

Table 11

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 11 NON FINANCIAL MEASURES
WATER SERVICE ACTIVITIES (NI Water Only)**

DESCRIPTION	UNITS	DP	1 BASE YEAR SBP 2006-07		2 REPORTING YEAR 2007-08		3 REPORTING YEAR 2008-09		4 REPORTING YEAR 2009-10		
			CG		CG		CG		CG		
A ASSET BALANCE AT APRIL 1											
1	Total length of mains	km	2	25921.72	C3	25972.00	B3	26067.07	B3	26349.22	B3
B CHANGES DURING REPORT YEAR											
2	Mains renewed	km	2	239.87	B3	136.00	A2	288.62	C2	172.22	A2
3	Mains relined	km	2	10.05	B3	0.00	A2	0.00	A2	0.00	A1
4	Mains cleaned (total)	km	2			8259 jobs	C5	1925.35	B4	1487.62	B3
5	Distribution mains cleaned for quality	km	2			0.00	A2	96.41	C5	376.27	B3
6	New mains	km	2	199.18	B3	238.00	A2	354.01	C2	298.88	A2
7	Mains abandoned and other changes	km	2	148.90	B3	259.00	A2	360.48	C2	325.10	A2
8	Lead communication pipes replaced - quality	nr	0					168	B3	380	B3
9	Lead communication pipes replaced - maintenance or other	nr	0			659	B3	385	B3	1371	B3
10	Communication pipes replaced - other	nr	0			9809	B4	8801	B3	6418	B3
11	Mains bursts per 1000km	nr	0			139	C3	141	B3	147	B3
C ASSET BALANCE AT MARCH 31											
12	Total length of mains	km	2	25972.00	B3	26067.07	B3	26349.22	B3	26435.45	B3
D DISTRIBUTION STUDIES											
13	Cumulative number of distribution zone studies completed	nr	0	22	A1	30	A1	46	A1	54	A1
14	Distribution zone studies ongoing	nr	0	27	A1	21	A1	19	A1	17	A1
15	Total distribution zones identified for study	nr	0	71	A1	71	A1	71	A1	71	A1
16	Cumulative % distribution zone studies completed	%	1	31.0	A1	42.3	A1	64.8	A1	76.1	A1
17	Percentage population/properties - completed studies	%	1	31.0	A1	43.1	A1	60.8	A1	71.9	A1
E OTHER WATER SERVICE ACTIVITIES											
18	Length of aqueducts refurbished for maintenance	km	2								
19	Substantive refurb. work - dams & impounding reservoirs (maintenance)	nr	0								
20	Number of existing water treatment works refurbished for maintenance	nr	0								
21	Capacity of refurbished water treatment works for maintenance	MI/d	3								
22	Number of new or enhanced water treatment works for quality	nr	0								
23	Distribution input of new or enhanced water treatment works for quality	MI/d	0								
24	Number of pumping stations refurbished for maintenance	nr	0								
25	Number of service reservoirs & water towers refurbished for maintenance	nr	0								
26	Number of household meters renewed	nr	0								
27	Number of security related improvements	nr	0								
28	Environmental impact - number of investigations	nr	0								
29	Environmental impact - number of options appraisals	nr	0								
30	Other environmental improvements	nr	0								

Table 11 - Non Financial Measures - Water Service Activities (NIW only)**General**

The Reporter recommended consolidation of Table 11 methodologies to improve visibility and avoid possible conflicts to this end the Asset Management Section (AMS) has co-ordinated the input into this table from a number of sources.

Line 1 – Total length of mains at 1 April

The value of 26349.22km has been extracted from line 12 of the AIR09 Table 11.

Lines 2 – 10 – Changes during the reporting year

Asset Management Section has compiled submitted data from EP Procurement Business Unit and from Networks Water Operations to populate the values for these lines.

The confidence grades have been reviewed by AMS, taking into consideration those proposed by both NIW sections, as follows:

The confidence grades for lines 2, 6, 7 and 9 have been proposed as A2, as:

1. The EP Procurement Business Unit's confidence grades for these lines were A1, and those from Networks Water Operations were B3; and
2. The proportion of the data, from Networks Water Operations, for these lines is minimal.

The confidence grades for line 3 remains as A1 is proposed by EP Procurement Business Unit, as this operation has not been carried out by Networks Water Operations.

The confidence grades for lines 4, 5 and 8 remain as proposed by Networks Water Operations i.e. B3, as either these lines are not relevant to EP or they have zero as a return.

The confidence grade for line 10 has been proposed as B2 as:

1. The EP Procurement Business Unit's confidence grades for this line was A1, and that from Networks Water Operations was B3; and
2. The proportion of the data, from Networks Water Operations, for this line amounts to 20% of the total value populated in table.

The commentaries from EP Procurement Business Unit and from Water Supply are contained below.

The Reporter recommended re-assessing the method for reporting of line 7; a process still has to be developed to ensure that CAR can provide a single source of data for this line. However the latter is presently not possible with

the current software and NIW procedures, hence NIW has not been able to alter it's method for reporting the total length of abandoned mains in Table 11 Line 7, for AIR10.

Commentary from EP Procurement Business Unit for Lines 2, 3, 6-10

B	CHANGES DURING REPORT YEAR			
2	Mains renewed	km	166.67	A1
3	Mains relined	km	0	A1
4	Mains cleaned (total)	km	N/A	N/A
5	Distribution mains cleaned for quality	km	N/A	N/A
6	New mains	km	298.30	A1
7	Mains abandoned and other changes	km	319.9	A1
8	Lead communication pipes replaced - quality	nr	0	A1
9	Lead communication pipes replaced - maintenance or other	nr	1337	A1
10	Communication pipes replaced - other	nr	5075	A1

General

NIW intends to replace/rehabilitate approximately 1.3% of the water mains network on an annual basis. This is equivalent to 915 km over the 3 year period of 07/08, 08/09 and 09/10.

One of the main drivers for the water mains 'rehab' project is water quality. The rehab programme is driven by a priority scoring. The coarse information used at the outset to define zonal study priority is further refined to determine exact construction priority. These work packages are then further split into high and low priority areas. At each stage more information has been gathered to ensure that the most accurate and up to date information is utilised.

Lines 2, 3, 6 – 10 – Changes during the Reporting Year

All information is compiled from EP contract management information monthly returns. This is an accurate measurement of the actual lengths of water mains laid, renovated or replaced, compiled from contractor's on-site records. The information is collated from each individual contract on a monthly basis and aggregated into an overall annual figure. The EP data is assessed as confidence grade A1 on the basis of the competency of our long term contracting partners' understanding of their reporting requirements, the quality and robustness of their on-site measurements and NI Water's 'Captrax' management system which stores the information and is used to populate the AIR table.

Please note: NI Water has maintained its method of reporting of new and renewed mains in lines 2 and 6 as from previous years. The Reporter in his report of August 2009 indicated that this reporting method resulted in double counting and the Regulator in his Annual Information Return reporting requirements and definitions manual, March 2010 requires that mains activity lengths should only be reported on Lines 2, 3, and 6 on the basis of primary purpose for the activity. NI Water had maintained it's method of capturing information from source throughout the year pending confirmation of reporting requirements from the Regulator. The possibility of interrogating the records

retrospectively to address the double counting has been considered and determined to be very labour and time intensive. Consequently we are of the opinion that it is an inappropriate use of resources to comply with the recent guidance. The new reporting requirements are in place for pipes laid from 1 April 2010.

Please note: The expenditure on water mains infrastructure for 09/10 is almost exactly the same as that for 08/09; however, the outputs for mains renewed and new mains (lines 2 & 6) are less than 08/09. This reduction is due to a greater expenditure on trunk mains in 09/10 and more activity in urban areas, at a more expensive rate than rural activity. Also, the numbers of lead communication pipes (lines 8 & 9) has increased, consistent with an increased activity in urban areas.

The Reporter had recommended that NIW should improve field data records to enable more direct categorising of replaced communication pipe materials. For the last elements of the current framework, the clerk of works on site has had to sign the track sheets clearly identifying lead services from any other services. For the new framework, that is now awarded, there has been a change of coding to clearly identify lead services and this is incorporated into the new Cost Management System.

The confidence grades for EP information for these lines 2, 3, 6 - 10, remain as last year.

Lines 4 & 5

EP does not undertake any of these functions as part of construction projects.

Commentary from Network Water Operations for Lines 2 - 10

B	CHANGES DURING REPORT YEAR			
2	Mains renewed	km	5.548	B3
3	Mains relined	km	0	
4	Mains cleaned (total)	km	1487.62	B3
5	Distribution mains cleaned for quality	km	376.272	B3
6	New mains	km	0.575	B3
7	Mains abandoned and other changes	km	5.195	B3
8	Lead communication pipes replaced - quality	nr	380	B3
9	Lead communication pipes replaced - maintenance or other	nr	34	B3
10	Communication pipes replaced - other	nr	1343	B3

The following provides the commentary on lines for Network Water Operations which record the amount of maintenance activity carried out in the report year 09/10 on water mains and communication pipes.

Detailed data for March 09 – April 10 was collated by Field Managers using system reports which when checked and confirmed were transferred onto a spreadsheet and sent to the Clean Water Business Unit who collate the data for the annual reporting period.

