

EA water quality



ENVIRONMENT AGENCY

BATHING WATER QUALITY
IN ENGLAND AND WALES IN 1997

- A SUMMARY REPORT

1 INTRODUCTION

1.1 The role of the Environment Agency

On April 1 1996, the Environment Agency (the Agency) came into being as an amalgamation of the National Rivers Authority (NRA), Her Majesty's Inspectorate of Pollution (HMIP), the Waste Regulation Authorities and some functions of the Department of the Environment, Transport and the Regions (DETR; formerly the Department of the Environment, DoE). From this date the Agency assumed the responsibilities of the NRA for the Bathing Water Directive.

As the competent authority for England and Wales, the Agency plays an important part in the implementation of the EC Bathing Water Directive (76/160/EEC). Under the Directions given in May 1992 and Notices given in May 1992 and February 1997 by the Secretary of State, the Agency is required to sample and analyse bathing waters in accordance with the requirements of the Directive. The results are reported annually to the DETR and Welsh Office. The DETR uses these data to assess compliance of individual sites and transmits the results annually to the European Commission.

The Agency also has statutory duties and powers under the Water Resources Act 1991 to control discharges to controlled waters with respect to relevant water quality objectives. For bathing waters, water quality objectives were set out in the Bathing Water (Classification) Regulations 1991 (SI 1597), which came into force in August 1991 (DoE, 1991).

This summary report, Bathing Water Quality in England and Wales 1997, is the second to be published by the Agency on this subject; the first report was published in 1996. Previous reports on bathing water quality in England and Wales by the NRA (1990, 1991, 1992, 1993, 1994 and 1995) have been published by HMSO.

The results of the 1997 bathing water quality survey in England and Wales are also available on the Environment Agency's "State of the Environment" Internet service. Details on compliance of individual bathing waters are shown on the Agency's World Wide Web site at [http:// www.environment-agency.gov.uk](http://www.environment-agency.gov.uk).

1.2 Identified bathing waters for the 1997 season

In 1997 there were 448 bathing waters identified in England and Wales for the purposes of the Directive, 15 more bathing waters than the 1996 bathing season. The new identified bathing waters are:

Botany Bay	Southern Region	NGR TR39107120
Ramsgate Main Sands	Southern Region	NGR TR38706490
Broadstairs - Stone Bay	Southern Region	NGR TR40106880
Walpole Bay	Southern Region	NGR TR36507150
Westbrook Bay	Southern Region	NGR TR34107060
Westgate Bay	Southern Region	NGR TR32007020
Poole Sandbanks Car Park	South West Region	NGR SZ04608753
Broadhaven South	Welsh Region	NGR SR97909390
Caerfai	Welsh Region	NGR SM76102430
Llanddona	Welsh Region	NGR SH56608121
Llanddwyn	Welsh Region	NGR SH40346305
Llangranog	Welsh Region	NGR SN31005430
Lydstep	Welsh Region	NGR SS09209830
Manorbier	Welsh Region	NGR SS05809740
Marloes	Welsh Region	NGR SM78100740

2 THE 1997 EC IDENTIFIED BATHING WATER QUALITY SURVEY

2.1 Sampling and analysis

The bathing season in England and Wales runs from 15 May to 30 September and sampling commences two weeks before the start of the season. Agency policy is that 20 samples are taken at regular intervals throughout the season at each site. All samples are taken at predetermined points off the beach of the identified bathing water where the daily average density of bathers is at its highest. Samples are normally taken 30 cm below the surface, except in the case of samples used for testing for mineral oils, which are taken at the water's surface.

The results of the analyses of samples taken in the 1997 bathing season have been supplied to DETR for publication in the 1997 DETR Report to Parliament. Twenty samples were taken for coliform and faecal streptococci analysis at each bathing water (except for Torre Abbey in South West Region and Llanendwyn in Welsh Region where 19 samples were taken). A minimum of two samples are analysed for enteroviruses at those bathing waters which failed the mandatory coliform standards during the 1996 season. All coliform counts were confirmed using the methods set out in the "Manual of Standard Methods for Microbiological Analysis" (NRA 1992b).

