



DŴR CYMRU  
WELSH WATER

## June Return 2002



# Overview

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# Introduction

This report provides an overview of Dŵr Cymru's performance in the year to 31 March 2002. It is addressed to the Director General of Ofwat and accompanies our annual June Return.

It covers levels of service and outputs for our water and sewerage activities, environmental performance, financial performance and overall progress against targets established at the last price review in 1999 and the IDOK of 2000.

All the uncertainty that accompanied the change of ownership has not prevented all those who work with and for Dŵr Cymru from delivering an excellent overall performance for the year. In addition, Glas Cymru's ownership of Dŵr Cymru is already delivering real benefits for customers.

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## Highlights for the year

### *Customer service delivery*

- Compliance with bacteriological drinking water quality standards best ever at 99.8% "at the tap".
- Compliance with overall water quality standards maintained at 99.6% "at the tap".
- Leakage targets achieved and water abstractions now 15% lower than in 1998.
- Properties at risk of low pressure reduced by half (DG2).
- Unplanned interruptions to supply lasting more than six hours (DG3) reduced by nearly two thirds.
- Sewer flooding incidents (excluding those problems caused by exceptional storms) reduced by more than half (DG5).
- Improved environmental performance with 99% compliance with environmental quality standards at wastewater treatment works.
- Improved results for coastal bathing water quality, with 78 bathing beaches achieving "Guideline" standard leading to 30 Blue Flag awards - nearly a third of the UK total - and 26 Green Coast awards for 2002.

- Best ever performance in meter reading (DG8), and steady improvement in customer contact centre performance.

### *AMP3 improvement programme*

- 426km of water mains renewed or relined to improve water quality (S19 Undertaking).
- 27 Water Treatment Works schemes completed.
- 17 Wastewater Treatment Works improvement schemes completed, including the commissioning of the new Cardiff Wastewater Treatment Works (£190m, population equivalent of 900,000).
- 148 CSO schemes completed.
- Capital maintenance expenditure in line with Ofwat 1999 determination.

### *Financials*

- Water operating costs 5% lower, sewerage operating costs 5% higher, slightly behind assumptions included in Final Determination
- Capital investment £206m, some £26m less than what was assumed in the Final Determination.

- Glas Cymru financial Reserves £241m and gearing 89% (net debt/RCV).

### Operational issues

We also faced a number of specific operational issues during the year:

- An increase in the number of written complaints, following the introduction of a new debt management system in October 2000.
- A fall in compliance against the drinking water quality standards for trihalomethanes.
- The very severe storms on 3 July that caused 692 sewage flooding incidents out of a total for the year of 827.
- An increase in the reported number of pollution incidents caused by asset breakdown
- Taste problems with drinking water in the Swansea and Hereford areas last summer.
- Delays to some capital investment works due to access problems caused by the continuation of the foot and mouth disease.

All of the these issues were actively addressed and in those areas where performance fell below target action was taken. In each case performance had improved by the end of the year.

### Competitive procurement plan

At the beginning of the year we implemented a new competitive procurement policy under which specialist service providers now carry out under contract much of the day to day operation of assets and service delivery. We also out-sourced customer billing and call centre operation.

Following a highly competitive process in accordance with EU Procurement Rules, United Utilities secured the contract for asset operation and service delivery, and Thames Water secured the contract for customer billing and contact centre management. Other contracts were competitively let for sewer network operation, laboratory services and meter installation. Dŵr Cymru had previously established its Capital Alliance for delivery of key elements of the AMP3 capital investment programme. All of these contracts and working arrangements are intended to operate over the course of AMP3.

Our procurement strategy is designed to bring significant benefits to Welsh Water and customers, including the best combination of value for money and quality of service from the most capable and competitive operators in the marketplace for each distinct area of activity. It also delivers predictable costs, transparent market pricing (which will provide an important new source of information at regulatory price reviews), reduction in risk and continuing pressure for good performance.

### Progress against Monitoring Plan

In our Monitoring Plan, published in December 2000, we set out the minimum service standards we expected to achieve over the AMP3 period and the target levels we are aiming to achieve by 2005. This Overview provides a summary of our progress against these targets.

# Performance against the Monitoring Plan

## Water Service

Performance Measure	Units	The 2005 Monitoring Plan Target	Previous Performance 2000/01	Actual Performance 2001/02
DG2 Properties below reference level for low pressure	No.	1,828	1,439	748
DG2 Properties at risk of receiving low pressure	%	0.14	0.11	0.06
DG3 Overall performance score (interruption to supply)	No.	0.66	0.32	0.14
DG4 Restrictions on water supply	No.	0	0	0
Trend in burst mains per 1,000km of main	No.	194	213	203
Distribution input not covered by S19 undertakings at wtw	%	98	84.92	80.75
Compliance with water quality regulations "at the tap"	%	99.8	99.58	99.60
Iron compliance "at the tap"	%	97.7	98.04	98.78

## Sewerage Service

Performance Measure	Units	The 2005 Monitoring Plan Target	Previous Performance 2000/01	Actual Performance 2001/02
Properties flooded internally – excluding severe weather	No.	310	363	169
Total props subject to internal flooding (excluding severe weather)	%	0.023	0.04	0.02
Properties at risk of flooding	No.	315	394	395
Trend in sewer collapses per 1,000km of sewer	No.	27	32	36 [ <i>*31.8</i> ]
Wastewater treatment works complying with numeric consents	%	100	98.61	99.06
Combined sewer overflows satisfactory	%	81	63	71

\* The underlying sewer collapse rate compared on a like for like basis with 2000/01

## Quality and Environmental Compliance

Performance Measure	Units	The 2005 Monitoring Plan Target	Previous Performance 2000/01	Actual Performance 2001/02
Percentage population equivalent served by compliant works (LUT)	%	>90	96.50	99.97
Sewage sludge disposed of satisfactorily	%	100	100	100
Bathing waters – planned compliance with mandatory standards	%	100	98.6	93.3
Bathing waters – planned compliance with guideline standards	%	Stable	43.4	60.0
Number pollution incidents at CSOs and sewers (cat 1 & 2)	no.	9 +/- 30%	6	11

## Customer Service

Performance Measure	Units	The 2005 Monitoring Plan Target	Previous Performance 2000/01	Actual Performance 2001/02
DG6 Billing contacts responded to within 5 days	%	99.2	99.5	99.99
DG7 Written complaints responded to within 10 days	%	99.46	99.4	99.1
DG8 Bills based on company or customer meter readings	%	99.7	99.6	99.9
DG9 Received telephone calls answered within 30 seconds	%	94.6	93.64	98.45

# CHAPTER 1

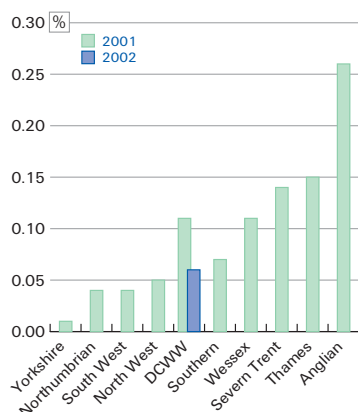
## Key Outputs and Service Delivery

Over the last year we have made further improvements to our levels of service to customers and with few exceptions we are outperforming our targets for water and wastewater quality improvement. We have worked closely with our outsourcing partners throughout the year to ensure that improvements have been effected through targeted expenditure and improved working practices.