Line 3 - Mains relined – per km

At present this operation is not carried out by Networks Water.

Line 4 - Mains cleaned per km

The recorded units were number of fire hydrant flushes which are then converted from units to km using the factor of 0.156.

2010 information return is 9536 flushings (x 0.156) = 1487.62 Kms

A flushing programme has been established and Work Orders are generated and sent to the Field Operators. This information is captured on the MWM system.

Confidence Grade: B3 - Although the AIR09 Reporter's Recommendations had indicated that C5 was more applicable to line 4, B3 (minor short comings with Accuracy within +/- 10%) is more applicable for the AIR10 return as there is a full years data from Mobile Work Management (MWM). MWM performance is improving year on year.

- As per audit recommendations the number of flushings has been converted to km.
- The number of flushings has been captured March 09 – April 10 year using base information from MWM and then converted to km using the factor of 0.156.

Line 5 - Distribution Mains cleaned for quality – km

The recorded units were number of fire hydrant flushes which are then converted from units to km using the factor of 0.156.

2010 information return is 2412 flushings (x 0.156) = 376.27 Kms

Future Reporting

For AIR10 Networks Water will continue to use the established process for monthly reporting using MWM as a source for base information.

Line 11 - Mains bursts per 1000km

The specified unit for Line 11 is Mains Bursts per 1000km. NIW do not currently record Mains Bursts per 1000km but record the number of Mains Bursts Repairs. Detailed data for reporting period March 09 – April 10 was collated by Field Managers using system reports which when checked and confirmed were transferred onto a spreadsheet and sent to the Clean Water Business Unit who collate the data for the annual reporting period.

The totals for Networks Water were then converted from units to bursts/km.

Calculation of Mains Bursts per 1000kms

Total Burst Mains divided by Total length of mains multiplied by 1000
 $3910 / 26,625.6 = 0.1414 \times 1000 = 146.85$

Total Bursts per 1000kms = 146.85

2007 information return was 5054
2008 information return was 3611
2009 information return was 3764

Proportion of Bursts within Line 11 detected by Proactive Methods.

The number of Mains Repairs carried out by Networks Water Function was 2541. The number of Mains Repairs carried out by Leakage Function was 1369. The total number of Mains Repairs carried out by NIW was 3910.

Confidence Grade B3

The number of bursts for Networks Water have been captured for the complete year using base information from MWM plus information captured by the Leakage function.

Future Reporting

For AIR10 Networks Water will continue to use the established process for monthly reporting using MWM as a source for base information.

Line 12 – Total length of mains at 31 March

The value of 26435.45km has been extracted from NI Water digital data which is held in the Asset Mapper GIS.

There has been no change to the structure of the data reported on this year from the previous years that would directly affect the total. The same queries have been used to extract the data from the Corporate Asset Register and have been checked to ensure that they are still relevant. The confidence grade of the data will remain as B3, the same as that in AIR09. There have been no significant improvements in data quality since the AIR09 reports. Any new data will have adhered to the NIW Code of Practice for the submission of asset data ensuring that data quality levels have been maintained throughout the year.

Consideration of lines 6 and 7 (on Table 12) in conjunction with line 1 will not equate to the figure entered for line 12, due to the fact that information may be pending for uploading onto Asset Mapper GIS.

Line 13 – Distribution zone studies completed

NIW's Distribution Zonal Studies conform to industry best practice and have received favourable comments following audits on several occasions.

This value is derived from the number of zones studied year by year against a total of 71 no. zones in Northern Ireland with start/finish dates held on the following spreadsheet.

54 no: Zonal studies have been completed since the start of the Zonal study programme. The latter is highlighted in yellow in the table below.

Confidence grade A1 reflects actual Zonal study report.

Zonal Studies Start & Completion Dates (31 March 2010)				
Zone	Area	Start Date	Completion Date	AIR10 Population
Craigavon West	SE	11/11/99	Aug-01	21494
B'mena Borough	NW	20/04/00	Dec-02	28095
Silent Valley	SE	16/07/01	Jan-Mar 2004	3450
Fofanny Newry	SE	16/07/01	Jan-Mar 2004	51206
Camlough	SE	10/10/01	Jan-Mar 2004	14579
Ballinrees West	NW	07/01/02	Apr-Jun 2003	16768
Breda South	SE	20/03/01	Oct-02	37885
Cityside	NW	09/08/00	Oct-04	57510
Castor Bay/Armagh	NW	18/12/02	Feb-06	16054
Seagahan	NW	18/12/02	Feb-06	31675
Clay Lake	NW	18/12/02	Feb-06	6682
Ards North	SE	24/06/03	Nov-05	27764
Lough Cowey	SE	24/06/03	Nov-05	9509
Bangor Outer	SE	24/06/03	Nov-05	43788
Castor Bay/M'liskmisk	SE	19/11/03	Nov-05	16490
Altnahinch	NW	04/06/01	Feb-03	30934
Drumabest	NW	05/06/01	Feb-03	13248
Ballinrees East	NW	07/01/02	Apr-Jun 2003	22894
Ballinrees Central	NW	07/01/02	Apr-Jun 2003	25612
Dungonnell	NW	30/05/01	Jan-05	36971
North Tyrone	NW	10/05/01	May-Jun 2006	29657
South West	NW	10/05/01	May-Jun 2006	13461
Tardree	NW	04/09/03	Mar-09	10483
Dunore West	NW	04/09/03	Mar-09	43797
Lough Fea	NW	23/04/01	Dec-07	29652
Castlereagh	SE	19/05/02	Nov-07	25683
Purdysburn East	SE	19/05/02	Nov-07	31641
Castor Bay Shanmoy	NW	12/11/02	Dec-09	21919
Altmore/Gortlenaghan	NW	12/11/02	Dec-09	11452
Newtownards Town	SE	02/11/04	Dec-07	32195
Ballintemple	SE	02/07/02	Apr-09	15418
Lough Ross	SE	02/07/02	Apr-09	10398
Fofanny B'bridge	SE	05/04/01	Dec-07	19037
Castor Bay/Banbridge	SE	05/04/01	Dec-07	30103
Carmoney East	NW	04/07/01	Mar-08	16461
Waterside	NW	04/07/01	Mar-08	25284
Moyola	NW	01/10/01	Aug-09	40322
Lisburn Town	SE	29/04/03	Jan-08	40730
Lisburn Rural	SE	29/04/03	Jan-08	10249
Mid Down	SE	02/11/04	Feb-09	29173
Ballygowan	SE	02/11/04	Feb-09	6369
Comber	SE	02/11/04	Feb-09	12927
Craigavon North	SE	19/11/03	Feb-08	35217
Craigavon South	SE	19/11/03	Feb-08	20879
Limavady	NW	19/05/04	Sep-08	30702
North East	NW	19/05/04	Sep-08	4181
South	NW	06/01/08	Dec-10	20656

Zone	Area	Start Date	Completion Date	AIR10 Population
South East	NW	06/01/08	Dec-10	14108
N Down/Bangor	SE	01/04/06	Jan-08	31436
South Down	SE	15/06/07	Mar-09	15630
Downpatrick	SE	15/06/07	Mar-09	8297
Newcastle	SE	15/06/07	Mar-09	10098
Mourne Coastal	SE	15/06/07	Mar-09	12371
Breda North	SE	22/02/08	Oct-09	53227
Belfast East	SE	22/02/08	Oct-09	37066
Hollywood	SE	22/02/08	Oct-09	8308
Dunmurry	SE	Jul-08	Dec-10	34730
Lisburn South Rural	SE	Jul-08	Dec-10	20228
Ballywonard/Dunanney	SE	Jun-08	Jun-10	38826
Ballysillan/Ballyaghagan	SE	Jun-08	Jun-10	33625
West Belfast rural	SE	Jun-08	Jun-10	10171
Omagh	NW	Jul-08	Jan-11	38921
Dunore East	NW	Jun-09	2011/12	20673
Killylane	NW	Jun-09	2011/12	32365
Lough Mourne	SE	05/02/09	Jun-10	7557
Carrickfergus	SE	05/02/09	Jun-10	37843
Newtownabbey	SE	05/02/09	Jun-10	34630
Whiterock	SE	Jun-09	2011/12	32575
B'gomartin/P'burn West	SE	Jun-09	2011/12	33506
Oldpark	SE	Jun-09	2011/12	63997
Ballygomartin North	SE	Jun-09	2011/12	29308
KEY				
Started/finished	54	Studies completed population		1286431
Started/ongoing	17	N Ireland population		1790150
Programmed to start	0			
Remaining zones to start	0	Percentage Complete		71.9%

Line 14 – Distribution zone studies ongoing

The number of zonal studies ongoing, 17 no., is taken from the above Table as held and updated by the Project Management team.

Line 15 – Total distribution zones identified for study

Total zones identified for study encompasses the 71 no. Distribution zones in Northern Ireland.

Line 16 – Cumulative percentage distribution zones studies completed

The percentage figure is calculated from the Zonal studies completed (54 no.) compared to the number of zones to be studies (71 no.). Figures from above Table.