2.2 Survey results: compliance with Directive

The mandatory coliform standards given in the Directive which are generally used to assess compliance require there to be no more than 10,000 total coliforms per 100 ml and no more than 2,000 faecal coliforms per 100 ml. In order for a bathing water to comply 95% of samples taken must meet these standards.

During the 1997 bathing season, 448 identified bathing waters were examined in England and Wales. The number of bathing waters complying with the Directive, as determined by the DETR on the basis of the coliform parameters, was 397; that is to say, 88.8%. This is a decrease of 0.3% compared with the results of the 1996 survey. Beacon Cove in South West Region was closed for most of the season due to engineering works and no sampling could take place. This bathing water has not been

included in the assessment, therefore percentage compliance has been calculated for a total of 447 bathing waters.

Table 1 gives details of the numbers and percentages of bathing waters complying with the Directive in 1997 by Agency region. The changes in the number of bathing waters complying between 1996 and 1997 are also given. In previous seasons West Kirby (on the Wirral) has been counted in compliance for Welsh Region in accordance with the Agency's operational boundary. However, it has now been agreed with the DETR and the Welsh Office that this bathing water shall be counted in North West Region compliance according to the Agency's public face boundary. The figures now shown for Welsh Region do not include West Kirby and so represent the compliance statistics for Wales.

The Water Service Companies are continuing with their investment programme aimed at improving bathing water quality to the schedule agreed with the DETR. A report detailing the progress of these remedial schemes was compiled by the Department for the European Commission in September 1997. The report shows that in England and Wales 85 capital schemes (affecting water quality at 160 bathing waters) had been completed by June 1997. It is expected that the completion of 19 remaining schemes will contribute to better water quality at bathing beaches in future seasons.

Table 1 - 1997 EC identified bathing waters - coliform results

Agency Region	Number of Bathing Waters	Complying		Non-Complying		Number of compliant bathing waters compared with 1996
		No.	%	No.	%	
Anglian	35	35	100.0	0	0.0	+1
North East	56	51	91.1	5	8.9	+2
North West	34	17	50.0	17	50.0	-3
Southern	75	67	89.3	8	10.7	+5
South West *	180	164	91.1	16	8.9	-3
Thames	3	3	100.0	0	0.0	+1
Welsh	64	60	93.8	4	6.2	+8
TOTAL *	447	397	88.8	50	11.2	+11

* excludes Beacon Cove which was closed due to engineering works.

2.2.1 Abnormal weather waiver

Article 5.2 of the Directive states that “deviations from the values referred to in Article 3 shall not be taken into consideration in the calculation of the percentage referred to in paragraph 1 when they are the result of floods, other natural disasters or abnormal weather conditions”.

There is no official definition of what constitutes abnormal weather, but DETR have advised that generally a “one-in-five-year storm event” can be regarded as exceptional weather. That is a storm which is statistically likely to occur only once in every five years. The amount of rainfall which equates to a one-in-five-year event depends on the prevailing weather in a specific location.

In 1997, the DETR applied three abnormal weather waivers to samples where Directive mandatory coliform standards were exceeded following exceptionally heavy rainfall: at Cleethorpes (Anglian Region) on 13 August and Minehead Terminus (South West Region) on 5 August and 7 August. Consequently these sample results were excluded from compliance assessment and these bathing waters met the mandatory coliform standards of the Directive. An abnormal weather waiver was also applied to a sample taken at Weymouth Central on 6 August which exceeded the Directive guideline value for faecal streptococci. As a result this bathing water complied with the more stringent guideline standards.

2.3 Agency region by region analysis 1997

Maps (Figures 1 to 6) are included for each Agency region showing compliance of identified bathing waters during the 1997 bathing season. Midlands Region has no waters identified by the DETR as subject to the Bathing Water Directive and is therefore not included.

Bathing waters which met the mandatory coliform standards are indicated by a green circle (●), those which did not meet the mandatory coliform standards are indicated by a red square (■) and those which met the guideline coliform and faecal streptococci standards are indicated by a blue diamond (◆).

The guideline coliform and faecal streptococci standards given in the Directive are as follows: 80% of samples must not contain more than 500 total coliforms or 100 faecal coliforms per 100ml and 90% of samples must not contain more than 100 faecal streptococci per 100ml.