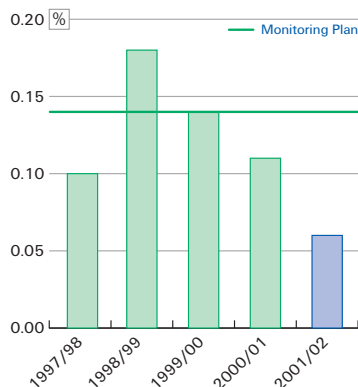
We are particularly pleased that overall performance has improved against a background of some quite exceptional weather events experienced during the reporting year.

During the year we carried out research with customers to understand their satisfaction with the services provided by Dŵr Cymru. Latest research shows that overall satisfaction with the Company's levels of service is the highest ever.

### 1 Properties at risk of low pressure DG2



### 2 Properties at risk of low pressure DG2



## Water Service

### Low pressure DG2

In 1999 the company set itself a challenging DG2 target of 0.14% by 2005. By the end of the 2001/02 reporting year 748 properties or 0.06% of the 1.3 million total properties we serve received a supply below the reference level for low pressure. This compares with 1,439 properties in the previous year.

Our performance continues to be above average for the sector (0.06% of properties compared with 0.1% as an industry average for 2000/01).<sup>[1]</sup>

In total 1,815 properties have been removed from the DG2 register as a result of company action; this has involved substantial mains replacement and a continued focus on a rolling programme of pressure monitoring.

DG2 additions resulting from asset deterioration show a downward trend with 1,078 property additions in 2001/02 as compared with 1,261 in the previous year, reflecting positive outputs from the Company's maintenance programme.<sup>[2]</sup>

### Interruptions to supply DG3

During the year 1,501 properties experienced unplanned supply interruptions lasting more than 6 hours, compared with 3,299 in the previous year. Correspondingly, Company performance as measured by Ofwat's "overall performance score" has improved this year to 0.14 (2001/02) from 0.32 in the previous year, continuing the trend of year on year improvement delivered since 1997.<sup>[3]</sup>

The number of unplanned supply interruptions lasting more than 12 hours has also reduced with 331 properties affected in 2001/02 as compared to 893 properties in the previous year.

During the year we have invested significantly on a programme of mains renewal and maintenance and continued to focus on reducing response times and on pressure management to reduce the frequency of bursts. We have reported an increase in the number of planned

interruptions arising from activities on the network by third parties. This reflects the increased workload on the mains rehabilitation programme and especially an increased focus on the use of relining techniques to meet the DWI S19 undertaking.

Despite this increase in activity levels and the numbers of planned interruptions, the number of customers affected by planned shutdowns exceeding the planned and warned interruption periods reduced from 268 last year to 50 this year. <sup>4</sup>

## Delivering the drinking water compliance programme

The Company achieved a high level of water quality compliance during 2001 with performance against a number of key measures being best ever. This performance reflects both the continued improvements at Water Treatment Works, the substantial ongoing investment on water mains rehabilitation and improvements in operational procedures defined in the Company's Quality Management System.

In the reporting year we have renovated some 426km of unlined iron mains to meet the DWI S19 Undertakings (451km in calendar year 2001) and we remain on track to achieve key Milestones for the revised programme agreed with DWI following delays to the original programme caused by the Foot and Mouth Disease outbreak.

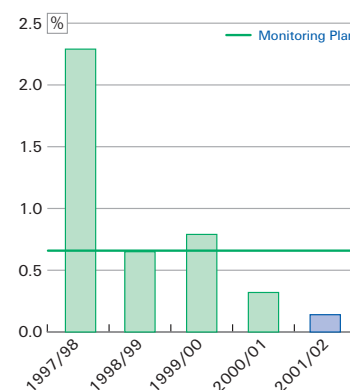
The revised standard on lead (reduction from 50ug/l to 25 ug/l by 2004 and to 10ug/l by 2014) will almost certainly require replacement of a considerable number of lead communication pipes. However, both Ofwat and DWI advocate a policy of plumbosolvency treatment to meet the interim standard before committing to a programme of lead pipe replacement. The Company has introduced a policy of replacing lead pipes in zones where the water mains are being replaced (rather than relined) as part of the quality improvement programme and where lead compliance is less than 90%. In the reporting year we replaced a total of 3,901 lead communication pipes, up from 2,069 in 2000/01 and against a nil allowance included in the IDOK.

Bacteriological and overall water quality compliance "at the tap" was 99.8% and 99.6% respectively.

Iron and manganese compliance, the commonest cause of discoloured water at customers' taps both improved to best ever performance, with compliance being 98.8% and 99.6% respectively. However, compliance with the quality standard for trihalomethanes (THMs) was 95.4%, down from 98.6% in the previous year. The deterioration in 2001 occurred in North Wales and was caused by a change in the natural quality of the water we abstract in some upland areas. Capital investment and other improvements to treatment processes at the nine treatment works affected have been identified and performance in the first quarter of calendar year 2002 shows compliance at 100%, up from 97% in the same quarter in 2001.

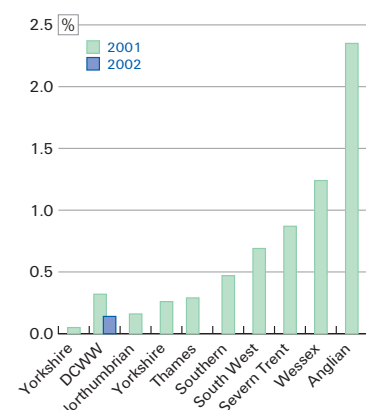
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### Unplanned interruptions to supply DG3



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### Unplanned interruptions to supply DG3 - industry comparison





Overall compliance, for the calendar year 2001, measured by the Operational Performance Index (OPI) was 99.49%, down slightly on the previous year as a result of the lower THM compliance performance.

Performance against five of the main chemical parameters which comprise the OPI measure is shown in the charts below. [5](#) [6](#) [7](#) [8](#) [9](#)

Compliance for coliforms at water treatment works has improved in the reporting year, with only 0.04% of

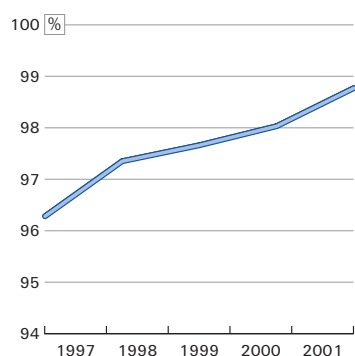
WTW samples containing coliforms in 2001 compared with 0.05% in the previous year. We have also reported improvements in compliance in Service Reservoirs and Zones and this continues the trend of year on year improvement since 1997/98. [10](#)

#### Bacteriological Compliance - 2001

	Coliforms	E.Coli
WTW	99.96%	100%
Service Reservoirs	99.87%	99.98%
Zones	99.81%	99.97%

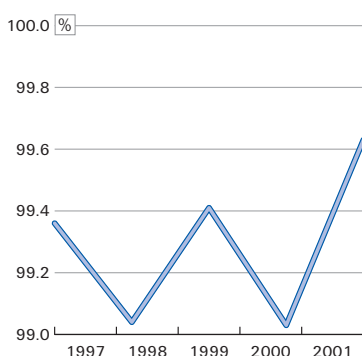
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#### Iron compliance



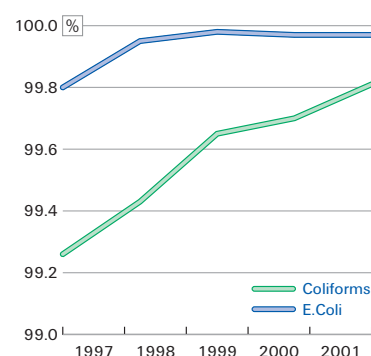
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#### Manganese compliance



