

**2000  
BATHING WATERS REPORT WALES**

For further copies of this report please contact:

Regional Water Quality Planning  
Environment Agency Wales  
Rivers House  
St. Mellons Business Park  
St. Mellons  
Cardiff CF3 0LT

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# ENVIRONMENT AGENCY WALES

## 2000 BATHING WATER SURVEY

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**ENVIRONMENT AGENCY WALES**  
**2000 BATHING WATER SURVEY**

**1. BACKGROUND**

- 1.1 The Environment Agency (the Agency) was created on April 1 1996, 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).
- 1.2 EC Directives are agreements between the EC and Member States. Thus the interpretation of them at national level, their adoption into national law, and accountability for compliance with the terms of the directives, lies entirely with National Governments.
- 1.3 The EC Bathing Waters Directive (76/160/EEC) was intended primarily to safeguard public health and the environment by reducing the pollution of bathing waters and protecting such waters against further deterioration. Under the Water Act 1989, the Environment Agency has inherited the responsibility of carrying out the necessary monitoring programmes in relation to certain water-related directives, which include the Bathing Water Directive, in England and Wales. The results from these monitoring programmes in Wales are submitted to the National Assembly for Wales (NAW) and the Department of Transport, Environment and the Regions (DETR). It is for such Government Departments, however, to interpret this and other such EC Directives within England and Wales, and it follows from the preceding paragraph that only they can assess 'compliance' or otherwise with the Directives.
- 1.4 When Directive 76/160/EEC was first adopted, only a limited number of bathing waters were identified by the UK Government. A large list of bathing waters has since been added to the initial list and all these are included in the Government's report to the EC. If bathing waters are not included in that report then they do not come within the terms of the Directive and thus, by definition, cannot be said to comply, or fail to comply, with its conditions. However, a number of non-identified bathing waters have in the past been routinely monitored by one of the Agency's predecessors, the NRA, and the results included in this report for comparison.
- 1.5 The NRA decided to cease all non-EC bathing water monitoring from 1994 because it considered that it had sufficient information to characterise these waters. The only exceptions to this are any bathing waters nominated by local councils for consideration for EC Directive "identification". However, in Wales, to enable local councils to continue to apply for the various Bathing Beach awards at non-EC bathing waters, an initiative, now co-ordinated by the Environment Agency and involving the National Assembly for Wales, Wales Tourist Board, Keep Wales Tidy, Dwr Cymru Welsh Water (DCWW), Hyder Environmental and the maritime local authorities, has been set up to collect the necessary data. 2000 was the seventh year of this initiative, the results of which are

included in this report. It is hoped that the initiative will continue next year, further details of which are given in section 4.

- 1.6 The Directive specifies a range of water quality standards that should be achieved in identified bathing waters and indicates the required monitoring frequency. These standards fall into two categories, (mandatory) imperative (I) and guideline (G) standards. Details of the requirements for compliance with these are given in Appendix 1.
- 1.7 The Bathing Waters (Classification) Regulations 1991 were published as a Statutory Instrument on 9th August 1991, bringing the regulations into UK law. The "Notice" and "Directions" were received in 1992.
- 1.8 The Government currently uses the faecal and total coliforms "I" standards as the basis for determining UK compliance with the Directive. Additional microbiological "I" standards concern the occurrence of Salmonella and Enteroviruses. Physico-chemical "I" standard parameters are tested as indicated in Appendix 1. The occurrence of Faecal Streptococci is also examined, although this parameter only has a non-mandatory "G" standard in the Directive. Environment Agency Wales has been granted a derogation for transparency (see Appendix 1) at all its bathing waters from 1991.
- 1.9 Compliance with the "G" standards is not mandatory but the Directive states that Member States should "endeavour" to observe them as guidelines. The "G" standard compliance requirements are specified in Appendix 1.

## 2. SAMPLING PROGRAMME

- 2.1 The 75 bathing waters reported for Wales in 2000 which are currently identified by the UK Government as falling within the scope of the Directive are displayed on Figure 1 and listed in Appendix 2. This also shows West Kirby, which is under Environment Agency Wales operational control but lies outside Wales.
- 2.2 The Government requires that these bathing waters are monitored in accordance with the requirements of the Bathing Waters Directive and the data is reported to the NAW and DETR during October of each year. This report summarises the results of the monitoring carried out during the 2000 bathing season.
- 2.3 The non-identified bathing waters included in the initiative described in section 1.5 and monitored by the local authorities listed in Appendix 3.
- 2.4 A summary poster on the current status of Directive 76/160/EEC compliance in England and Wales will be published in February 2001 by the Environment Agency.

### 3 2000 MONITORING PROGRAMME FOR BATHING WATERS IDENTIFIED AS FALLING WITHIN THE TERMS OF THE BATHING WATERS DIRECTIVE

3.1 Monitoring is confined to the period 1st May - 30th September, which includes two weeks sampling prior to the DETR identified bathing season (15 May - 30th September).

3.2 Guidance has been issued by DETR indicating the frequency of monitoring required for each parameter. This guidance has been used to develop the monitoring programme within Wales. DETR specified that faecal streptococci, faecal and total coliforms should be analysed on at least 20 occasions during the bathing season. Since 1992 the reported faecal and total coliform results have been "confirmed"\* instead of the "presumptive" results which had been reported in previous years. The need for enterovirus and salmonella sampling is determined using a 'trigger' involving weekly aesthetic surveys of each beach to determine if any deterioration could be due to the presence of sewage pollution. Those which fail the 'trigger' are sampled twice for enterovirus and salmonella in addition to the beaches that had failed to achieve the faecal/total coliform standards during the previous year. Details of this "trigger" are contained in Appendix 4.

pH is only required to be measured once during the season and the physicochemical parameters are assessed on 20 occasions during the bathing season.

3.3 Table 1 shows compliance of identified bathing waters with faecal and total coliforms "I" & "G" standards and with faecal streptococci "G" standards as reported by NAW/DETR in 2000. The number of samples taken at each beach, the number of exceedences against "I" and "G" standards and the compliance ("G" guideline and imperative, "I" imperative or "F" failure) are given for each determinand at each beach. As well as compliance with each determinand, the table shows the overall compliance of the beach. The table also shows a summary of Salmonella and Enterovirus sampling including the number of samples taken, the number of positive Salmonella results and the minimum and maximum Enterovirus values in Plaque Forming Units per 10 litres (PFU/10L). At beaches where Salmonella and Viruses have been sampled, letters a to d indicate the reasons for sampling. A key below the table explains these reasons.

3.4 Table 2 shows compliance of identified Bathing Waters with "I" standards for Faecal and Total Coliforms from 1986 to 2000.

3.5 Table 3 shows compliance of identified Bathing Waters with "G" standards for Faecal Streptococci, Faecal and Total Coliforms from 1990 to 2000. This is the water quality standard required for Blue Flag compliance.

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\* confirmed refers to the confirmation of the coliform test which requires further analysis of all samples to substantiate the result.

#### **4. 2000 MONITORING PROGRAMME FOR BATHING WATERS NOT IDENTIFIED UNDER THE TERMS OF THE BATHING WATERS DIRECTIVE**

- 4.1 The NRA ceased monitoring non-identified waters from 1994 but co-ordinated an initiative to help to ensure that the necessary data was available to enable local councils to nominate waters for Bathing Water awards. In 2000, the initiative was funded largely by a European Community grant under the INTERREG programme along with matched funding from Wales Tourist Board and the National Assembly for Wales with Environment Agency Laboratory in Llanelli carrying out most of the analyses under contract. Local councils carried out the sampling to Agency specifications. Swansea Council did not take part in this initiative although they collected samples and had them analysed at Carmarthen Public Health Laboratory.

A total of 114 non-identified bathing waters in Wales were monitored during 2000. These results have been reported to the National Assembly for Wales. Due to limited resources it was not possible to report "confirmed" faecal and total coliform results for all samples. Most of the samples, which exceeded the 2000/100ml faecal coliform standard or the 10000/100ml total coliform standard, were "confirmed".

- 4.2 Table 4 shows compliance of the Non-EC identified Bathing Waters with Faecal and Total Coliform "I" and "G" standards and with Faecal Streptococci "G" standards in 2000. The number of samples taken at each beach, the number of failures against "I" and "G" standards and the compliance ("G" guideline and imperative, "I" imperative or "F" failure) are given for each determinand at each beach. As well as compliance with each determinand the table shows the overall compliance of the beach.
- 4.3 Tables 5 & 6 show compliance of Non-EC identified Bathing Waters with "I" and "G" standards respectively. Table 5 shows compliance with "I" standards for Faecal and Total Coliforms from 1986 to 2000 and table 6 show compliance with "G" standards for Faecal Streptococci, Faecal and Total Coliforms from 1990 to 2000.

#### **5 BLUE FLAG AND SEASIDE AWARDS**

- 5.1 The European Blue Flag Scheme is organised by the Federation of Environmental Education in Europe (FEEE). In Wales it is administered by the charity Keep Wales Tidy (KWT), part of the Tidy Britain Group (TBG). European Blue Flags are only awarded to those EC identified beaches where an application has been made by the local authority, or another interested party, and they meet the strict water quality and land-based requirements of the award scheme.

The water quality is judged on the results of the analyses of samples taken during the previous bathing season. The 2000 awards required compliance with "guideline" value water quality standards of the Directive for total and faecal coliforms and for faecal streptococci. In Wales 21 beaches were awarded Blue Flags in 2000. These were as follows;

- ★ Llanddona,
- ★ Newborough, Llanddwyn
- ★ Pwllheli, Marian y De
- ★ Barmouth
- ★ Borth
- ★ Aberystwyth North, Traeth y Gogledd
- ★ New Quay, Traeth y Harbwr
- ★ Tre-saith
- ★ Aberporth
- ★ Poppit Sands
- ★ St Davids, Whitesands Bay

- ★ Newgale
- ★ Lydstep
- ★ Tenby South
- ★ Tenby Castle
- ★ Amroth
- ★ Pembrey Country Park, Cefn Sidan
- ★ Port Eynon
- ★ Caswell Bay
- ★ Langland Bay
- ★ Bracelet Bay
- ★ Porthcawl, Rest Bay

5.2 The Seaside Award scheme was introduced in 1992 and is also administered by KWT. Both EC identified and other beaches are eligible for application of these awards. There are two categories of award, Resort and Rural, depending on whether the beach is part of a managed tourist resort or whether it is a smaller beach with limited facilities, but still has clean water.

Water quality is again judged on the results of the analyses of samples taken during the previous bathing season. In order to be eligible for a "Seaside Award", the beach must meet at least the mandatory standard for faecal and total coliforms, along with the specified land-based criteria. In 2000, 97 beaches in Wales received Seaside Awards.

5.3 The Green Coast was piloted at nine beaches throughout Wales during 1998 and the first awards were made in 1999. The award is backed by the Green Sea partnership, and is being developed by the Keep Wales Tidy Campaign. The aim of the award is to recognise those beaches of high environmental quality, without the level of infrastructure and intensive management generally associated with more urban, traditional seaside resort beaches. In order to receive the award, beaches must attain guideline water quality, and have effective and appropriate management, to ensure protection of the natural environment. In 2000, 24 beaches in Wales were awarded the Green Coast Award. These were as follows;

- |   |                            |
|---|----------------------------|
| ★ Cemlyn                                | ★ St Davids, Caerfai Bay   |
| ★ Rhydwyn, Porth Swtan, Church Bay      | ★ St Brides Haven          |
| ★ Llanfaethlu, Porth Trwyn              | ★ Martins haven            |
| ★ Rhoscolyn, Borth Wen                  | ★ Marloes Sands            |
| ★ Rhoscolyn, Silver Bay                 | ★ Wesdale Bay              |
| ★ Rhosneigr, Traeth Llydan, Broad Beach | ★ Broad Haven, Bosherton   |
| ★ Llanfaelog, Porth Nobla               | ★ Barafundle Bay           |
| ★ Llanfaelog, Porth Tre Castell         | ★ Manorbier                |
| ★ Harlech                               | ★ Rhossili                 |
| ★ Bennar, Morfa Dyffryn                 | ★ Mewslade Bay nr Rhossili |
| ★ Aber Eiddi                            | ★ Tor Bay nr Penmaen       |
|   | ★ Three Cliffs Bay         |
|   | ★ Pwll-du, nr Bishopston   |



## **6 REMEDIAL MEASURES REQUIRED TO MEET LONG TERM OBJECTIVE**

- 6.1 The long-term objective is for all identified bathing waters to comply with the mandatory standards laid down in the Directive. In order to facilitate this the former NRA Welsh Region identified and prioritised the remedial works required at identified bathing waters to ensure that Dwr Cymru Welsh Water (DCWW) discharges were not the cause of failure of the faecal and total coliform standards by the end of 1995. This deadline was later relaxed to 1999 for the Swansea Bay area.

The necessary improvements have been one of the main drivers behind DCWW's investment programme during the last 5 years. Now these improvements are nearing completion, it is clear that in some cases other non DCWW discharges, riverine and other diffuse inputs are causing problems for beach compliance.

It must be emphasised that compliance is considered an unreliable indication of trends due to the statistical limitations of such a small data set. Variation in compliance from year to year therefore does not necessarily indicate genuine improvements or deteriorations. There will always be some beaches which change their status because they are marginal failures or passes.

- 6.2 Appendix 6 shows the statistical risk of non compliance of all beaches with the 'I' and 'G' standards. The data used to calculate this risk, covers the period 1990 – 2000 (inclusive) for EC beaches and 1994 – 2000 for Non EC beaches, where the data is available.

These lists highlight, which beaches in Wales are at risk of failing "I" and "G" standards in the future, and assigns a percentage probability of this risk.

### **6.3 Green Sea Initiative**

This initiative is co-ordinated by the Wales Tourist Board and comprises membership by those bodies with an interest in the quality of the coastal environment around Wales. This includes Local Councils, Industry including the water company DCWW, local environmental groups, Countryside Commission for Wales (CCW), the Environment Agency along with several others.

The overall objective is to work together to improve the coastal environment. This obviously includes water quality around the Welsh coast. The organisation was formed in 1995 and has, as one of its objectives, to improve Guideline compliance by tackling the issues of diffuse pollution. This will be achieved through continued work with local communities and local Green Sea groups.

## **7. SUMMARY TABLE OF RESULTS**

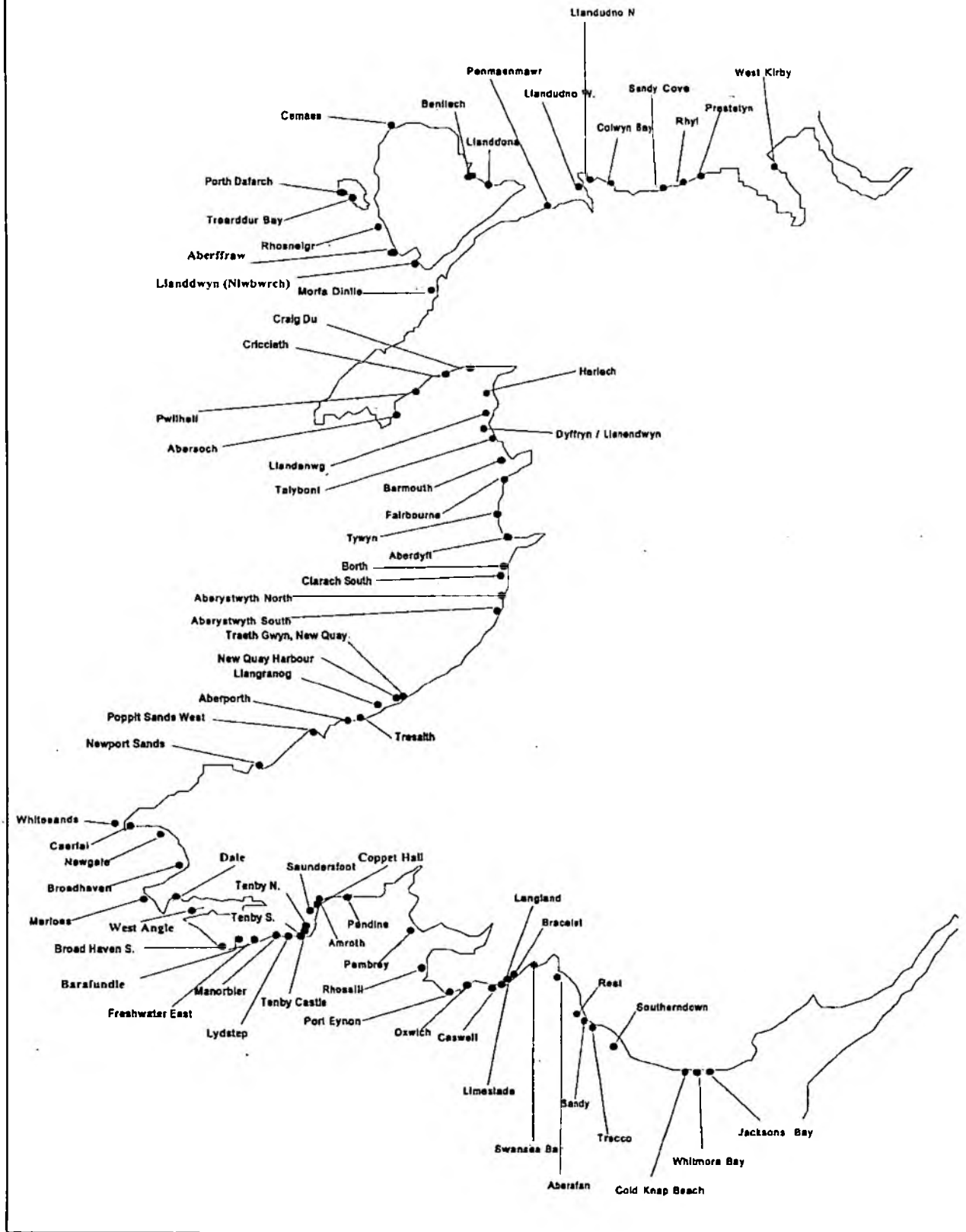
Summary table showing compliance with the faecal and total coliform and faecal streptococci standards

| Bathing Water |                      | Number | "I" standard Compliance | Percent | "G" standard Compliance | Percent |
|---------------|----------------------|--------|-------------------------|---------|-------------------------|---------|
| EC            | Wales                | 75     | 74                      | 98.7    | 32                      | 42.7    |
|               | Wales and West Kirby | 76     | 75                      | 98.7    | 33                      | 43.4    |
| NON EC        | Wales                | 114    | 89                      | 78.1    | 32                      | 28.1    |

Note: "I" and "G" standards are explained in appendix 1.

All samples were "confirmed" for identified waters, but at non-identified waters only those samples which exceeded the 2000/100ml faecal coliform standard or the 10000/100ml total coliform standard were "confirmed".

Figure 1 - Location of Identified Bathing Water Sampling Sites in 2000



**Table 1. Compliance of Identified Bathing Waters with "I" & "G" Values in 2000 for Total Coliforms, Faecal Coliforms and Faecal Streps and results for Salmonella & Viruses**