Of the 50 non-compliant bathing waters during 1997, 28 had remedial schemes which are part of the UK bathing water investment programme completed before the 1997 bathing season and one scheme was completed during the season. Of these, additional improvements affecting five bathing waters are planned to help achieve consistent compliance. A total of 15 bathing waters have no associated remedial scheme and the majority of these have a very good compliance record; however other improvements are planned at seven of these. The remaining six non-compliant bathing waters have remedial schemes in hand and they are expected to achieve compliance by the year 2000.

Anglian Region (Figure 1)

In Anglian Region all identified bathing waters were compliant during the 1997 season. Although Cleethorpes was compliant, the Region is continuing investigations into pollution sources with the water company to underpin the improvements in water quality. There are four outstanding remedial schemes affecting eight bathing waters and these improvements should help ensure continuing high levels of compliance.

Thames Region (Figure 1)

All identified bathing waters in Thames Region were compliant during the 1997 season. There is one remaining remedial scheme which will affect water quality at all three Thames Region bathing waters.

North East Region (Figure 2)

In North East Region, of the five non-compliant bathing waters none has remedial schemes outstanding. One of the bathing waters has a completed remedial scheme, however it is still being impacted by a discharge which is due to be removed by the 1998 bathing season. Of the four remaining non-compliant bathing waters, three of these have become non-compliant for the first time in several years. Exceedences are mainly due to operation of combined sewer overflows (CSOs) and riverine inputs during wet weather. Improvements to ensure future compliance are planned at three of these bathing waters and the Agency is investigating exceedences at the fourth.

North West Region (Figure 3)

In North West Region, of the 17 non-compliant bathing waters 16 have completed remedial schemes, and there are no further schemes outstanding. Exceedences are continuing due to a combination of point source sewage inputs; operation of storm overflows during wet weather; diffuse inputs from farm pollution; and riverine impacts on the coast including plumes from the Ribble and Wyre estuaries. The Agency is very concerned about continuing poor levels of compliance during the 1997 season and has carried out two major projects to investigate bacterial loads impacting the coast. Where point source discharges are known to be causing problems the Agency is pursuing improvements and where reasons for exceedences are not known investigations are continuing. In addition discussions are taking place with North West Water over inconsistent operation of UV (ultraviolet) disinfection at two sewage treatment works.

Southern Region (Figure 4)

Two of the eight non-compliant bathing waters in Southern Region have outstanding improvement schemes (Folkestone and Hastings). Three have no planned schemes and three have schemes already completed. Exceedences at these bathing waters are thought to be due to operation

of CSOs following heavy rainfall and problems with local sewerage systems, and investigations are continuing. Plans are already in place to upgrade CSOs by the year 2000.

South West Region (Figure 5)

In South West Region, out of the 16 non-compliant bathing waters, two have outstanding remedial schemes (Instow and Plymouth Hoe West) and a remedial scheme associated with one bathing water was completed just after the start of the 1997 season (Lynmouth). An additional five non-compliant bathing waters have other improvement schemes in hand. The remaining eight have completed schemes or none planned and most of these have a very good compliance record in recent years. A majority of exceedences are attributed to inputs from contaminated surface waters following heavy rainfall and/or operational sewerage problems. The cause of remaining non-compliance is unknown and under investigation. It is expected that most of the bathing waters should comply when current improvement programmes are completed. However, a residual risk of non-compliance will remain due to contamination from streams draining rural catchments, particularly following heavy rainfall.

Welsh Region - Rhanbarth Cymru (Figure 6)

In Welsh Region there were four non-compliant bathing waters in the 1997 season, and of these two have outstanding remedial schemes (Limeslade Bay, Swansea Bay). Prior to the 1997 season, the other two bathing waters have been compliant since the late 1980s. The reasons for non-compliance in 1997 are being investigated.