Line 17 – Percentage population/properties – completed studies

The population for zones is calculated using the zone boundaries which are applied to the POINTER address database and the NISRA population projections, as described in the commentary for the Leakage Table. Hence the population (1,790,150) which has been used has been cross checked with

that being used in AIR10 by the Leakage Section, and by Customer Services. The 71.9% accounts for updated studies up to the 31st March 2010.

Table 11a

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 11A NON FINANCIAL MEASURES
WATER SERVICE SERVICEABILITY INDICATORS (NIW Only)**

DESCRIPTION		1		2	
		NUMBER OF WTWs	CG	OUTPUT FOR CALENDAR YEAR	CG
A	WATER TREATMENT WORKS - TURBIDITY	UNITS	DP	UNITS	DP
		nr	0	MI/d	2
1	95%ile greater than or equal to 0.5NTU	7		65.19	A3
2	95%ile less than 0.5NTU	18		293.63	A3
3	Turbidity not recorded	6		2.73	A2
4	Total	31		361.55	A2

Table 11a –Non Financial Measures – Water Service Serviceability Indicators

Background – Year on Year

During the period 2005 to date, a number of non-compliant water treatment works (WTWs) and small sources have either been completely replaced with new works, or else taken out of service as and when a replacement supply is available. During 2008, 5 existing major WTWs were replaced/upgraded as part of the Alpha PPP project. This contributed to the closure during 2009 of 6 non-compliant small water treatment works/sources.

The turbidity compliance at WTWs has stabilised in 2009 with 43 exceedances of the limit in 2009, compared to 42 in the equivalent period in 2008.

Now that full year data is available for the above 5 PPP sites, these sites have been assessed in their own separate table.

Lines 1 – 4 - Turbidity

The data used for the estimation of average flow at WTWs in Table 11a lines 1 - 4 was supplied from operations leakage metering. This data was estimated prior to 2005 to allow the scheduling of audit samples to meet regulatory requirements during the year. This scheduling was audited by DWI. For the purposes of scheduling from 2007, an estimate of expected daily throughput by works was received from operational scientists in order to populate the LIMS system for frequency of sampling. For 2008 and this return the Distribution Input was calculated as the average daily flow from the various individual sites or amalgamation of associated readings obtained from leakage metering.

The calculations were carried using the following data criteria:

- Only scheduled audit final water samples lifted to meet Water Supply regulatory requirements during the calendar year were used, and using accredited laboratory analyses rather than onsite analyses.
- Only those WTWs which had more than 11 months worth of data were included. This led to the exclusion of 6 sites which were put out of service during the reporting period, with 25 other NI Water sites reported on. These 6 sites have been included in the report on line 3 "Turbidity not recorded".
- In addition to the 31 NI Water sites, the 5 PPP sites have been reported on separately in their own table.
- In its Drinking Water Quality Report for 2009, NI Water will be reporting overall on 36 sites.

During 2009, one of the reported sites (W2515) had its sampling point moved downstream for operational reasons. This necessitated now sampling at a service reservoir which had flows from other WTWs incorporated. For the purpose of this return, although there is a higher distribution input at the new

sample point than at the original sample point, the distribution input from the original sample point is the one used to avoid double counting.

2009 WTW Excluded from calculations

Site Code	Site Name	Reason
W1307	Buckna Borehole	Out of service at year end
W1704	Alcrossagh Borehole	Out of service at year end
W1705	Drumabest Borehole at Dunaghy	Out of service at year end
W3320	Creightons Green (Whinney Hill)	Out of service at year end
W4324	Stradreagh	Out of service at year end
W4326	Brishey	Out of service at year end
6 Sites		

2009 NIW WTW Included in calculations

Site Code	Site Name	ML/d	95%ile	≥ 0.5NTU	MI/d ≥ 0.5	MI/d < 0.5
W1302	Lough Fea	11.84	0.4	0		11.84
W1303	Dungonnell	9.27	0.3	0		9.27
W1310	Glarryford Borehole	4.32	0.3	0		4.32
W1501	Killylane	10.81	0.5	1	10.81	
W1702	Altnahinch	8.33	0.4	0		8.33
W1706	Rathlin Borehole	0.10	0.445	0		0.10
W2501	Altmore	3.74	1.28	1	3.74	
W2509	Clay Lake	4.13	0.4	0		4.13
W2512	Gortlenaghan Borewell	0.87	10.205	1	0.87	
W2514	Seagahan	10.92	0.4	0		10.92
W2515	Shanmoy Borewell	1.89	0.5	1	1.89	
W2706	Camlough	4.30	0.6	1	4.30	
W2801	Fofanny (New Works)	38.72	0.31	0		38.72
W2802	Carron Hill (New works)	6.78	0.2	0		6.78
W3317	Dorisland	26.47	0.3	0		26.47
W3801	Drumaroad	112.67	0.4	0		112.67
W4301	Carmony	18.56	0.5	1	18.56	
W4306	Caugh Hill	20.31	0.4	0		20.31
W4501	Derg	13.18	0.3	0		13.18
W4513	Lough Bradan	8.32	0.4	0		8.32
W4523	Lough Macrory	11.73	0.3	0		11.73
W4541	Glenhordial	4.43	0.4	0		4.43
W4542	Lenamore Springs	0.44	0.4	0		0.44
W4701	Killyhevlin	25.01	0.5	1	25.01	
W4722	Belleek	1.65	0.3	0		1.65
25 Sites	Overall DI Input	361.55				

2009 PPP WTW Included in calculations

Site Code	Site Name	ML/d	95%ile	≥ 0.5NTU	MI/d ≥ 0.5	MI/d < 0.5
W1301P	Moyola PPP	14.51	0.16	0		14.51
W1701P	Ballinrees PPP	25.69	0.2398	0		25.69
W2308P	Castor Bay PPP	80.74	0.1944	0		80.74
W3301P	Dunore Point PPP	119.40	0.17	0		119.40
W3315P	Forked Bridge PPP	21.18	0.18	0		21.18
5 Sites	Overall DI Input	261.52				

Table 12

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 12 NON FINANCIAL MEASURES
WATER EXPLANATORY FACTORS - (NIW Only)**

DESCRIPTION	UNITS	DP	1	2	3	4	CG																																							
			NR OF SOURCES	PROP'N DIST INPUT	BULK PROP'N OF D.I.	REPORT YEAR 2009-10																																								
A SOURCE TYPES AND PUMPING			<table border="1"> <thead> <tr> <th>UNITS</th> <th>DP</th> <th>UNITS</th> <th>DP</th> <th>UNITS</th> <th>DP</th> </tr> <tr> <td>nr</td> <td>0</td> <td>Prop'n (0-1)</td> <td>3</td> <td>Prop'n (0-1)</td> <td>3</td> </tr> </thead> <tbody> <tr> <td>15</td> <td></td> <td>0.776</td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td></td> <td>0.198</td> <td></td> <td></td> <td></td> </tr> <tr> <td>9</td> <td></td> <td>0.026</td> <td></td> <td></td> <td></td> </tr> <tr> <td>30</td> <td></td> <td>1.000</td> <td></td> <td>0.000</td> <td></td> </tr> </tbody> </table>		UNITS	DP	UNITS	DP	UNITS	DP	nr	0	Prop'n (0-1)	3	Prop'n (0-1)	3	15		0.776				6		0.198				9		0.026				30		1.000		0.000							
UNITS	DP	UNITS	DP	UNITS	DP																																									
nr	0	Prop'n (0-1)	3	Prop'n (0-1)	3																																									
15		0.776																																												
6		0.198																																												
9		0.026																																												
30		1.000		0.000																																										
1	Impounding reservoirs						B2																																							
2	River abstractions						B2																																							
3	Boreholes						B2																																							
4	Source types and pumping; total						B2																																							
5	Average pumping head - total	m.hd	1			87.1	B4																																							
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13	Potable mains (nominal bore)	km	2																																											

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 12 NON FINANCIAL MEASURES
WATER EXPLANATORY FACTORS (PPP Only)

DESCRIPTION				UNITS	DP	1	2	3	4		
NR OF SOURCES				PROP'N DIST INPUT		BULK PROP'N OF D.I.		REPORT YEAR 2009-10		CG	
A	SOURCE TYPES AND PUMPING										
1	Impounding reservoirs					nr	DP	UNITS	DP		
2	River abstractions					nr	0	Prop'n (0-1)	3		
3	Boreholes					1		0.103		B2	
4	Source types and pumping; total					3		0.897		B2	
5	Average pumping head - total			m.hd	1	0		0.000		B2	
						4		1.000	0.000	B2	
										51.5	
										B4	
TOTAL						TOTAL NR					
B	TREATMENT TYPE					UNITS	DP	UNITS	DP		
6	Proportion of distribution input - simple disinfection					Prop'n (0-1)	3	nr	0		
7	Proportion of distribution input - W1					0.000		0			
8	Proportion of distribution input - W2					0.000		0			
9	Proportion of distribution input - W3					0.000		0			
10	Proportion of distribution input - W4					0.000		0			
11	Proportion of distribution input - total					1.000		4			
12	Total numbers of works					1.000				4	
C						POTABLE MAINS					
13	Potable mains (nominal bore)			km	2	BAND 1	BAND 2	BAND 3	BAND 4		
						<= 165mm	166 - 320mm	321 - 625mm	> 625mm		
						0.00	0.00	16.42	0.00		