(G= Guideline and Imperative pass; I=Imperative pass; F= Imperative fail)

| Bathing Water        | Total Coliforms |              |              | Faecal Coliforms |             |             | Faecal Streps |            |             | Overall Compliance G,I,F. | Salmonella   |            | Viruses PFU / 10 l |                 |             |           |           |
|----------------------|-----------------|--------------|--------------|------------------|-------------|-------------|---------------|------------|-------------|---------------------------|--------------|------------|--------------------|-----------------|-------------|-----------|-----------|
|                      | No. Samples     | No. Fail "I" | No. Fail "G" | Compliance       | No. Samples | No Fail "I" | No Fail "G"   | Compliance | No. Samples |                           | No. Fail "G" | Compliance | No. Samples        | No. +ve results | No. Samples | Min Value | Max Value |
| Jacksons Bay         | 20              | 0            | 9            | I                | 20          | 1           | 18            | I          | 20          | 5                         | F            | I          | 2(a)               | 0               | 0           |           |           |
| Whitmore Bay Central | 20              | 0            | 5            | I                | 20          | 1           | 15            | I          | 20          | 5                         | F            | I          | 2(a)               | 0               | 0           |           |           |
| Cold Knap            | 20              | 0            | 2            | G                | 20          | 0           | 8             | I          | 20          | 0                         | G            | I          | 1(d)               | 0               | 0           |           |           |
| Southerndown         | 20              | 0            | 7            | I                | 20          | 0           | 14            | I          | 20          | 1                         | G            | I          | 0                  |                 | 0           |           |           |
| Trecco Bay           | 20              | 0            | 1            | G                | 20          | 0           | 5             | I          | 20          | 4                         | F            | I          | 2(a)               | 0               | 0           |           |           |
| Sandy Bay            | 20              | 0            | 2            | G                | 20          | 0           | 6             | I          | 20          | 2                         | G            | I          | 0                  |                 | 0           |           |           |
| Rest Bay             | 20              | 0            | 1            | G                | 20          | 0           | 2             | G          | 20          | 0                         | G            | G          | 0                  |                 | 0           |           |           |
| Aberafan Slip        | 20              | 1            | 6            | I                | 20          | 1           | 13            | I          | 20          | 5                         | F            | I          | 0                  |                 | 0           |           |           |
| Swansea Bay          | 20              | 0            | 4            | G                | 20          | 1           | 15            | I          | 20          | 4                         | F            | I          | 2(a)               | 0               | 0           |           |           |
| Bracelet Bay         | 20              | 0            | 0            | G                | 20          | 0           | 0             | G          | 20          | 0                         | G            | G          | 0                  |                 | 0           |           |           |
| Limeslade            | 21              | 0            | 5            | I                | 21          | 1           | 8             | I          | 21          | 3                         | F            | I          | 0                  |                 | 2(a)        | <1        | <1        |
| Langland West        | 20              | 0            | 3            | G                | 20          | 0           | 6             | I          | 20          | 0                         | G            | I          | 0                  |                 | 0           |           |           |
| Caswell Central      | 20              | 0            | 1            | G                | 20          | 0           | 1             | G          | 20          | 1                         | G            | G          | 0                  |                 | 0           |           |           |
| Oxwich West          | 20              | 0            | 0            | G                | 20          | 0           | 2             | G          | 20          | 0                         | G            | G          | 2(a)               | 0               | 0           |           |           |
| Port Eynon West      | 20              | 0            | 0            | G                | 20          | 0           | 2             | G          | 20          | 1                         | G            | G          | 0                  |                 | 0           |           |           |
| Rhossili at Hillend  | 20              | 0            | 0            | G                | 20          | 0           | 1             | G          | 20          | 0                         | G            | G          | 2(a)               | 0               | 0           |           |           |
| Pembrey              | 20              | 0            | 0            | G                | 20          | 0           | 3             | G          | 20          | 0                         | G            | G          | 0                  |                 | 0           |           |           |
| Pendine East         | 20              | 0            | 2            | G                | 20          | 0           | 7             | I          | 20          | 2                         | G            | I          | 0                  |                 | 0           |           |           |
| Amroth Central       | 20              | 0            | 2            | G                | 20          | 0           | 5             | I          | 20          | 1                         | G            | I          | 0                  |                 | 0           |           |           |
| Coppet Hall          | 20              | 0            | 1            | G                | 20          | 0           | 5             | I          | 20          | 2                         | G            | I          | 0                  |                 | 0           |           |           |
| Saundersfoot         | 20              | 0            | 1            | G                | 20          | 0           | 7             | I          | 20          | 3                         | F            | I          | 0                  |                 | 0           |           |           |
| Tenby North          | 20              | 0            | 1            | G                | 20          | 0           | 6             | I          | 20          | 2                         | G            | I          | 0                  |                 | 0           |           |           |
| Castle Beach Tenby   | 20              | 0            | 1            | G                | 20          | 0           | 4             | G          | 20          | 2                         | G            | G          | 0                  |                 | 0           |           |           |
| Tenby South          | 20              | 0            | 0            | G                | 20          | 0           | 3             | G          | 20          | 1                         | G            | G          | 0                  |                 | 0           |           |           |

| Bathing Water             | Total Coliforms |              |              |            | Faecal Coliforms |             |             |            | Faecal Streps |             |            | Overall Compliance G,I,F. | Salmonella  |                 | Viruses PFU / 10 l |           |
|---------------------------|-----------------|--------------|--------------|------------|------------------|-------------|-------------|------------|---------------|-------------|------------|---------------------------|-------------|-----------------|--------------------|-----------|
|                           | No. Samples     | No. Fail "I" | No. Fail "G" | Compliance | No. Samples      | No Fail "I" | No Fail "G" | Compliance | No. Samples   | No Fail "G" | Compliance |                           | No. Samples | No. +ve results | No. Samples        | Min Value |
| Lydstep North Beach       | 20              | 0            | 0            | G          | 20               | 0           | 1           | G          | 20            | 1           | G          | G                         | 0           |                 | 0                  |           |
| Manorbrier Beach          | 20              | 0            | 0            | G          | 20               | 0           | 1           | G          | 20            | 1           | G          | G                         | 0           |                 | 0                  |           |
| Freshwater East           | 20              | 0            | 1            | G          | 20               | 0           | 3           | G          | 20            | 1           | G          | G                         | 0           |                 | 0                  |           |
| Barafundle                | 20              | 0            | 0            | G          | 20               | 0           | 1           | G          | 20            | 0           | G          | G                         | 0           |                 | 0                  |           |
| Broadhaven South          | 20              | 0            | 0            | G          | 20               | 0           | 0           | G          | 20            | 0           | G          | G                         | 0           |                 | 0                  |           |
| West Angle                | 20              | 0            | 1            | G          | 20               | 0           | 3           | G          | 20            | 1           | G          | G                         | 0           |                 | 0                  |           |
| Dale                      | 20              | 0            | 1            | G          | 20               | 0           | 3           | G          | 20            | 1           | G          | G                         | 0           |                 | 0                  |           |
| Marloes Sands             | 20              | 0            | 0            | G          | 20               | 0           | 1           | G          | 20            | 1           | G          | G                         | 0           |                 | 0                  |           |
| Broadhaven Central        | 20              | 0            | 0            | G          | 20               | 0           | 5           | I          | 20            | 3           | F          | I                         | 0           |                 | 0                  |           |
| Newgale Central           | 20              | 0            | 0            | G          | 20               | 0           | 1           | G          | 20            | 0           | G          | G                         | 0           |                 | 0                  |           |
| Caerfai Bay               | 20              | 0            | 0            | G          | 20               | 0           | 0           | G          | 20            | 1           | G          | G                         | 0           |                 | 0                  |           |
| Whitesands Central        | 20              | 0            | 0            | G          | 20               | 0           | 0           | G          | 20            | 0           | G          | G                         | 0           |                 | 0                  |           |
| Newport North             | 20              | 0            | 1            | G          | 20               | 0           | 5           | I          | 20            | 0           | G          | I                         | 0           |                 | 0                  |           |
| Poppit West               | 20              | 0            | 2            | G          | 20               | 0           | 3           | G          | 20            | 0           | G          | G                         | 0           |                 | 0                  |           |
| Aberporth                 | 20              | 0            | 0            | G          | 20               | 0           | 0           | G          | 20            | 0           | G          | G                         | 0           |                 | 0                  |           |
| Tresaith                  | 20              | 0            | 1            | G          | 20               | 0           | 3           | G          | 20            | 2           | G          | G                         | 0           |                 | 0                  |           |
| Centre of Llangrannog Bay | 20              | 0            | 7            | I          | 20               | 1           | 12          | I          | 20            | 5           | F          | I                         | 0           |                 | 0                  |           |
| Newquay Harbour           | 20              | 0            | 0            | G          | 20               | 0           | 2           | G          | 20            | 1           | G          | G                         | 0           |                 | 0                  |           |
| New Quay                  | 20              | 1            | 2            | G          | 20               | 1           | 5           | I          | 20            | 4           | F          | I                         | 0           |                 | 0                  |           |
| Aberystwyth South         | 20              | 0            | 8            | I          | 20               | 0           | 8           | I          | 20            | 1           | G          | I                         | 0           |                 | 0                  |           |
| Aberystwyth North         | 20              | 0            | 2            | G          | 20               | 0           | 7           | I          | 20            | 0           | G          | I                         | 0           |                 | 0                  |           |
| Borth                     | 20              | 0            | 1            | G          | 20               | 0           | 5           | I          | 20            | 1           | G          | I                         | 0           |                 | 0                  |           |
| Aberdyfi                  | 20              | 0            | 7            | I          | 20               | 1           | 14          | I          | 20            | 4           | F          | I                         | 0           |                 | 0                  |           |
| Clarach South             | 20              | 0            | 5            | I          | 20               | 1           | 6           | I          | 20            | 5           | F          | I                         | 0           |                 | 0                  |           |
| Tywyn                     | 20              | 0            | 3            | G          | 20               | 0           | 9           | I          | 20            | 5           | F          | I                         | 0           |                 | 0                  |           |

| Bathing Water          | Total Coliforms |              |              | Faecal Coliforms |             |             | Faecal Streps |            |             | Overall Compliance G,I,F. | Salmonella  |            | Viruses PFU / 10 l |                 |             |           |           |
|------------------------|-----------------|--------------|--------------|------------------|-------------|-------------|---------------|------------|-------------|---------------------------|-------------|------------|--------------------|-----------------|-------------|-----------|-----------|
|                        | No. Samples     | No. Fail "I" | No. Fail "G" | Compliance       | No. Samples | No Fail "I" | No Fail "G"   | Compliance | No. Samples |                           | No Fail "G" | Compliance | No. Samples        | No. +ve results | No. Samples | Min Value | Max Value |
| Fairbourne             | 20              | 1            | 2            | G                | 20          | 0           | 6             | I          | 20          | 1                         | G           | I          | 0                  |                 | 0           |           |           |
| Barmouth               | 20              | 0            | 2            | G                | 20          | 0           | 4             | G          | 20          | 1                         | G           | G          | 0                  |                 | 0           |           |           |
| Talybont               | 20              | 0            | 1            | G                | 20          | 0           | 4             | G          | 20          | 0                         | G           | G          | 0                  |                 | 0           |           |           |
| Duffryn                | 20              | 0            | 3            | G                | 20          | 0           | 9             | I          | 20          | 2                         | G           | I          | 0                  |                 | 0           |           |           |
| Llandanwg Central      | 20              | 0            | 4            | G                | 20          | 2           | 11            | F          | 20          | 7                         | F           | F          | 0                  |                 | 0           |           |           |
| Harlech North          | 20              | 0            | 3            | G                | 20          | 0           | 6             | I          | 20          | 1                         | G           | I          | 0                  |                 | 0           |           |           |
| Craig Du Beach Central | 20              | 0            | 4            | G                | 20          | 0           | 10            | I          | 20          | 2                         | G           | I          | 0                  |                 | 0           |           |           |
| Criccieth East         | 20              | 0            | 2            | G                | 20          | 0           | 7             | I          | 20          | 2                         | G           | I          | 0                  |                 | 0           |           |           |
| Pwllheli               | 20              | 0            | 0            | G                | 20          | 0           | 5             | I          | 20          | 1                         | G           | I          | 0                  |                 | 0           |           |           |
| Abersoch South         | 20              | 0            | 0            | G                | 20          | 0           | 4             | G          | 20          | 3                         | F           | I          | 0                  |                 | 0           |           |           |
| Morfa Dinlle           | 20              | 0            | 0            | G                | 20          | 0           | 4             | G          | 20          | 1                         | G           | G          | 0                  |                 | 0           |           |           |
| Llanddwyn              | 20              | 0            | 0            | G                | 20          | 0           | 3             | G          | 20          | 0                         | G           | G          | 0                  |                 | 0           |           |           |
| Aberffraw              | 20              | 0            | 1            | G                | 20          | 1           | 7             | I          | 20          | 3                         | F           | I          | 0                  |                 | 0           |           |           |
| Rhosneigr              | 20              | 0            | 0            | G                | 20          | 0           | 0             | G          | 20          | 0                         | G           | G          | 0                  |                 | 0           |           |           |
| Trearddur Bay          | 20              | 0            | 1            | G                | 20          | 0           | 5             | I          | 20          | 4                         | F           | I          | 0                  |                 | 0           |           |           |
| Porth Dafarch          | 20              | 0            | 0            | G                | 20          | 0           | 6             | I          | 20          | 2                         | G           | I          | 0                  |                 | 2(a)        | <1        | <1        |
| Cemaes                 | 20              | 0            | 6            | I                | 20          | 0           | 13            | I          | 20          | 3                         | F           | I          | 0                  |                 | 0           |           |           |
| Benllech               | 20              | 1            | 2            | G                | 20          | 1           | 6             | I          | 20          | 1                         | G           | I          | 0                  |                 | 0           |           |           |
| Llanddona              | 20              | 0            | 2            | G                | 20          | 0           | 3             | G          | 20          | 2                         | G           | G          | 0                  |                 | 0           |           |           |
| Penmaenmawr            | 20              | 0            | 1            | G                | 20          | 0           | 4             | G          | 20          | 1                         | G           | G          | 2(b)               | 0               | 2(b)        | <1        | <1        |
| Llandudno West         | 20              | 0            | 2            | G                | 20          | 0           | 6             | I          | 20          | 5                         | F           | I          | 0                  |                 | 0           |           |           |
| Llandudno North        | 20              | 0            | 1            | G                | 20          | 0           | 8             | I          | 20          | 3                         | F           | I          | 0                  |                 | 0           |           |           |
| Colwyn Bay             | 20              | 0            | 3            | G                | 20          | 1           | 9             | I          | 20          | 6                         | F           | I          | 0                  |                 | 0           |           |           |
| Sandy Cove             | 20              | 0            | 2            | G                | 20          | 1           | 4             | G          | 20          | 2                         | G           | G          | 0                  |                 | 0           |           |           |
| Rhyl                   | 20              | 0            | 9            | I                | 20          | 0           | 15            | I          | 20          | 6                         | F           | I          | 0                  |                 | 0           |           |           |
| Prestatyn Central      | 20              | 0            | 1            | G                | 20          | 0           | 10            | I          | 20          | 1                         | G           | I          | 0                  |                 | 0           |           |           |
| West Kirby             | 20              | 0            | 1            | G                | 20          | 0           | 1             | G          | 20          | 1                         | G           | G          | 0                  |                 | 0           |           |           |

Reasons for Virus and Salmonella Sampling

(a) Positive Salmonella or Virus Result in 1999

(b) Non-compliant with "I" standards in 1999

(c) Sewage Debris Trigger

(d) Area operational decision

**Table 2. Summary of Identified Bathing Waters sampled between 1986 and 2000.  
Overall compliance with Imperative (I) standards for Faecal and Total Coliforms.**

| Bathing Water   | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Jacksons Bay    | F  | F  | F  | F  | F  | F  | F  | P  | F  | P  | F  | P  | P  | P  | P  |
| Whitmore Bay    | F  | F  | F  | F  | F  | P  | F  | P  | F  | P  | P  | P  | P  | P  | P  |
| Cold Knap       | F  | F  | F  | P  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Southerndown    | F  | P  | F  | P  | P  | P  | P  | P  | P  | P  | P  | F  | P  | P  | P  |
| Trecco Bay      | F  | F  | P  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Sandy Bay       | F  | F  | F  | P  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Rest Bay        | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Aberafan        | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Swansea Bay     | F  | F  | F  | P  | F  | P  | F  | F  | P  | F  | F  | F  | F  | P  | P  |
| Bracelet Bay    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Limeslade Bay   | F  | F  | P  | F  | P  | P  | P  | P  | F  | P  | P  | F  | P  | P  | P  |
| Langland Bay    | F  | P  | P  | F  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  | P  |
| Caswell Bay     | P  | F  | P  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  | P  | P  |
| Oxwich Bay      | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Port Eynon Bay  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Rhossili        | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Pembrey         | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Pendine         | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Amroth          | F  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | F+ | P  | P  | P  |
| Coppet Hall     |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Saundersfoot    | P  | F  | P  | P  | F  | P  | P  | P  | F  | P  | P  | P+ | P  | P  | P  |
| Tenby North     | P  | F  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P+ | P  | P  | P  |
| Tenby Castle    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  |
| Tenby South     | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P+ | P  | P  | P  |
| Lydstep North   |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Manobier        |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Freshwater East |    |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  |

| Bathing Water        | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Barafundle           |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Broad Haven South    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| West Angle           |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Dale                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Marloes              |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Broadhaven           | F  | P  | P  | P  | P  | P  | P  | P  | F  | P  | P  | P+ | P  | P  | P  |
| Newgale              | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Caerfai              |    |    |    |    |    |    |    |    |    |    |    | P+ | P  | P  | P  |
| Whitesands           | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P+ | P  | P  | P  |
| Newport North        | P  | P  | P  | P  | P  | P  | P  | F  | F  | P  | P  | P  | P  | P  | P  |
| Poppit Sands         |    |    |    |    |    |    |    |    |    |    | P  | P  | F  | P  | P  |
| Aberporth            |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  |
| Tresaith             |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  |
| Llangranog           |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| New Quay Harbour     |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Traeth Gwyn New Quay | P  | P  | P  | P  | P  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  |
| Aberystwyth South    | F  | F  | P  | P  | F  | P  | F  | F  | F  | P  | P  | P  | P  | P  | P  |
| Aberystwyth North    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Clarach South        |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Borth                | P  | P  | P  | P  | P  | P  | P  | P  | P  | F  | P  | P  | P  | P  | P  |
| Aberdyfi             |    |    |    |    | F  | P  | F  | F  | P  | F  | F  | P  | P  | P  | P  |
| Tywyn                | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Fairbourne           | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Barmouth             | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Talybont             |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  |
| Dyffryn/Llanendwyn   |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  |
| Llandanwg            | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | F  |
| Harlech              | P  | P  | P  | P  | P  | P  | P  | P  | P  | F  | F  | P  | P  | P  | P  |
| Craig Du Beach       | F  | F  | P  | P  | P  | P  | F  | P  | F  | P  | P  | P  | P  | P  | P  |
| Criccieth            | P  | F  | P  | P  | F  | P  | F  | P  | F  | P  | P  | P  | F  | P  | P  |



| Bathing Water                            | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Pwllheli                                 | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Abersoch                                 | P  | P  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | F  | P  | P  |
| Morfa Dinlle                             |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Llanddwyn                                |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Aberffraw                                |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Rhosneigr                                |    |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Trearddur Bay                            | F  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Porth Dafarch                            |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Cemaes Bay                               |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Benllech                                 | P  | F  | P  | P  | F  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Llanddona                                |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Penmaenmawr                              |    |    |    |    |    |    |    |    |    | F  | P  | P  | P  | F  | P  |
| Llandudno West Shore                     | F  | F  | F  | F  | F  | F  | F  | F  | F  | P  | P  | P  | P  | P  | P  |
| Llandudno North Shore                    | P  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Colwyn Bay                               | P  | P  | P  | P  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  | P  |
| Sandy Cove                               | F  | F  | F  | F  | F  | F  | F  | P  | P  | P  | P  | P  | P  | P  | P  |
| Rhyl                                     | F  | F  | F  | F  | F  | F  | F  | F  | P  | F  | P  | P  | P  | P  | P  |
| Prestatyn                                | F  | P  | P  | P  | F  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  |
| * West Kirby                             |    |    |    |    |    | F  | F  | F  | P  | F  | F  | P  | P  | P  | P  |
| Total No. Waters in Wales                | 47 | 47 | 48 | 48 | 50 | 51 | 50 | 50 | 50 | 55 | 56 | 64 | 68 | 70 | 75 |
| Total No. Pass in Wales                  | 23 | 28 | 37 | 40 | 35 | 45 | 39 | 42 | 38 | 49 | 52 | 60 | 64 | 69 | 74 |
| % Pass in Wales                          | 49 | 60 | 77 | 83 | 70 | 88 | 76 | 82 | 76 | 89 | 91 | 94 | 94 | 99 | 99 |
| Total No. Waters in Wales and West Kirby | 47 | 47 | 48 | 48 | 50 | 51 | 51 | 51 | 51 | 56 | 57 | 65 | 69 | 71 | 76 |
| Total No. Pass in Wales and West Kirby   | 23 | 28 | 37 | 40 | 35 | 45 | 39 | 42 | 39 | 49 | 52 | 61 | 65 | 70 | 75 |
| % Pass in Wales and West Kirby           | 49 | 60 | 77 | 83 | 70 | 88 | 76 | 82 | 76 | 88 | 91 | 94 | 94 | 99 | 99 |

# From 1992 all samples were subject to "confirmation" of analysis compared with previous years "presumptive" results  
+1 sample of 20 taken has been discounted due to an exceptional weather waiver.

\* West Kirby is situated in England but falls within the Welsh Region of the Environment Agency, for operational purposes, but is not reported in Environment Agency Wales statistics.

**Table 3. Summary of Identified Bathing Waters sampled between 1990 and 2000. Overall compliance with Guideline (G) standards for Faecal Streptococci, Faecal and Total coliforms.**

| Bathing Water        | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|----------------------|----|----|----|----|----|----|----|----|----|----|----|
| Jacksons Bay         | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Whitmore Bay         | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Cold Knap            | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Southerndown         | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Trecco Bay           | F  | F  | F  | F  | F  | P  | P  | P  | F  | F  | F  |
| Sandy Bay            | F  | F  | F  | F  | F  | P  | F  | F  | F  | F  | F  |
| Rest Bay             | F  | F  | F  | P  | F  | F  | P  | P  | P  | P  | P  |
| Aberafan             | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Swansea Bay          | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Bracelet Bay         | F  | F  | F  | F  | F  | F  | F  | F  | F  | P  | P  |
| Limeslade Bay        | F  | F  | F  | F  | F  | F  | F  | F  | F  | P  | F  |
| Langland Bay         | F  | F  | F  | F  | F  | F  | F  | F  | F  | P  | F  |
| Caswell Bay          | F  | F  | F  | F  | F  | F  | F  | P  | F  | P  | P  |
| Oxwich Bay           | F  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Port Eynon Bay       | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Rhossili             | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Pembrey              | P  | P  | P  | P  | F  | P  | P  | F  | F  | P  | P  |
| Pendine              | F  | F  | F  | P  | F  | F  | F  | F  | P  | P  | F  |
| Amroth               | F  | F  | P  | F  | F  | P  | F  | F  | P  | P  | F  |
| Coppet Hall          |    |    |    |    |    |    |    |    |    |    | F  |
| Saundersfoot         | F  | F  | F  | F  | F  | F  | F  | F  | P  | F  | F  |
| Tenby North          | F  | P  | P  | F  | F  | P  | P  | P  | P  | F  | F  |
| Tenby Castle         |    |    |    |    |    |    |    |    |    | P  | P  |
| Tenby South          | F  | F  | F  | F  | F  | F  | F  | P  | P  | P  | P  |
| Lydstep North        |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Manobier             |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Freshwater East      |    |    |    |    |    |    |    |    |    | P  | P  |
| Barafundle           |    |    |    |    |    |    |    |    |    |    | P  |
| Broad Haven South    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| West Angle           |    |    |    |    |    |    |    |    |    |    | P  |
| Dale                 |    |    |    |    |    |    |    |    |    |    | P  |
| Marloes              |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Broadhaven           | F  | F  | P  | F  | F  | P  | P  | F  | F  | F  | F  |
| Newgate              | P  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  |
| Caerfai              |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Whitesands           | F  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  |
| Newport North        | F  | F  | P  | F  | F  | F  | F  | F  | F  | P  | F  |
| Poppit Sands         |    |    |    |    |    |    | F  | F  | F  | P  | P  |
| Aberporth            |    |    |    |    |    | P  | F  | F  | F  | P  | P  |
| Tresaith             |    |    |    |    |    | F  | F  | P  | F  | P  | P  |
| Llangranog           |    |    |    |    |    |    |    | F  | F  | F  | F  |
| New Quay Harbour     |    |    |    |    |    |    |    |    | P  | P  | P  |
| Traeth Gwyn New Quay | F  | F  | F  | F  | F  | F  | P  | P  | F  | F  | F  |
| Aberystwyth South    | F  | F  | F  | F  | F  | F  | P  | P  | F  | F  | F  |
| Aberystwyth North    | F  | F  | F  | F  | F  | F  | P  | F  | F  | P  | F  |