Figure 1 Anglian Region and Thames Region



Figure 2 North East Region

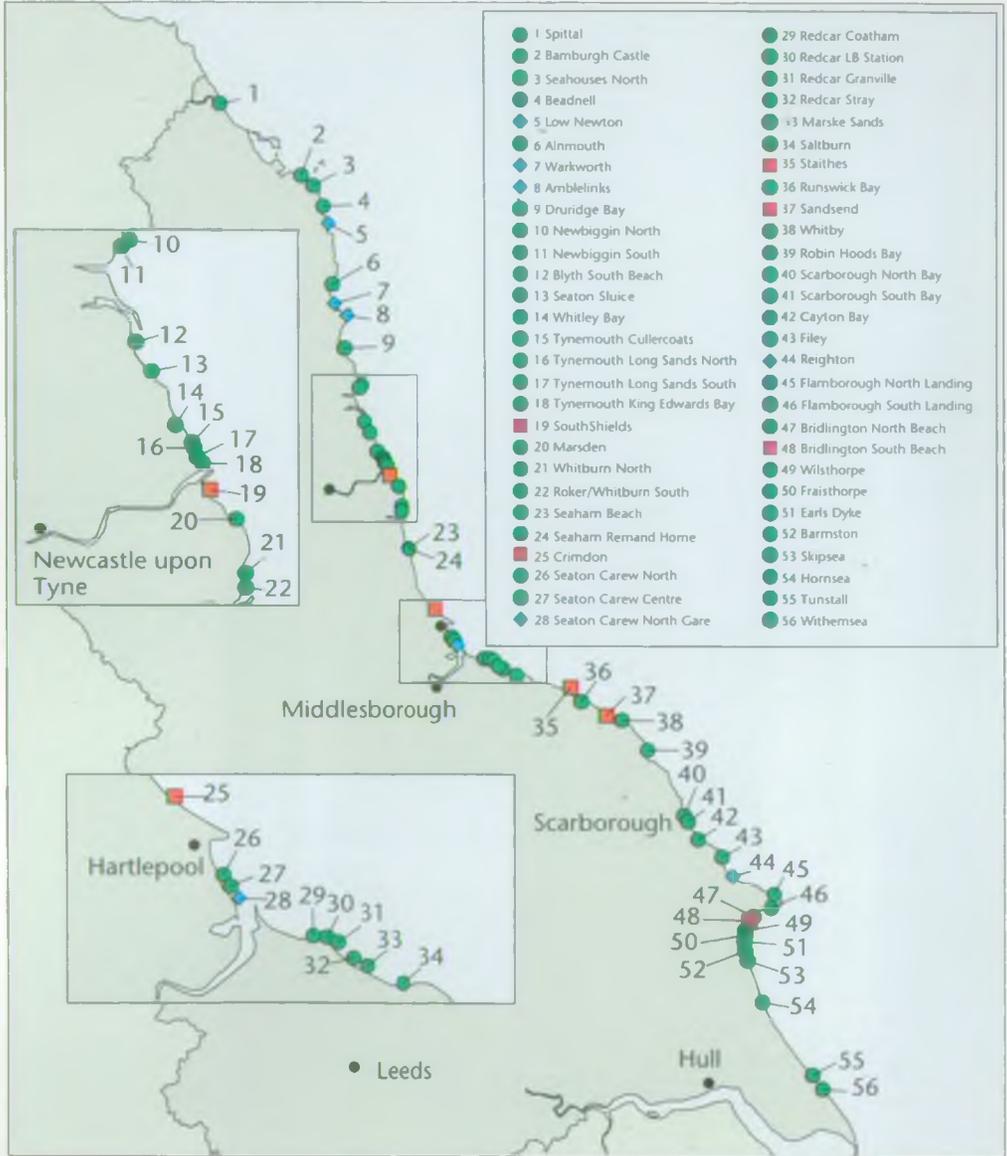


Figure 3 North West Region



Figure 4 Southern Region



- | | |
|--------------------------|------------------------|
| ◆ 1 Sheerness | ◆ 20 St Margaret's Bay |
| ● 2 Leysdown | ■ 21 Folkestone |
| ● 3 West Beach | ● 22 Sandgate |
| ◆ 4 Herne Bay | ◆ 23 Hythe |
| ◆ 5 Minnis Bay | ● 24 Dymchurch |
| ◆ 6 Westgate Bay | ● 25 St Mary's Bay |
| ◆ 7 St Mildred's Bay | ● 26 Littlestone |
| ● 8 Westbrook Bay | ● 27 Camber |
| ● 9 Margate The Bay | ◆ 28 Winchelsea |
| ◆ 10 Fulsam Rock | ■ 29 Hastings |
| ● 11 Walpole Bay | ● 30 St Leonards |
| ● 12 Botany Bay | ● 31 Bexhill |
| ◆ 13 Joss Bay | ● 32 Norman's Bay |
| ● 14 Stone Bay | ■ 33 Pevensey Bay |
| ● 15 Broadstairs | ● 34 Eastbourne |
| ◆ 16 Ramsgate Main Sands | ◆ 35 Seaford |
| ◆ 17 Ramsgate | ● 36 Newhaven |
| ◆ 18 Sandwich Bay | ◆ 37 Saltdean |
| ◆ 19 Deal Castle | ● 38 Brighton |

- 39 Hove
- ◆ 40 Southwick
- 41 South Lancing
- 42 Worthing
- 43 Littlehampton
- 44 Middleton-On-Sea
- 45 Felpham
- 46 Bognor Regis
- 47 Pagham
- ◆ 48 Selsey
- ◆ 49 Bracklesham Bay
- 50 West Wittering
- ◆ 51 West of Eastoke
- ◆ 52 West Hayling
- 53 Eastney
- 54 Southsea
- ◆ 55 Stokes Bay
- ◆ 56 Lee-On-Solent
- ◆ 57 Hillhead
- ◆ 58 Calshot
- ◆ 59 Lepe
- ◆ 60 Milford-On-Sea
- ◆ 61 Christchurch Bay
- ◆ 62 Highcliffe
- ◆ 63 Compton Bay
- 64 Totland Bay
- 65 Colwell Bay
- 66 Gurnard
- ◆ 67 Cowes
- 68 Ryde
- 69 Seagrove
- 70 St Helens
- 71 Bembridge
- 72 Whitecliffe Bay
- 73 Sandown
- 74 Shanklin
- 75 Ventnor