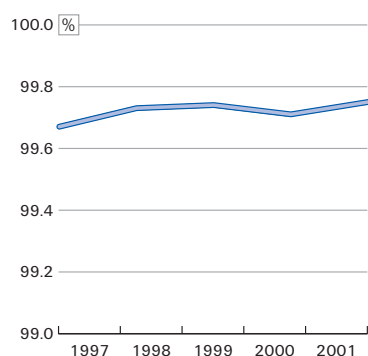
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#### Bacteriological compliance at tap



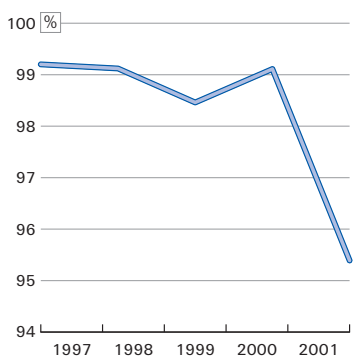
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#### Aluminium compliance



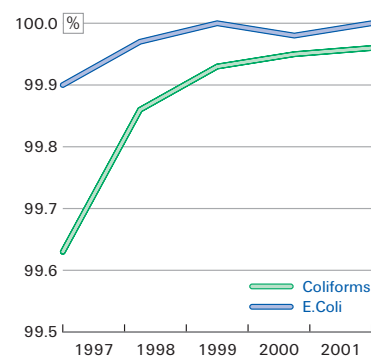
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#### THM compliance



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#### WTW bacteriological compliance



## Maintaining serviceability to customers

Despite abnormal weather conditions during the reporting year, overall serviceability as measured by Ofwat has been maintained and the trend remains stable.

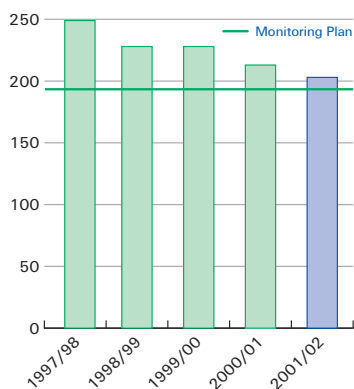
This year we have reported a reduction in the mains burst rate (per km) of some 5% compared with 2000/01, with a total of 203 bursts per 1000km. The Company's monitoring plan target for burst reduction was 15% over the 5 year period from the 1999/00 baseline (228). Over the first two years of this regulatory period the burst rate has been reduced by over 10%. [11](#) [12](#)

Our mains refurbishment programme is steadily improving our compliance with the water quality standard for iron. Out of the Company's total of 177 zones, 34 experienced sample failure against the water quality standard for iron at least once during the year, which continues the trend of steady improvement. [13](#)

We have reported to DWI that 98.78% of samples from customers' taps were compliant within the required standard of 200 ug/l iron per litre, a significant improvement over last year.

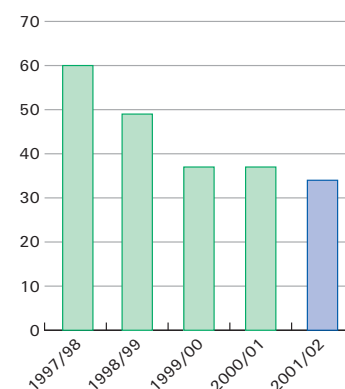
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Water mains burst rate



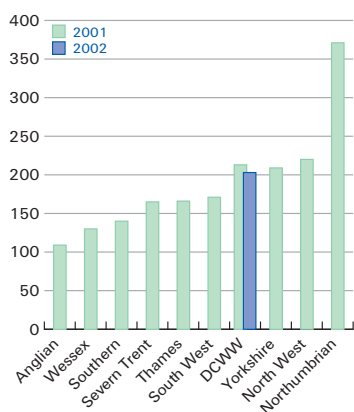
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Zones failing iron standard



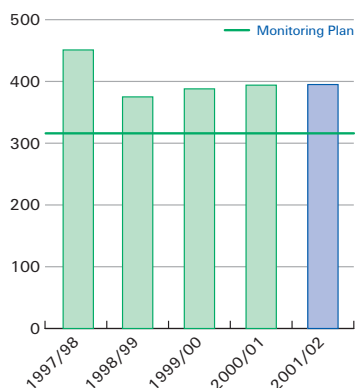
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Water mains burst rate



14

### Sewer flooding “at risk register” DG5



## Sewerage Service

### Sewer Flooding DG5

Reducing the risk of sewage flooding is a priority for Dŵr Cymru. £23m of the £41m reinvestment of targeted savings announced in November is to accelerate work to reduce the risk of sewage flooding for some 250 properties which have been flooded more than once following very heavy rainfall. This takes our total planned AMP3 spend to £37m on alleviating sewage flooding problems and this will deliver over 600 solutions which is around twice what was allowed for in the Final Determination and included in our Monitoring Plan.

During the reporting year we carried out investment schemes (at an average cost of £76,000 per property) to remove the risk of sewage flooding from 26 properties, and we removed a further 19 properties from the “at risk register” as a result of better information being available following re-investigation. During the year a total of 46 properties have been added to the register and so the total number of properties on the Company’s “at risk register” at the end of the reporting year was 395, a net increase of 1 compared with the previous year. We continue to out-perform our minimum Monitoring Plan target.

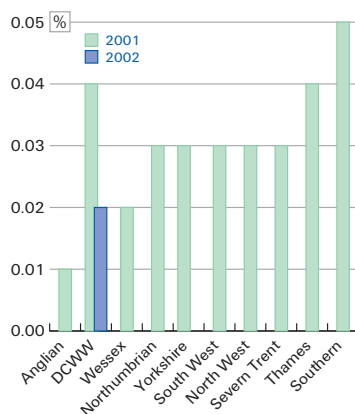
We have prioritised work throughout the year to address problems at properties where flooding has occurred most frequently. Significantly, the number of properties remaining on the “at risk register”, with a 2 in 10 risk of flooding, has reduced from 135 last year to 117 in the reporting year. [14](#) [15](#)

Last year, 806 properties were actually flooded with sewage as a result of the hydraulic overloading of sewers; this corresponded to 827 flooding incidents. However, of this total, 711 were flooding incidents that occurred during exceptional storms experienced in Wales during the months of July and October. The July storm particularly gave rise to rainfall and flooding which affected most parts of Wales. Over a 17 hour period, on the afternoon and evening of 3/4th July, the storm return frequency recorded by the Company (and confirmed by the Meteorological Office) was in the range 1:16 to 1:159, with hotspots having prolonged storm intensities, indicating particularly exceptional conditions. Rainfall volumes exceeded the hydraulic capacity of the network in some localised areas, resulting in 690 properties flooding for the first time as a result of this single event.

The underlying DG5 performance (ie excluding the incidents caused by exceptional weather) has improved during the reporting year, and on this basis the percentage of properties that experienced flooding (all causes) was reduced from 0.04% in 2000/01 to below 0.02% in 2001/02. We have also reported a reduction in the number of sewer flooding incidents caused by sewer collapses. [16](#)

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### Flooding incidents DG5



Note: rounded to nearest 0.01%

## Delivering the quality enhancement programme

At the start of the current AMP3 period 2000-2005 the Company had some 3,000 intermittent discharges at sewage treatment works, sewage pumping stations, and within the sewerage system.