| Bathing Water                        | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|--------------------------------------|----|----|----|----|----|----|----|----|----|----|----|
| Clarach South                        |    |    |    |    |    |    |    |    | F  | P  | F  |
| Borth                                | F* | F  | P  | F  | P  | F  | F  | F  | F  | P  | F  |
| Aberdyfi                             | F* | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Tywyn                                | F* | F  | F  | F  | F  | F  | P  | F  | F  | F  | F  |
| Fairbourne                           | F* | F  | F  | F  | P  | F  | P  | P  | F  | P  | F  |
| Barmouth                             | F* | F  | F  | F  | P  | P  | P  | P  | P  | P  | P  |
| Talybont                             |    |    |    |    |    | P  | P  | P  | P  | F  | P  |
| Dyffryn/Llanendwyn                   |    |    |    |    |    | P  | P  | P  | F  | P  | F  |
| Llandanwg                            | F* | F  | F  | F  | F  | F  | F  | P  | F  | F  | F  |
| Harlech                              | F* | F  | F  | P  | F  | F  | F  | P  | F  | P  | F  |
| Morfa Bychan                         | F* | F  | F  | F  | F  | F  | P  | P  | F  | P  | F  |
| Criccieth                            | F* | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Pwllheli                             | P* | P  | F  | P  | P  | P  | P  | P  | P  | P  | F  |
| Abersoch                             | F* | F  | F  | F  | F  | P  | F  | P  | F  | F  | F  |
| Morfa Dinlle                         | F* | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Llanddwyn                            |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Aberffraw                            |    |    |    |    |    |    |    |    |    |    | F  |
| Rhosneigr                            | P* | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Trearddur Bay                        | F* | F  | F  | F  | P  | P  | F  | F  | P  | F  | F  |
| Porth Dafarch                        |    |    |    |    |    |    |    |    | P  | F  | F  |
| Cemaes Bay                           |    |    |    |    |    |    |    |    | F  | F  | F  |
| Benllech                             | F* | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Llanddona                            |    |    |    |    |    |    |    | P  | F  | P  | P  |
| Penmaenmawr                          |    |    |    |    |    | F  | F  | F  | F  | F  | P  |
| Llandudno West Shore                 | F* | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Llandudno North Shore                | F* | F  | F  | F  | F  | P  | F  | F  | F  | F  | F  |
| Colwyn Bay                           | F* | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Sandy Cove                           | F* | F  | F  | F  | F  | F  | P  | F  | F  | F  | P  |
| Rhyl                                 | F* | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Prestatyn                            | F* | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| West Kirby                           |    | F  | F  | F  | F  | F  | F  | F  | P  | F  | P  |
| Total No. Waters in Wales            | 50 | 50 | 50 | 50 | 50 | 55 | 56 | 64 | 68 | 70 | 75 |
| Total No. pass in Wales              | 6  | 9  | 13 | 11 | 10 | 21 | 23 | 31 | 25 | 39 | 32 |
| % Pass in Wales                      | 12 | 18 | 26 | 22 | 20 | 38 | 41 | 48 | 37 | 56 | 43 |
| Total No. in Wales & West Kirby      | 50 | 51 | 51 | 51 | 51 | 56 | 57 | 65 | 69 | 71 | 76 |
| Total No. pass in Wales & West Kirby | 6  | 9  | 13 | 11 | 10 | 21 | 23 | 31 | 26 | 39 | 33 |
| % Pass in Wales & West Kirby         | 12 | 18 | 26 | 22 | 30 | 38 | 40 | 48 | 38 | 55 | 43 |

# From 1992 all samples were subject to "confirmation" of analysis compared with previous years "presumptive" results

## West Kirby is situated in England but falls within the Welsh Region of the Environment Agency, for operational purposes, but is not reported in Environment Agency Wales statistics.

\* Compliance against "G" value for total and faecal coliforms only, streptococci results deleted due to AQC protocol problems.

**Table 4.**

**Compliance of Non-Identified Bathing Waters with "I" and "G" Values in 2000**

**(G=Guideline and Imperative pass: I=Imperative pass: F= Imperative fail)**

|    | Bathing Water                    | Total Coliforms |              |              |            | Faecal Coliforms |              |              |            | Faecal Streps. |              |            | Overall Compliance<br>G, I, F |
|----|----------------------------------|-----------------|--------------|--------------|------------|------------------|--------------|--------------|------------|----------------|--------------|------------|-------------------------------|
|    |                                  | No. Samples     | No. Fail "I" | No. Fail "G" | Compliance | No. Samples      | No. Fail "I" | No. Fail "G" | Compliance | No. Samples    | No. Fail "G" | Compliance |                               |
| 1  | Penarth Yacht Club               | 20              | 0            | 20           | I          | 20               | 7            | 20           | F          | 20             | 16           | F          | F                             |
| 2  | Bendricks Beach                  | 20              | 0            | 9            | I          | 20               | 1            | 18           | I          | 20             | 4            | F          | I                             |
| 3  | Watchouse Bay                    | 20              | 1            | 8            | I          | 20               | 2            | 19           | F          | 20             | 6            | F          | F                             |
| 4  | Fontygary Bay                    | 20              | 0            | 3            | G          | 20               | 0            | 7            | I          | 20             | 3            | F          | I                             |
| 5  | Limpert Bay                      | 20              | 0            | 3            | G          | 20               | 0            | 10           | I          | 20             | 2            | G          | I                             |
| 6  | Llantwit Major Beach             | 20              | 0            | 1            | G          | 20               | 0            | 8            | I          | 20             | 4            | F          | I                             |
| 7  | Newton Bay                       | 20              | 0            | 9            | I          | 20               | 1            | 13           | I          | 20             | 8            | F          | I                             |
| 8  | Aberafan East                    | 20              | 0            | 1            | G          | 20               | 0            | 6            | I          | 20             | 0            | G          | I                             |
| 9  | Jersey Marine West               | 20              | 0            | 9            | I          | 20               | 0            | 11           | I          | 20             | 5            | F          | I                             |
| 10 | Swansea Bay County Hall          | 20              | 0            | 3            | G          | 20               | 0            | 11           | I          | 20             | 3            | F          | I                             |
| 11 | Swansea Bay Sketty Lane          | 20              | 1            | 9            | I          | 20               | 3            | 13           | F          | 20             | 9            | F          | F                             |
| 12 | Swansea Bay Black Pill           | 20              | 1            | 13           | I          | 20               | 2            | 17           | F          | 20             | 10           | F          | F                             |
| 13 | Swansea Bay opposite Norton Road | 21              | 3            | 13           | F          | 20               | 2            | 16           | F          | 20             | 9            | F          | F                             |
| 14 | Swansea Bay West Cross           | 21              | 2            | 14           | F          | 20               | 7            | 18           | F          | 20             | 10           | F          | F                             |
| 15 | Mumbles Knab Rock                | 20              | 1            | 4            | G          | 20               | 2            | 6            | F          | 20             | 5            | F          | F                             |

|    | Bathing Water              | Total Coliforms |              |              |            | Faecal Coliforms |              |              |            | Faecal Streps. |              |            | Overall Compliance<br>G, I, F |
|----|----------------------------|-----------------|--------------|--------------|------------|------------------|--------------|--------------|------------|----------------|--------------|------------|-------------------------------|
|    |                            | No. Samples     | No. Fail "I" | No. Fail "G" | Compliance | No. Samples      | No. Fail "I" | No. Fail "G" | Compliance | No. Samples    | No. Fail "G" | Compliance |                               |
| 16 | Mumbles Head Pier          | 20              | 1            | 3            | G          | 20               | 2            | 6            | F          | 20             | 3            | F          | F                             |
| 17 | Pwlldu                     | 20              | 0            | 1            | G          | 20               | 0            | 2            | G          | 20             | 1            | G          | G                             |
| 18 | Three Cliffs Bay West      | 20              | 0            | 1            | G          | 20               | 0            | 2            | G          | 20             | 2            | G          | G                             |
| 19 | Torbay, Crawley Woods      | 20              | 0            | 0            | G          | 20               | 0            | 0            | G          | 20             | 0            | G          | G                             |
| 20 | Mewslade Bay East          | 20              | 0            | 0            | G          | 20               | 0            | 3            | G          | 20             | 0            | G          | G                             |
| 21 | Rhossili                   | 20              | 0            | 0            | G          | 20               | 0            | 2            | G          | 20             | 0            | G          | G                             |
| 22 | Broughton Beach            | 20              | 0            | 6            | I          | 20               | 3            | 7            | F          | 20             | 4            | F          | F                             |
| 23 | Llanelli + Lougher Estuary | 20              | 0            | 6            | I          | 20               | 1            | 9            | I          | 20             | 4            | F          | I                             |
| 24 | Burry Port Beach           | 20              | 0            | 1            | G          | 20               | 0            | 4            | G          | 20             | 0            | G          | G                             |
| 25 | St Ishmael                 | 20              | 1            | 7            | I          | 20               | 2            | 16           | F          | 20             | 7            | F          | F                             |
| 26 | Llanstephen Beach          | 20              | 1            | 9            | I          | 20               | 2            | 16           | F          | 20             | 3            | F          | F                             |
| 27 | Ferryside Beach            | 20              | 1            | 11           | I          | 20               | 2            | 18           | F          | 20             | 9            | F          | F                             |
| 28 | Morfa Bychan (Pendine)     | 20              | 0            | 4            | G          | 20               | 2            | 11           | F          | 20             | 4            | F          | F                             |
| 29 | Wisemans Bridge            | 22              | 0            | 4            | G          | 22               | 2            | 11           | F          | 22             | 7            | F          | F                             |
| 30 | Glen Beach                 | 20              | 0            | 4            | G          | 20               | 0            | 8            | I          | 20             | 5            | F          | I                             |
| 31 | Monkstone Beach            | 21              | 0            | 0            | G          | 21               | 0            | 2            | G          | 21             | 0            | G          | G                             |
| 32 | Waterwynch Bay             | 20              | 0            | 1            | G          | 20               | 0            | 2            | G          | 20             | 0            | G          | G                             |
| 33 | Penally                    | 20              | 0            | 0            | G          | 20               | 0            | 3            | G          | 20             | 1            | G          | G                             |

|    | Bathing Water            | Total Coliforms |              |              |            | Faecal Coliforms |              |              |            | Faecal Streps. |              |            | Overall Compliance<br>G, I, F |
|----|--------------------------|-----------------|--------------|--------------|------------|------------------|--------------|--------------|------------|----------------|--------------|------------|-------------------------------|
|    |                          | No. Samples     | No. Fail "T" | No. Fail "G" | Compliance | No. Samples      | No. Fail "T" | No. Fail "G" | Compliance | No. Samples    | No. Fail "G" | Compliance |                               |
| 34 | Priory Bay, Caldy Island | 19              | 0            | 0            | G          | 19               | 0            | 4            | I          | 19             | 0            | G          | I                             |
| 35 | Swanlake Bay             | 20              | 0            | 0            | G          | 20               | 0            | 0            | G          | 20             | 1            | G          | G                             |
| 36 | Freshwater West          | 20              | 0            | 0            | G          | 21               | 0            | 0            | G          | 21             | 0            | G          | G                             |
| 37 | Gelliswick               | 20              | 0            | 5            | I          | 20               | 1            | 11           | I          | 20             | 8            | F          | I                             |
| 38 | Sandy Haven              | 21              | 0            | 3            | G          | 21               | 1            | 10           | I          | 21             | 7            | F          | I                             |
| 39 | Watwick                  | 21              | 0            | 1            | G          | 21               | 0            | 2            | G          | 21             | 1            | G          | G                             |
| 40 | West Dale                | 20              | 0            | 0            | G          | 20               | 0            | 0            | G          | 20             | 0            | G          | G                             |
| 41 | Martins Haven            | 21              | 0            | 0            | G          | 21               | 0            | 0            | G          | 21             | 0            | G          | G                             |
| 42 | St. Brides Haven         | 20              | 0            | 0            | G          | 20               | 0            | 1            | G          | 20             | 0            | G          | G                             |
| 43 | Little Haven             | 21              | 0            | 2            | G          | 21               | 0            | 4            | G          | 21             | 5            | F          | I                             |
| 44 | Druidston Haven          | 20              | 1            | 2            | G          | 20               | 1            | 2            | G          | 20             | 2            | G          | G                             |
| 45 | Nolton Haven             | 21              | 2            | 4            | F          | 21               | 3            | 5            | F          | 21             | 4            | F          | F                             |
| 46 | Porthselau               | 20              | 0            | 0            | G          | 20               | 0            | 0            | G          | 20             | 0            | G          | G                             |
| 47 | Aberreiddy               | 20              | 0            | 0            | G          | 20               | 0            | 1            | G          | 20             | 0            | G          | G                             |
| 48 | Traethllyn               | 20              | 0            | 0            | G          | 20               | 0            | 0            | G          | 20             | 0            | G          | G                             |
| 49 | Abercastle               | 20              | 0            | 1            | G          | 20               | 1            | 6            | I          | 20             | 6            | F          | I                             |
| 50 | Abermawr                 | 20              | 0            | 2            | G          | 20               | 0            | 3            | G          | 20             | 3            | F          | I                             |
| 51 | Goodwick Harbour         | 20              | 0            | 2            | G          | 20               | 0            | 6            | I          | 20             | 0            | G          | I                             |

|    | Bathing Water          | Total Coliforms |              |              |            | Faecal Coliforms |              |              |            | Faecal Streps. |              |            | Overall Compliance<br>G, I, F |
|----|------------------------|-----------------|--------------|--------------|------------|------------------|--------------|--------------|------------|----------------|--------------|------------|-------------------------------|
|    |                        | No. Samples     | No. Fail "I" | No. Fail "G" | Compliance | No. Samples      | No. Fail "I" | No. Fail "G" | Compliance | No. Samples    | No. Fail "G" | Compliance |                               |
| 52 | Goodwick Sands         | 20              | 0            | 1            | G          | 20               | 0            | 8            | I          | 20             | 5            | F          | I                             |
| 53 | Pwll Gwaelod           | 20              | 0            | 10           | I          | 20               | 2            | 15           | F          | 20             | 6            | F          | F                             |
| 54 | Cwm yr Eglwys          | 20              | 0            | 2            | G          | 20               | 1            | 9            | I          | 20             | 3            | F          | I                             |
| 55 | Patch                  | 20              | 1            | 8            | I          | 20               | 3            | 14           | F          | 20             | 7            | F          | F                             |
| 56 | Mwnt at Aberporth      | 20              | 0            | 2            | G          | 20               | 0            | 3            | G          | 20             | 0            | G          | G                             |
| 57 | Penbryn                | 20              | 0            | 1            | G          | 20               | 1            | 10           | I          | 20             | 1            | G          | I                             |
| 58 | Cil Borth              | 20              | 0            | 6            | I          | 20               | 0            | 10           | I          | 20             | 3            | F          | I                             |
| 59 | Cwmtudu                | 20              | 0            | 2            | G          | 20               | 0            | 11           | I          | 20             | 5            | F          | I                             |
| 60 | Newquay N              | 20              | 0            | 5            | I          | 20               | 0            | 9            | I          | 20             | 6            | F          | I                             |
| 61 | Llanina                | 20              | 1            | 9            | I          | 20               | 1            | 17           | I          | 20             | 8            | F          | I                             |
| 62 | Little Quay (Cei Bach) | 20              | 0            | 5            | I          | 20               | 0            | 10           | I          | 20             | 4            | F          | I                             |
| 63 | Gillach yr Halen       | 20              | 0            | 4            | G          | 20               | 0            | 12           | I          | 20             | 3            | F          | I                             |
| 64 | Aberaeron S            | 20              | 0            | 0            | G          | 20               | 0            | 5            | I          | 20             | 0            | G          | I                             |
| 65 | Aberaeron N 4th Groyne | 20              | 0            | 1            | G          | 20               | 0            | 7            | I          | 20             | 2            | G          | I                             |
| 66 | Aberaeron N of outfall | 19              | 0            | 4            | G          | 19               | 0            | 14           | I          | 19             | 10           | F          | I                             |
| 67 | Aberarth               | 20              | 0            | 4            | G          | 20               | 1            | 11           | I          | 21             | 5            | F          | I                             |
| 68 | Llanon                 | 20              | 1            | 4            | G          | 20               | 1            | 8            | I          | 20             | 4            | F          | I                             |
| 69 | Llansantffraid         | 20              | 0            | 3            | G          | 20               | 0            | 6            | I          | 20             | 3            | F          | I                             |

|    | Bathing Water                 | Total Coliforms |              |              |            | Faecal Coliforms |              |              |            | Faecal Streps. |              |            | Overall Compliance<br>G, I, F |
|----|-------------------------------|-----------------|--------------|--------------|------------|------------------|--------------|--------------|------------|----------------|--------------|------------|-------------------------------|
|    |                               | No. Samples     | No. Fail "T" | No. Fail "G" | Compliance | No. Samples      | No. Fail "T" | No. Fail "G" | Compliance | No. Samples    | No. Fail "G" | Compliance |                               |
| 70 | Llanrhystud S                 | 20              | 0            | 0            | G          | 20               | 0            | 3            | G          | 20             | 1            | G          | G                             |
| 71 | Ynyslas                       | 20              | 0            | 3            | G          | 20               | 0            | 6            | I          | 20             | 3            | F          | I                             |
| 72 | Ynyslas Estuary               | 20              | 0            | 9            | I          | 20               | 2            | 15           | F          | 20             | 2            | G          | F                             |
| 73 | Garreg Wen                    | 20              | 1            | 6            | I          | 20               | 3            | 13           | F          | 20             | 8            | F          | F                             |
| 74 | Criccieth E                   | 20              | 0            | 5            | I          | 20               | 2            | 9            | F          | 20             | 6            | F          | F                             |
| 75 | Morfa Abererch                | 20              | 0            | 0            | G          | 20               | 0            | 4            | G          | 20             | 2            | G          | G                             |
| 76 | Llanbedrog                    | 20              | 0            | 3            | G          | 20               | 2            | 8            | F          | 20             | 6            | F          | F                             |
| 77 | Porth Neigwl                  | 20              | 0            | 0            | G          | 20               | 0            | 3            | G          | 20             | 1            | G          | G                             |
| 78 | Aberdaron                     | 20              | 0            | 2            | G          | 20               | 0            | 5            | I          | 20             | 2            | G          | I                             |
| 79 | Porth Nefyn                   | 20              | 0            | 3            | G          | 20               | 0            | 5            | I          | 20             | 5            | F          | I                             |
| 80 | Porth Tre Castell             | 21              | 0            | 1            | G          | 21               | 0            | 3            | G          | 21             | 3            | F          | I                             |
| 81 | Porth Nobla, Llanfaelog       | 20              | 0            | 0            | G          | 20               | 0            | 1            | G          | 20             | 1            | G          | G                             |
| 82 | Porth Tyn Tywyn Llanfaelog    | 21              | 0            | 0            | G          | 21               | 0            | 3            | G          | 21             | 1            | G          | G                             |
| 83 | Traeth Crigyll, Rhosneigr     | 21              | 0            | 5            | I          | 21               | 0            | 6            | I          | 21             | 5            | F          | I                             |
| 84 | Silver Bay, Rhoscolyn         | 20              | 0            | 0            | G          | 20               | 0            | 0            | G          | 20             | 0            | G          | G                             |
| 85 | Borth Wen, Rhoscolyn          | 20              | 0            | 0            | G          | 20               | 0            | 4            | G          | 20             | 4            | F          | I                             |
| 86 | Porth Tywyn Mawr, Sandy Beach | 20              | 0            | 3            | G          | 20               | 0            | 5            | I          | 20             | 3            | F          | I                             |
| 87 | Porth Trwyn                   | 20              | 0            | 1            |            | 20               | 0            | 0            | G          | 20             | 1            | G          | G                             |



|     | Bathing Water                | Total Coliforms |              |              |            | Faecal Coliforms |              |              |            | Faecal Streps. |              |            | Overall Compliance<br>G, I, F |
|-----|------------------------------|-----------------|--------------|--------------|------------|------------------|--------------|--------------|------------|----------------|--------------|------------|-------------------------------|
|     |                              | No. Samples     | No. Fail "T" | No. Fail "G" | Compliance | No. Samples      | No. Fail "T" | No. Fail "G" | Compliance | No. Samples    | No. Fail "G" | Compliance |                               |
| 88  | Church Bay                   | 20              | 1            | 2            | G          | 20               | 0            | 1            | G          | 20             | 1            | G          | G                             |
| 89  | Cemlyn                       | 20              | 0            | 0            | G          | 20               | 0            | 0            | G          | 20             | 1            | G          | G                             |
| 90  | Traeth Bach, Cemaes Bay      | 20              | 0            | 2            | G          | 20               | 1            | 8            | I          | 20             | 7            | F          | I                             |
| 91  | Porth Eilian, Amlwch         | 20              | 0            | 2            | G          | 20               | 0            | 7            | I          | 20             | 4            | F          | I                             |
| 92  | Traeth Llugwy                | 20              | 0            | 2            | G          | 20               | 0            | 6            | I          | 20             | 4            | F          | I                             |
| 93  | Moelfre                      | 20              | 0            | 2            | G          | 20               | 1            | 5            | I          | 20             | 2            | G          | I                             |
| 94  | St. Davids, Benllech         | 20              | 0            | 2            | G          | 20               | 0            | 4            | G          | 20             | 2            | G          | G                             |
| 95  | Red Wharf Bay                | 18              | 0            | 1            | G          | 18               | 0            | 6            | I          | 18             | 5            | F          | I                             |
| 96  | Lleiniog                     | 20              | 0            | 2            | G          | 20               | 0            | 3            | G          | 20             | 2            | G          | G                             |
| 97  | Beaumaris                    | 20              | 0            | 5            | I          | 20               | 0            | 9            | I          | 20             | 4            | F          | I                             |
| 98  | Port Dinorwic                | 20              | 0            | 4            | G          | 20               | 0            | 7            | I          | 20             | 0            | G          | I                             |
| 99  | Plas Menai                   | 20              | 0            | 3            | G          | 20               | 0            | 8            | I          | 20             | 0            | G          | I                             |
| 100 | Llanfairfechan               | 20              | 0            | 1            | G          | 20               | 0            | 4            | G          | 20             | 3            | F          | I                             |
| 101 | Morfa Conwy                  | 20              | 0            | 6            | I          | 20               | 1            | 12           | I          | 20             | 4            | F          | I                             |
| 102 | Deganwy N Shelter            | 20              | 0            | 5            | I          | 20               | 2            | 8            | F          | 20             | 3            | F          | F                             |
| 103 | Penrhyn Bay                  | 20              | 0            | 4            | G          | 20               | 2            | 9            | F          | 20             | 5            | F          | F                             |
| 104 | Colwyn Bay, Rhos Abbey Hotel | 20              | 0            | 0            | G          | 20               | 0            | 4            | G          | 20             | 0            | G          | G                             |
| 105 | Colwyn Bay, Caley Promenade  | 20              | 0            | 5            | I          | 20               | 0            | 12           | I          | 20             | 3            | F          | I                             |

|     | Bathing Water           | Total Coliforms |              |              |            | Faecal Coliforms |              |              |            | Faecal Streps. |              |            | Overall Compliance<br>G, I, F |
|-----|-------------------------|-----------------|--------------|--------------|------------|------------------|--------------|--------------|------------|----------------|--------------|------------|-------------------------------|
|     |                         | No. Samples     | No. Fail "I" | No. Fail "G" | Compliance | No. Samples      | No. Fail "I" | No. Fail "G" | Compliance | No. Samples    | No. Fail "G" | Compliance |                               |
| 106 | Colwyn Bay, Marine Road | 20              | 0            | 2            | G          | 20               | 0            | 8            | I          | 20             | 1            | G          | I                             |
| 107 | Old Colwyn              | 20              | 0            | 1            | G          | 20               | 0            | 5            | I          | 20             | 4            | F          | I                             |
| 108 | Llanddulas              | 20              | 0            | 1            | G          | 20               | 1            | 8            | I          | 20             | 3            | F          | I                             |
| 109 | Abergele                | 20              | 0            | 3            | G          | 20               | 0            | 5            | I          | 20             | 2            | G          | I                             |
| 110 | Towyn                   | 20              | 2            | 2            | F          | 20               | 2            | 5            | F          | 20             | 3            | F          | F                             |
| 111 | Rhyl Splash Point       | 20              | 0            | 7            | I          | 20               | 3            | 13           | F          | 20             | 5            | F          | F                             |
| 112 | Ffrith Beach, Prestatyn | 20              | 0            | 5            | I          | 20               | 1            | 7            | I          | 20             | 6            | F          | I                             |
| 113 | Prestatyn Barkby Beach  | 20              | 0            | 2            | G          | 20               | 1            | 8            | I          | 20             | 6            | F          | I                             |
| 114 | Gronant / Talacre       | 20              | 0            | 4            | G          | 20               | 1            | 7            | I          | 20             | 4            | F          | I                             |