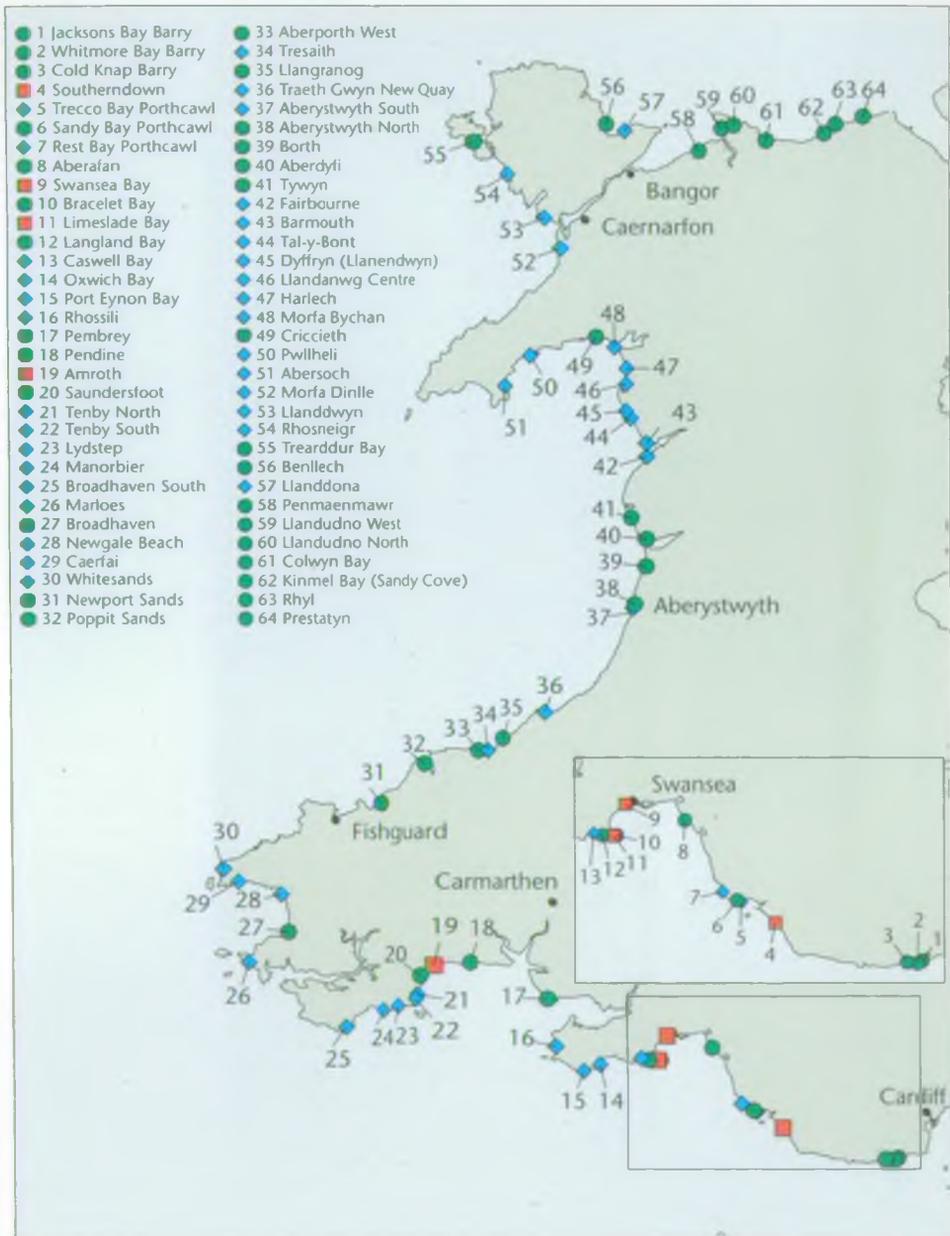
Figure 5 South West West Region



- 1 Christchurch Highcliffe Castle
- 2 Christchurch Friar's Cliff
- 3 Christchurch Avon
- ◆ 4 Christchurch Mudeford Sandbank
- ◆ 5 Bournemouth Hengistbury East
- ◆ 6 Bournemouth Fishermans Walk
- 7 Bournemouth Boscombe
- 8 Bournemouth Pier
- 9 Bournemouth Durley Chine
- ◆ 10 Poole Shore Road Sandbanks
- ◆ 11 Poole Harbour Sandbanks
- ◆ 12 Poole Sandbanks Car Park
- 13 Poole Harbour Lake
- 14 Poole Harbour Rockley Sands Pier
- ◆ 15 Shell Bay North
- ◆ 16 Studland Knoll House
- 17 Swanage Central
- ◆ 18 Kimmeridge Bay
- 19 Lulworth Cove
- ◆ 20 Durdle Door East
- ◆ 21 Durdle Door West
- ◆ 22 Ringstead Bay
- ◆ 23 Bowleaze Cove
- ◆ 24 Church Ope Cove
- ◆ 25 Weymouth Lodmoor
- ◆ 26 Weymouth Central
- 27 Portland Harbour Castle Cove
- 28 Portland Harbour Sandfoot Castle
- ◆ 29 West Bay (West)
- ◆ 30 Eyepmouth
- ◆ 31 Seatown
- 32 Charmouth West
- 33 Lyme Regis Church
- 34 Lyme Regis Cobb
- 35 Seaton (Devon)
- 36 Beer
- 37 Sidmouth Town
- 38 Sidmouth Jacobs Ladder
- 39 Ladram Bay