We commenced the 2001/02 reporting year with 1114 unsatisfactory intermittent discharges on the EA list and we have dealt with 148 of these discharges in the year against a business plan target of 131. In addition, we have made improvements to 55 intermittent discharges carried over from the AMP2 programme. <sup>[17]</sup>

During the year 17 wastewater treatment enhancement schemes were completed, against a target of 14, delivering improvements for a population equivalent of 511,964 against a target of 292,000. In addition we have completed 5 AMP2 schemes serving a population equivalent of 80,500. Over the first two years of AMP2 we have completed a total of 48 projects serving a population equivalent of 1.2 million against a target of 42 projects serving a population equivalent of 655,000. The planned improvements at Freshwater East WWTW were delayed as a result of land acquisition issues, which have now been resolved, and work has been rescheduled for completion in the 2002/03 reporting year.

Projects completed during the year have included:

- the commissioning of Cardiff WWTW;
- completion of the South Eastern Coastal Strategy which provides full treatment for discharges from all villages from Chepstow to Newport in Gwent;

- completion of the treatment works and long sea outfall at Penmaenmawr.

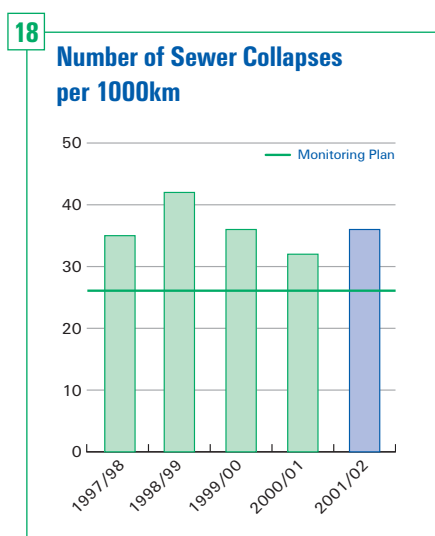
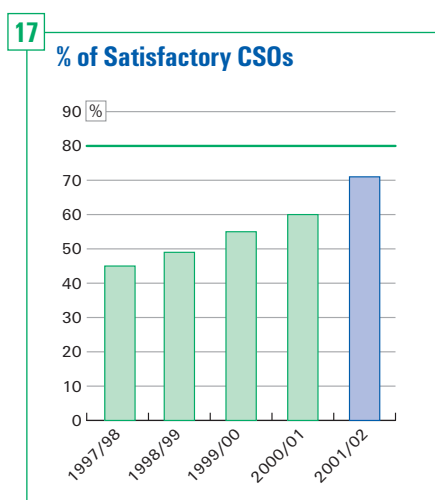
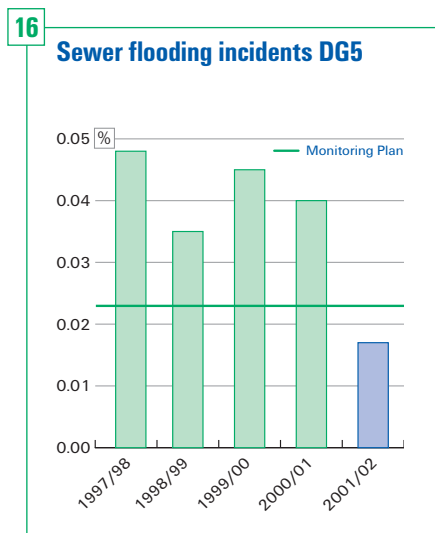
## Maintaining Serviceability to Customers

Over the AMP3 period the Company has targeted a 25% reduction in the rate of sewer collapse; this will bring the number of collapses per 1000km of sewer down to 26 by 2005.

In the reporting year we have experienced an increase in the number of sewer collapses from 32 per 1000km in 2000/01 to 36 per 1000km in 2001/02.

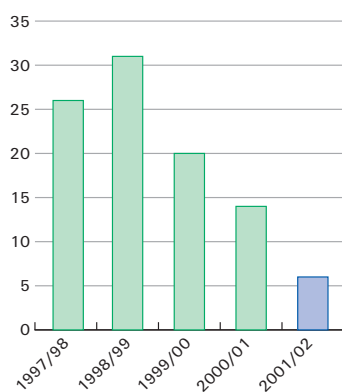
This does not reflect a decline in serviceability but rather a better understanding of the performance and condition of the network following the letting of new contracts in April 2001. The new sewer operating contract partners took over the activities of the local authority sewerage agencies and this allowed us to harmonise operations and implement new working practices. One of the benefits from this has

been the availability of better information and asset data. Our sewer network contract partners have undertaken a major de-silting, cleaning and inspection programme, targeted in the North West and South East areas of Wales. A total of 120km of CCTV investigations have been carried out resulting in a number of collapses and structural deficiencies being identified prior to operational problems arising. Were we to report on the same basis as 2000/01 (i.e. collapses causing operational problems) the figure would have been 31.8 per 1000km for 2001-02. <sup>[18]</sup>



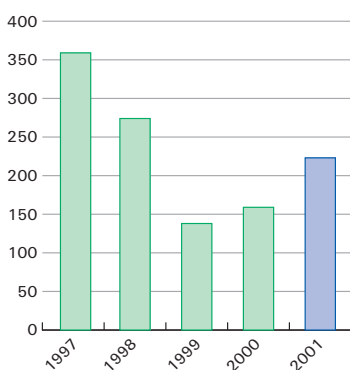
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**Number of Flooding Incidents caused by Sewer Collapses**



20

**Number of Pollution Incidents at CSOs Cat 1, 2 and 3**



Despite the overall increase in collapse rates we have reported a significant reduction in the number of flooding incidents resulting from sewer collapses. <sup>19</sup>

We have reported a total of 22 Category 1 and 2 pollution incidents of which 11 were associated with combined sewer overflows and foul sewers.

With the inclusion of Category 3 incidents the total number of incidents was 350 for the year. Of this total 223 were caused by CSOs and foul sewers, which compared to a figure of 159 for 2000 represents a deterioration in performance on this important measure.

This is a major disappointment but we are firmly committed to improving performance on key environmental measures and reducing the number of pollution incidents. Over the last 12 months, we have worked closely with EA Wales to understand the causes of these incidents and we have put in place a strategy to reverse this unacceptable trend. <sup>20</sup>

Key here is ensuring that the risk of asset breakdown is minimised, but with a large and often antiquated network of assets, notwithstanding the large investment programme since privatisation, we continue to remain exposed to asset failures. Given therefore the reality that our asset network will continue to experience problems, it is imperative that whenever there is an asset breakdown we respond quickly and effectively.

A comprehensive review of our incident management procedures has been carried out and we have put in place a compliance strategy that

includes the following initiatives during the reporting year:

- accelerated investment on sewerage and wastewater treatment assets that have been assessed as being “at risk” of breakdown or non-compliance generally; this has been made possible as a result of targeted savings on our capital investment programme, and forms part of the additional £41m reinvestment programme announced in November 2001;
- we have worked closely with EA (Wales) to make improvements in a number of areas, including speed of incident feedback, accuracy of reports, and consistency of incident treatment and definition;
- we are working closely with our contract partners to ensure that maintenance expenditure is targeted to best effect on the system and at sewage pumping stations, and additional processes and procedures have been put in place which will allow to be more effective response to asset breakdowns; and
- we have put in place a wastewater treatment works compliance strategy to assess the requirements at all works that failed during 2000/01 and all works that are considered “at risk”; a steering group and a core team have been appointed to monitor progress and deliver improvements.