**Table 5 Summary of Non-Identified Bathing waters sampled between 1986 and 2000.  
Overall Compliance with Imperative (I) standard for Faecal and Total Coliforms**

| Bathing Water                                       | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <i>Vale of Glamorgan County Borough Council</i>     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Penarth Yacht Club (19029)                          | F  | F  |    | F  | F  |    | F  | F  | F  | F  | F  | F  | P  | F  | F  |
| St Marys Well Bay (19032)                           | F  | F  |    | F  | F  | F  | F  | P  | F  | F  | P  |    |    |    |    |
| Bendricks Beach (19076)                             |    |    |    |    |    | F  |    |    | F  | F  | F  | P  | P  | F  | P  |
| Whitmore Bay (19033)                                |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| Whitmore Bay (19035)                                |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| Little Island (19056)                               |    |    |    |    |    | P  | P  | P  |    |    |    |    |    |    |    |
| Watchouse Bay (68603)                               | F  | F  |    | F  | F  | P  | P  | P  | F  | P  | P  | P  | P  | P  | F  |
| Fontygary Bay (19038)                               | F  | P  |    | P  | P  | F  | P  | P  | P  | P  | P  | P  | P  | F  | P  |
| Limpert Bay (19147)                                 |    |    |    |    |    |    | P  |    | P  | P  | P  | P  | P  | P  | P  |
| Llantwit Major Beach (74050)                        | P  | P  |    | P  | P  | F  | P  | P  | P  | F  | P  | P  | P  | P  | P  |
| Ogmore by Sea (19042)                               | F  | F  |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Ogmore by Sea (19043)                               | F  | F  | F  | F  | F  | F  | P  |    |    |    |    |    |    |    |    |
| Ogmore by Sea (19044)                               | F  | F  |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <i>Bridgend County Borough Council</i>              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Newton Bay (19112)                                  |    |    |    |    |    | F  |    |    | F  | P  | P  | P  | P  | P  | P  |
| <i>Neath and Port Talbot County Borough Council</i> |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Aberafan East (19050)                               |    |    | F  | P  | P  | P  | P  |    | P  | P  | P  | P  | F  | P  | P  |
| Aberafan West (19052)                               |    |    | P  | P  | F  | P  | P  | P  |    |    |    |    |    |    |    |
| Margam Sands (19131)                                | P  | F  |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Margam Sands (19135)                                | P  | P  | F  | P  | F  | P  | P  |    |    |    |    |    |    |    |    |
| Margam Sands (74004)                                | P  | F  |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Jersey Marine East (74026)                          | F  | F  |    | P  |    |    | P  | P  | F  | P  | P  | P  | P  |    |    |
| Jersey Marine Central (39153)                       | F  | F  | F  | P  | P  | P  | P  | P  | F  | P  | P  | P  | F  |    |    |
| Jersey Marine West (39097)                          | F  | F  |    | F  |    |    | F  | P  | F  | P  | P  | P  | P  | F  | P  |
| <i>Swansea County Council</i>                       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Swansea Bay (39098)                                 |    |    |    | P  |    |    |    |    |    |    |    |    |    |    |    |
| Swansea Bay County Hall (74060)                     |    |    |    |    |    |    |    | P  | P  | P  | F  | F  | F  | P  | P  |
| Swansea Bay (39100)                                 |    |    |    | F  |    |    |    |    |    |    |    |    |    |    |    |
| Swansea Bay Sketty Lane (39154)                     |    |    |    |    |    |    |    |    | F  | F  | F  | F  | F  | P  | F  |
| Swansea Bay Black Pill (39101)                      |    |    |    | P  |    | P  | P  | P  | F  | P  | F  | F  | F  | P  | F  |
| Swansea Bay West Cross (74005)                      |    |    |    |    |    |    |    |    |    |    |    |    |    | F  | F  |
| Swansea Bay opposite Norton Road (39102)            |    |    |    | F  |    |    |    |    | P  | P  |    |    |    | F  | F  |
| Mumbles Knab Rock (39103)                           |    |    |    | F  |    | F  | P  | P  | P  | P  | P  | F  | P  | P  | F  |
| Mumbles Head Pier (39104)                           |    |    |    | F  |    | F  | P  | F  | P  | F  | P  | F  | P  | P  | F  |
| Langland Bay E (39107)                              |    |    |    |    |    | P  | P  |    |    |    |    |    |    |    |    |
| Brandy Cove (39170)                                 |    |    |    |    |    | P  |    |    |    |    | F  | P  | P  | P  |    |
| Pwlldu (39114)                                      |    |    |    |    |    |    |    |    |    |    | P  |    | P  | P  | P  |
| Three Cliffs Bay West (39117)                       |    |    |    |    |    |    |    | P  |    |    | P  | P  | F  | P  | P  |
| Torbay, Crawley Woods (74062)                       |    |    |    |    |    | P  |    |    |    |    |    |    |    | P  | P  |
| Mewslade Bay East (39128)                           |    |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  |
| Fall Bay (74096)                                    |    |    |    |    |    |    | P  |    |    |    |    |    |    | P  |    |
| Rhossili Bay (39161)                                |    |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  |
| Broughton Beach (74025)                             |    | P  |    | P  | P  | P  | P  | P  | F  | P  | P  | P  | F  | P  | F  |
| <i>Carmarthenshire County Council</i>               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Llanelli & Loughor Estuary (39001)                  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | P  | P  | P  | P  |

| Bathing Water                       | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|-------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Llanelli (39002)                    | F  | F  |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Burry Port Beach(39003)             | F  | P  | F  | P  | P  | P  | P  | P  | F  | F  | F  | P  | P  | P  | P  |
| St Ishmael (88503)                  | F  |    |    |    |    |    |    |    | F  | F  | F  | P  | P  | P  | F  |
| St Ishmael (88502)                  | F  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Llanstephen Beach (39008)           | F  |    |    |    |    |    | F  |    | F  | P  | F  | P  | F  | F  | F  |
| Ferryside Beach (39007)             |    |    |    |    |    |    |    |    |    |    | F  | F  | F  | P  | F  |
| Pendine West (39011)                |    |    | P  | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Morfa Bychan (88501)                | F  | P  |    |    |    |    |    |    |    |    |    | F  | P  | P  | F  |
| <i>Pembrokeshire County Council</i> |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Amroth E (39012)                    |    |    | P  | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Amroth W (39014)                    |    |    | P  | P  | P  | P  |    |    |    |    |    |    |    |    |    |
| Wisemans Bridge (32797)             |    |    |    |    |    |    |    | P  | P  | P  | P  | F  | P  | P  | F  |
| Coppett Hall Beach (32421)          |    |    |    |    |    | F  |    | P  | F  | F  | P  | P  | P  | P  |    |
| Saundersfoot E (39016)              |    |    | P  | P  | F  | F  | P  |    |    |    |    |    |    |    |    |
| Glen Beach (83777)                  |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Saundersfoot Slip (39018)           |    |    | F  | F  |    |    |    |    |    |    |    |    |    |    |    |
| Saundersfoot W (39019)              |    |    | F  | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Monkstone Beach (39574)             |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Tenby,N Lifeboat (39021)            |    |    | P  | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Tenby S St.Catherines (39022)       |    |    | P  | P  | P  | P  | P  |    |    |    | P  | P  | P  |    |    |
| Tenby S Atlantic Hotel (39023)      |    |    | P  | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Penally (83617)                     |    |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  |
| Waterwynch-Bay (83616)              |    |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  |
| Priory Bay, Caldey (39573)          |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | F  |
| Tenby S Opp Kiln Park (39025)       |    |    | P  | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Lydstep N Beach (39026)             |    |    |    |    |    | P  | P  | P  | P  | P  | P  |    |    |    |    |
| Skrinkle (39423)                    |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  |    |    |    |
| Manorbier Beach (39027)             | P  |    |    | F  | F  |    | P  | P  | P  | P  | P  |    |    |    |    |
| Manorbier (39028)                   | P  |    |    | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Swanlake Bay (83776)                |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Freshwater East (86210)             | P  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Freshwater East (39029)             | P  |    |    | P  | P  |    | P  |    | P  | P  | P  | P  | P  |    |    |
| Freshwater East (39030)             | P  |    |    | P  | P  | P  | P  | P  |    |    |    |    |    |    |    |
| Barafundle (39136)                  |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  |    |
| Broad Haven South (32422)           |    |    |    |    |    | P  | P  | P  | P  | P  | P  |    |    |    |    |
| Freshwater West (39031)             |    |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  |
| West Angle (39032)                  |    |    | P  |    | P  |    |    | P  | P  | P  | P  | P  | P  | P  |    |
| Llanreath Bay (86106)               |    |    | F  |    | P  | P  |    |    |    |    |    |    |    |    |    |
| Neyland Slip (85110)                |    |    | F  |    |    | F  |    |    |    |    |    |    |    |    |    |
| Milford Beach (39191)               |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| Gelliswick (39037)                  | P  |    | F  |    | P  | F  | P  | P  | P  | P  | P  | F  | P  | P  | P  |
| Sandy Haven (39192)                 |    |    |    |    |    | P  |    |    |    |    | P  | P  | P  | P  | P  |
| Lindsway Bay (St Ishmaels) (39572)  |    |    |    |    |    |    |    |    |    |    |    | P  |    |    |    |
| Dale (39040)                        |    | P  | P  |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |    |
| Watwick (39634)                     |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| West Dale (39571)                   |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Marloes (39139)                     |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| Marloes (32788)                     |    |    |    |    |    |    |    | P  | P  | P  | P  |    |    |    |    |
| Martins Haven (39041)               |    |    |    |    |    |    |    |    | P  |    | P  | P  | P  | P  | P  |

| Bathing Water                       | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|-------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Musselwick (39140)                  |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| St. Brides Haven (39042)            |    |    |    |    |    | P  |    |    |    | P  | P  | P  | P  | P  | P  |
| Little Haven (39043)                |    | P  |    |    | P  |    | P  |    | F  | P  | P  | F  | P  | P  | P  |
| Druidston Haven (39141)             |    |    |    |    |    |    | P  |    |    |    |    |    |    | P  | P  |
| Nolton Haven (39046)                | F  |    |    |    |    |    | P  | P  | F  | P  | P  | F  | P  | P  | F  |
| Newgale S (39047)                   |    |    | P  | P  | P  | P  |    |    |    |    |    |    |    |    |    |
| Newgale N (39049)                   |    |    | P  | P  | F  | P  |    |    |    |    |    |    |    |    |    |
| Solva (39050)                       | F  |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |
| Caerfai (39142)                     |    | P  |    |    |    | P  | P  | P  | P  | P  | P  |    |    |    |    |
| Porthclais (32686)                  |    |    |    |    |    |    | F  |    |    |    | P  | F  |    |    |    |
| Porthselau (83778)                  |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Aberiddy (39053)                    |    | P  |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Traethllyn (39143)                  |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  | P  |
| Traethllyn (32789)                  |    |    |    |    |    |    |    | P  |    |    |    |    |    |    |    |
| Porthgain (32685)                   |    |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |
| Trevine (39055)                     | F  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Abercastle (39056)                  |    |    |    |    |    |    | P  |    |    |    | F  | P  |    |    | P  |
| Abermawr (39144)                    |    |    |    |    |    |    |    |    |    |    | P  | P  |    | P  | P  |
| Goodwick (84004)                    | P  | P  |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Goodwick Harbour (39058)            | P  | F  |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Goodwick Beach (39059)              | P  | P  |    | P  | P  | P  | P  | P  | F  | P  | F  | P  | P  |    |    |
| Goodwick Sands (83613)              |    |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  |
| Fishguard (39060)                   | F  | F  |    |    |    |    | P  |    |    |    |    |    |    |    |    |
| Pwll Gwaelod (32790)                |    |    |    |    |    |    |    | P  | F  | P  | F  | F  | F  | P  | F  |
| Cwm yr Eglwys (32791)               |    |    |    |    |    |    |    | P  | P  | F  | P  | P  | P  | P  | P  |
| Newport Parrog Beach (39063)        |    |    |    |    |    |    |    |    |    |    | F  | F  |    |    |    |
| Newport Sands South (39064)         |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |    |    |
| Poppit Sands West (39067)           | F  | F  |    | P  | P  | P  | P  | P  | P  | P  |    |    |    |    |    |
| Poppit Sands East (39068)           | P  | F  |    | P  | P  | P  | P  | P  | P  | P  | P  |    |    |    |    |
| Ceibwr (39066)                      |    |    |    |    |    |    |    |    |    |    |    |    | P  |    |    |
| St Dogmaels Slipway (39341)         |    |    |    |    |    |    |    |    |    |    |    |    | F  |    |    |
| <i>Cardiganshire County Council</i> |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Patch (32424)                       |    |    |    |    |    | F  | F  | F  | F  | F  | P  | F  | F  | P  | F  |
| Gwbert (83515)                      |    | F  | F  |    |    | F  | F  | P  | F  | F  | F  | P  |    |    |    |
| Gwbert (39070)                      |    | F  |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Mwnt at Aberporth (32425)           |    |    |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Aberporth (39072)                   | F  | F  | F  |    | F  | F  | F  | P  | F  |    |    |    |    |    |    |
| Aberporth E (83502)                 | P  | P  | F  |    | F  | F  | P  | P  | F  |    | P  | P  | P  |    |    |
| Tresaith (39073)                    | F  | F  |    | P  | F  | P  | P  | P  | P  |    |    |    |    |    |    |
| Penbryn (39147)                     |    |    |    | P  |    | F  | P  | P  | P  | P  | P  | F  | P  | P  |    |
| Llangranog (39075)                  | F  | F  | F  | F  | F  | F  | P  | P  | F  | P  | P  |    |    |    |    |
| Cil Borth (32851)                   |    |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  |
| Cwmtudu (32426)                     |    |    |    |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Newquay N (39077)                   |    |    |    |    |    | P  | F  | P  | P  | P  | P  | P  | P  | P  | P  |
| Newquay S (39079)                   |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |    |    |    |
| Llanina (39146)                     |    |    |    | P  | F  | P  | P  | P  | P  | F  | P  | P  | F  | F  | P  |
| Little Quay (Cei Bach) (39081)      | P  |    | P  | P  | P  | P  | P  | P  | F  | F  | F  | P  | P  | P  | P  |
| Gilfach yr Halen (32427)            |    |    |    |    |    | P  | P  | P  | F  | P  | P  | P  | P  | F  | P  |

| Bathing Water                                 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Aberaeron S (39082)                           | P  |    |    |    | P  | P  | P  | P  | F  | P  | P  | P  | P  | P  | P  |
| Aberaeron N 4 <sup>th</sup> Groyne (39083)    |    |    |    |    | F  | P  | F  | P  | F  | P  | P  | F  | P  | P  | P  |
| Aberaeron N (39084)                           | P  |    |    |    |    |    |    |    |    | F  | F  |    |    |    |    |
| Aberaeron N of outfall (N of Groynes) (39427) |    |    |    |    | F  | F  | P  | P  | F  | P  | F  | P  | P  | F  | P  |
| Aberaeron Harbour (39426)                     |    |    |    |    |    |    | F  |    |    |    |    |    |    |    |    |
| Aberarth (32428)                              |    |    |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Llanon (32429)                                |    |    |    |    |    | P  | P  | P  | P  | P  | F  | P  | P  | P  | P  |
| Llansantffraid (32430)                        |    |    |    |    |    | P  | P  | P  | P  | P  | F  | P  | P  | P  | P  |
| Llanrhystud S (39087)                         |    |    |    |    |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Morfa Bychan at Slipway (32431)               |    |    |    |    |    | P  | P  | P  | P  | P  | P  |    |    |    |    |
| Tanybwllch (32432)                            |    |    |    |    |    | P  | P  | P  | F  | P  | P  |    |    |    |    |
| Aberystwyth Slip (82103)                      |    |    | F  | F  |    | F  | F  | F  | F  |    |    |    |    |    |    |
| Clarach Bay S (39095)                         | F  | P  | F  | F  | F  | F  | F  | F  | F  | P  |    |    |    |    |    |
| Aberystwyth S (39090)                         |    |    | F  | F  | F  | F  | F  |    |    |    |    |    |    |    |    |
| Clarach Bay N (39096)                         | F  |    |    |    |    | F  | F  | F  | F  | P  | P  | P  |    |    |    |
| Ynyslas (20022)                               |    |    |    |    | P  | P  | P  |    | P  | P  | P  | P  | P  | P  | P  |
| Ynyslas (20399)                               |    |    |    |    | F  | P  | P  |    | P  | F  | P  | F  | F  | P  | F  |
| <b>Gwynedd County Borough Council</b>         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Aberdyfi (20170)                              | F  | F  | F  | P  | F  | F  | F  |    |    |    |    |    |    |    |    |
| Aberdyfi (20172)                              | F  | F  | F  | P  | F  | F  | P  |    |    |    |    |    |    |    |    |
| Aberdyfi (20171)                              | F  | F  | F  | P  |    |    |    |    |    |    |    |    |    |    |    |
| Llwyngwrl (20189)                             |    |    |    | F  | F  | F  | F  |    |    |    |    |    |    |    |    |
| Barmouth (20181)                              |    |    |    | F  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Llanaber (20025)                              | P  |    | P  |    |    | P  | P  |    |    |    |    |    |    |    |    |
| Talybont (20026)                              | P  |    |    |    | P  |    | P  | P  |    |    |    |    |    |    |    |
| Llanendwyn (20027)                            |    | P  |    |    | P  | P  |    | P  |    |    |    |    |    |    |    |
| Black Rock Sands (22540)                      |    |    | P  |    | P  | P  | P  | P  |    |    |    |    |    |    |    |
| Garreg Wen (23253)                            | P  | F  | F  |    | P  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Criccieth E (23141)                           |    |    |    |    |    |    | P  |    | F  | P  | P  | F  | F  | P  | F  |
| Criccieth W (22541)                           |    |    | F  | F  | F  | F  | F  |    |    |    |    |    |    |    |    |
| Afon Wen (22543)                              | F  | F  | F  |    |    |    |    |    |    |    |    |    |    |    |    |
| Pen y chain (22544)                           | P  | F  | F  |    | P  |    | P  |    |    |    |    |    |    |    |    |
| Morfa Abererch (22545)                        |    | P  | P  |    | P  |    | P  |    | P  | P  | P  | P  | P  | P  | P  |
| Pwllheli (22546)                              |    |    | F  |    | P  | P  | P  |    |    |    |    |    |    |    |    |
| Traeth Crugen (22548)                         |    | P  | P  |    | P  |    | P  |    |    |    |    |    |    |    |    |
| Llanbedrog (22549)                            | F  | F  | F  | P  | F  | F  | P  |    | P  | P  | P  | P  | P  | P  | F  |
| Abersoch (22550)                              |    |    | F  | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Abersoch (23346)                              |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| Abersoch (22586)                              |    |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |
| Machroes (20335)                              |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| Porth Ceiriad (20334)                         |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| Porth Neigwl (23331)                          |    |    |    |    | P  | P  |    |    |    |    |    |    |    |    |    |
| Porth Neigwl (25437)                          |    |    |    |    |    |    | P  |    | P  | P  | P  | P  | P  | P  | P  |
| Aberdaron (22553)                             | P  | P  | P  | P  | P  | P  | P  |    | P  | P  | P  | P  | P  | P  | P  |
| Porth Oer (22555)                             | F  |    |    |    | P  | P  | P  |    |    |    |    |    |    |    |    |
| Porth Iago (22556)                            | P  |    |    |    | P  | P  | P  |    |    |    |    |    |    |    |    |
| Porth Colman (22557)                          | P  |    |    |    | P  | P  | P  |    |    |    |    |    |    |    |    |
| Porth Tywyn (22558)                           |    |    | P  |    | P  | P  | P  |    |    |    |    |    |    |    |    |