- 40 Budleigh Salterton
- 41 Sandy Bay
- 42 Exmouth
- ◆ 43 Dawlish Warren
- 44 Dawlish Town
- 45 Dawlish Coryton Cove
- 46 Teignmouth Holcombe
- 47 Teignmouth Town
- 48 Shaldon
- ◆ 49 Ness Cove
- ◆ 50 Maidencombe
- 51 Watcombe
- ◆ 52 Oddicombe
- 53 Babbacombe
- ◆ 54 Redgate
- ◆ 55 Meadfoot
- 56 Beacon Cove (Closed in 1997)
- 57 Torre Abbey
- 58 Hollicombe
- 59 Paignton Preston Sands
- 60 Paignton Paignton Sands
- 61 Goodrington
- 62 Broadsands
- ◆ 63 Shoalstone
- 64 St Mary's Bay
- 65 Dartmouth Castle And Sugary Cove
- ◆ 66 Blackpool Sands
- ◆ 67 Slapton Sands Monument
- 68 Slapton Sands Torcross
- ◆ 69 Mill Bay
- 70 Salcombe North Sands
- 71 Salcombe South Sands
- ◆ 72 Hope Cove
- ◆ 73 Thurlestone South
- ◆ 74 Thurlestone North
- 75 Bantham
- 76 Bigbury-on-Sea South
- ◆ 77 Bigbury-on-Sea North
- ◆ 78 Challaborough
- 79 Mothecombe
- ◆ 80 Wembury
- ◆ 81 Bovisand
- 82 Plymouth Hoe East
- 83 Plymouth Hoe West
- ◆ 84 Portwrinkle
- 85 Downderry
- 86 Seaton (Cornwall)
- 87 Millendreath
- 88 East Looe
- 89 Readymoney
- 90 Polkerris
- 91 Par

