Intermittent | Fish | | Bathing | | | Shellfish | | | Habitats | | Crow Act | | | Flow | BAP | | | Sub Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Imp[6] | Imp | Inv[7] | CMgt Inv[8] | Imp | Imp | Inv | Imp | EDM[9] | Inv | Imp | EDM | Inv | Imp | Inv | Imp | CMgt Imp[10] | Inv | Imp | Imp | Inv | CMgt Imp | |
| **Anglian** | 5 | 5 | 30 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 7 | 0 | 0 | 16 | 0 | 0 | 0 | 1 | 55 | 0 | 0 | 0 | 124 |
| **Dwr Cymru** | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 17 | 8 | 1 | 3 | 3 | 1 | 21 | 0 | 0 | 0 | 3 | 13 | 0 | 0 | 0 | 77 |
| **Severn Trent** | 29 | 9 | 0 | 35 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 4 | 37 | 0 | 0 | 0 | 120 |
| **Northumbrian** | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 1 | 18 |
| **Yorkshire** | 0 | 24 | 0 | 0 | 0 | 12 | 6 | 21 | 21 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 2 | 0 | 97 |
| **United Utilities** | 17 | 0 | 0 | 0 | 3 | 6 | 0 | 36 | 20 | 1 | 35 | 18 | 2 | 5 | 0 | 2 | 1 | 1 | 0 | 0 | 1 | 1 | 149 |
| **Southern** | 28 | 21 | 4 | 0 | 0 | 9 | 0 | 2 | 17 | 3 | 3 | 62 | 13 | 18 | 0 | 8 | 0 | 3 | 28 | 1 | 4 | 0 | 224 |
| **Thames** | 4 | 13 | 1 | 0 | 25 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 29 | 0 | 0 | 0 | 77 |
| **South West** | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 243 | 12 | 14 | 41 | 11 | 0 | 0 | 1 | 12 | 1 | 11 | 0 | 0 | 0 | 352 |
| **South Staffs** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wessex** | 7 | 0 | 0 | 0 | 64 | 0 | 0 | 2 | 32 | 3 | 2 | 21 | 1 | 0 | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 0 | 143 |
| **Sub total** | 90 | 85 | 35 | 35 | 92 | 31 | 7 | 83 | 341 | 34 | 64 | 145 | 28 | 61 | 0 | 15 | 13 | 20 | 190 | 1 | 9 | 2 | 1381 |
| **Total** | **90** | **155** | | | **92** | **38** | | **458** | | | **237** | | | **61** | | **48** | | | **190** | **12** | | | **1381** |

## Final NEP (October 2009)

[6] "Imp" stands for improvement actions.
[7] "Inv" stands for investigations.
[8] "CMgt Inv" stands Catchment management investigation
[9] "EDM" stands for Event Duration Monitoring.
[10] "CMgt Imp" stands for Catchment Management improvement action.

## Water Quality Water Framework Directive – Summary of Number of Actions for each Water Company broken down by environmental driver

| | Water Framework Directive Specific Drivers | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Ammonia** | | **Phosphorus** | | **BOD** | | **Dissolved Oxygen** | | **Drinking water** | **Priority Substances** | **Local** | | **Total** |
| | Imp | Inv | Imp | Inv | Imp | Inv | Imp | Inv | CMgt Inv | Inv | Imp | Inv | |
| **Anglian** | 3 | 0 | 12 | 5 | 3 | 0 | 0 | 0 | 1 | 38 | 0 | 0 | **62** |
| **Dwr Cymru** | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 23 | 0 | 5 | **32** |
| **Severn Trent** | 5 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 10 | 62 | 0 | 0 | **80** |
| **Northumbrian** | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | **9** |
| **Yorkshire** | 2 | 6 | 0 | 2 | 1 | 6 | 0 | 3 | 0 | 34 | 0 | 0 | **54** |
| **United Utilities** | 6 | 4 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 19 | 1 | 3 | **37** |
| **Southern** | 3 | 0 | 24 | 0 | 2 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | **46** |
| **Thames** | 3 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 62 | 5 | 0 | **75** |
| **South West** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 7 | 0 | 0 | **24** |
| **South Staffs** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | **2** |
| **Wessex** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 0 | 1 | **13** |
| **Sub Total** | **26** | **10** | **36** | **7** | **13** | **8** | **4** | **3** | **34** | **278** | **6** | **9** | **434** |
| **Total** | **36** | | **43** | | **21** | | **7** | | **34** | **278** | **15** | | **434** |