| Bathing Water                         | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|---------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Porth Dinllaen (22559)                | F  | P  | F  | P  | F  | P  | P  | P  |    |    |    |    |    |    |    |
| Porth Nefyn (22560)                   | F  | P  | P  | P  | P  | P  | P  |    | P  | P  | P  | P  | P  | P  | P  |
| Trefor (22561)                        | P  | P  | P  |    | P  |    | P  |    |    |    |    |    |    |    |    |
| Aberdesach (22562)                    | P  | P  |    |    | P  |    | P  |    |    |    |    |    |    |    |    |
| Pontllynfi (22563)                    |    |    | P  |    |    | P  |    |    |    |    |    |    |    |    |    |
| Morfa Dinlle (22564)                  | P  | P  |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Dinas Dinlle (23244)                  | P  | P  | P  |    | P  | P  | F  |    |    |    |    |    |    |    |    |
| Plas Menai (23290)                    |    |    |    | P  | P  | P  | P  |    | P  | P  | P  | F  | F  | P  | P  |
| Port Dinorwic (23252)                 | F  | F  |    |    | F  | F  | F  |    | P  | P  | F  | P  | P  | P  | P  |
| <i>Anglesey County Council</i>        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Llanddwyn (Niwbwrch) (27537)          | F  |    | P  |    | P  |    |    | P  | P  | P  | P  |    |    |    |    |
| Malltraeth (27556)                    |    |    |    |    |    | P  |    |    |    |    |    |    |    |    |    |
| Traeth Mawr, Aberffraw (27538)        | P  |    | P  | P  |    |    | P  |    |    |    | P  | P  | P  | P  |    |
| Porth Trecastell (27539)              | P  |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Porth Nobla, Llanfaelog (27540)       | P  |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  | P  |
| Porth Tyn Tywyn Llanfaelog (23476)    |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Rhosneigr (27536)                     | P  | P  | F  | P  |    |    |    |    |    |    |    |    |    |    |    |
| Rhosneigr (27534)                     | P  | F  | F  | P  | P  | P  | F  |    |    |    |    |    |    |    |    |
| Traeth Crigyll Rhosneigr (23477)      |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Traeth Crigyll (27557)                |    |    |    |    |    | P  | P  |    |    |    |    |    |    |    |    |
| Silver Bay, Rhoscolyn (27541)         |    |    |    |    | P  |    |    |    |    |    | P  | P  | P  | P  | P  |
| Borth Wen - Rhoscolyn (27542)         |    |    |    |    | F  |    |    | P  | P  | P  | P  | P  | P  | P  | P  |
| Porth y Garan (27787)                 | F  |    |    |    | P  |    |    |    |    |    |    |    |    |    |    |
| Porth Gwr Mawr (27544)                |    |    |    |    |    | F  | F  | F  |    |    |    |    |    |    |    |
| Porth Dafarch - Trearddur (27546)     | P  |    |    |    |    |    |    | P  | P  | P  | P  | P  |    |    |    |
| Holyhead Newry (27559)                |    |    |    |    |    | P  | P  |    |    |    |    |    | P  |    |    |
| Penrhos (27817)                       | P  |    |    |    | F  | P  |    |    |    |    |    |    |    |    |    |
| Porth Tywyn Mawr, Sandy Beach (27547) |    |    |    |    | P  |    |    |    |    | P  | P  | P  | P  | P  | P  |
| Porth Trefadog (23479)                |    |    |    |    |    |    |    |    |    |    |    |    | F  |    |    |
| Porth Trwyn (23480)                   |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Church Bay (27548)                    | P  |    | P  |    | P  |    |    |    |    | P  | P  | P  | P  | P  | P  |
| Cemlyn (27531)                        |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Cemaes (27529)                        | P  | F  |    | P  | F  | P  |    | F  |    |    | P  | P  |    |    |    |
| Traeth Bach, Cemaes Bay (23481)       |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Bull Bay (27566)                      |    |    |    |    |    |    |    |    |    |    | F  | P  |    |    |    |
| Porth Eilian, Amlwch (27549)          |    |    |    |    |    |    | F  |    |    |    | P  | P  | F  | F  | P  |
| Traeth Llugwy (27528)                 | P  |    | P  | P  | P  |    |    |    |    |    | P  | P  | F  | P  | P  |
| Moelfre (27561)                       |    |    |    |    |    |    | F  |    |    |    | P  | P  | F  | P  | P  |
| Traeth Bychan (27527)                 | P  |    |    | P  | F  |    | P  |    |    |    |    |    |    |    |    |
| St. Davids, Benllech (23491)          |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Benllech (27827)                      |    |    | F  | P  | P  | P  | P  |    |    |    |    |    |    |    |    |
| Red Wharf Bay (27552)                 |    |    |    | F  |    | F  |    |    |    |    |    |    |    |    |    |
| Red Wharf Bay (25806)                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    | P  |
| Llanddona (27562)                     | P  |    |    | P  | P  | P  |    | P  | P  | P  | P  |    |    |    |    |
| Lleiniog (27564)                      |    |    |    |    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Beaumaris (27829)                     |    |    |    | F  | F  | F  | F  |    |    |    |    |    |    |    |    |
| Beaumaris (27828)                     | P  |    |    | F  | P  | P  | F  |    |    |    |    |    |    |    |    |
| Beaumaris (27757)                     |    |    |    |    |    |    |    |    |    |    | P  | P  | P  | P  | P  |

| Bathing Water  | 86 | 87 | 88 | 89 | 90  | 91  | 92  | 93 | 94  | 95  | 96  | 97  | 98  | 99  | 00  |
|--|----|----|----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|
| Pentraeth (23482)                                      |    |    |    |    |     |     |     |    |     |     |     |     | F   |     |     |
| Menai Bridge Pier (27568)                              |    |    |    |    |     | F   | P   |    |     |     |     |     |     |     |     |
| <i>Aberconwy and Conwy County Borough Council</i>      |    |    |    |    |     |     |     |    |     |     |     |     |     |     |     |
| Llanfairfechan Shore Rd (23245)                        | P  | F  | F  | P  | P   | P   | P   | F  | P   | P   | P   | P   | F   | P   | P   |
| Penmaenmawr (22996)                                    |    |    |    |    |     |     | P   |    |     |     |     |     |     |     |     |
| Penmaenmawr (22995)                                    | F  |    |    |    | P   | P   | P   | P  | P   |     |     |     |     |     |     |
| Penmaenmawr (23006)                                    | P  |    |    | P  | P   | P   | P   |    |     |     |     |     |     |     |     |
| Penmaenmawr (23005)                                    | P  |    |    | F  | F   | P   | F   |    |     |     |     |     |     |     |     |
| Morfa Conwy (23246)                                    | F  | F  | F  |    | F   |     |     | P  | P   | F   | P   | P   | P   | P   | P   |
| Conwy Morfa (25036)                                    | F  |    |    |    |     |     |     |    |     |     |     |     |     |     |     |
| Deganwy N Shelter (25034)                              |    |    |    |    | F   | F   | F   | F  | P   | P   | F   | P   | P   | P   | F   |
| Llandudno W (25033)                                    |    |    |    |    | F   | F   | F   |    |     |     |     |     |     |     |     |
| Llandudno N (25026)                                    |    |    |    |    |     | F   | P   |    |     |     |     |     |     |     |     |
| Llandudno N (25185)                                    |    |    |    |    |     |     | P   |    |     |     |     |     |     |     |     |
| Penrhyn Bay (25045)                                    | F  | F  | F  |    | F   | F   | F   | F  | F   | F   | F   | F   | F   | P   | F   |
| Colwyn Bay, Rhos Abbey Hotel(25042)                    |    |    | P  |    | F   | P   | P   | P  | P   | P   | P   | P   | P   | P   | P   |
| Colwyn Bay, Caley Promenade (25041)                    |    |    | F  |    | P   | F   | P   | F  | P   | P   | P   | P   | P   | P   | P   |
| Colwyn Bay, Marine Road (25020)                        |    |    |    |    |     |     |     |    | P   | P   | P   | P   | P   | P   | P   |
| Old Colwyn (23492)                                     |    |    |    |    |     |     |     |    |     |     |     |     | P   | P   | P   |
| Llanddulas (3597)                                      |    |    | F  | P  | P   | P   | F   |    | P   | P   | P   | F   | F   | P   | P   |
| Abergele (3600)  |    |    |    |    |     |     | P   |    |     |     |     |     |     |     |     |
| Abergele (3601)  | P  | P  | F  | P  | F   | P   | P   |    | P   | P   | P   | P   | P   | P   | P   |
| Towyn (25436)  |    |    |    |    |     |     |     |    | P   | P   | P   | P   | P   | P   | F   |
| Kinnel Bay (3605)                                      |    |    | F  | F  |     | F   | F   |    |     |     |     |     |     |     |     |
| <i>Denbighshire County Council</i>                     |    |    |    |    |     |     |     |    |     |     |     |     |     |     |     |
| Rhyl Splash Point (3610)                               |    |    | F  | P  | F   | F   | F   |    |     |     |     |     | P   | P   | F   |
| Ffrith Beach, Prestatyn (3611)                         | P  | F  | F  | P  | F   | F   |     |    |     | P   | P   | P   | P   | P   | P   |
| Prestatyn Barkby (3614)                                |    |    | F  |    | P   | F   | P   |    |     |     |     |     | P   | P   | P   |
| <i>Flintshire County Council</i>                       |    |    |    |    |     |     |     |    |     |     |     |     |     |     |     |
| Gronant (25498)  |    |    |    |    |     |     |     |    |     | P   | P   |     |     |     |     |
| Gronant / Talacre (3617)                               |    | P  |    | P  | P   | P   | P   |    | P   | P   | P   | P   | P   | P   | P   |
| <i>Wirral County Council</i>                           |    |    |    |    |     |     |     |    |     |     |     |     |     |     |     |
| Thurstaston Station Rd (3649)                          |    |    |    |    |     | F   | F   |    |     |     |     |     |     |     |     |
| Caldycroft Drive (3648)                                |    |    |    |    |     | F   | F   |    |     |     |     |     |     |     |     |
| W. Kirby (3647)  |    |    |    |    |     | P   | P   |    |     |     |     |     |     |     |     |
| Total Number Sampled in Wales                          | 89 | 63 | 73 | 83 | 111 | 142 | 149 | 87 | 102 | 102 | 121 | 113 | 116 | 116 | 114 |
| Number not Exceeding "I" standards in Wales            | 47 | 27 | 31 | 59 | 70  | 96  | 112 | 73 | 65  | 82  | 95  | 88  | 92  | 104 | 89  |
| % Not Exceeding "I" standards in Wales                 | 53 | 43 | 42 | 71 | 63  | 69  | 76  | 84 | 64  | 80  | 78  | 78  | 79  | 90  | 78  |
| Total Number Sampled in Wales and Wirral               | 89 | 63 | 73 | 83 | 111 | 143 | 150 | 87 | 102 | 102 | 121 | 113 | 116 | 116 | 114 |
| Number not Exceeding "I" standards in Wales and Wirral | 47 | 27 | 31 | 59 | 70  | 97  | 113 | 73 | 65  | 82  | 95  | 88  | 92  | 104 | 89  |
| % Not Exceeding "I" standards in Wales and Wirral      | 53 | 43 | 42 | 71 | 63  | 68  | 75  | 84 | 64  | 80  | 78  | 78  | 79  | 90  | 78  |

P = ≤ 5% of samples with > 2000/100ml for Faecal Coliforms and ≤ 5% of samples > 10000/100ml Total Coliforms  
F = > 5% of samples with > 2000/100ml for Faecal Coliforms and > 5% of samples > 10000/100ml Total Coliforms



**Table 6. Summary of Non-Identified Bathing waters sampled between 1990 and 2000. Overall compliance with Guideline (G) standards for Faecal Coliforms, Total Coliforms and Faecal Streptococci.**

| Bathing Water                                       | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|---|----|----|----|----|----|----|----|----|----|----|----|
| <i>Vale of Glamorgan County Borough Council</i>     |    |    |    |    |    |    |    |    |    |    |    |
| Penarth Yacht Club (19029)                          | F  |    | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| St Marys Well Bay (19032)                           | F  | F  | F  | F  | F  | F  | F  |    |    |    |    |
| Bendricks Beach (19076)                             |    | F  |    |    | F  | F  | F  | F  | F  | F  | F  |
| Whitmore Bay (19033)                                |    | F  |    |    |    |    |    |    |    |    |    |
| Whitmore Bay (19035)                                |    | F  |    |    |    |    |    |    |    |    |    |
| Little Island (19056)                               |    | F  | F  | F  |    |    |    |    |    |    |    |
| Watchouse Bay (68603)                               | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Fontygary Bay (19038)                               | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Limpert Bay (19147)                                 |    |    | F  |    | F  | F  | F  | F  | P  | F  | F  |
| Llantwit Major Beach (74050)                        | F  | F  | F  | F  | F  | F  | F  | F  | F  | P  | F  |
| Ogmore by Sea (19043)                               | F  | F  | F  |    |    |    |    |    |    |    |    |
| <i>Bridgend County Borough Council</i>              |    |    |    |    |    |    |    |    |    |    |    |
| Newton Bay (19112)                                  |    | F  |    |    | F  | F  | F  | F  | F  | F  | F  |
| <i>Neath and Port Talbot County Borough Council</i> |    |    |    |    |    |    |    |    |    |    |    |
| Aberafan East (19050)                               | F  | F  | F  |    | F  | F  | F  | F  | F  | F  | F  |
| Aberafan West (19052)                               | F  | F  | F  | F  |    |    |    |    |    |    |    |
| Margam Sands (19135)                                | F  | F  |    |    |    |    |    |    |    |    |    |
| Jersey Marine East (74026)                          |    |    | F  | F  | F  | F  | F  | F  | F  |    |    |
| Jersey Marine Central (39153)                       | F  | F  | F  | F  | F  | F  | F  | F  | F  |    |    |
| Jersey Marine West (39097)                          |    |    | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| <i>Swansea County Council</i>                       |    |    |    |    |    |    |    |    |    |    |    |
| Swansea Bay County Hall (74060)                     |    |    |    | F  | F  | F  | F  | F  | F  | F  | F  |
| Swansea Bay Sketty Lane (39154)                     |    |    |    |    | F  | F  | F  | F  | F  | F  | F  |
| Swansea Bay Black Pill (39101)                      |    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| West Cross Swansea Bay (74005)                      |    |    |    |    |    |    |    |    |    | F  | F  |
| Swansea Bay Opposite Norton Road (39102)            |    |    |    |    | F  | F  |    |    |    | F  | F  |
| Mumbles Knab Rock (39103)                           |    | F  | F  | F  | F  | F  | F  | F  | F  | P  | F  |
| Mumbles Head Pier (39104)                           |    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Langland Bay E (39107)                              |    | F  | F  |    |    |    |    |    |    |    |    |
| Brandy Cove (39170)                                 |    | F  |    |    |    |    | F  | F  | F  | P  |    |
| Pwlldu (39114)                                      |    |    |    |    |    |    | F  |    | F  | P  | P  |
| Three Cliffs Bay West (39117)                       |    |    |    | P  |    |    | F  | F  | F  | P  | P  |
| Torbay (74062)                                      |    | P  |    |    |    |    |    |    |    | P  | P  |
| Mewslade Bay East (39128)                           |    |    |    |    |    |    |    |    |    | P  | P  |
| Fall Bay (74096)                                    |    |    | P  |    |    |    |    |    |    | P  |    |
| Rhossili Bay (39161)                                |    |    |    |    |    |    |    |    |    | P  | P  |
| Broughton Beach (74025)                             | P  | F  | P  | F  | F  | F  | F  | F  | F  | F  | F  |
| <i>Carmarthenshire County Council</i>               |    |    |    |    |    |    |    |    |    |    |    |
| Llanelli & Loughor Estuary (39001)                  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Burry Port Beach (39003)                            | F  | F  | F  | F  | F  | F  | F  | F  | F  | P  | P  |
| St Ishmael (88503)                                  |    |    |    |    | F  | F  | F  | F  | F  | F  | F  |

| Bathing Water                       | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|-------------------------------------|----|----|----|----|----|----|----|----|----|----|----|
| Llanstephen Beach (39008)           |    |    | F  |    | F  | F  | F  | F  | F  | F  | F  |
| Ferryside Beach (39007)             |    |    |    |    |    |    | F  | F  | F  | F  | F  |
| Pendine West (39011)                | F  | F  | F  |    |    |    |    |    |    |    |    |
| Morfa Bychan (88501)                |    |    |    |    |    |    |    | F  | F  | F  | F  |
| <i>Pembrokeshire County Council</i> |    |    |    |    |    |    |    |    |    |    |    |
| Amroth E (39012)                    | P  | F  | F  |    |    |    |    |    |    |    |    |
| Amroth W (39014)                    | F  | F  |    |    |    |    |    |    |    |    |    |
| Wisemans Bridge (32797)             |    |    |    | F  | F  | P  | F  |    | F  | F  | F  |
| Coppett Hall Beach (32421)          |    | F  |    |    | F  | F  | F  |    | F  | F  |    |
| Saundersfoot E (39016)              | F  | F  | F  |    |    |    |    |    |    |    |    |
| Glen Beach (83777)                  |    |    |    |    |    |    |    |    |    |    | F  |
| Saundersfoot W (39019)              | F  | F  | F  |    |    |    |    |    |    |    |    |
| Monkstone Beach (39574)             |    |    |    |    |    |    |    | P  | P  | F  | P  |
| Tenby N Lifeboat (39021)            | P  | P  | F  |    |    |    |    |    |    |    |    |
| Tenby S St.Catherines (39022)       | F  | F  | F  |    |    |    |    | P  | F  |    |    |
| Tenby S Atlantic Hotel (39023)      | F  | F  | F  |    |    |    |    |    |    |    |    |
| Penally (83617)                     |    |    |    |    |    |    |    |    |    | F  | P  |
| Waterwynch Bay (83616)              |    |    |    |    |    |    |    |    |    | F  | P  |
| Priory Bay, Caldey (39573)          |    |    |    |    |    |    |    | P  | P  | F  | F  |
| Tenby S Opp Kiln Park (39025)       | F  | F  | P  |    |    |    |    |    |    |    |    |
| Lydstep N Beach (39026)             |    | F  | P  | P  | F  | P  | P  |    |    |    |    |
| Skrinkle (39423)                    |    |    | P  | P  | P  | P  | P  | P  |    |    |    |
| Manorbier Beach (39027)             | F  | F  | P  | P  | F  | P  | F  |    |    |    |    |
| Manorbier (39028)                   | F  |    | P  |    |    |    |    |    |    |    |    |
| Swanlake Bay (83776)                |    |    |    |    |    |    |    |    |    |    | P  |
| Freshwater East (39029)             | P  | F  | F  | P  | P  | P  | F  | P  | F  |    |    |
| Freshwater East (39030)             | F  |    | F  |    |    |    |    |    |    |    |    |
| Barafundle (39136)                  |    |    | P  | P  | P  | P  | P  | P  | P  | P  |    |
| Broad Haven South (32422)           |    | P  | P  | F  | P  | P  | P  |    |    |    |    |
| Freshwater West (39031)             |    |    |    | F  | P  | F  | P  | P  | P  | P  | P  |
| West Angle (39032)                  | P  |    |    | F  | F  | F  | P  | F  | F  | F  |    |
| Llanreath Bay (86106)               | F  | F  |    |    |    |    |    |    |    |    |    |
| Neyland Slip (85110)                |    | F  |    |    |    |    |    |    |    |    |    |
| Milford Beach (39191)               |    | F  |    |    |    |    |    |    |    |    |    |
| Gelliswick (39037)                  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Sandy Haven (39192)                 |    | P  |    |    |    |    | P  | F  | F  | F  | F  |
| Lindsway Bay (St Ishmaels) (39572)  |    |    |    |    |    |    |    | P  |    |    |    |
| Dale (39040)                        | F  | F  | F  | F  | P  | F  | F  | F  | F  | F  |    |
| Watwick (39634)                     |    |    |    |    |    |    |    |    | P  | P  | P  |
| West Dale (39571)                   |    |    |    |    |    |    |    | P  | P  | P  | P  |
| Marloes (32788)                     |    | P  |    | P  | P  | P  | P  |    |    |    |    |
| Martins Haven (39041)               |    |    |    |    | P  |    | P  | P  | P  | P  | P  |
| Musselwick (39140)                  |    | P  |    |    |    |    |    |    |    |    |    |
| St. Brides Haven (39042)            |    | P  |    |    |    | F  | F  | F  | F  | P  | P  |
| Little Haven (39043)                | F  |    | F  |    | F  | F  | F  | F  | F  | F  | F  |