These initiatives have already started to deliver improvements and in the first quarter of 2002 there have been no “Category 1” incidents and one confirmed “Category 2” incident (another remains under review).

### Number of Pollution Incidents associated with CSOs and Foul Sewers during 2001.

Incident Category	No. of incidents associated with CSOs	No. of incidents associated with Foul Sewers
1	1	1
2	6	3
3	148	64
Total	155	68

There are over 3,000 storm water overflows (CSOs) on Dŵr Cymru's network and of these, almost a third have been identified as needing improvement. Unsatisfactory CSOs have been one of the main causes of pollution incidents. The CSO investment programme agreed with the Environment Agency Wales will deliver improvements at 690 CSOs during AMP3.

Compliance with numeric consents was 99.1% in calendar year 2001, up from 98.6% in calendar year 2000. Three works failed "look-up" with the result that 99.9% of connected population was served by 'look-up' compliant works in calendar year 2001, up from 96.5% in calendar year 2000.

## Customer contact

### Billing Contacts DG6

During the reporting year we handled 1.2 million queries and requests concerning bills, an increase of nearly 5% compared with 2000/01. Of the total nearly 200,000 were written contacts and just over one million were telephone contacts.

We dealt with 99.99% of billing contacts within a five day period, up from 99.5% in the 2000/01.

Overall billing contacts have increased due to growth in our measured customer base coupled with increased activity in pursuing payment defaults. <sup>[21]</sup>

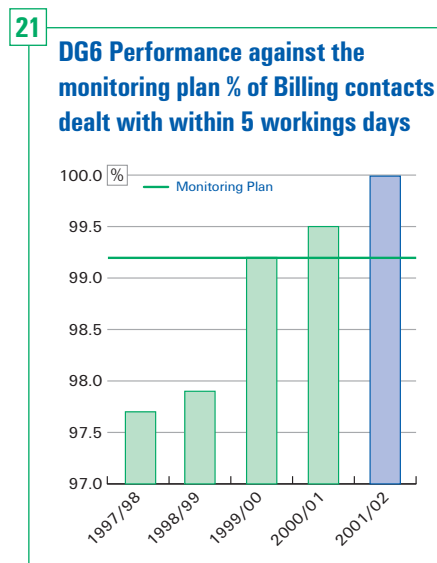
### Written Complaints DG7

In the reporting year we responded to 18,809 written complaints compared with 13,076 in 2000/01. Overall, DG7 performance has remained stable with the percentage responded to within 10 days being 99.1%, a performance only marginally below the monitoring plan target for 2005 set at 99.5%.

The increase in the number of complaints experienced during the year has occurred primarily in the customer accounts area of the business, accounting for some 85% of the total number of complaints received. Some 20% of all complaints received were directly associated with the Company's proactive initiatives to collect outstanding customer debt. <sup>[22]</sup>

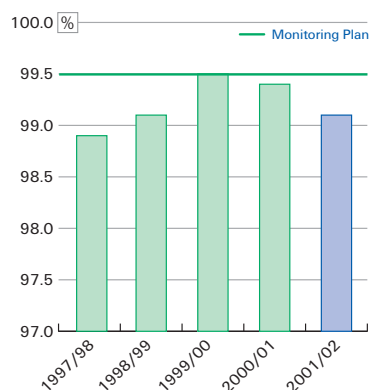
An analysis of the trend of complaints over the year shows a progressive increase in complaint numbers in the early part of 2001 peaking in June/July, with a sustained reduction in the rate of complaints during the latter part of the year. The root cause of this adverse trend pre-dates the restructuring of the business and the implementation of the competitive outsourcing arrangements, and is directly linked to the introduction of the Company's Debt Collection System (DCS) in October 2000.

The higher level of debt collection activity substantially increased the number of telephone contacts coming into the business in the early part of the reporting year, causing



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**DG7: % of Written Complaints responded to within 10 days**  
**Performance against the monitoring plan**



delays at our customer call centre, which in turn generated an increased number of written complaints. This coincided with the Company's annual billing round, which commenced in February 2001, further compounding the situation resulting in additional volumes of telephone traffic at the customer contact centre. <sup>23</sup>

Notwithstanding that overall response times to complaints are good, in the early part of the report year we experienced a shift in our response times from the 0 to 5 day response category to the 6 to 10 day response category.

During the year we have put in the place a series of initiatives to reverse the trend and to redress the rising number of complaints overall:

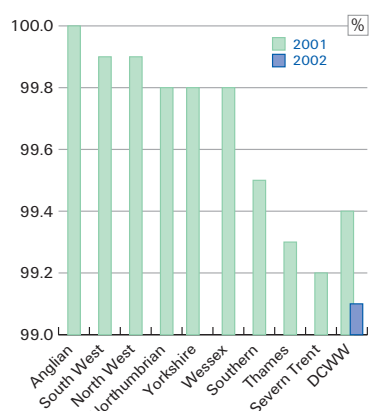
- increased manning levels at the call centre – 40 additional agents;
- increased the number of lines into the call centre from 90 to 150 and made changes to the telecommunications network configuration;
- introduced Queue-buster which offers callers the option of an automated call-back within 30 minutes;
- invested in a workflow and scheduling tool (Q.Max) that enables resources to be matched with call activity.

The number of customer account complaints received in the first quarter of calendar 2002 and our response times are in line with performance prior to last year's problems.

Throughout the year we have ensured that WaterVoice Wales have been fully informed of our position and improvement plans.

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**DG7: % of Written Complaints responded to within 10 days**  
**Industry Comparison**



**Trend in the number of “Customer Account” written complaints received each month and Dŵr Cymru response times**

	2000/01		2001/02	
	Total Responses to Written Complaints	% Responded to within 0-5 days	Total Responses to Written Complaints	% Responded to within 0-5 days
Apr	644	74	1525	1
May	898	69	1289	2
Jun	818	71	2073	1
Jul	846	31	2076	0
Aug	583	56	1555	1
Sep	608	51	1503	3
Oct	504	87	1373	6
Nov	886	11	1073	41
Dec	703	45	768	10
Jan	1188	2	935	96
Feb	1557	1	857	97
Mar	1203	7	1094	97
Total	10,438	%	16,121	%

**Meter Reading DG8**

During 2001/02 we have achieved our best ever DG8 compliance, with 99.91% of metered accounts being read during the year despite the Foot and Mouth Disease outbreak affecting our performance in the early part of the reporting year. The number of meter readings has increased from 173,103 in 2000/01 to 201,906 in 2001/02. <sup>24</sup>

In addition, we have reported only 224 meters that have not been read by the Company for two years, well within the Ofwat target of <0.15%.