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 12 NON FINANCIAL MEASURES
WATER EXPLANATORY FACTORS - (Total)

DESCRIPTION	UNITS	DP
-------------	-------	----

A	SOURCE TYPES AND PUMPING		
1	Impounding reservoirs		
2	River abstractions		
3	Boreholes		
4	Source types and pumping; total		
5	Average pumping head - total	m.hd	1

B	TREATMENT TYPE		
6	Proportion of distribution input - simple disinfection		
7	Proportion of distribution input - W1		
8	Proportion of distribution input - W2		
9	Proportion of distribution input - W3		
10	Proportion of distribution input - W4		
11	Proportion of distribution input - total		
12	Total numbers of works		

C	POTABLE MAINS		
13	Potable mains (nominal bore)	km	2

1	2	3	4
NR OF SOURCES	PROP'N DIST INPUT	BULK PROP'N OF D.I.	REPORT 2009-10
			CG

UNITS	DP	UNITS	DP	UNITS	DP
nr	0	Prop'n (0-1)	3	Prop'n (0-1)	3
16		0.493			
9		0.492			
9		0.015			
34		1.000		0.000	
				138.6	

B2
B2
B2
B2
B4

TOTAL	TOTAL NR
-------	----------

UNITS	DP	UNITS	DP
Prop'n (0-1)	3	nr	0
0.007		6	
0.000		0	
0.008		3	
0.346		12	
0.639		13	
1.000		34	

BAND 1 ≤ 165mm	BAND 2 166 - 320mm	BAND 3 321 - 625mm	BAND 4 > 625mm
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21067.32	3871.65	1291.99	220.91
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Table 12 – Water Explanatory Factors**General**

The Reporter recommended consolidation of Table 12 methodologies to improve visibility and avoid possible conflicts, to this end the Asset Management Section (AMS) has co-ordinated the input into this table from a number of sources.

Lines 1 – 4 - Sources and Types Column 1 NIW only

AIR 09 Decommissioning List
April 08 Glenburn (BH,SD) & Lesters Dam (BH,SD) removed as not in service 08-09
Nov 08 Ballycullen combined BHs Decommissioned.(SD)
Nov 08 Kilwee BH Decommissioned.(SD)
Nov.08 Bellsie Rd BH Decommissioned.(SD)
Nov. 08 Barbour No. 2 Decommissioned.(SD)
Nov. 08 Ballysallagh WTWs Decommissioned.(W4 & IR Source))
Nov 08 Lough Cowey WTWs Decommissioned.(W3 & IR Source))
Dec 08 Forked Bridge WTW Decommissioned.(W3 & IR Source)
Jan 09 Drumabest BH Decommissioned (W2 & BH Source) – was in use during AIR10
March 09 Crieghtons Green Decommissioned.(W3 & IR Source) – was in use during AIR10

The Supply Function on the 31st March 2009 had 29 NR Sources In-Service consisting of 14 NR Impounding Res., 6 NR River/Lough Abstraction & 9 NR BH Sources.

Buckna BH source was decommissioned on 1st April 2009 (hence a reduction to 28 sources). During the year Brishley and Stradreagh were decommissioned, hence reducing the number of sources in service on 31st March 2010 to 26. It should be noted that during the AIR10 period Creightons Green (which had been decommissioned in March 2009) and Drumabest (which had been decommissioned in Jan 2009) were in service to a minimum extent. Therefore it is viewed that NIW had 30 sources in service during the AIR10 period. In addition Alcrossagh BH was decommissioned in Sept 09, but brought back into service temporarily under the Cat 1 Incident.

The Supply Function on the 31st March 2010 had. 26 NR Sources In-Service consisting of 14 NR Impounding Res., 6 NR River/Lough Abstraction & 6NR BH Sources.

The Site Status Information throughout the Reporting Year is as Follows;

- 1st April 09 Buckna BH Decommissioned (Not in Service During AR10) (BH)
- July 09 Stradreah BH Decommissioned (BH)
- Sept 09 Alcrossagh BH Decommissioned (BH)
- Nov 09 Brishy BH Decommissioned (BH)
- Dec 09 Alcrossagh BH brought back into service under Cat 1 Incident. (BH)

The Reporter's comments and recommendations from last year's AIR have been considered and taken into account in drafting the commentary.

Lines 6-12 - Water Source Treatment Types

The Supply Function on the 31st March 2009 had 29 NR WTW's In-Service consisting of the following treatment types; 6NR (SD), 3NR (W2), 11NR (W3) & 9NR (W4).

The Supply Function on the 31st March 2010 had 26 NR WTW's In-Service consisting of the following treatment types; 4NR (SD), 2NR (W2), 11NR (W3) & 9NR (W4).

Seagaghan had new processes commissioned Nov 2009. Although Process changed from SSF-GAC to DAF-Prim Filtration-GAC-Mng Filtration the treatment type remained as AR09 at W4.

The Site Status Information throughout the Reporting Year is as Follows:

- 1st April 09 Buckna BH Decommissioned (Not in-service during AR10) (W2)
- July 09 Stradrea BH Decommissioned (SD)
- Sept 09 Alcrossagh BH Decommissioned (W2)
- Nov 09 Brishy BH Decommissioned (SD)
- Dec 09 Alcrossagh (W2) Temporally brought back into service under Cat 1 Incident.(W2)

Summary of status of NIW only water sources and their treatment types in service during the AIR10 period, and those in service on 31st March 2010.

Location	Source Type	Treatment Type	In Service during AIR10 Period	In Service at 31st March 2010
Gortlenaghan	Borehole	SD	Yes	yes
Shanmoy BHs	Borehole	SD	Yes	yes
Lenamoy Spring	Borehole	SD	Yes	yes
Brishley	Borehole	SD	Yes	no
Stradreaugh Springs	Borehole	SD	Yes	no
Rathlin	Borehole	SD	Yes	yes
Buckna-decommissioned 1st Apr 2010	Borehole	W2	No	no
Alcrossagh	Borehole	W2	Yes	yes
Glarryford	Borehole	W2	Yes	yes
Drumabest - - was decommissioned in Jan 2009 - but brought back into service during AIR10	Borehole	W2	Yes	no
Killylane	Imp. Reservoir	W3	Yes	yes
Dungonnell	Imp. Reservoir	W3	Yes	yes
Altnahinch	Imp. Reservoir	W3	Yes	yes
Lough Fea	Imp. Reservoir	W3	Yes	yes
Drumaroad	Imp. Reservoir	W3	Yes	yes
Caugh Hill	Imp. Reservoir	W3	Yes	yes
Glenhordial	Imp. Reservoir	W3	Yes	yes
Lough Bradan	Imp. Reservoir	W3	Yes	yes
Altmore	Imp. Reservoir	W3	Yes	yes

Location	Source Type	Treatment Type	In Service during AIR10 Period	In Service at 31st March 2010
Doriland	Imp. Reservoir	W3	Yes	Yes
Lough Macrory	Imp. Reservoir	W4	Yes	Yes
Clay Lake	Imp. Reservoir	W4	Yes	Yes
Fofanny	Imp. Reservoir	W4	Yes	Yes
Seagahan	Imp. Reservoir	W4	Yes	Yes
Creightons Green - was decommissioned in March 2009, but brought back into service during AIR10	Imp. Reservoir	W3	Yes	No
Camlough	Lough	W4	Yes	Yes
Killyhevin	Lough	W4	Yes	Yes
Carran Hill	Lough	W4	Yes	Yes
Belleek	Lough	W3	Yes	Yes
Carmony	River	W4	Yes	Yes
Derg	River	W4	Yes	Yes
Total			30	26

The Reporter's comments and recommendations from last year's AIR have been considered and taken into account in drafting the commentary.

Lines 1 - 4 and 6 - 11 - Distribution Input

Leakage Section have provided the Distribution Input of 625.40 MI/d (which is the pre Maximum Likelihood Estimate leakage DI value) against the individual impounding reservoirs, river abstractions and borehole sources, as identified by Water Supply Section.

The Distribution Input has been assigned a Confidence Grade of B2.

The DI figure is the average amount of potable water entering the distribution system and supplied to customers within the company's area of supply. All distribution input meters are on telemetry and these report via the Serck Telemetry system to TDMS and this discrete list of sites forms the templates on which calculations are based.

The reporting process produces a DI total on a daily basis using a single spreadsheet with the minimum amount of data input and a maximum amount of spreadsheet calculation. The data is extracted from TDMS using automated functionality within that system to transfer to an Excel spreadsheet with all information calculated in MI/day. Conditional formatting is employed to enable comparison with previous days, weeks and months. All files are password protected with access only to those involved in the data capture and audit process.

The M&E Function undertake a calibration programme of all DI meters on an annual basis.

It should be noted that this figure may be affected by the Water Balance Calculation, whereby adjustments are applied to all components including Distribution Input, creating a post Maximum Likelihood Estimate leakage DI value.

This figure of 625.40 MI/d has been employed to derive the derivation of the Average Pumping Head.