- ◆ 92 Crinnis Golf Links
- ◆ 93 Crinnis Leisure Centre
- ◆ 94 Charlestown
- ◆ 95 Duporth
- ◆ 96 Porthpean
- ◆ 97 Pentewan.
- ◆ 98 Polstreath
- ◆ 99 Port Mellon
- 100 Gorran Haven Little Perhaver
- ◆ 101 Gorran Haven (Vault)
- 102 Porthluney
- ◆ 103 Pendower
- ◆ 104 Gyllyngvase
- 105 Swanpool
- 106 Maen Porth
- 107 Porthallow
- ◆ 108 Porthoustock
- 109 Coverack
- ◆ 110 Kennack Sands
- 111 Polunan Cove
- 112 Poldhu Cove
- ◆ 113 Gunwalloe Cove
- ◆ 114 Porthleven West
- ◆ 115 Praa Sands East
- ◆ 116 Praa Sands West
- ◆ 117 Perran Sands
- 118 Mounts Bay-Little Hogus
- 119 Mounts Bay-Heliport
- 120 Mounts Bay Penzance
- 121 Mounts Bay-Wherrytown
- ◆ 122 Porthcumo
- 123 Sennen
- ◆ 124 Porthmeor
- ◆ 125 Porth Gwidden
- 126 Porthminster
- ◆ 127 Carbis Bay Station
- ◆ 128 Carbis Bay Porth Kidney Sands
- ◆ 129 The Towans (Hayle)
- ◆ 130 The Towans (Godrevy)
- ◆ 131 Portreath
- 132 Porthtownan
- 133 Trevaunance Cove
- ◆ 134 Perranporth Village End
- 135 Perranporth Penhale Sands
- 136 Holywell Bay
- 137 Crantock
- ◆ 138 Fistral
- 139 Towan
- ◆ 140 Great Western
- ◆ 141 Tolcarne
- ◆ 142 Lusty Glaze
- 143 Porth
- ◆ 144 Watergate
- 145 Mawgan Porth
- ◆ 146 Porthcothan
- ◆ 147 Treyamon Bay
- ◆ 148 Constantine Bay
- ◆ 149 Mother Ivey's Bay
- ◆ 150 Harlyn Bay
- 151 Trevone Bay
- 152 Rock
- ◆ 153 Daymer Bay
- 154 Polzeath
- ◆ 155 Widemouth Sand
- 156 Bude Summerleaze
- ◆ 157 Bude Crooklets
- ◆ 158 Bude Sandy Mouth
- ◆ 159 Hartland Quay
- 160 Westward Hol
- 161 Instow
- ◆ 162 Saunton Sands
- ◆ 163 Croyde Bay
- ◆ 164 Woolacombe Putsborough
- ◆ 165 Woolacombe Village
- 166 Ilfracombe Tunnels
- 167 Ilfracombe Capstone (Wildersmouth)
- 168 Ilfracombe Hele
- 169 Combe Martin
- 170 Lynmouth
- 171 Porlock Weir
- 172 Minehead Terminus
- 173 Dunster North West
- 174 Blue Anchor West
- 175 Burnham Jetty
- 176 Berrow
- 177 Brean
- 178 Weston-s-Mare Slipway
- 179 Weston-s-Mare Main
- 180 Weston-s-Mare Sand Bay
- 181 Clevedon