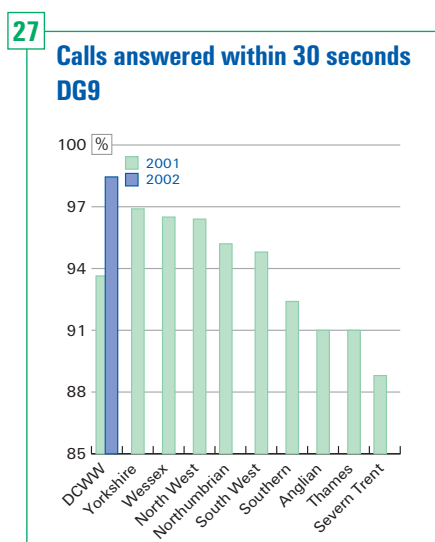
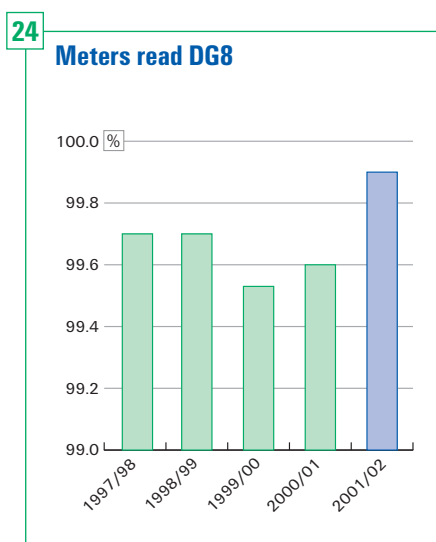
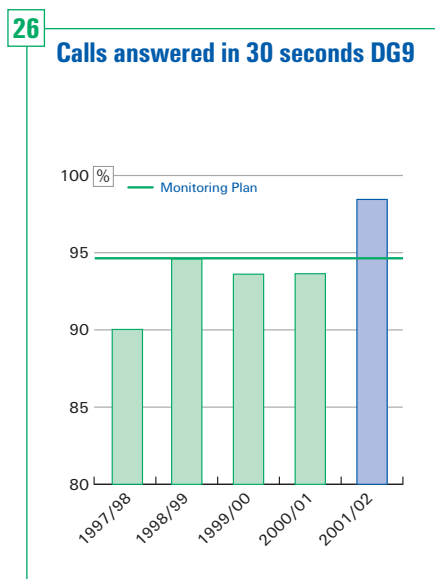
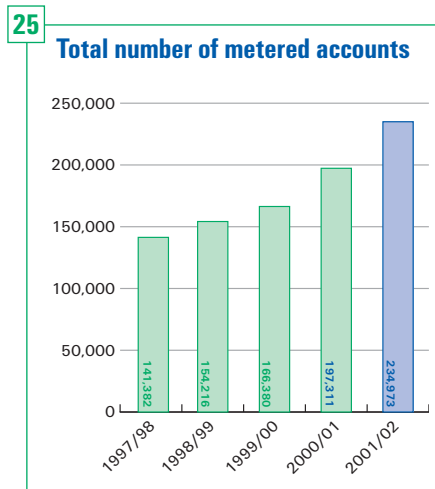
Throughout the year we have implemented a series of initiatives to improve the performance associated with internal meter reading. These included mailshots, pre-planned appointments and telephoning customers directly. Our customers' responses to these initiatives have been positive.

**Telephone Contact DG9**

During the reporting year a total of 1.2 million calls were received on the principal advertised customer contact points.

This represents a 6% increase compared to 2000/01. The increase is attributed to the introduction of the company's debt collection system (DCS) in October 2000 and the rise in the number of customers who have switched from unmeasured to metered accounts. <sup>25</sup> <sup>26</sup>

Despite the rise in call volumes the average time taken to answer telephone calls from customers was 3 seconds, with 98.45% of calls being answered within 30 seconds. <sup>27</sup>





# Chapter 2:

## Financial Performance Measures

Glas Cymru's financial performance during the year was satisfactory with all financial measures being ahead of the forecasts made in the "Glas Cymru Bond Prospectus" in May 2001.

The following summarises the financial position for the year and actual performance against financial projections for both Dŵr Cymru and Glas Cymru. As a result of the different corporate structure of Glas Cymru and the change in the focus from managing on an accounting basis to managing on cash-flows it is not meaningful to directly compare financial ratios for the period 2001-02 with those from previous years.

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### Dŵr Cymru

Turnover in the year to 31 March 2002 was £453.6m, some 4.1% higher than in the previous financial year, largely reflecting the RPI+K price increase of 3.4% allowed by Ofwat. Income from industrial customers fell, due to lower manufacturing activity.

The average domestic customer bill in 2001-02 was £274, as compared with £304 in the year 1999/00 (reflecting the real price reduction of 10.5% which came into effect on 1 April 2000).

We have continued to make steady progress in managing costs. The total operating expenditure for the water service before exceptional items was £116m which, in real terms, was 5% less than the previous year. Water service operating cost was £6m above that forecast in the Final Determination.

Operating expenditure for the sewerage service, before exceptional items, was £90m, which is 5% higher than in the previous year, in real terms, but is in line with business plan projections and slightly behind the Final Determination assumption.

Capital expenditure during the year was £96.2m for the water service and £110.3m for the sewerage

service, a total of £206.5 (before grants and contributions).

This figure was some £26.1m less than assumed for 2001/02 in the Final Determination (including IDOK and using Ofwat's November 1999 inflation assumptions). For the first two years of AMP3, capital expenditure has been £412m, some £91m behind what was assumed in the Final Determination (again including IDOK and using Ofwat's November 1999 inflation assumptions). The difference is due to some re-phasing of the AMP3 capital investment programme (mains refurbishment, sewer refurbishment), some delays due to planning or Foot and Mouth (some WTW schemes), completing less expensive solutions first (CSO programme) and efficiency. In the first two years of AMP3 we have delivered the key required regulatory outputs (named WTW schemes, CSOs, reprofiled mains programme), as well as some additional outputs (CSOs, DG5 solutions, population served by improved Wastewater Treatment Works). In addition, the total capital maintenance expenditure for both water and sewerage services is in line with the total allowed for in the Final Determination.

For the five years to 31 March 2005, our business plan targets (which is public domain) include a total capital investment spend of £1,175m, which is some 5% below the figure assumed in the Final Determination (again including IDOK and using Ofwat's 1999 November inflation assumptions). This figure includes the reinvestment of £41m for additional high customer value outputs announced in November. The 5% target saving will contribute to our Financial Reserves which in turn are key to raising funds for the AMP4 capital investment programme at the lowest possible cost of capital. Delivering the AMP3 capital investment programme within the £1,175m overall budget remains one of our biggest challenges.

### Glas Cymru

The underlying profit of the business (before the amortisation of negative goodwill and the release of fair value provisions) was £24.1m. All of this profit is retained in the business to provide Financial Reserves and to further the objectives of the Company for the benefit of its customers. Earnings before interest, tax, depreciation and amortisation (EBITDA) were £222m.

In March 2002, Ofwat published a revised calculation of Regulatory Capital Values which included a RCV for Dŵr Cymru of £2,125m at outturn prices as at 31 March 2002.

The level of net debt at 31 March 2002 was £1,884m, which is £144m below the level forecast in the Bond Issue Prospectus.

Improved operating cashflows, lower interest costs, asset sales and capital expenditure efficiencies and

reprofiling during the period all contributed to the lower than expected level of net debt.

Net interest payable by Glas Cymru in the period was £104.8m, over 10% lower than the forecast made in the Bond Issue Prospectus. The lower level of net interest payable reflects the better than anticipated interest rates achieved in the May 2001 bond issue and the lower level of net debt over the period.

As a consequence of lower interests costs and higher earnings figures during the period, interest cover ratios (on an EBITDA basis) are higher than forecast in the Bond Issue Prospectus.

Financial Reserves (RCV less net debt) are now forecast to reach £400m, or 15% of RCV by 31 March 2005. The forecast growth in Financial Reserves is after allowing for the additional capital investment announced in November 2001 and the planned customer bill rebates of £11m in 2003 and £12m in 2004.

Financial Reserves at 31 March 2002 were £241m, compared to £173m forecast in the Bond Issue Prospectus.

This has resulted in gearing (net debt/RCV) of 88.6% as at 31 March 2002 which compares with the forecast gearing of 92.1% in the Bond Issue Prospectus.