Proportional Distribution Input (DI) - for 'NIW only', 'PPP' and 'Total' tables

The proportional distributional input has been calculated using the spreadsheet provided by Leakage, depicting the 625.40 MI/d Distribution Input, with sources (NIW and PPP) as listed below, with associated DIs.

Supply Source	Average DI (ML/d)
Ballinrees	27.02
Rathlin	0.09
Alcrossagh	0.31
Drumabest	0.38
Altnahinch	8.97
Glarryford	4.42
Dungonnell	9.13
Killylane	9.89
Moyola	14.80
Lough Fea	12.04
Stradreagh	0.69
Brishey	0.56
Caugh Hill	20.12
Carmoney	19.30
Lenamore	0.44
Lough Macrory	12.15
Derg	13.79
Glenhordial	4.47
Lough Braden	8.54
Belleek	1.66
Killyhevin	26.01
Altmore	3.80
Gortlen	0.86
Shanmoy	1.59
Seagahan	11.08
Clay Lake	4.28
Castor Bay	102.16
Carron Hill	6.85
Camlough	4.24
New Fofanny	39.12
Dunore	119.47
Drumaroad	111.42
Creightons Green	0.03
Dorisland	26.50
Total DI	626.19

However it should be noted that DI is calculated by Leakage as an average monthly DI (based on an average daily production), and subsequently

determined by taking the average of the 12 months. Since the proportional DI has been computed, by AMS, on the basis of the yearly average of the individual supply sources the resultant overall DI totals 626.19MI/d (although the AMS Proportional DI calculation spreadsheet depicts an overall DI of 626.18 MI/d) rather than the 625.40MI/d.

AMS has computed the proportional DI for NIW sources, PPP sources and 'total', using a dedicated calculation spreadsheet.

The confidence grade of the resultant data is governed by that of the DI figure from Leakage, hence B2.

Line 5 - Average Pumping Head

Introduction

Efforts for the AIR10 Average Pumping Head calculation continue to centre on using a greater proportion of the completed DZS area data. This includes the remaining western and eastern study areas that have become available since AIR09 and are included in the calculation.

Distribution Pump Data in Master Pump Table

The Average Pumping Head for NI Water Ltd. has been determined using distribution pump data collected from field test data and available calibrated network models (Current Average Daily Demand Models) constructed by a framework of Consultants performing Detailed Zonal Studies (DZS) in various study areas across Northern Ireland. Calibrated network model data / field test data is now available for all areas of Northern Ireland, except for two DZS areas in the Antrim/Larne region (Killylane & Dunore East).

Additional zones comprising;

- Omagh;
- South;
- South East;
- Ballygomartin;
- South/Purdysburn West;
- Dunmurry;
- Lisburn South Rural;
- Belfast West Rural;
- Ballysillan/Ballyaghagan;
- Ballygomartin North;
- Oldpark;
- Ballywonard;
- Newtownabbey;
- Carrickfergus;
- Lough Mourne;
- Belfast East;
- Whiterock;
- Holywood; and
- Breda North.

have been completed to field test stage/Calibrated Network Model stage since AIR09 and data has now been included in the Master Pump Table. These zones have also been incorporated into the Average Pumping Head calculation for AIR10.

Aside from the above changes, there have been no further updates to the distribution pump data obtained from the DZSC's for completed zonal study areas. The models, and hence data from the models, still represent the best data available for these areas. In future returns, the confidence in old models will decrease as network and usage changes occur in Northern Ireland. The models will eventually become obsolete and an alternative source of distribution pump data will be required.

Where calculated mean lift and average ADD flow cannot be obtained from a suitable network model or where flow and pressure data from field test installations is missing, no estimation of these parameters has been included for distribution pumps in the Master Pump Table.

Supply Pump Data in Master Pump Table

Abstraction pumps, treatment process pumps and WTW outlet pumps have not generally been included in the DZS network models. Therefore, local NI Water Ltd. supply personnel have provided data from a variety of sources, listed below, for the determination of mean lift and average current flow for each pump supplying the distribution zones.

- Telemetry Data Monitoring System (TDMS),
- Direct readings of dials from pump sites,
- Record Drawings for pump lift,
- NIW Total Flow Calculations for WTW in NI.

Supply pump data collection in AIR10 focused on where changes to the network have been put into effect since AIR09. This is particularly evident in the Northern region where 7 No. BH's have been taken out of service since AIR09. The boreholes in question are: -

- Alcrossagh (3no),
- Drumabest and
- Buckna (3no).

With the increase in data from DZS's for the Belfast/Eastern area, this has allowed most of the Dunore WTW pumps Average Daily Demand (ADD) to be included in the calculation. Excluded is the ADD for the 2 DZS not complete within the Antrim/Larne zone. The ADD for the Dunore pumps and for the DZS excluded, have been extracted from the Telemetry Data Monitoring System (TDMS). No other update to the data was obtained on lift and flow for pumps within Supply for inclusion in the AIR10 return (data used remains unchanged from AIR09 return except as mentioned above).

Data is available for all supply pumps in Northern Ireland; however, all supply pumping requires matching to the distribution pumping fed by it to allow division by the distribution input for that area.

Distribution Input

With the increase in Distribution Pump data being provided through the Detailed Zonal Studies, the whole of NI is covered, apart from the Antrim/Larne region. As a result the whole NI Water DI has been used except for the DI relating to Antrim/Larne, which has been excluded from the calculation. Therefore, total DI for calculation will not be the complete DI reported for whole of NI.

PPP Only and NIW Only 'Average Pumping Head' Calculations

Average Pumping Head is by definition the amount of pumping required to transport an average ML of water from abstraction at source to supply the customer through the Distribution Network.

The NIAUR AIR10 Guidance for Table 12 has requested an 'Average Pumping Head' to be calculated for NIW only and PPP only. It should be noted that it is NIW's interpretation that the true definition (as stated above) of Average Pumping Head is not being reflected through the splitting up of the overall NIW Average Pumping Head value.

PPP WTW's do not have specific Distribution Networks, and therefore the water is extracted, treated and then exits the works into the NIW Distribution Network. Within the Distribution Network, PPP water then mixes with NIW water, therefore making it impossible for NIW and PPP flows to be truly separated for use in PPP only and NIW only average pumping head calculations. Hence the value of 51.47m calculated for PPP only is more in relation to the Pumping Head within the works.

Hence a confidence grade of 'C5' has been allocated to these values of 87.10m.hd and 51.47m.hd for the 'Average Pumping Head' for NIW only and PPP only respectively.

Updated information, as below, was received through reconciliation work with the PPP Section

- Three pumps, River Bann LL, Moys HL & Castor Bay to Forked Bridge, were not returned on in the past as they were installed post DZS, so no information was returned by the DZS Consultant. The DZS for River Bann & Moys was completed in 2003. The DZS for Caster Bay to Forked Bridge was completed in 2005. When a more in-depth look was carried out for the PPP/NIW only split, the PPP section was able to provide details on the 3 pumping stations, which came into operation in 2008/09. The details for the 3 pumping stations are now included in the AIR10 APH calculation sheet.
- PPP section has provided updated flow figures. These have now replaced the flows previously provided by Atkins. All flow figures used for PPP pumps have been supplied by PPP except for Dunore LL & HL pumps which have been sourced from the DI spreadsheet. It should be noted that the flow figures for the two Dunore pumps exclude flows to Killylane/Dunore East Zonal area. The zonal study for these two areas is

not at a stage to provide information for APH returns so have been excluded this year.

- The flow figure for the interstage pump at Moyola WTW previously was 13MI/d. Flow figures for the LL & HL pumps provided by PPP is 15MI/d. It is assumed that the interstage pump flow should match the LL & HL, so the value of 15MI/d has been used.

With ref to the NIAUR's Guidance, regarding the 'proportion of water taken from Lough Neagh that is included within Block A of each table and identify which source type'. – the PPP sources Castor Bay, Moyola and Dunore extract from Lough Neagh, with no extraction by NIW sources.

Data Shortcomings

Calibrated hydraulic network models used in the data collection of pump lift and head have been built by a framework of DZSC's over a period of more than five years. Thus, models used have various calibration days.

Leakage reduction and changes to the system subsequent to the field test and model construction have not been taken into account. New pumps or pumps not field tested / modelled will also have no data available from DZSC's.

NI Water distribution input for WTW's / sources in NI are current 2009/10 figures which may not absolutely match pump data available from the older network models but this represents the best combination available.

Confidence Grade – NIW total average pumping head

Distribution pump data has been taken from available calibrated network models, therefore, confidence in the data obtained is reasonably good; **B3**. Calibrated network models represent the best source of distribution pump data currently available.

Water Resource and Treatment pump data has been taken from a variety of sources:

- TDMS (various periods of analysis based on staff supplying data); **C4**.
- Direct readings from pumps by site staff (care must be taken as snap shot may not be fully representative of average day figures); **B4**.
- Record drawings / Site Staff Experience (head calculated as difference in pipe invert levels on drawings); **B4**.
- Distribution Input data obtained from NI Water Ltd personnel; **B2**.

When the supply and distribution data source confidence grades are combined for the Average Pumping Head Calculation, the overall confidence grade is **B3**, given the variety of sources and periods of data used.

The NIW total average pumping head for AIR10 is 138.57m.hd.