**Explanations**

**UWWTD** (Urban Waste Water Treatment Directive). This driver ensures that sewers are provided for urban waste water from cities, towns, villages and industrial premises above a certain size. It ensures that sewage is treated to specified minimum standards before being discharged into the environment. It also requires more stringent treatment of sewage for areas classified as "sensitive". "Sensitive Areas" are normally areas where local biological conditions mean there is a risk of excessive plant growth and decay (eutrophication).

**Groundwater** This driver ensures that dangerous chemicals are prevented from entering, or prevented from polluting, groundwater.

**Intermittents** This seeks to reduce the volume of sewage which overflows from the sewers into the water during periods of heavy rainfall.

**Fish** This driver seeks to improve the quality of fresh waters, which support, or which, if pollutions were reduced or eliminated, would be capable of supporting fish life. It specifies environmental standards to be achieved for designated freshwater fish waters.

**Bathing** This seeks to improve the quality of designated bathing waters and, by doing so, improve the health of people who bathe in the water.

**Shellfish** This protects shellfish waters by setting maximum pollution levels for certain substances in designated shellfish waters. Its objective is to support shellfish life and growth, which contributes to the high quality of shellfish products eaten by people.

**Habitats** Certain sites in England and Wales have been identified as "Special Areas of Conservation". These sites have protected status as they are important habitats for specific species. Here we are looking for water companies to take action if some of their actions have an adverse impact on protected sites.

**Crow Act** The Countryside and Rights of Way Act identifies and protects areas of land of special interest due to their flora, fauna, or geological or physiographical features. These are called Sites of Special Scientific Interest (SSSI). Here we are looking for water companies to take action if some of their actions have an adverse impact on SSSIs.

**Flow** This is action to ensure that discharges from sewage treatment works do not damage the water.

**BAP** The Biodiversity Action Plan contributes to compliance with national targets for conserving and enhancing those species and habitats identified as being of principal importance for the conservation of biological diversity in England. Actions here seek to ensure compliance with national targets.

**Water Framework Directive** The Water Framework Directive is a new piece of European legislation which promotes a new approach to water management through river basin planning. It will help us to improve and protect inland and coastal waters; drive wiser, sustainable use of water as a natural resource; and create better habitats for wildlife that lives in and around water.

The following are all Water Quality drivers under the Water Framework Directive:

- **Ammonia** This seeks to reduce the amount of ammonia, which is discharged from sewage treatment plants into the water. Ammonia can be harmful to fish.

- **Phosphorus** This seeks to reduce the amount of phosphorus, which is discharged from sewage treatment plant into the water. Phosphorous can lead to excessive plant growth and decay (eutrophication) and can damage fish and habitats.

- **BOD and Dissolved Oxygen** BOD is Biological Oxygen Demand. Actions in these areas seek to decrease the level of BOD and increase Dissolved Oxygen, which improves the quality of water for fish.

- **Priority Substances** Priority Substances refer to dangerous chemicals in the water. Here we are asking water companies to undertake a number of investigations to quantify the risk from chemicals and to assess treatment options.

- **Drinking Water** This relates to surface waters designated under the Water Framework Directive as Drinking Water Protected areas, which require special protection. These measures investigate ways to improve the quality of water which is used for drinking water in these areas.

- **Local priorities** These are actions which do not have a legislative driver but where there is strong evidence that action is required to address a problem in a local water body. If agreed as part of the River basin management plan, under the Water Framework Directive, these measures will become statutory.

**Sludge** Additional treatment and/or alternative disposal routes for sewage sludge required due to the impact of extending designations of Nitrate Vulnerable Zones

**Environmental Permitting Regulations** Work required in relation to permitting under the Environmental Permitting Regulations. This will include control of air emissions from the burning of sludge gas in Combined Heat and Power plants used to provide heat for sludge treatment.