| Bathing Water                                 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|---|----|----|----|----|----|----|----|----|----|----|----|
| Druidston Haven (39141)                       |    |    | P  |    |    |    |    |    |    | F  | P  |
| Nolton Haven (39046)                          |    |    | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Newgale S (39047)                             | P  | F  |    |    |    |    |    |    |    |    |    |
| Newgale N (39049)                             | F  | F  |    |    |    |    |    |    |    |    |    |
| Solva (39050)                                 |    |    | F  |    |    |    |    |    |    |    |    |
| Caerfai (39142)                               |    | P  | P  | F  | P  | P  | P  |    |    |    |    |
| Porthclais (32686)                            |    |    | F  |    |    |    | F  | F  |    |    |    |
| Porthselau (83778)                            |    |    |    |    |    |    |    |    |    |    | P  |
| Abereiddy (39053)                             |    | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |
| Traethllyn (39143)                            |    |    |    |    |    |    | P  | P  | P  | P  | P  |
| Traethllyn (32789)                            |    |    |    | P  |    |    |    |    |    |    |    |
| Porthgain (32685)                             |    |    | F  |    |    |    |    |    |    |    |    |
| Abercastle (39056)                            |    |    | F  |    |    |    | F  | F  |    |    | F  |
| Abermawr (39144)                              |    |    |    |    |    |    | P  | P  | F  | P  | F  |
| Goodwick Harbour (39058)                      | F  | P  | P  | F  | F  | F  | F  | P  | P  | P  | F  |
| Goodwick Beach (39059)                        | F  | F  | F  | F  | F  | F  | F  | F  | F  |    |    |
| Goodwick Sands (83613)                        |    |    |    |    |    |    |    |    |    | F  | F  |
| Fishguard (39060)                             |    |    | F  |    |    |    |    |    |    |    |    |
| Pwll Gwaelod (32790)                          |    |    |    | F  | F  | F  | F  | F  | F  | F  | F  |
| Cwm yr Eglwys (32791)                         |    |    |    | F  | F  | F  | F  | F  | F  | F  | F  |
| Newport Parrog Beach (39063)                  |    |    |    |    |    |    | F  | F  |    |    |    |
| Newport Sands South (39064)                   | P  | F  | F  | F  | P  | P  | F  | P  | F  |    |    |
| Poppit Sands West (39067)                     | P  | P  | F  | F  | P  | P  |    |    |    |    |    |
| Poppit Sands East (39068)                     | P  | F  | F  | F  | F  | P  | F  |    |    |    |    |
| Ceibwr (39066)                                |    |    |    |    |    |    |    | F  |    |    |    |
| <i>Cardiganshire County Council</i>           |    |    |    |    |    |    |    |    |    |    |    |
| Patch (32424)                                 |    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Gwbert (83515)                                |    | F  | F  | F  | F  | F  | F  | F  |    |    |    |
| Mwnt at Aberporth (32425)                     |    | P  | P  | P  | P  | P  | P  | F  | F  | F  | P  |
| Aberporth (39072)                             | F  | F  | F  | F  | F  |    |    |    |    |    |    |
| Aberporth E (83502)                           | F  | F  | F  | F  | F  |    | F  | F  | F  |    |    |
| Tresaith (39073)                              | F  | F  | F  | F  | F  |    |    |    |    |    |    |
| Penbryn (39147)                               |    | F  | F  | F  | F  | P  | F  | F  | F  | F  | F  |
| Llangranog (39075)                            | F  | F  | F  | F  | F  | F  | F  |    |    |    |    |
| Cil Borth (32851)                             |    |    |    | F  | F  | P  | F  | F  | F  | P  | F  |
| Cwmtudu (32426)                               |    |    | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Newquay N (39077)                             |    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Newquay S (39079)                             | F  | F  | F  | F  | F  | F  | P  | F  |    |    |    |
| Llanina (39146)                               | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Little Quay (Cei Bach) (39081)                | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Gilfach yr Halen (32427)                      |    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Aberaeron S (39082)                           | P  | F  | F  | F  | F  | P  | F  | F  | F  | F  | F  |
| Aberaeron N 4 <sup>th</sup> Groyne (39083)    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Aberaeron N (39084)                           |    |    |    |    |    | F  | F  |    |    |    |    |
| Aberaeron N of outfall (N of Groynes) (39427) | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |

| Bathing Water                         | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|---------------------------------------|----|----|----|----|----|----|----|----|----|----|----|
| Aberaeron Harbour (39426)             |    |    | F  |    |    |    |    |    |    |    |    |
| Aberarth (32428)                      |    | F  | F  | P  | F  | P  | F  | F  | F  | F  | F  |
| Llanon (32429)                        |    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Llansantffraid (32430)                |    | F  | F  | P  | F  | F  | F  | F  | P  | P  | F  |
| Llanrhystud S (39087)                 |    | P  | P  | F  | P  | P  | F  | P  | F  | P  | P  |
| Morfa Bychan at Slipway (32431)       |    | F  | F  | F  | F  | P  | P  |    |    |    |    |
| Tanybwlech (32432)                    |    | F  | F  | F  | F  | P  | P  |    |    |    |    |
| Aberystwyth Slip (82103)              |    | F  | F  | F  | F  |    |    |    |    |    |    |
| Clarach Bay S (39095)                 | F  | F  | F  | F  | F  | F  |    |    |    |    |    |
| Aberystwyth S (39090)                 | F  | F  | F  |    |    |    |    |    |    |    |    |
| Clarach Bay N (39096)                 |    | F  | F  | F  | F  | F  | F  | F  |    |    |    |
| Ynyslas (20022)                       |    | P  | P  |    | P  | F  | P  | P  | F  | F  | F  |
| Ynyslas (20399)                       |    | F  | F  |    | F  | F  | F  | F  | F  | F  | F  |
| <i>Gwynedd County Borough Council</i> |    |    |    |    |    |    |    |    |    |    |    |
| Aberdyfi (20170)                      |    | F  | F  |    |    |    |    |    |    |    |    |
| Aberdyfi (20172)                      |    | F  | F  |    |    |    |    |    |    |    |    |
| Llwyngwriil (20189)                   |    | F  | F  |    |    |    |    |    |    |    |    |
| Barmouth (20181)                      |    | F  | F  |    |    |    |    |    |    |    |    |
| Llanaber (20025)                      |    | F  | P  |    |    |    |    |    |    |    |    |
| Talybont (20026)                      |    |    | F  | F  |    |    |    |    |    |    |    |
| Llanendwyn (20027)                    |    | P  |    | F  |    |    |    |    |    |    |    |
| Black Rock Sands (22540)              |    | F  | F  | F  |    |    |    |    |    |    |    |
| Garreg Wen (23253)                    |    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Criccieth E (23141)                   |    |    | F  |    | F  | P  | F  | F  | F  | F  | F  |
| Criccieth W (22541)                   |    | F  | F  |    |    |    |    |    |    |    |    |
| Pen y chain (22544)                   |    |    | F  |    |    |    |    |    |    |    |    |
| Morfa Abererch (22545)                |    |    | F  |    | P  | P  | F  | P  | F  | P  | P  |
| Pwllheli (22546)                      |    | F  | F  |    |    |    |    |    |    |    |    |
| Traeth Crugen (22548)                 |    |    | F  |    |    |    |    |    |    |    |    |
| Llanbedrog (22549)                    |    | F  | F  |    | F  | F  | F  | F  | F  | F  | F  |
| Abersoch (22550)                      |    | F  | F  |    |    |    |    |    |    |    |    |
| Abersoch (23346)                      |    | F  |    |    |    |    |    |    |    |    |    |
| Abersoch (22586)                      |    |    | F  |    |    |    |    |    |    |    |    |
| Machroes (20335)                      |    | F  |    |    |    |    |    |    |    |    |    |
| Porth Ceiriad (20334)                 |    | P  |    |    |    |    |    |    |    |    |    |
| Porth Neigwl (25437)                  |    | P  | P  |    | P  | P  | P  | P  | P  | P  | P  |
| Aberdaron (22553)                     |    | P  | P  |    | F  | F  | F  | F  | P  | P  | F  |
| Porth Oer (22555)                     |    | P  | P  |    |    |    |    |    |    |    |    |
| Porth Iago (22556)                    |    | P  | P  |    |    |    |    |    |    |    |    |
| Porth Colman (22557)                  |    | F  | F  |    |    |    |    |    |    |    |    |
| Porth Tywyn (22558)                   |    | P  | P  |    |    |    |    |    |    |    |    |
| Porth Dinllaen (22559)                |    | F  | F  | F  |    |    |    |    |    |    |    |
| Porth Nefyn (22560)                   |    | F  | F  |    | F  | F  | F  | F  | F  | F  | F  |
| Trefor (22561)                        |    |    | F  |    |    |    |    |    |    |    |    |
| Aberdesach (22562)                    |    |    | F  |    |    |    |    |    |    |    |    |

| Bathing Water                                     | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
|---|----|----|----|----|----|----|----|----|----|----|----|
| Pontllynfi (22563)                                |    | F  |    |    |    |    |    |    |    |    |    |
| Dinas Dinlle (23244)                              |    | F  | P  |    |    |    |    |    |    |    |    |
| Plas Menai (23290)                                |    | F  | F  |    | F  | F  | F  | F  | F  | F  | F  |
| Port Dinorwic (23252)                             |    | F  | F  |    | F  | F  | F  | F  | F  | F  | F  |
| <i>Anglesey County Council</i>                    |    |    |    |    |    |    |    |    |    |    |    |
| Llanddwyn (Niwbwrch) (27537)                      |    |    |    | F  | P  | P  | P  |    |    |    |    |
| Traeth Mawr, Aberffraw (27538)                    |    |    | F  |    |    |    | F  | P  | F  | F  |    |
| Porth Tre Castell (27539)                         |    |    |    |    |    |    |    |    | F  | P  | F  |
| Porth Nobla, Llanfaelog (27540)                   |    |    |    |    |    |    | F  | P  | P  | P  | P  |
| Porth Tyn Tywyn Llanfaelog (23476)                |    |    |    |    |    |    |    |    | P  | P  | P  |
| Rhosneigr (27534)                                 |    | F  | F  |    |    |    |    |    |    |    |    |
| Traeth Crigyll Rhosneigr (23477)                  |    |    |    |    |    |    |    |    | F  | F  | F  |
| Traeth Crigyll (27557)                            |    | F  | F  |    |    |    |    |    |    |    |    |
| Silver Bay, Rhoscolyn (27541)                     |    |    |    |    |    |    | F  | P  | P  | P  | P  |
| Borth Wen – Rhoscolyn (27542)                     |    |    |    |    | F  | P  | F  | P  | F  | P  | F  |
| Porth Gwr Mawr (27544)                            |    | F  | F  | F  |    |    |    |    |    |    |    |
| Porth Dafarch – Trearddur (27546)                 |    |    |    | F  | F  | P  | F  | F  |    |    |    |
| Holyhead Newry (27559)                            |    | P  | F  |    |    |    |    |    | F  |    |    |
| Penrhos (27817)                                   |    | F  |    |    |    |    |    |    |    |    |    |
| Porth Tywyn Mawr, Sandy Beach (27547)             |    |    |    |    |    | P  | F  | F  | P  | P  | F  |
| Porth Trefadog (23479)                            |    |    |    |    |    |    |    |    | F  |    |    |
| Porth Trwyn (23480)                               |    |    |    |    |    |    |    |    | P  | P  | P  |
| Church Bay (27548)                                |    |    |    |    |    | P  | F  | P  | P  | P  | P  |
| Cemlyn (27531)                                    |    |    |    |    |    |    |    |    | P  | P  | P  |
| Cemaes (27529)                                    |    | F  |    |    |    |    | F  | F  |    |    |    |
| Traeth Bach, Cemaes Bay (23481)                   |    |    |    |    |    |    |    |    | F  | F  | F  |
| Bull Bay (27566)                                  |    |    |    |    |    |    | F  | F  |    |    |    |
| Porth Eilian, Amlwch (27549)                      |    |    | F  |    |    |    | F  | F  | F  | F  | F  |
| Traeth Llugwy (27528)                             |    |    |    |    |    |    | F  | F  | F  | F  | F  |
| Moelfre (27561)                                   |    |    | F  |    |    |    | F  | F  | F  | F  | F  |
| Traeth Bychan (27527)                             |    |    | F  |    |    |    |    |    |    |    |    |
| St. Davids, Benllech (23491)                      |    |    |    |    |    |    |    |    | F  | P  | P  |
| Benllech (27827)                                  |    | F  | F  |    |    |    |    |    |    |    |    |
| Red Wharf Bay (27552)                             |    | F  |    |    |    |    |    |    |    |    |    |
| Red Warf Bay (25806)                              |    |    |    |    |    |    |    |    |    |    | F  |
| Llanddona (27562)                                 |    | F  |    |    | F  | P  | P  |    |    |    |    |
| Lleiniog (27564)                                  |    |    |    |    |    |    |    |    | P  | F  | P  |
| Beaumaris (27829)                                 |    | F  | F  |    |    |    |    |    |    |    |    |
| Beaumaris (27828)                                 |    | F  | F  |    |    |    |    |    |    |    |    |
| Beaumaris (27757)                                 |    |    |    |    |    |    | F  | F  | F  | F  | F  |
| Pentraeth (23482)                                 |    |    |    |    |    |    |    |    | F  |    |    |
| Menai Bridge Pier (27568)                         |    | F  | F  |    |    |    |    |    |    |    |    |
| <i>Aberconwy and Conwy County Borough Council</i> |    |    |    |    |    |    |    |    |    |    |    |
| Llanfairfechan Shore Rd (23245)                   |    | F  | F  | F  | F  | F  | F  | F  | F  | F  | F  |
| Penmaenmawr (22996)                               |    |    | F  |    |    |    |    |    |    |    |    |

| Bathing Water   | 90  | 91  | 92  | 93 | 94  | 95  | 96  | 97  | 98  | 99  | 00  |
|---|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|
| Penmaenmawr (22995)   |     | F   | F   | F  | F   |     |     |     |     |     |     |
| Penmaenmawr (23006)   |     | F   | F   |    |     |     |     |     |     |     |     |
| Penmaenmawr (23005)   |     | F   | F   |    |     |     |     |     |     |     |     |
| Morfa Conwy (23246)   |     |     |     | F  | F   | F   | F   | F   | F   | F   | F   |
| Deganwy N Shelter (25034)                                     |     | F   | F   | F  | F   | F   | F   | F   | F   | F   | F   |
| Llandudno W (25033)   |     | F   | F   |    |     |     |     |     |     |     |     |
| Llandudno N (25026)   |     | F   | F   |    |     |     |     |     |     |     |     |
| Llandudno N (25185)   |     |     | F   |    |     |     |     |     |     |     |     |
| Penrhyn Bay (25045)   |     | F   | F   | F  | F   | F   | F   | F   | F   | F   | F   |
| Colwyn Bay, Rhos Abbey Hotel (25042)                          |     | F   | F   | F  | F   | F   | F   | F   | F   | F   | P   |
| Colwyn Bay, Caley Promenade (25041)                           |     | F   | F   | F  | F   | F   | F   | F   | F   | F   | F   |
| Colwyn Bay, Marine Road (25020)                               |     |     |     |    | F   | F   | F   | F   | F   | F   | F   |
| Old Colwyn (23492)  |     |     |     |    |     |     |     |     | F   | F   | F   |
| Llanddulas (3597)   |     | F   | F   |    | F   | F   | F   | F   | F   | F   | F   |
| Abergele (3600)   |     |     | F   |    |     |     |     |     |     |     |     |
| Abergele (3601)   |     | F   | F   |    | F   | F   | F   | F   | F   | F   | F   |
| Towyn (25436)   |     |     |     |    | P   | F   | F   | F   | F   | F   | F   |
| Kinmel Bay (3605)   |     | F   | F   |    |     |     |     |     |     |     |     |
| <i>Denbighshire County Council</i>                            |     |     |     |    |     |     |     |     |     |     |     |
| Rhyl Splash Point (3610)                                      |     | F   | F   |    |     |     |     |     | F   | F   | F   |
| Ffrith Beach, Prestatyn (3611)                                |     | F   |     |    |     | F   | F   | F   | F   | F   | F   |
| Prestatyn Barkby (3614)                                       |     | F   | F   |    |     |     |     |     | F   | F   | F   |
| <i>Flintshire County Council</i>                              |     |     |     |    |     |     |     |     |     |     |     |
| Gronant (25498)   |     |     |     |    |     | F   | F   |     |     |     |     |
| Gronant / Talacre (3617)                                      |     | F   | F   |    | F   | F   | F   | F   | F   | F   | F   |
| <i>Wirral County Council</i>                                  |     |     |     |    |     |     |     |     |     |     |     |
| Thurstaston Station Rd (3649)                                 |     | F   | F   |    |     |     |     |     |     |     |     |
| Caldycroft Drive (3648)                                       |     | F   | F   |    |     |     |     |     |     |     |     |
| W. Kirby (3647)   |     | F   | F   |    |     |     |     |     |     |     |     |
| <b>Total Number Sampled in Wales</b>                          | 50* | 139 | 145 | 83 | 102 | 102 | 120 | 109 | 116 | 116 | 114 |
| <b>Number not Exceeding "G" standards in Wales</b>            | 10  | 23  | 27  | 12 | 19  | 30  | 21  | 24  | 22  | 36  | 32  |
| <b>% Not Exceeding "G" standards in Wales</b>                 | 20  | 17  | 19  | 14 | 19  | 29  | 18  | 22  | 19  | 31  | 28  |
| <b>Total Number Sampled in Wales and Wirral</b>               | 50* | 142 | 148 | 83 | 102 | 102 | 120 | 109 | 116 | 116 | 114 |
| <b>Number not Exceeding "G" standards in Wales and Wirral</b> | 10  | 23  | 27  | 12 | 19  | 30  | 21  | 24  | 22  | 36  | 32  |
| <b>% Not Exceeding "G" standards in Wales and Wirral</b>      | 20  | 16  | 18  | 14 | 19  | 29  | 18  | 22  | 19  | 31  | 28  |

1. Article 3 of the EC Directive on the quality of bathing waters (76/160/EEC) requires member states to set bathing water quality standards no less stringent than those specified as "Imperative" (I) values in the Annex to the Directive. Article 3 also requires member states to endeavour to observe "Guideline" (G) values as guidelines, whether or not there is a corresponding "I" value.

2. Article 5 sets out the detailed requirements for compliance.

For "I" value determinands:-

- a) 95% of the samples must comply with the "I" value
- b) The 5% not complying with the "I" value must not allow consecutive samples taken at statistically valid intervals to exceed the "I" value, i.e. "I" value failures must be of short duration.

For "G" value determinands:-

- a) 90% of the samples must conform with the "G" value (80% in the case of total coliform and faecal coliform parameters).
- b) The 10 (or 20%) not complying with the "G" value must not allow consecutive samples taken at statistically valid intervals to not exceed the "G" value, ie. "G" value failures should be of short duration.

**Quality Standards for Bathing Waters used in this Report**

| <b><u>Parameter</u></b>       | <b><u>Imperative Standard</u></b> | <b><u>Guide Standard</u></b> |
|-------------------------------|-----------------------------------|------------------------------|
| <b><u>Microbiological</u></b> |                                   |                              |
| Faecal coliforms              | 2000/100 ml                       | 100/100 ml                   |
| Total coliforms               | 10000/100 ml                      | 500/100 ml                   |
| Faecal streptococci           |                                   | 100/100 ml                   |
| Salmonella                    | 0 / litre                         |                              |
| Enteroviruses                 | 0 PFU/10 litres                   |                              |

| <b><u>Parameter</u></b>                       | <b><u>Imperative Standard</u></b>  | <b><u>Guide Standard</u></b>   |
|---|--|--|
| <b><u>Physico-chemical</u></b>                |  |  |
| pH  | 6 - 9  | -  |
| Colour  | No abnormal change in colour   | -  |
| Mineral Oils                                  | No film visible on water surface and no odour                                | 0.3 mg / litre   |
| Surface Active Substances                     | No lasting foam  | 0.3 mg / litre   |
| Phenols                                       | No specific odour (0.05 mg / litre)  | 0.005 mg / litre   |
| Transparency *                                | Extinction depth of 1m for Secchi disc - equivalent to 6.665 ftu (turbidity) | Extinction depth of 2m - equivalent turbidity value not yet calculated |
| Tarry Residues and Persistent Floating Solids | -  | Must be absent   |

\* Environment Agency Wales has been granted a derogation for transparency at all its bathing waters so is not required to comply with these standards.