Future Improvements

Data taken from record drawings / site supervision staff regarding pump lift for high and low lift pumps in WTW's could be improved if pressure gauges were

available up - and downstream of the pumps and could be recorded via TDMS.

The whole of NI is covered by DZS, apart from two areas in the Antrim/Larne region. Where returned data exists in partial completed model/field test data format, with these progressing to Calibrated Network Models, and with the data from the DZS area in Antrim/Larne, will help towards completing missing data.

Recommendations for Future Returns

- Devising a programme of flow and pressure monitoring in locations where pump data is not available under the Detailed Zonal Study Framework to gap fill,
- A long term plan should be developed to determine when distribution pump data will require updating and where this data will be obtained. A period of time should be established after which a network model may be considered too old to supply suitable data for the return, particularly in areas where facilities have passed over to Dalriada or where significant changes to the network make a network model obsolete.
- Installing flow / pressure monitors via TDMS for future returns,
- Developing a list of NI Water personnel responsible for supplying data in particular locations, and
- Developing a programme of when pump data should be gathered and delivered to Asset Management to reduce time required to source information each year.

Data coverage of Average Pumping Head Return calculation in NI

Data Coverage	2007 Return	2008 Return	2009 Return	2010 Return
No of Modelled Properties in Calculation	14.94%	41.91%	65.4%	95.8%

The above table demonstrates per year improvement of properties covered by full modelled DZS. The percentage of properties covered is based on pointer data provided by Ordinance Survey (NI).

Distribution Input used in Average Pumping Head Calculation

DI Used in APH Calculation as % of Total	2007 Return		2008 Return		2009 Return		2010 Return	
Total DI (from NIW Total Flows 2006 -2007)	585.91							
Total DI (from NIW Total Flows 2007 -2008)			616.575					
Resource Zone DI Apr 08 to Mar 09					633			
Resource Zone DI Apr 09 to Mar 10							625.4	
DI Used in Calculation	117.82	20.11%	284.459	46.14%	420.93	66.5%	609.57	97.48%

The above table details DI used in the calculation. Dunore East and Killylane have not been included in DZS to date and so there has been no average pumping head calculation undertaken for these areas. As a result the DI for these two areas has not been included in the overall calculation.

Average Pumping Head Result Comparison from 2007 to 2010

	2007 Assessment	2008 Assessment	2009 Assessment	2010 Assessment
Total DI ml/day	117.82	284.459	420.93	609.57
Sum (flow x lift)	8325.66	31655.54	47845.27	84470.31
Average Pumping Head m	70.66	111.28	113.67	138.57

The significant increase in the Average Pumping Head from AIR09 can be attributed mainly to the increase in coverage for the eastern areas. The inclusion of additional Dunore Pumps (low and high lift) make a major contribution to this increase.

Lines 1 - 3 – Number of sources (PPP)

There have been no changes to the PPP Water sources over the reporting period.

Line 5 Column 4 only – Average pumping head (PPP)

This has been requested by the Regulator and has been evidenced by the Table produced for Table 42; see Methodology for Table 42 Line 27.

Lines 6 - 10 Column – Types of Treatment (PPP)

There have been no changes to the PPP types of treatment over the reporting period.

Lines 6 – 10 Column 2 - Total number of Units referred to type (PPP)

There have been no changes to the PPP types of treatment over the reporting period.

Lines 13 – Potable Mains (PPP)

There have been no changes to the length of Potable Mains operated by the PPP Contractor over the reporting period.

The data represents the length of the DBFO Link Main, it does not represent the length of the Limavady and Ballymoney Link Mains which were commissioned and transferred to NI Water in 2008.

Table 13

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 13 NON FINANCIAL MEASURES
SEWERAGE PROPERTIES & POPULATION (TOTAL)**

DESCRIPTION	UNITS	DP	1		2		3		4		
			BASE YEAR SBP		REPORTING YEAR		REPORTING YEAR		REPORTING YEAR		
			2006-07	CG	2007-08	CG	2008-09	CG	2009-10	CG	
A PROPERTIES											
1	Households properties connected during the year	000	3	5.078	C4	6.380	C4	7.447	C3	3.493	C3
2	Non-households properties connected during the year	000	3	5.859	B4	1.319	B3	0.723	C3	0.167	C3
B BILLING											
3	Households billed unmeasured sewage	000	3	539.625	C4	533.506	C4	564.052	C3	568.886	C3
4	Households billed measured sewage	000	3	25.639	C4	25.616	C4	0.000	C3	0.000	C3
5	Households billed sewage	000	3	565.264	C4	559.122	C4	564.052	C3	568.886	C3
6	Non-households billed unmeasured sewage	000	3	48.690	B2	30.638	B2	27.881	C3	13.635	C3
7	Non-households billed measured sewage	000	3	50.420	B2	38.002	B2	32.063	C3	22.067	C3
8	Non-households billed sewage	000	3	99.110	B2	68.640	B2	59.944	C3	35.702	C3
9	Void properties	000	3	39.104	C4	38.357	C4	39.469	C3	41.508	C3
C POPULATION											
10	Total connected population	000	3	1464.617	C4	1495.054	C4	1423.480	C4	1453.610	C4

Table 13 – Non Financial Measures - Sewerage Properties and Population

Table 13 focuses on the number of properties and population connected to the public sewerage supply system. It extends to 10 lines, set out in three blocks:

Block A Properties (Lines 1 & 2)	Reports properties connected during the year
Block B Billing (Lines 3-9)	Includes a breakdown of all measured and unmeasured household and non-household properties billed by the company. The property numbers should be the average for the report year.
Block C Population (Lines 10)	This records the population within each of the measured and unmeasured household and non-household categories. The population numbers should be the average for the report year.

The information in this table is used for the water balance calculation and also in tariff and charging analysis and determination (water delivered unit cost).

Definition of 'Billed' Properties

Domestic customers were originally due to be charged for water and sewerage charges from April 2007. However this has been deferred and is not planned to be implemented during 2010/11.

In April 2008, Northern Ireland Water introduced sewerage charging to include non-households, phased in at 50%. Volumes returned to sewer are assumed to be 95%, based on standard industry figures, unless the customer challenges this assumption, whereupon they can apply for a non-return to sewer allowance which will be investigated and determined by NIW. These charges are based on the NAV of the non-household property.

For clarity, where reference is made in table 7 to 'billed' household and 'billed' non-household, this is taken as the provision of water services to customers whether they are billed directly (non-domestic customers) or payment is made through subsidy by DRD (domestic customers).

Classification of Farms

As with Table 7 (Water) - per Utility Regulator guidelines, farms were reclassified as billed non-households for AIR09 – this has remained for AIR10. Previously, in AIR08, farms had been classified and reported as 'billed' households on the principle of their status and allocation of 'domestic allowance'.

Data Sources and Data Validation

As with Table 7 (Water), the key source of information for the new connections and property data is the customer billing database, RapidXtra.

Customer information is updated through;

- 'Business as usual' customer contacts, such as new connection requests, move in/move outs, or
- Through initiatives such as the data quality programme (to confirm and cleanse data on voids, site meters and duplicates) or universal non-domestic metering programme.

There has been significant focus on customer numbers during 2009/10, primarily due to the PC10 draft and final determination process and NIW Undertakings. As a result, there will be data shifts from AIR09 especially in unmeasured non-domestic numbers as test meters have been omitted in AIR10 (see detailed comments below).

In addition, the roll-out of the metering programme has continued. Overall the number of non-domestic unmeasured properties has decreased from circa 14900 to 12300. This shows a reduction of 2600 in year and circa 12500 since March 2008.

Even though NIW has been installing meters on all new household connections since April 2008, as explained above, customers are not being charged on a measured basis, so the property is still being reported as unmeasured for both water & sewerage. Depending on the basis for charging when domestic billing is introduced in April 2010, these customers can be activated as measured household if required.

Data on property counts and classifications continue to be reported monthly and reconciled (where possible) with other data collection activities, such as the metering programme.

Data on population is obtained from Northern Ireland Statistics and Research Agency (NISRA), adjusted for the summer months based on information received from Northern Ireland.

For the purposes of the Annual Information Reporting, these have been subtracted manually and added to the non-households billed measured water category.

There are deemed to be 625 (gross) unmeasured – not charged properties which (based on sample taken) are mostly NI Water premises as per table below.

Description	Count
Sewage Disposal Works	607
Fire Authority For N I	11
Sewage Disposal Work (empty)	2
Doe (Roads)	1
Fire Authority For N I 18-22	1
Generator House	1
Stores Yard	1
Totals	625

Test Meters

NIW has a significant number of meters classified as 'test' from its legacy databases, which are being cleansed and reclassified as part of our data quality programme.

The survey and reclassification of test meters, initially identified through the Data Integrity Project, is still going. Of the 11,500 in total, circa 1900 still need to be surveyed and 2500 require further analysis. As a general rule, unless there are details of a septic tank being associated with the property on system, test meters deemed billable for water are also deemed billable for sewerage. Those that are found to be non-domestic billable should be attributed to the non-domestic measured category and billed retrospectively to April 2007.