Figure 6 Welsh Region



2.4 Variation in compliance

During the 1997 bathing season 16 previously compliant bathing waters became non-compliant for the first time in several seasons. It has always been the case that a number of bathing waters pass the Directive's mandatory coliform standards in one year and fail the next (or vice versa). This is due to the inherent variability of the data collected over the bathing season and the way in which compliance is assessed as a "pass/fail" on the basis of 20 samples. The laws of chance can therefore play a significant part in determining the overall compliance level, as can weather conditions which affect bacterial die-off.

The variability in compliance is demonstrated by examining the number of bathing waters failing to meet the Directive standards in three, two, one or none of the previous three seasons. Table 2 illustrates this for each three-year period since 1988.

It can be seen that a certain percentage of bathing waters (19% for the period 1995 -1997) switch between compliance and non-compliance and the real cause of this (whether due to volatility of the compliance assessment methods used in the Directive or real change in water quality) is difficult to determine. However the figures indicate that this group of bathing waters has decreased in recent years.

Table 2 also illustrates that, despite the 0.3% decrease in overall compliance since 1996, the trend of increased consistency of compliance continues. The percentage of bathing waters complying each year from 1995-1997 now stands at 78% and has risen steadily from the 57% attained during 1988-1990. The percentage of bathing waters consistently failing has also been reduced to 3% from 13%. This indicates that the trend is for individual bathing waters to become more consistently compliant.

Table 2 - Consistency of compliance over three year periods

No failures at all	1988-1990	1989-1991	1990-1992	1991-1993	1992-1994	1993-1995	1994-1996	1995-1997
	57%	60%	64%	63%	65%	70%	73%	78%
Failed 1 year	18%	22%	16%	17%	17%	16%	6%	13%
	30%	28%	24%	28%	30%	27%	24%	19%
Failed 2 years	12%	6%	8%	11%	13%	11%	18%	6%
Failed 3 years	13%	13%	12%	9%	5%	3%	3%	3%

3 AGENCY ACTIONS

The Agency will continue to investigate possible sources of contamination at all non-compliant bathing waters with a view to controlling them where statutory powers allow. To this end, the Agency will be responding to a Government request to report on a strategy to achieve better compliance and to improve bathing water quality standards. Actions will focus on the need to:

- deliver compliance with standards according to agreed timescales for outstanding improvement schemes;
- continue to investigate the reasons for those schemes that have been recently completed as part of the bathing waters programme but have failed to secure compliance, in particular the North West Region;
- assess what can be done for those waters with no remedial or other improvement schemes in hand where the record of compliance is variable;
- examine options for upgrading of coastal sewerage systems where CSOs continue to cause problems;
- continue to assess what can be done to prevent pollution from diffuse sources which results in failure to meet the standards;
- instigate research programmes to address long term water quality problems.

DoE (1991). *Bathing Waters (Classification) Regulations 1991* (SI 1597). DoE, Welsh Office, 1991.

NRA (1991). *Bathing Water Quality in England and Wales 1990*. National Rivers Authority Water Quality Series No 3, August 1991. HMSO.

NRA (1992a). *Bathing Water Quality in England and Wales 1991*. National Rivers Authority Water Quality Series No 8, June 1992. HMSO.

NRA (1992b). *Manual of Standard Methods for Microbiological Analysis*.

NRA (1993). *Bathing Water Quality in England and Wales 1992*. National Rivers Authority Water Quality Series No 11, May 1993. HMSO.

NRA (1994). *Bathing Water Quality in England and Wales 1993*. National Rivers Authority Water Quality Series No 18, May 1994. HMSO.

NRA (1995). *Bathing Water Quality in England and Wales 1994*. National Rivers Authority Water Quality Series No 22, April 1995. HMSO.

Environment Agency (1996). *Bathing Water Quality in England and Wales in 1996 - A Summary Report*. January 1996. Environment Agency.

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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