**Appendix 2****Identified Bathing Water Sample Point Details**

| Bathing Water      | Sample Point NGR | Sample Point Number | DETR/NAW Number |
|--------------------|------------------|---------------------|-----------------|
| Jacksons Bay       | ST1220066570     | 19055               | 36100           |
| Whitmore Bay       | ST1145066250     | 19034               | 36200           |
| Cold Knap          | ST0965066400     | 19037               | 36300           |
| Southerndown       | SS8840072900     | 19100               | 36400           |
| Trecco Bay         | SS8310076300     | 19114               | 36500           |
| Sandy Bay          | SS8240076500     | 19117               | 36600           |
| Rest Bay           | SS8000077900     | 19122               | 36700           |
| Aberafan           | SS7390089600     | 19051               | 36800           |
| Swansea Bay        | SS6440092100     | 74006               | 36900           |
| Bracelet Bay       | SS6300087100     | 39105               | 37000           |
| Limeslade Bay      | SS6250087000     | 39106               | 37100           |
| Langland Bay       | SS6060087100     | 39109               | 37200           |
| Caswell Bay        | SS5910087400     | 39111               | 37300           |
| Oxwich Bay         | SS5070086200     | 39123               | 37400           |
| Port Eynon Bay     | SS4720084800     | 39127               | 37500           |
| Rhossili           | SS4140090000     | 74010               | 37600           |
| Pembrey            | SS4000099800     | 39005               | 37700           |
| Pendine            | SN2380007400     | 39010               | 37800           |
| Amroth             | SN1670006800     | 39013               | 37900           |
| Coppet Hall        | SN14300 05300    | 32421               | 37980           |
| Saundersfoot       | SN1410004700     | 39017               | 38000           |
| Tenby North        | SN1345000800     | 39020               | 38100           |
| Tenby Castle       | SN 13820 00230   | 39022               | 38150           |
| Tenby South        | SS1325099850     | 39024               | 38200           |
| Lydstep North      | SS0920098300     | 39570               | 38220           |
| Manobier           | SS0580097400     | 39027               | 38230           |
| Freshwater East    | SS 02200 97900   | 39029               | 38235           |
| Barafundle         | SR9920095000     | 39136               | 38238           |
| Broad Haven South  | SR9790093900     | 32422               | 38240           |
| West Angle         | SM8520003300     | 39032               | 38250           |
| Dale               | SM8130005700     | 39040               | 38260           |
| Marloes            | SM7850007500     | 32788               | 38280           |
| Broadhaven Central | SM8610013800     | 84231               | 38300           |
| Newgale            | SM8460021700     | 39048               | 38400           |
| Caerfai            | SM7600024400     | 39142               | 38460           |
| Whitesands         | SM7300027000     | 84232               | 38500           |
| Newport North      | SN0530040700     | 39065               | 38600           |
| Poppit Sands       | SN1520048900     | 39067               | 38630           |
| Aberporth          | SN2580051700     | 39072               | 38660           |

| Bathing Water                              | Sample Point NGR | Sample Point Number | DETR/NAW Number |
|--|------------------|---------------------|-----------------|
| Tresaith                                   | SN2780051700     | 39073               | 38670           |
| Llangranog                                 | SN3100054300     | 39075               | 38680           |
| New Quay Harbour                           | SN3910059900     | 39079               | 38690           |
| Traeth Gwyn New Quay                       | SN3980059700     | 39080               | 38700           |
| Aberystwyth South                          | SN5790081400     | 39091               | 38800           |
| Aberystwyth North                          | SN5830082200     | 39093               | 38900           |
| Clarach South                              | SN5860083700     | 39095               | 38920           |
| Borth                                      | SN6077090080     | 20023               | 39000           |
| Aberdyfi                                   | SN6072095800     | 20171               | 39050           |
| Tywyn                                      | SH5767000320     | 20019               | 39100           |
| Fairbourne                                 | SM9240013600     | 20402               | 39200           |
| Barmouth                                   | SH6084015900     | 20014               | 39300           |
| Talybont                                   | SH5775021100     | 20026               | 39350           |
| Dyffryn/Llanendwyn                         | SH5671022580     | 20027               | 39360           |
| Llandanwg                                  | SH5669028180     | 20028               | 39400           |
| Harlech                                    | SH5676031480     | 22596               | 39500           |
| Craig Du Beach - from 1998                 | SH5362036410     | 22593               | 39600           |
| Morfa Bychan / Black Rock Sands (Old Site) | SH5421035950     | 22539               |                 |
| Criccieth                                  | SH5033338075     | 23142               | 39700           |
| Pwllheli                                   | SH3710034070     | 22589               | 39800           |
| Abersoch                                   | SH3168027720     | 22552               | 39900           |
| Morfa Dinlle                               | SH4349056690     | 22564               | 39970           |
| Llanddwyn                                  | SH4034063050     | 27537               | 39980           |
| Aberffraw                                  | Sh3524067640     | 27538               | 39985           |
| Rhosneigr                                  | SH3237072120     | 27536               | 39990           |
| Trearddur Bay                              | SH2556078910     | 27532               | 40000           |
| Porth Dafarch                              | SH2330079900     | 27546               | 40010           |
| Cemaes Bay                                 | SH3732093620     | 27529               | 40050           |
| Benllech                                   | SH5268082560     | 27551               | 40100           |
| Llanddona                                  | SH5660081210     | 27562               | 40140           |
| Penmaenmawr                                | SH7180076930     | 22995               | 40180           |
| Llandudno West Shore                       | SH7655081650     | 25032               | 40200           |
| Llandudno North Shore - from 1998          | SH7832082490     | 23486               | 40300           |
| Llandudno North (Old Site)                 | 7918082270       | 25046               |                 |
| Colwyn Bay                                 | SH8584079170     | 25049               | 40400           |
| Sandy Cove                                 | SH9780080600     | 3604                | 40500           |
| Rhyl                                       | SJ0020082600     | 3608                | 40600           |
| Prestatyn                                  | SJ0585084200     | 3612                | 40700           |
| West Kirby                                 | SJ2100086800     | 3646                | 40750           |

**Appendix 3      Non-Identified Bathing Water Sample Point Details.**

| Bathing Water              | NGR          | Spt_No |
|----------------------------|--------------|--------|
| Penarth Yacht Club         | ST1895070850 | 19029  |
| Bendricks Beach, Barry     | ST1360067000 | 19076  |
| Watch House Bay, Barry     | ST1060066200 | 68603  |
| Fontygary Bay, Rhose       | ST0525065750 | 19038  |
| Limpert Bay, Aberthaw      | ST0190066200 | 19147  |
| Llantwit Major             | SS9550067300 | 74050  |
| Newton Bay, Porthcawl      | SS8380076940 | 19112  |
| Aberafan East              | SS7445088950 | 19050  |
| Jersey Marine West         | SS6920092000 | 39097  |
| Swansea Bay - County Hall  | SS6530092000 | 74060  |
| Swansea Bay - Sketty Lane  | SS6290091400 | 39154  |
| Swansea Bay - Black Pill   | SS6320089800 | 39101  |
| Norton Road                | SS6270088700 | 39102  |
| West Cross                 | SS6160089400 | 74005  |
| Mumbles - Knab Rock        | SS6250087800 | 39103  |
| Mumbles Head Pier          | SS6320087400 | 39104  |
| Pwll Du                    | SS5750087000 | 39114  |
| Three Cliffs Bay           | SS5330087600 | 39117  |
| Torbay/Crawley Woods       | SS5280087600 | 39118  |
| Mewslade East              | SS4200087000 | 39128  |
| Rhossili                   | SS4140088300 | 39161  |
| Broughton Bay              | SS4190093000 | 74025  |
| Llanelli & Loughor Estuary | SS4960099500 | 39001  |
| Burry Port                 | SN4460000200 | 39003  |
| St. Ishmael (Kidwelly)     | SN3650007500 | 88503  |
| Llanstephan & Tywi Estuary | SS3550010700 | 39008  |
| Ferryside Beach            | SN3050010400 | 39007  |
| Morfa Bychan (Pendine)     | SN2240007400 | 88501  |
| Wisemans Bridge            | SN1440006000 | 32797  |
| Glen Beach                 | SS1400004500 | 83777  |
| Monkstone Beach (Nr Tenby) | SN1480003100 | 39574  |
| Waterwynch Bay             | SN1370001900 | 83616  |
| Penally                    | SS1240098900 | 83617  |
| Priory Bay, Caldy Island   | SS1380097000 | 39573  |
| Swanlake Bay               | SS0450098000 | 83776  |
| Freshwater West            | SR8820099700 | 39031  |
| Gelliswick, Milford Haven  | SM8870005600 | 39037  |
| Sandy Haven                | SM8570007300 | 39192  |
| Watwick                    | SM8170004100 | 39634  |

| Bathing Water                           | NGR          | Spt_No |
|---|--------------|--------|
| Westdale                                | SM7980005800 | 39571  |
| Martin's Haven                          | SM7610009200 | 39041  |
| St. Brides Haven                        | SM8020011100 | 39042  |
| Little Haven                            | SM8570012800 | 39043  |
| Druidston Haven                         | SM8600017000 | 39141  |
| Nolton Haven                            | SM8580018800 | 39046  |
| Porthselau                              | SM7260026000 | 83778  |
| Aberiddy                                | SM7970031300 | 39053  |
| Traethllyfn                             | SM8010031900 | 39143  |
| Abercastle                              | SM8520033500 | 39056  |
| Abermawr                                | SM8810034600 | 39144  |
| Goodwick Harbour South                  | SM9480038200 | 39058  |
| Goodwick Sands                          | SM9480037900 | 83613  |
| Pwllgwaelod                             | SN0050039900 | 32790  |
| Cwm yr Eglwys                           | SM0150040100 | 32791  |
| Patch                                   | SN1627048520 | 32424  |
| Mwnt                                    | SN1930051900 | 32425  |
| Penbryn                                 | SN2910052400 | 39147  |
| Cil Borth                               | SN3110054400 | 32851  |
| Cwmtydu                                 | SN3555057650 | 32426  |
| New Quay, North Beach                   | SN3900060200 | 39077  |
| Llanina                                 | SN4030059800 | 39146  |
| Little Quay (Cei Bach)                  | SN4100059800 | 39081  |
| Gilfach yr Halen                        | SN4354061360 | 32427  |
| Aberaeron South (Northern Groyne)       | SN4530062800 | 39082  |
| Aberaeron Harbour (Fourth Groyne North) | SN4550063400 | 39083  |
| Aberaeron North (North of groynes)      | SN4620063500 | 39427  |
| Aberarth                                | SN4765063870 | 32428  |
| Llanon                                  | SN5067066750 | 32429  |
| Llansantffraid                          | SN5086067180 | 32430  |
| Llanrhystyd                             | SN5230069100 | 39087  |
| Ynyslas (Northern Groyne - Sea)         | SN6030092800 | 20022  |
| Ynyslas (Twyni Bach - Estuary)          | SN6120094300 | 20399  |
| Carreg Wen                              | SH5607037060 | 23253  |
| Criccieth West End                      | SH5017537967 | 23141  |
| Abererch                                | SH4031035790 | 22545  |
| Llanbedrog                              | SH3339031440 | 22549  |
| Porth Neigwl                            | SH2808026310 | 25437  |
| Aberdaron                               | SH1733026260 | 22553  |
| Porth Nefyn                             | SH3017040840 | 22560  |
| Port Dinorwic (Felinheli)               | SH5217067370 | 23252  |

| Bathing Water                  | NGR          | Spt No |
|--------------------------------|--------------|--------|
| Plas Menai                     | SH5024066120 | 23290  |
| Porth Treacastell              | SH3321070660 | 27539  |
| Porth Nobla, Llanfaelog        | SH3292071160 | 27540  |
| Porth Tyn Llanfaelog           | SH3274071580 | 23476  |
| Traeth Crigyll                 | SH3143073240 | 23477  |
| Silver Bay, Rhoscolyn          | SH2925075160 | 27541  |
| Borth Wen, Rhoscolyn           | SH2732075000 | 27542  |
| Porth Tywyn Mawr (Sandy Beach) | SH2867085160 | 27547  |
| Porth Trwyn                    | SH2950087800 | 23480  |
| Church Bay                     | SH2997089400 | 27548  |
| Cemlyn                         | SH3356093160 | 27531  |
| Traeth Bach                    | SH3710093600 | 23481  |
| Porth Eilian, Amlwch           | SH4768092960 | 27549  |
| Traeth Llugwy                  | SH4990087520 | 27528  |
| Moelfre                        | SH5133086250 | 27561  |
| St. Davids, Benllech           | SH5307082040 | 23491  |
| Red Wharf Bay                  | SH5320081200 | 25806  |
| Lleiniog Beach Penmon          | SH6250079020 | 27564  |
| Beaumaris                      | SH6095076000 | 27757  |
| Llanfairfechan                 | SH6802075810 | 23245  |
| Conwy Morfa                    | SH7574078840 | 23246  |
| Deganwy                        | SH7750079450 | 25034  |
| Penrhyn Bay                    | SH8312081630 | 25045  |
| Colwyn Bay Rhos Abbey Hotel    | SH8450080490 | 25042  |
| Colwyn Bay Cayley Promenade    | SH8493079610 | 25041  |
| Colwyn Bay Marine Road         | SH8527079370 | 25020  |
| Old Colwyn                     | SH8662078750 | 23492  |
| Llanddulas                     | SH9070078800 | 3597   |
| Abergele (Pensarn)             | SH9445079000 | 3601   |
| Towyn                          | SH9650079600 | 25436  |
| Splash Point                   | SJ0190082700 | 3610   |
| Ffrith, Prestatyn              | SJ0460083600 | 3611   |
| Barkby Beach                   | SJ0653084500 | 3614   |
| Point of Ayr, Talacre          | SJ1210085900 | 3617   |

#### **Appendix 4. Salmonella and Enterovirus Sampling 2000**

It was considered desirable that there should be a trigger mechanism to initiate Enterovirus and Salmonella monitoring.

The following criteria triggered Enterovirus and Salmonella monitoring:-

1. Non compliance with I standard in 1999 for Total or Faecal Coliforms
2. Positive Enterovirus result in 1999 triggered Enterovirus sampling in 2000
3. Positive Salmonella result in 1999 triggered Salmonella sampling in 2000
4. Non-compliance with Faecal Coliform or Total Coliform I value standards within the 2000 bathing season (i.e. two or more samples out of the planned twenty exceeding the I-value numerical limit during the monitoring period – if time permits)
5. Significant increase in the amount of sewage derived litter observed in a 10 metre band either side of the Bathing Water sample transect. A scoring system based on the Garber assessment for sewage debris was used, which then triggered sampling. Details of the Garber assessment are given in Appendix 5.

## Appendix 5 "GARBER" ASSESSMENT

The "Garber" assessment consists of a visual examination of an area of beach (i) extending approximately 50 metres to one side of the sample point along the strandline, (ii) in a 3 metre wide strip down the beach from the strandline to the water's edge, and (iii) 50 metres back to the sampling point along the water's edge. In addition collection of some information regarding weather conditions and beach use is made. The parameters examined with the determinand numbers are listed below.

Those used to set the basis for a virus trigger are marked with "+".

|      |  |   |   |   |
|------|--|---|---|---|
| 4    | Time of High Tide (Hours)                              |   | Water's Edge  |   |
| 28   | Wind Direction (Degrees)                               | + | 9052 Sanitary Towels at Strandline to Water's Edge              |   |
| 76   | Water Temperature (Celsius)                            | + | 9053 Noxious Sewage Odours at Strandline to Water's Edge        |   |
| 1192 | Sea State  |   | 9054 Terrestrially Derived Litter at Strandline to Water's Edge |   |
| 2153 | Cloud Cover  |   | 9055 Oil and Tar at Strandline to Water's Edge                  |   |
| 2159 | Wind Speed   |   | 9061 Dead Marine Life at Water's Edge                           |   |
| 9031 | Dead Marine Life at Strandline                         |   | 9062 Animal Faeces at Water's Edge                              |   |
| 9032 | Animal Faeces at Strandline                            |   | +   | 9063 Intact Human Faeces at Water's Edge          |
| +    | 9033 Intact Human Faeces at Strandline                 |   | +   | 9064 Grease/Scum Slick at Water's Edge            |
| +    | 9034 Grease/Scum Slick at Strandline                   |   | +   | 9065 Sewage Debris at Water's Edge                |
| +    | 9035 Sewage Debris at Strandline                       |   | +   | 9066 Condoms/Tampon Applicators at Water's Edge   |
| +    | 9036 Condoms/Tampon Applicators at Strandline          |   | +   | 9067 Sanitary Towels at Water's Edge              |
| +    | 9037 Sanitary Towels at Strandline                     |   | +   | 9068 Noxious Sewage Odours at Water's Edge        |
| +    | 9038 Noxious Sewage Odours at Strandline               |   | +   | 9069 Terrestrially Derived Litter at Water's Edge |
| 9039 | Terrestrially Derived Litter at Strandline             |   | 9071  | Oil and Tar at Water's Edge                       |
| 9041 | Oil and Tar at Strandline                              |   | 9076  | Number of Bathers (No.)                           |
| 9045 | Dead Marine Life at Strandline to Water's Edge         |   | 9077  | Number of Beach Users (No.)                       |
| 9046 | Animal Faeces at Strandline to Water's Edge            |   | 9078  | Number Taking Part in Water Sports (No.)          |
| +    | 9047 Intact Human Faeces at Strandline to Water's Edge |   | 9170  | Salinity (ppt)                                    |
| +    | 9048 Grease/Scum Slick at Strandline to Water's Edge   |   | 9247  | Time Relative to High Water (Hours)               |
| +    | 9049 Sewage Debris at Strandline to Water's Edge       |   |   |   |
| +    | 9051 Condoms/Tampon Applicators at Strandline to       |   |   |   |

All determinands above which have been listed without units are measured on a scale of 0 - 3 as follows:-

- 0 - absence of coded material
- 1 - trace of coded material
- 2 - some at intervals (1-5 items)
- 3 - sufficient to be objectionable (>5 items)

Listed below are brief notes to clarify filling in the log sheet for Garber conditions.

1. HW  
Time of high water in British Summer Time nearest to the time of sampling in hours and minutes.
2. Wind  
Wind direction using the first 2 digits of compass bearing.  
NORTHERLY = 00 (0 degrees)  
EASTERLY = 09 (90 degrees)  
SOUTHERLY = 18 (180 degrees)  
WESTERLY = 27 (270 degrees)  
eg a wind blowing from the North West = 31
3. Temperature  
Water temperature degrees Celsius

#### 4. STASEA

State of sea coded as:

|                     |             |              |
|---------------------|-------------|--------------|
| 0 Calm (Glassy)     | Wave height | 0 m          |
| 1 Calm (Rippled)    | Wave height | 0 - 0.1 m    |
| 2 Smooth (Wavelets) | Wave height | 0.1 - 0.5 m  |
| 3 Light             | Wave height | 0.5 - 1.25 m |
| 4 Moderate          | Wave height | 1.25 - 2.5 m |
| 5 Rough             | Wave height | 2.5 - 4.0 m  |
| 6 Very Rough        | Wave height | 4.0 - 6.0 m  |
| 7 High              | Wave height | 6.0 - 9.0 m  |
| 8 Very High         | Wave height | 9.0 - 14.0 m |
| 9 Phenomenal        | Wave height | Over 14.0 m  |

#### 5. Cloud Cover

Amount of cloud cover recorded on a scale of 0 to 4:

- 0 - Sun obscured
- 1 - Weak sun, no shadows
- 2 - Weak sun, shadows
- 3 - Sun occasionally obscured by clouds
- 4 - Bright sunshine

#### 6. Wind Speed

Beaufort scale wind force.:

- 0 - Calm
- 1 - Light airs
- 2 - Light breeze
- 3 - Gentle breeze
- 4 - Moderate breeze
- 5 - Fresh breeze
- 6 - Strong breeze

#### 7. Garber Scheme Coded Materials

A transect should be examined of 50 metres either side of an imaginary line passing at a right angle from the shore to the sea through the grid reference if the sampling point.

The quantification of coded materials is clearly subjective but to attempt some standardisation the following has been suggested:-

- 0 - Absence of coded materials
- 1 - Trace of coded materials
- 2 - Some at intervals (1 - 5 items)
- 3 - Sufficient to be objectionable (> 5 items)

Position on beach.

Strandline of last high tide

Between strandline and water's edge

At water's edge

#### 7a Dead Marine Life

Includes crabs, lug worms, heart urchins, etc. Large items such as dolphins and porpoises etc should be reported to the relevant Environmental Protection Officer.

#### 7b Animal Faeces

This refers mainly to dog, horse and sheep droppings. Rafts of dried out sheep droppings brought in by high tides do give rise to complaint at some beaches.



- 7c Intact Human Faeces  
Record even small faecal particulates that may arise from crude outfalls.
- 7d Grease / Scum / Slick  
This should be sewage derived grease/scum, usually in a visible plume or slick from an outfall.
- 7e Sewage Debris  
This is sewage derived materials other than contraceptives, tampon applicators and intact sanitary towels.  
It may include cotton buds, toilet paper, hair, backing strips of sanitary towels etc.
- 7f Condoms / Tampon Applicators  
Often only the thick rubber rings from condoms may be found.
- 7g Sanitary Towels  
Complete sanitary towels with absorbent material still present.
- 7h Noxious Sewage Odours  
Distinctive sewage smells - not to be confused with decaying seaweed or agricultural smells.
- 7i Terrestrially Derived Litter  
Litter and debris eg cans, plastic containers, paper, wood etc which is not likely to have been discharged via a sewage outfall.
- 7j Oil and Tar  
Diesel and lubricating oil and the washings from sea going tankers, may be semi solid or globules.

#### Non Garber Determinands

- 8. Number of Bathers  
The number of people in the water.
- 9. Number of Beach Users  
The number of people not in the water but on or near the beach...
- 10. Number Water Contact Sports  
The number of people windsurfing, water skiing, jet skiing, tubing, surfing etc.

**Appendix 6 Future Risk of Non-Compliance with Imperative and Guideline Standards Based on Historical Compliance Data**

**Notes**

1. The risk assessment has been undertaken with monitoring data collected over the period 1990 to 2000 (inclusive) where available. Where schemes have been introduced data has only been used after the scheme completion date.
2. Bathing Waters highlighted in italics have been assessed with only two years data (1999 to 2000). These results should be treated with caution as the minimum data requirement for such an assessment is usually 3 years with the ideal of 5+ years of data.
3. The table can be interpreted as follows:

| <u>%age Risk of Non-Compliance</u> | <u>Predicted Compliance</u>  |
|------------------------------------|--|
| < 10                               | Should achieve 'G' Compliance 9 out of 10 bathing seasons on average |
| 10-20                              | Should achieve 'G' Compliance 8 out of 10 bathing seasons on average |

The above should be considered as the relatively consistent 'G' compliance achievers and will include the bathing waters which achieve Blue Flags generally year on year.

|       |   |
|-------|---|
| 21-50 | Should achieve 'G' Compliance 5 to 7 times out of 10 bathing seasons. Could reasonably be expected to improve with investment and other measures to achieve consistent 'G' compliance |
| > 51  | Would achieve < 5 times out of 10 bathing seasons. None or only occasional 'G' compliance achieved.   |

4. The risk assessment has been completed for all 76 bathing waters in the Welsh operational region (includes West Kirby).