A contrasting approach has been adopted for the treatment of 'test' meters for household and non-household properties, whereby 'test' meter numbers have been included in household property numbers but excluded from non-household numbers.

Unlike last year, no allowance is being made for non-domestic test meter numbers until their status is confirmed and uploaded onto Rapid. As discussed with the Reporter in November 2009, these test meters have not been added to the unmeasured base being deemed to be water taken legally unbilled.

The Reporter queried the logic of this assumption and was advised that the non household 'test' meters have not been included as the status of these accounts is still uncertain and further work to ascertain whether these are actually 'billable' properties, needs to be undertaken. You could argue that by adopting this approach, NIW is understating the number of billable non-household properties included in the tariff model, as it would be reasonable to assume that a number of the test meters will prove to be billable non-household properties.

However, the Reporter believes that NI Water has adopted a prudent approach, and as we work to fully verify each test meter it is possible that the number of test meters assigned to the measured non-household customers could reasonably be expected to increase over time as the status of more accounts of this nature are assessed and verified.

The Rapid Property Summary for 31st March 2010 indicates a reduction of 613 non-domestic test meters and 561 domestic test meters during 2009/10 for sewerage services.

Site Metered Properties

As part of the ongoing data checks, NIW has been confirming the number of site metered properties, (multiple properties being charged through a single meter, such as business parks and industrial estates).

To ensure that these meters are not double counted, as with Table 7, the non-domestic test meters are no longer included in Table 13 non-domestic property counts, (although NIW still retain this information for customer record and charging purposes). However, there are 386 domestic properties classified as site meters and these will require further investigations and analysis to be completed during 2010/11 to ensure these are classified correctly.

Overall, the number of non-domestic site meters has increased by 681 during 2009/10 and circa 3120 since March 2008, driven primarily as a result of charging and data cleanse activities.

Confidence Grades

We would expect the confidence grade for this table (C3 / C4) to improve throughout the year as the benefits of the data quality programme are realised.

Table 14

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 14 NON FINANCIAL MEASURES

SEWAGE COLLECTED (TOTAL)

DESCRIPTION	UNITS	DP	1		2		3		4		
			BASE YEAR SBP 2006-07	CG	REPORTING YEAR 2007-08	CG	REPORTING YEAR 2008-09	CG	REPORTING YEAR 2009-10	CG	
A	SEWAGE - VOLUMES										
1	Volume unmeasured household sewage	MI/d	2	233.51	C4	244.67	B3	257.99	C3	256.26	C3
2	Volume unmeasured non-household sewage	MI/d	2	39.64	B4	20.70	B4	18.05	C3	9.19	C3
3	Volume unmeasured sewage	MI/d	2	273.15	C4	265.37	B4	276.04	C3	265.45	C3
4	Volume measured household domestic sewage	MI/d	2	11.45	C4	11.78	C3	0.00	A1	0.00	A1
5	Volume measured non - household domestic sewage	MI/d	2	86.36	C3	79.17	C3	53.34	B3	49.38	B3
6	Volume trade effluent (excluding Roads Drainage)	MI/d	2	36.49	B2	26.25	C3	18.44	C4	28.37	B2
7	Volume waste water returned	MI/d	2	407.45	C4	382.57	C3	347.82	B4	343.20	C3
8	Volume of Roads Drainage returned	MI/d	2							175.80	CX

Table 14 – Non Financial Measures - Sewage Collected (Total)**Line 1 – Volume unmeasured household sewage**

This is calculated by assuming a 95% return to sewer of volume delivered to households factored by the percentage of the number of households billed for water against the number of households billed for sewerage services.

Sources

- AIR Table 10 Line 4 – Billed unmeasured household (Ml/d)
- AIR Table 13 Line 3 – Households billed unmeasured sewage
- AIR Table 7 Line 3 – Households billed unmeasured water

Volume of unmeasured = AIR Table 10 Line 4 X 0.95 X $\frac{\text{AIR Table 13 Line 3}}{\text{AIR Table 7 Line 3}}$
household sewage (Ml/d)

It is worth noting that water Billed unmeasured household volume includes the MLE adjustment, meter under registration and supply pipe leakage.

The Billed Unmeasured Household volumes have been calculated by multiplying the average PCC figure for NI Water by the unmeasured household population. The source of the PCC figure is the NI Water domestic consumption monitor. The household population figure is sourced from the Northern Ireland Statistics and Research Agency (NISRA).

Underground Supply Pipe leakage has been applied to the billed unmeasured household volume component of this calculation.

A meter under registration factor of 7.39% has been applied to this total volume. This percentage has been provided by WRc, as a result of a project initiated by NI Water, and is specific to NI Water's domestic consumption monitor meters. In AIR09 an interim assessment of 6.52% was used.

Line 2 - Volume unmeasured non-household sewage

This is calculated by assuming a 95% return to sewer of volume delivered to non-households factored by the percentage of the number of non-households billed for water against the number of non-households billed for sewerage services.

Sources

- AIR Table 10 Line 5 – Billed unmeasured non-household (Ml/d)
- AIR Table 13 Line 6 – Non-households billed unmeasured sewage
- AIR Table 7 Line 8 – Non-households billed unmeasured water

Volume of unmeasured = AIR Table 10 Line 5 X 0.95 X $\frac{\text{AIR Table 13 Line 6}}{\text{AIR Table 7 Line 8}}$
Non-household sewage (Ml/d)

It is worth noting that water Billed unmeasured non-household volume includes the MLE adjustment, meter under registration and supply pipe leakage.

The reported value for Billed Unmeasured Non-Household for AIR10 is 11.38 MI/d. The value reported in AIR09 was 20.80 MI/d

The average non domestic unmeasured usage is based on 265m³ per property and 30.5k properties. The 2009/10 tariff calculations assumed 20.4k non domestic unmeasured properties and that this lower number resulted in a reduction of the average consumption to 165m³ per property. The difference in the numbers of properties (AIR compared to tariff submission, 30.5k & 20.4k respectively) is largely due to a reduction in the overall number in voids 2.5k, the inclusion in the AIR of test meters 4.3k and the averaging basis used in AIR.

Line 5 - Volume measured non-household domestic sewerage

The reported sewerage figure calculation was based on the Rapid 'effectives' report for YTD Feb 2010 and YTD March 2010. The report details every transaction for the year per bill. The sewerage customers were selected by using the criteria of any customer charges a standing charge for sewerage. The volumetric charge associated to this was totalled. This included monthly and 6 monthly customers.

Sewerage volume is a direct calculation from water volume minus a minimum of 5% non return to sewer allowance (NRTS). Some customers may apply and be granted a larger allowance. This was 15,990,817 m³ Converted to mega litres per day of 43.8 MI/d (excluding domestic allowance), which equates to 49.38 MI/d (including domestic allowance).

Sewerage volume is lower than last year for a couple of reasons:

- The significant reduction experienced in water consumption during 2009/10, primarily as a result of the economic downturn, has shown a comparable reduction in sewerage volume.
- Several significant NRTS allowances were granted during 2009/10.

This line has been allocated a confidence grade of B3 as it has an element of manual manipulation of raw data from Rapid report to get the full year.

Line 6 - Volume trade effluent

Source of Information

The names of the traders were taken from Trade Effluent Register which is sited in Source under Resources /Databases and updated by NIW on a regular basis. Confidence grade B2.

Calculation of Flows

The actual volume of each trader was supplied by our Billing Section in Customer Service. Where annual volumes were only partially available, these

were then pro-rated up to 12 months. Where no volumes were supplied, then consented volumes, on the small number of traders were used.

Line 7 – Volume of waste water returned

This line is based on the summation of lines 3, 4, 5 and 6. The components of this calculation received confidence grades of C3, A1, B3 and B2 respectively. As C3 was the lowest confidence grade for a component, this line has been allocated a confidence grade of C3.

The Reporter's recommendation on determining the number of farmhouses with septic tanks is being addressed as part of the overall Data Quality programme.

Line 8 – Volume of Road Drainage returned

In line with the proposed methodology, we carried out the following steps:

1. Based on information provided by Road Service, determined the surface area of all roads and footpaths in urban areas (i.e. within the 40mph speed limit) as follows:
 - Urban road surface area 39,264,486 m²
 - Urban footway surface area 17,022,987 m²
 - Total urban road & footway surface area 56,287,473 m²
2. Obtained Northern Ireland average annual rainfall data from the Met Office over the last 10 years – 1.14m
3. Using the above, calculated the annual volume of rain falling on these surfaces and hence the run-off from roads & footpaths discharged to NIW sewers and storm drains.
 - $56,287,473 \times 1.14 = \mathbf{64,167,719m^3}$ (175.80 MLD)
4. From data extracted from NIW's network information management system (NIMS) for the largest 105 urban areas in Northern Ireland (i.e. all areas with greater than 1,000 population) we determined the following:
 - Aggregate length of combined sewers = 4,378km
 - Aggregate length of stormwater sewers = 4,317 km.

Both of these figures were adjusted to allow for those stormwater sewers which –rather than discharging to a watercourse – are connected into the combined system.

Applying the assumption that the sewer lengths represent a 'proxy' estimate of road lengths, this yields an approximate **50:50** split between areas draining to combined systems and those draining to separate systems.