# Chapter 3:

## Key Supporting Information

The organisational changes within the business, following the acquisition by Glas Cymru, has resulted in an overall greater transparency of operating and capital costs for both the water and sewerage services. Over 80% of the Company's annual expenditure is now carried out under contract with service providers and partners.

Operating expenditure by principal contracts	
	£000
United Utilities (Operations)	99,753
Thames (Customer Contact)	18,721
Severn Trent (Laboratories)	7,091
Various (Sewerage Network)	8,582

The largest element of operating expenditure is undertaken by United Utilities. All service providers and partners report expenditure over the various functional expenditure categories in line with Ofwat definitions.

Overall operating expenditure for the water and sewerage services was £206.7m. This is marginally less than last year in real terms. Total operating expenditure is slightly above that assumed in the Final Determination.

The operating expenditure position at the end of the year in respect of the four principal outsourced contracts is shown in the table

Additional costs were incurred for the Severn Trent Laboratories contract related to additional sampling that was required for geosmin, cryptosporidium and pesticides last summer.

### Contract for Difference (CfD)

In March 2001, Dŵr Cymru entered into a contract with WPD Finance Limited, the Contract for Difference (CfD). This contract fixed the price of the operations and customer outsourcing contracts before the contracts were awarded. Following competitive tender, the outsourcing of the contracts were in total below the CfD price. The actual net difference has resulted in Dŵr Cymru making an annual payment to WPD of some £8million.

### Water

#### Operating Expenditure by Purpose

Analysis of water operating expenditure shows a reduction per property served in 2001/02 of nearly 3% in real terms, compared with last year.

Total water service operating expenditure for the year was £116.4m, a comparison with last year and the Final Determination is shown below.

Operating Expenditure Water Service (£m)	Ofwat allowance for 2001/02 – FD (Outturn)	Actual Opex 2001/02 (Outturn)	Previous Year Opex 2000/01 (Outturn)
Base	106.9	111.7	117.2
Enhanced Service	0.0	0.3	0.3
Supply & Demand & IDOK	2.5	0.9	0.6
Quality & IDOK	0.9	3.5	2.6
Total Water Service (£m)	110.3	116.4	120.7

## Capital Expenditure

At the end of the second year of AMP3 the Company had substantially met or exceeded its key output targets. One area where we have reported being behind target is the mains replacement programme, where, because of restrictions imposed by the Foot and Mouth Disease outbreak we have agreed a reprofiling of our undertaking with the DWI; we have renewed or relined 426km in the year against a reprofiled planned output of 441km.

Water service capital expenditure for the year was £72/property compared to £61/property in the previous year.

Last year we delivered the following outputs from our Water Service investment programme:

- **Water treatment works:** Spend £11m. 27 schemes completed against a target of 33. Delays experienced at six sites due to Foot and Mouth disease and planning constraints. Work focused on compliance with quality requirements including removal of lead, manganese and cryptosporidium. Work undertaken at Felindre, Cefni, Bontgoch, Rhiwgoch and Portis.
- **Water Mains Programme:** Spend £34m. 426km of water mains refurbished to improve water quality and reliability of supply. Slightly behind target due to access restrictions during the foot and mouth outbreak. Schemes rescheduled to 2002-03.
- **Meters:** Spend £4m. Over 31,000 unmeasured customers have switched in the year and a further 1,916 former unmeasured customers switched to paying on an AMC.

Capital Expenditure by Purpose Water Service (£/M)	Ofwat allowance for 2001/02 in Final Determination (Nov 99 assumption)	Actual Capex 2001/02* (Outturn)	Previous Year Capex 2000/01 (Outturn)
Base - Infrastructure	22.2	26.9	20.7
Base - Non Infrastructure	27.8	28.7	23.1
Enhanced Service	0.0	0.1	0.0
Supply & Demand & IDOK	14.4	7.5	7.4
Quality & IDOK	31.2	31.0	28.9
<b>Total</b>	<b>97.6</b>	<b>94.2</b>	<b>80.1</b>

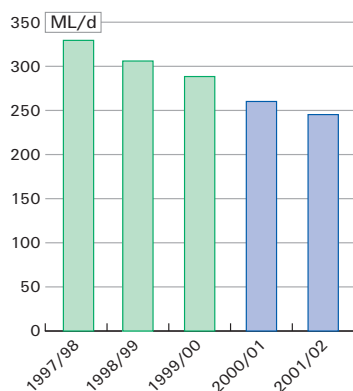
\* Total Capex for water and sewerage (2001/02) was £206.5 million gross of infrastructure contributions.

- **Leakage Reduction:** Spend £12m. Leakage identification and prevention work has achieved a reduction of average leakage per day from 260MI to 245MI this year.
- **New assets for new development:** Spend £4m. 62km of new water mains to serve new development.
- **Water Supply Asset Maintenance:** Spend £31m. Investment to maintain the performance of water treatment works, service reservoirs, impounding reservoirs, water pumping stations and water mains at over 250 sites, and over 76km of water mains improved.

Table D requires the Company to identify any water treatment works where maintenance investment in the year has exceeded 25% of the MEA value of the work. This threshold is too high and does not reflect the amount of capital maintenance actually carried out by the Company. During the reporting year we have carried out capital maintenance at 93 of our 104 works, with 16 water treatment works having more than £100k invested during the year and of these one WTW had over £500k invested.

Maintenance work has also been undertaken at 157 service reservoirs and 112 water pumping stations during the report year.

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**Total Leakage ML/d**

Expenditure in excess of 25% of the MEA value of individual assets is reported on 6 service reservoirs and 8 pumping stations.

During the year we renewed a total of 393km of water mains, which includes 294km of water mains renewed to meet the DWI S19 undertaking and 76 km renewed under prime purpose maintenance, and we have relined 132km of unlined iron water mains. In the first two years of AMP3, relining has accounted for some 28% of the S19 mains refurbishment programme.

### Leakage

Last year we made further progress to reduce leakage in our region. The annual leakage figure for the reporting year is 245ml/d, which is 2ml/d below the Ofwat target for 2001/02.

Leakage was 9.1m<sup>3</sup>/km/day, down from 10.2m<sup>3</sup>/km/day in 2000/01.

Our leakage performance overall is in line with the rest of the sector, although in a number of water resource zones leakage remains above estimated ELL and work is under way to reduce leakage further. [28](#)

### Distribution Input and Water Delivered

Mainly as a result of leakage reduction, we have reduced the amount of water we need to abstract by around 10% since 1998.

The average distribution input for 2001/02 was 894ml/d. During the reporting year we have carried out a programme of work to verify the accuracy of meters measuring input to the distribution system and this too has contributed to the lower leakage figures reported.

### Metering

Dŵr Cymru will have over 31,000 extra metered customers or customers paying an Assessed Measured Charge (AMC) as a result of the Measured Charge Notices (MCN) received up to March 2002.

During the year we have installed 25,650 meters and a further 1,916 former unmeasured customers switched to paying on an AMC as they were unable to have a meter fitted for various reasons.

Since April 2000 over 50,000 customers have switched from unmeasured charging and over 8,000 had submitted an MCN by the end of March 2002. This is in line with the Ofwat assumption in the Interim Determination. Measured households now comprise 11.9% of the total households served by the Company.

### GSS – Payments

The total number of GSS payments made by the Company in the reporting year relating to the water and sewerage service, both automatically generated and claimed was 54 (excluding Enhanced GSS).