**Summary of EC Bathing Waters at Risk of Future Non-Compliance (greater than 5% risk) with the 'Imperative' Standards of the Bathing Waters Directive at the Start of the 2001 Bathing Season**

| <b>EC Bathing Water</b>   | <b>Percentage Risk of Non-Compliance</b> | <b>Data Period</b> | <b>Likely Source of Microbial Contamination</b>   |
|---------------------------|--|--------------------|---|
| <i>Limeslade</i>          | 25.50                                    | 1999-00            | <i>CSOs (Mumbles)</i>   |
| Aberdyfi                  | 18.97                                    | 1996-00            | Riverine  |
| Centre of Llangrannog Bay | 16.83                                    | 1993-00            | Streams and Continuous Discharge (Some improvements have been made to the discharge but further improvements are planned for early in AMP3) |
| Clarach South             | 14.23                                    | 1998-00            | Riverine  |
| Penmaenmawr               | 14.04                                    | 1995-00            | Streams and Continuous Discharge (improvements due for completion early in AMP3)  |
| Prestatyn Central         | 12.54                                    | 1990-00            | Continuous Discharge (Due to planning problems the scheme has been delayed and will not be completed in the AMP2 period)                    |
| Coppet Hall               | 11.79                                    | 1996-00            | Stream  |
| Benllech                  | 10.16                                    | 1992-00            | Streams   |
| Newport North             | 10.15                                    | 1990-00            | Riverine  |
| Broadhaven Central        | 9.99                                     | 1990-00            | Streams and Continuous Discharge (Studies still awaited to confirm impact of discharge)   |
| Aberafan Slip             | 9.77                                     | 1990-00            | Riverine and CSOs. The Continuous Discharges were improved prior to the 2000 bathing season. CSO improvements planned in AMP3               |
| <i>Cemaes</i>             | 8.82                                     | 1999-00            | <i>Riverine and Continuous Discharge (Improvements to this discharge were completed in 1999)</i>  |
| Criccieth East            | 8.82                                     | 1995-00            | Streams and CSOs  |
| <i>Swansea Bay</i>        | 8.82                                     | 1999-00            | <u>Unconfirmed</u>  |
| <i>Llandudno West</i>     | 8.82                                     | 1999-00            | <u>Unconfirmed</u>  |
| <i>Colwyn Bay</i>         | 8.82                                     | 1999-00            | <u>Unconfirmed</u>  |
| Amroth Central            | 7.49                                     | 1990-00            | Streams   |
| Poppit West               | 7.43                                     | 1990-00            | Riverine and Sewerage problems – rising main bursts   |
| Llandanwg Central         | 7.15                                     | 1990-00            | Continuous Discharge (improvements due for completion early in AMP3)  |
| Aberffraw                 | 5.89                                     | 1996-00            | Unconfirmed   |

**Summary:**

| <u>Likely Source of Impact</u>   | <u>No. of Bathing Waters</u> |
|----------------------------------|------------------------------|
| Continuous Discharge             | 2                            |
| CSOs                             | 1                            |
| Streams/Riverine                 | 6                            |
| Streams and Continuous Discharge | 4                            |
| Streams and CSOs                 | 3                            |
| Unconfirmed                      | 4                            |

**Future Risk of Non-Compliance with Guideline Standards Based on Historical Compliance Data at the end of the 2000 Bathing Season**

| EC Bathing Water          | Percentage Risk of Non-Compliance | Determinand Most At Risk | Data Period | Environment Protection Team                        |
|---------------------------|-----------------------------------|--------------------------|-------------|--|
| Jacksons Bay              | 100.00                            | Faecal Coliforms         | 1998-00     | Vale of Glamorgan and Ely                          |
| Whitmore Bay Central      | 100.00                            | Faecal Coliforms         | 1998-00     | Vale of Glamorgan and Ely                          |
| Swansea Bay               | 100.00                            | Faecal Coliforms         | 1999-00     | Swansea and Llanelli                               |
| Rhyl                      | 99.99                             | Faecal Coliforms         | 1998-00     | Clwyd / Dee Estuary                                |
| Coppet Hall               | 99.98                             | Faecal Streptococci      | 1996-00     | Bridgend, Neath and Port Talbot                    |
| Centre of Llangrannog Bay | 99.97                             | Faecal Coliforms         | 1993-00     | North Ceredigion, Teifi Valley and Carmarthenshire |
| Cemaes                    | 99.93                             | Faecal Coliforms         | 1999-00     | Anglesey / Conway                                  |
| Southerndown              | 99.74                             | Faecal Coliforms         | 1990-00     | Bridgend, Neath and Port Talbot                    |
| Aberafan Slip             | 99.53                             | Faecal Coliforms         | 1990-00     | Bridgend, Neath and Port Talbot                    |
| Colwyn Bay                | 99.41                             | Faecal Coliforms         | 1999-00     | Anglesey / Conway                                  |
| Prestatyn Central         | 99.14                             | Faecal Coliforms         | 1990-00     | Clwyd / Dee Estuary                                |
| Benllech                  | 99.00                             | Faecal Coliforms         | 1992-00     | Anglesey / Conway                                  |
| Aberdyfi                  | 98.79                             | Faecal Coliforms         | 1996-00     | Gwynedd  |
| Llandanwg Central         | 97.79                             | Faecal Coliforms         | 1990-00     | Gwynedd  |
| Llandudno North           | 92.10                             | Faecal Coliforms         | 1999-00     | Anglesey / Conway                                  |
| Clarach South             | 90.92                             | Faecal Coliforms         | 1998-00     | North Ceredigion, Teifi Valley and Carmarthenshire |
| Penmaenmawr               | 90.47                             | Faecal Coliforms         | 1995-00     | Anglesey / Conway                                  |
| Aberffraw                 | 87.54                             | Faecal Coliforms         | 1996-00     | Anglesey / Conway                                  |
| Sandy Cove                | 84.85                             | Faecal Coliforms         | 1998-00     | Clwyd / Dee Estuary                                |
| Sandy Bay                 | 83.75                             | Faecal Coliforms         | 1991-00     | Bridgend, Neath and Port Talbot                    |
| Cold Knap                 | 80.88                             | Faecal Coliforms         | 1998-00     | Vale of Glamorgan and Ely                          |
| Llandudno West            | 79.39                             | Faecal Streptococci      | 1999-00     | Anglesey / Conway                                  |
| Aberystwyth North         | 78.65                             | Faecal Coliforms         | 1995-00     | North Ceredigion, Teifi Valley and Carmarthenshire |
| Newport North             | 78.47                             | Faecal Coliforms         | 1990-00     | Cleddau and Pembrokeshire Coast                    |
| Dale                      | 77.73                             | Faecal Coliforms         | 1998-00     | Cleddau and Pembrokeshire Coast                    |
| Criccieth East            | 76.25                             | Faecal Coliforms         | 1995-00     | Gwynedd  |
| Saundersfoot              | 76.25                             | Faecal Coliforms         | 1996-00     | Cleddau and Pembrokeshire Coast                    |
| Limeslade                 | 74.00                             | Faecal Coliforms         | 1999-00     | Llanelli and Swansea Area                          |
| Broadhaven Central        | 73.62                             | Faecal Coliforms         | 1990-00     | Cleddau and Pembrokeshire Coast                    |
| West Angle                | 72.74                             | Faecal Coliforms         | 1994-00     | Cleddau and Pembrokeshire Coast                    |
| Trearddur Bay             | 72.64                             | Faecal Streptococci      | 1992-00     | Anglesey / Conway                                  |
| Pendine East              | 71.96                             | Faecal Coliforms         | 1990-00     | North Ceredigion, Teifi Valley and Carmarthenshire |
| Trecco Bay                | 71.28                             | Faecal Coliforms         | 1991-00     | Bridgend, Neath and Port Talbot                    |

|                        |              |                         |                |  |
|------------------------|--------------|-------------------------|----------------|--|
| Tywyn                  | 70.95        | Faecal Coliforms        | 1995-00        | Gwynedd  |
| Craig Du Beach Central | 70.95        | Faecal Coliforms        | 1998-00        | Gwynedd  |
| New Quay               | 67.13        | Faecal Streptococci     | 1995-00        | North Ceredigion, Teifi Valley and Carmarthenshire |
| Fairbourne             | 66.66        | Faecal Coliforms        | 1990-00        | Gwynedd  |
| Abersoch South         | 66.17        | Faecal Streptococci     | 1990-00        | Gwynedd  |
| Poppit West            | 56.20        | Faecal Coliforms        | 1990-00        | North Ceredigion, Teifi Valley and Carmarthenshire |
| Aberystwyth South      | 54.25        | Faecal Coliforms        | 1995-00        | North Ceredigion, Teifi Valley and Carmarthenshire |
| Porth Dafarch          | 53.34        | Faecal Coliforms        | 1993-00        | Anglesey / Conway                                  |
| Talybont               | 52.27        | Faecal Coliforms        | 1990-00        | Gwynedd  |
| Borth                  | 51.31        | Faecal Streptococci     | 1990-00        | Gwynedd  |
| Newquay Harbour        | 51.00        | Faecal Streptococci     | 1995-00        | North Ceredigion, Teifi Valley and Carmarthenshire |
| Amroth Central         | 50.92        | Faecal Coliforms        | 1990-00        | Cleddau and Pembrokeshire Coast                    |
| Duffryn                | 40.39        | Faecal Coliforms        | 1990-00        | Gwynedd  |
| Llandona               | 37.90        | Faecal Coliforms        | 1990-00        | Anglesey / Conway                                  |
| Harlech North          | 31.64        | Faecal Coliforms        | 1997-00        | Gwynedd  |
| Freshwater East        | 27.52        | Faecal Streptococci     | 1994-00        | Cleddau and Pembrokeshire Coast                    |
| <i>Langland West</i>   | <i>26.44</i> | <i>Faecal Coliforms</i> | <i>1999-00</i> | <i>Cleddau and Pembrokeshire Coast</i>             |
| Castle Beach Tenby     | 26.44        | Faecal Coliforms        | 1997-00        | Swansea and Llanelli                               |
| Morfa Dinlle           | 25.15        | Faecal Coliforms        | 1990-00        | Gwynedd  |
| Barmouth               | 23.99        | Faecal Coliforms        | 1990-00        | Gwynedd  |
| Rest Bay               | 23.13        | Faecal Coliforms        | 1991-00        | Bridgend, Neath and Port Talbot                    |
| Aberporth              | 22.99        | Faecal Streptococci     | 1995-00        | North Ceredigion, Teifi Valley and Carmarthenshire |
| Pwllheli               | 22.99        | Faecal Streptococci     | 1998-00        | Gwynedd  |
| West Kirby             | 22.99        | Faecal Streptococci     | 1998-00        | Clwyd / Dee Estuary                                |
| Tenby North            | 18.60        | Faecal Streptococci     | 1997-00        | Cleddau and Pembrokeshire Coast                    |
| Pembrey                | 17.63        | Faecal Coliforms        | 1990-00        | North Ceredigion, Teifi Valley and Carmarthenshire |
| Tresaith               | 17.02        | Faecal Coliforms        | 1997-00        | North Ceredigion, Teifi Valley and Carmarthenshire |
| Newgale Central        | 14.50        | Faecal Streptococci     | 1995-00        | Cleddau and Pembrokeshire Coast                    |
| Whitesands Central     | 12.84        | Faecal Streptococci     | 1990-00        | Cleddau and Pembrokeshire Coast                    |
| Caerfai Bay            | 11.37        | Faecal Streptococci     | 1991-00        | Cleddau and Pembrokeshire Coast                    |
| Barafundle             | 9.81         | Faecal Streptococci     | 1994-00        | Cleddau and Pembrokeshire Coast                    |
| Oxwich West            | 4.61         | Faecal Coliforms        | 1990-00        | Llanelli and Swansea Area                          |
| Lydstep North Beach    | 4.32         | Faecal Coliforms        | 1997-00        | Cleddau and Pembrokeshire Coast                    |
| Llanddwyn              | 3.73         | Faecal Streptococci     | 1993-00        | Anglesey / Conway                                  |

|                        |             |                            |                |                                  |
|------------------------|-------------|----------------------------|----------------|----------------------------------|
| Manorbrier Beach       | 3.73        | Faecal Streptococci        | 1997-00        | Cleddau and Pembrokeshire Coast  |
| Rhossili at Hillend    | 3.28        | Faecal Coliforms           | 1990-00        | Llanelli and Swansea Area        |
| Broadhaven South       | 3.01        | Faecal Streptococci        | 1991-00        | Cleddau and Pembrokeshire Coast  |
| Port Eynon West        | 2.28        | Faecal Streptococci        | 1990-00        | Llanelli and Swansea Area        |
| Rhosneigr              | 1.38        | Faecal Coliforms           | 1990-00        | Anglesey / Conway                |
| <i>Caswell Central</i> | <i>1.30</i> | <i>Faecal Streptococci</i> | <i>1999-00</i> | <i>Llanelli and Swansea Area</i> |
| Tenby South            | 1.30        | Faecal Streptococci        | 1997-00        | Cleddau and Pembrokeshire Coast  |
| Marloes Sands          | 0.19        | Faecal Streptococci        | 1993-00        | Cleddau and Pembrokeshire Coast  |
| <i>Bracelet Bay</i>    | <i>0.00</i> | <i>Faecal Coliforms</i>    | <i>1999-00</i> | <i>Llanelli and Swansea Area</i> |

Based on the risk assessment the average Guideline compliance is predicted to be 45.90% at the end of the AMP2 Period. This excludes West Kirby whose compliance is not reported by Wales.

The 95% confidence interval for this estimate is 34.62% to 57.17%. So in 19 years out of 20 we would expect compliance in an individual year to fall in this range. These predictions are based on data since 1995 where improvement schemes have been put in place. During that period Guideline compliance in Wales was as follows:

| <u>Year</u>         | <u>%age Guideline Compliance</u> |
|---------------------|----------------------------------|
| 1996                | 41.07                            |
| 1997                | 48.44                            |
| 1998                | 36.76                            |
| 1999                | 55.71                            |
| 2000                | 42.67                            |
| Average over Period | 44.93                            |

This is slightly lower than the predicted figure but is to be expected as AMP improvements continued through the period 1995 to 2000 giving better compliance later in the AMP2 period.

**Summary of Non EC Bathing Waters at Risk of Future Non-Compliance (greater than 5% risk) with the 'Imperative' Standards of the Bathing Waters Directive at the End of the 2000 Bathing Season**

| EC Bathing Water                        | Percentage Risk of Non-Compliance | Data Period    |
|---|-----------------------------------|----------------|
| Llanelli & Loughor Estuary              | 84.84                             | 1995-00        |
| Penarth Yacht Club                      | 81.87                             | 1997-00        |
| Llanstephan & Tywi Estuary              | 76.52                             | 1994-00        |
| Ferryside Beach                         | 71.09                             | 1996-00        |
| Patch                                   | 61.65                             | 1994-00        |
| St. Ishmael (Kidwelly)                  | 56.61                             | 1994-00        |
| Nolton Haven                            | 55.80                             | 1994-00        |
| Pwllgwaelod                             | 51.32                             | 1994-00        |
| Aberaeron North (North of groynes)      | 46.96                             | 1994-00        |
| Morfa Bychan (Pendine)                  | 44.87                             | 1997-00        |
| Llanina                                 | 37.14                             | 1994-00        |
| Wisemans Bridge                         | 35.50                             | 1994-00        |
| Broughton Bay                           | 35.50                             | 1994-00        |
| Llanon                                  | 32.12                             | 1994-00        |
| Aberaeron Harbour (Fourth Groyne North) | 31.20                             | 1994-00        |
| Aberafan East                           | 25.88                             | 1994-00        |
| Watch House Bay, Barry                  | 25.12                             | 1994-00        |
| Criccieth West End                      | 20.71                             | 1995-00        |
| Gilfach yr Halen                        | 20.40                             | 1994-00        |
| Burry Port                              | 19.69                             | 1995-00        |
| Porth Eilian, Amlwch                    | 18.68                             | 1996-00        |
| Bendricks Beach, Barry                  | 16.83                             | 1997-00        |
| Penbryn                                 | 15.89                             | 1994-00        |
| Little Haven                            | 15.71                             | 1994-00        |
| Aberaeron South (Northern Groyne)       | 15.54                             | 1994-00        |
| Porth Trwyn                             | 14.23                             | 1998-00        |
| Traeth Llugwy                           | 11.60                             | 1996-00        |
| Cwm yr Eglwys                           | 11.05                             | 1994-00        |
| <i>Penally</i>                          | 8.82                              | <i>1999-00</i> |
| <i>Druidston Haven</i>                  | 8.82                              | <i>1999-00</i> |
| Fontygary Bay, Rhose                    | 8.64                              | 1997-00        |
| Newton Bay, Porthcawl                   | 8.64                              | 1997-00        |
| Llansantffraid                          | 6.76                              | 1994-00        |
| Llanfairfechan                          | 6.68                              | 1994-00        |
| Three Cliffs Bay                        | 6.10                              | 1996-00        |
| Sandy Haven                             | 5.99                              | 1996-00        |

**Summary of Non EC Identified Bathing Waters at Risk of Future Non-Compliance with  
Guideline Standards of the Bathing Waters Directive at the End of the 2000 Bathing  
Season**

| EC Bathing Water                        | Percentage Risk of Non-Compliance | Determinand Most At Risk | Data Period |
|---|-----------------------------------|--------------------------|-------------|
| Penarth Yacht Club                      | 100.00                            | Faecal Coliforms         | 1997-00     |
| Watch House Bay, Barry                  | 100.00                            | Faecal Coliforms         | 1994-00     |
| Bendricks Beach, Barry                  | 100.00                            | Faecal Coliforms         | 1997-00     |
| Ferryside Beach                         | 100.00                            | Faecal Coliforms         | 1996-00     |
| Pwllgwaelod                             | 100.00                            | Faecal Coliforms         | 1994-00     |
| Llanelli & Loughor Estuary              | 100.00                            | Faecal Coliforms         | 1995-00     |
| Patch                                   | 99.99                             | Faecal Coliforms         | 1994-00     |
| Llanstephan & Tywi Estuary              | 99.99                             | Faecal Coliforms         | 1994-00     |
| Port Dinorwic (Felinheli)               | 99.99                             | Faecal Coliforms         | 1994-00     |
| Aberaeron North (North of groynes)      | 99.94                             | Faecal Coliforms         | 1994-00     |
| Newton Bay, Porthcawl                   | 99.94                             | Faecal Coliforms         | 1997-00     |
| St. Ishmael (Kidwelly)                  | 99.92                             | Faecal Coliforms         | 1994-00     |
| Fontygary Bay, Rhoose                   | 99.31                             | Faecal Coliforms         | 1997-00     |
| Llanina                                 | 99.01                             | Faecal Coliforms         | 1994-00     |
| Gilfachryr Halen                        | 98.93                             | Faecal Coliforms         | 1994-00     |
| Morfa Bychan (Pendine)                  | 98.57                             | Faecal Coliforms         | 1997-00     |
| Wisemans Bridge                         | 98.55                             | Faecal Coliforms         | 1994-00     |
| Aberafan East                           | 97.84                             | Faecal Coliforms         | 1994-00     |
| Aberaeron Harbour (Fourth Groyne North) | 97.84                             | Faecal Coliforms         | 1994-00     |
| Little Haven                            | 97.23                             | Faecal Streptococci      | 1994-00     |
| Llanon                                  | 96.80                             | Faecal Coliforms         | 1994-00     |
| Criccieth West End                      | 96.39                             | Faecal Streptococci      | 1995-00     |
| Cwmtedu                                 | 96.10                             | Faecal Coliforms         | 1994-00     |
| Gelliswick, Milford Haven               | 94.49                             | Faecal Coliforms         | 1994-00     |
| Limpert Bay, Aberthaw                   | 94.43                             | Faecal Coliforms         | 1997-00     |
| Nolton Haven                            | 92.44                             | Faecal Streptococci      | 1994-00     |
| Porth Nefyn                             | 92.26                             | Faecal Streptococci      | 1994-00     |
| Porth Eilian, Amlwch                    | 92.26                             | Faecal Coliforms         | 1996-00     |
| Cwm yr Eglwys                           | 90.87                             | Faecal Streptococci      | 1994-00     |
| Aberarth                                | 82.69                             | Faecal Coliforms         | 1994-00     |
| Traeth Llugwy                           | 81.14                             | Faecal Streptococci      | 1996-00     |
| Penbryn                                 | 80.26                             | Faecal Coliforms         | 1994-00     |
| Llanfairfechan                          | 79.67                             | Faecal Coliforms         | 1994-00     |
| Cil Borth                               | 76.89                             | Faecal Coliforms         | 1994-00     |
| Sandy Haven                             | 69.81                             | Faecal Coliforms         | 1996-00     |
| Llansantffraid                          | 69.32                             | Faecal Coliforms         | 1994-00     |
| Broughton Bay                           | 68.36                             | Faecal Coliforms         | 1994-00     |
| Burry Port                              | 65.36                             | Total Coliforms          | 1995-00     |
| Aberaeron South (Northern Groyne)       | 58.99                             | Faecal Streptococci      | 1994-00     |
| Borth Wen, Rhoscolyn                    | 57.01                             | Faecal Streptococci      | 1994-00     |
| Three Cliffs Bay                        | 50.63                             | Faecal Streptococci      | 1996-00     |



|                                |       |                            |                |
|--------------------------------|-------|----------------------------|----------------|
| Porth Tywyn Mawr (Sandy Beach) | 50.41 | Faecal Streptococci        | 1995-00        |
| St. Brides Haven               | 48.80 | Faecal Coliforms           | 1995-00        |
| <i>Penally</i>                 | 47.98 | <i>Faecal Coliforms</i>    | <i>1999-00</i> |
| <i>Druidston Haven</i>         | 46.47 | <i>Faecal Streptococci</i> | <i>1999-00</i> |
| Aberdaron                      | 43.35 | Faecal Streptococci        | 1994-00        |
| Porth Tre Castell              | 42.79 | Faecal Coliforms           | 1998-00        |
| St. Davids, Benllech           | 41.81 | Faecal Streptococci        | 1998-00        |
| Priory Bay, Caldy Island       | 37.04 | Faecal Coliforms           | 1997-00        |
| Waterwynch Bay                 | 37.04 | Faecal Coliforms           | 1999-00        |
| Abererch                       | 36.39 | Faecal Coliforms           | 1994-00        |
| Mwnt                           | 31.90 | Faecal Streptococci        | 1994-00        |
| Pwll Du                        | 30.25 | Total Coliforms            | 1996-00        |
| Church Bay                     | 27.16 | Faecal Streptococci        | 1995-00        |
| <i>Mewslade East</i>           | 24.72 | <i>Faecal Coliforms</i>    | <i>1999-00</i> |
| Porth Trwyn                    | 22.99 | Faecal Streptococci        | 1998-00        |
| Abermawr                       | 16.10 | Total Coliforms            | 1996-00        |
| Porth Nobla, Llanfaelog        | 10.76 | Faecal Streptococci        | 1996-00        |
| Monkstone Beach (Nr Tenby)     | 7.55  | Faecal Streptococci        | 1997-00        |
| Martin's Haven                 | 7.37  | Total Coliforms            | 1996-00        |
| Watwick                        | 7.26  | Faecal Streptococci        | 1998-00        |
| Silver Bay, Rhoscolyn          | 4.28  | Faecal Streptococci        | 1996-00        |
| Porth Neigwl                   | 3.68  | Faecal Streptococci        | 1994-00        |
| Abereiddy                      | 3.30  | Faecal Streptococci        | 1994-00        |
| Freshwater West                | 3.07  | Total Coliforms            | 1994-00        |
| Traethllyfn                    | 2.10  | Faecal Streptococci        | 1996-00        |
| <i>Rhossili</i>                | 1.16  | <i>Faecal Coliforms</i>    | <i>1999-00</i> |
| Porth Tyn Llanfaelog           | 0.82  | Faecal Coliforms           | 1998-00        |
| Cemlyn                         | 0.43  | Total Coliforms            | 1998-00        |
| Westdale                       | 0.20  | Faecal Streptococci        | 1997-00        |
| <i>Torbay/Crawley Woods</i>    | 0.00  | <i>Faecal Coliforms</i>    | <i>1999-00</i> |