GSS payments are categorised as follows:

Reason for GSS Payment	No.
Planned Interruptions:	40
Unplanned Interruptions:	14
<b>Total</b>	<b>54</b>

## Sewerage

### Operating Expenditure by Purpose

Analysis of sewerage operating expenditure shows an increase in cost per property served in 2001/02, compared with last year because of significant additional costs arising out of the capital investment programme.

Total sewerage service operating expenditure for the year was £90.3m broken down as shown in the table top right.

Operating Expenditure Sewerage Service (£m)	Ofwat allowance for 2001/02 – Final Determination (Outturn)	Actual Opex 2001/02 (Outturn)	Previous Year Opex 2000/01 (Outturn)
Base	67.2	72.8	70.3
Enhanced Service	0	0.2	0.2
Supply & Demand	1.2	0.3	0.3
Quality & IDOK	19.8	17.0	13.9
<b>Total Sewerage Service</b>	<b>88.3</b>	<b>90.3</b>	<b>84.7</b>

### Capital expenditure

Total sewerage service capital expenditure for the year was £110.4m broken down as shown in the table right.

Capital Expenditure Sewerage Service (£m)	Ofwat allowance for 2001/02 – Final Determination (Nov 99 assumption)	Actual Capex 2001/02 (Outturn)	Previous Year Capex 2000/01 (Outturn)
Base - Infrastructure	14.1	16.3	9.0
Base - Non Infrastructure	19.7	23.9	20.1
Enhanced Service	0.0	2.6	1.1
Supply & Demand	5.3	5.8	2.7
Quality + IDOK	96.0	61.8	94.6
<b>Total</b>	<b>135.1</b>	<b>110.4</b>	<b>127.5</b>

\* Total Capex for water and sewerage (2001/02) was £206.5 million gross of infrastructure contributions.

### Capital Works activity

We are currently on target to achieve the agreed regulatory outputs within the overall capital investment allowance included in the Final Determination.

Last year we delivered the following outputs from our Sewerage Service investment programme:

- **Wastewater treatment works:**  
Spend £33m. 17 schemes completed against a target of 14. Schemes completed include Cardiff, Hereford, Penmaenmawr, Pontyberem, and Chepstow and an additional 5 schemes from AMP2.
- **Sludge:** Spend £11m. Major work at 28 centres across Wales to increase capacity by 20%.
- **Section 101a:** Spend £2m. 11 schemes completed. On target to complete 25 schemes by 2003 but behind the target for 2002.

- **CSOs:** Spend £37m. 148 schemes completed. Major works at Rhymney, Amman, and Gwendraeth Valleys.
- **Sewer flooding:** Spend £5m. Removed 26 properties from the "at risk register" as a result of company action.
- **New sewers and other sewer refurbishment:** Spend £11m. 42km of new sewers and 5km of sewers refurbished in the year. CCTV surveys ahead of further investment.
- **Asset maintenance:** Spend £11m. Work carried out at over 400 sites to improve asset quality and serviceability.

We are behind on the number of schemes to develop Section 101A first time sewerage, although in terms of delivery against the population equivalent served we have met the target for 2001/02.

In the year we have dealt with 148 unsatisfactory CSOs identified under the AMP3 programme; we are now 15 outputs ahead of the 2001 year-end target agreed as part of the NEP programme. In addition the Company has completed 55 CSOs outstanding from the AMP2 programme. During the year we have assessed further the total number of active intermittent discharges on the Company's database. As a result, we are now reporting an increased figure of 3,357 which includes intermittent discharges at waste water treatment works, pumping stations and on the sewer network.

The total length of critical and non-critical sewer renovated or replaced during the year was 5.6km, compared to 3.5km in the previous year. Most of our work this year has been targeted at 'local' problems and 'local' repairs; these small scale schemes are expected to reduce as our sewer replacement and renovation programme progresses during AMP3. Our Monitoring Plan target was to replace or renew a total of 35km of critical and non-critical sewer by the 2001/02. The 35km target included renewal or replacement as part of the CSO improvement programme but to date this programme has been mainly focused on tackling aesthetic problems where, in most cases, screening is applied to existing discharges as opposed to renewing or enlarging pipework. We expect to

catch up the shortfall in the coming years as the sewer rehabilitation programmes and the major work on the CSO programme progresses.

Through savings identified in the overall capital investment programme we have added additional outputs to our original AMP3 programme, including £23m to remove an additional 250 properties from the sewer flooding "at risk register" and £6m to support our plans to secure 100% compliance at our WWTWs.

In the reporting year sludge production increased by some 3,000 tds. The total sludge disposed of during the reporting year was 65,359tds. All sludge was disposed of satisfactorily.

Table E requires the Company to identify any sewage treatment works where maintenance investment in the year has exceeded 25% of the MEA value of the works. This threshold is too high and does not reflect the amount of capital maintenance actually carried out by the Company. During the reporting year we have carried out capital maintenance work at over 400 of our 851 sewage treatment works and approximately 220 wastewater pumping stations.

# Chapter 4:

## Efficiencies

### Operating Efficiencies

Dŵr Cymru's operating costs are 3.5% lower in real terms compared to 1997/98 levels. This net reduction is after having absorbed significant new operating costs arising from the capital investment programme.

Operating costs for the year were £206.7m (excluding exceptional items), which is in line with our published forecasts but some £8.1m higher than the figure assumed in the Final Determination.

The outsourcing arrangements have significantly improved the transparency of costs which has enabled the Company to re-analyse costs by function.

The new working arrangements put in place under the Company's competitive Procurement Strategy provides for strong incentives for cost efficiency and quality of service delivery against by KPIs, targets and industry benchmarks.

### Capital Efficiencies

Dŵr Cymru undertook a thorough review of the capital investment programme following the change of ownership in May last year. The published target for delivery of the AMP3 capital expenditure programme is £1,175m before capital contributions. This assumes additional efficiency savings compared to those assumed in the Final Determination in the order of 5%. Dŵr Cymru's Capital Alliance is working well and good results have been achieved to date. Delivering the AMP3 capital investment programme on time and within budget remains a key challenge for the Company.



# Chapter 5:

## Competition

### Dŵr Cymru Policy

In March 2002, the Government announced its intentions in relation to Competition Policy in the Water Industry.

We support the Government's proposals, and in particular the recognition that water supply and sewerage is an essential public service.

### Competitive Tendering

The Glas Cymru model significantly extends competition to the business of water supply and sewerage services in Dŵr Cymru's region. This has been achieved through a process of competitive outsourcing. Over 80% of Dŵr Cymru's operating costs and capital expenditure are now established through a process of competitive tendering.

Our competitive procurement strategy is designed to bring significant benefits to Dŵr Cymru and customers, including the best combination of value for money and quality of service from the most capable and competitive operators in the marketplace for each distinct area of activity. It also delivers predictable costs, transparent market pricing (which will provide an important new source of information at regulatory price reviews), reduction in risk and continuing pressure for good performance.

Dŵr Cymru's ownership structure ensures that the benefits of this competitive approach feed through to customers.

### Network Access

Dŵr Cymru's Network Access code was published in August 2000. It was not updated during the reporting year partly as a result of the uncertainty surrounding the direction of competition policy of the Government and in anticipation of Ofwat's guidance.

### Inset Appointments

There has been no activity relating to new inset appointments during the reporting year.

# Chapter 6:

## Board Endorsement

On 7 June, the Board of Dŵr Cymru duly endorsed this Overview of the June Return 2002. The Reporter attended the Board Meeting for this matter.