5. Using points 3 and 4 the volumes of Road Drainage returned are calculated as follows:
 - Volume returned to combined sewer = 87.9 MLD
 - Volume returned to storm sewer = 87.9 MLD
 - Total Volume returned to sewer = 175.80 MLD

Table 15

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 15 NON FINANCIAL MEASURES
SEWAGE TREATMENT (NIW Only)

DESCRIPTION	UNITS	DP	1		2		3		4		
			BASE YEAR SBP 2006-07	CG	REPORTING YEAR 2007-08	CG	REPORTING YEAR 2008-09	CG	REPORTING YEAR 2009-10	CG	
A SEWAGE - LOADS											
1	Trade effluent load receiving secondary treatment (BOD/year)	tonnes	1	26316.0	B2			4484.0	C4	3086.5	B2
2	Total load receiving secondary treatment (BOD/year)	tonnes	1	44575.8	C3			45024.1	C3	39716.5	C3
3	Total load receiving primary treatment only (BOD/year)	tonnes	1	516.7	C3			377.8	C3	199.4	C3
4	Total load receiving preliminary treatment only (BOD/year)	tonnes	1	1234.5	C3			473.2	C3	553.7	C3
5	Total load entering sewerage system (BOD/year)	tonnes	1	48754.3	C3			46431.4	C5	40931.0	C5
6	Equivalent population served (resident)	000	2	2226.22	C3			2088.64	C5	1837.56	C5
7	Equivalent population served (resident) (numerical consents)	000	2	2034.90	C3			2024.99	C5	1783.03	C5
B SEWERAGE - SERVICE FACILITIES											
8	Number of sewage treatment works	nr	0	1097	A2			1056	A2	1,040	A2
9	Treatment capacity available (BOD5/day)	tonnes	1	132.0	D3			133.9	D3	126.3	D3
10	Number of STWs providing nutrient removal	nr	0	19	A2			22	A2	18	A1
11	Equivalent population served by STWs providing nutrient removal	000	2	1058.85	C3			1180.49	C3	1009.65	C3
12	Number of STWs providing pathogen reduction	nr	0	4	A2			2	A2	2	A1
13	Equivalent population served by STWs providing disinfection	000	2	24.56	C3			79.18	C3	31.76	C3
C SEWAGE - SLUDGE DISPOSAL											
14	Percentage unsatisfactory sludge disposal	%	2	0.00	A1			0.00	A1	0.00	A1
15	Total sewage sludge produced	ttds	1	38.0	B3			38.0	B3	30.5	B2
16	Total sewage sludge disposal	ttds	1	38.0	B3			38.0	B3	36.9	B2
17	Additional sewage sludge arising from new quality obligations since 2007	ttds	1	3.1	D3			0.0	A1	0.0	A1

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 15 NON FINANCIAL MEASURES
SEWAGE TREATMENT (PPP Only)

DESCRIPTION	UNITS	DP	1		2		3		4		
			BASE YEAR SBP 2006-07	CG	REPORTING YEAR 2007-08	CG	REPORTING YEAR 2008-09	CG	REPORTING YEAR 2009-10	CG	
A SEWAGE - LOADS											
1	Trade effluent load receiving secondary treatment (BOD/year)	tonnes	1			N/C		N/C		879.3	B2
2	Total load receiving secondary treatment (BOD/year)	tonnes	1			1880.0		3331.0	A2	8105.2	B3
3	Total load receiving primary treatment only (BOD/year)	tonnes	1			0.0		0.0	A1	0.0	A1
4	Total load receiving preliminary treatment only (BOD/year)	tonnes	1			0.0		663.0	B5	0.0	A1
5	Total load entering sewerage system (BOD/year)	tonnes	1							N/A	A1
6	Equivalent population served (resident)	000	2			78.00		152.00	A2	370.10	B3
7	Equivalent population served (resident) (numerical consents)	000	2					152.00	A2	370.10	B3
B SEWERAGE - SERVICE FACILITIES											
8	Number of sewage treatment works	nr	0			1		2	A1	6	A1
9	Treatment capacity available (BOD5/day)	tonnes	1			12.4		17.5	B4	30.4	B3
10	Number of STWs providing nutrient removal	nr	0			1		2	A1	3	A1
11	Equivalent population served by STWs providing nutrient removal	000	2			102.00		152.00	A2	254.67	B3
12	Number of STWs providing pathogen reduction	nr	0			0		1	A1	2	A1
13	Equivalent population served by STWs providing disinfection	000	2			0.00		68.00	A2	113.28	B3
C SEWAGE - SLUDGE DISPOSAL											
14	Percentage unsatisfactory sludge disposal	%	2			0.00				0.00	A1
15	Total sewage sludge produced	ttds	1			0.8				7.4	B3
16	Total sewage sludge disposal	ttds	1			0.8				1.0	B3
17	Additional sewage sludge arising from new quality obligations since 2007	ttds	1			0.0				0.0	A1

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 15 NON FINANCIAL MEASURES
SEWAGE TREATMENT (Total)**

DESCRIPTION	UNITS	DP	1		2		3		4	
			BASE YEAR SBP 2006-07	CG	REPORTING YEAR 2007-08	CG	REPORTING YEAR 2008-09	CG	REPORTING YEAR 2009-10	CG
A SEWAGE - LOADS										
1	Trade effluent load receiving secondary treatment (BOD/year)	tonnes	1		4919.9	C3	4484.0	C4	3965.8	B2
2	Total load receiving secondary treatment (BOD/year)	tonnes	1		43690.2	C3	48355.1	C3	47822.0	C3
3	Total load receiving primary treatment only (BOD/year)	tonnes	1		482.3	C3	377.8	C3	199.4	C3
4	Total load receiving preliminary treatment only (BOD/year)	tonnes	1		444.1	C3	1136.2	C5	553.7	C3
5	Total load entering sewerage system (BOD/year)	tonnes	1		46877.0	C3	46431.4	C5	40931.1	C5
6	Equivalent population served (resident)	000	2		2120.90	C3	2240.64	C5	2207.66	C5
7	Equivalent population served (resident) (numerical consents)	000	2		2054.70	C3	2176.99	C5	2153.13	C5
B SEWERAGE - SERVICE FACILITIES										
8	Number of sewage treatment works	nr	0		1058	A2	1058	A2	1046	A2
9	Treatment capacity available (BOD5/day)	tonnes	1		132.1	D3	151.4	D4	156.7	D3
10	Number of STWs providing nutrient removal	nr	0		18	A2	24	A2	21	A1
11	Equivalent population served by STWs providing nutrient removal	000	2		960.10	C3	1332.49	C3	1264.32	C3
12	Number of STWs providing pathogen reduction	nr	0		1	A2	3	A2	4	A1
13	Equivalent population served by STWs providing disinfection	000	2		28.40	C3	147.18	C3	145.04	B4
C SEWAGE - SLUDGE DISPOSAL										
14	Percentage unsatisfactory sludge disposal	%	2		0.00	A1	0.00	A1	0.00	A1
15	Total sewage sludge produced	ttds	1		38.4	B2	38.0	B3	37.9	B3
16	Total sewage sludge disposal	ttds	1		38.4	B2	38.0	B3	37.9	B3
17	Additional sewage sludge arising from new quality obligations since 2007	ttds	1		1.5	B3	0.0	A1	0.0	A1

Table 15 – Non Financial Measures - Sewage Treatment**Line 1 - Trade effluent load receiving secondary treatment (BOD/year)****Calculation of BOD Loading**

For traders that are sampled, we have used the actual BOD concentrations as determined by laboratory analyses.

For those traders not required to be sampled i.e. on "standard charge", standard sewage strength was calculated based on the average BOD results of monthly UWWTR samples taken at the inlet of the 10 major works. Again confidence grade B2.

Multiplying the BOD concentration by the volume and by the number of days a trader discharges results in the annual BOD loading figure for each trader.

Allocation of Trade Loads from Traders to Respective Sewage Treatment Works

The associated works for each of the traders (sampled and non-sampled) have been added to the list.

Lines 2-7 – Sewage Loads and Lines 8-13 – Sewerage –Service Facilities**NIW Only - Lines 2 - 13**

It should be noted that the banding of the WWTWs is based on the latest set of Populations Equivalents i.e. PEs (minus the allowance for the tourist population) held by the Asset Performance Team. Since AIR09 PEs for 143 WWTWs have been updated.

PEs computed by others within NIW, and on behalf of others within NIW, have also been considered and adopted by the Asset Performance Team.

Trade effluent information (up to end of March 2010) was obtained from NIW's Trade Effluent Section, for each individual consented trader, which enabled easy conversion to PEs. The COD:BOD conversion factor of 2:1 was not used as more accurate flow based information was available to the Trade Effluent Section.

The allowance for the tourist population, which has been deducted for the purposes of band size determination, has been the proportion of PE allocated to hotels, and caravan and tent pitches only.

PPP sites are reported on separately by the PPP section. There are 6 PPP WWTW where the contractors have the Water Order Consents; Kinnegar and Omega: North Down Ards, Armagh, Richhill, Ballyrickard, and Ballynacor WWTW. Ballynacor WWTW is an amalgam of three former WWTW: Ballynacor, Bullays Hill, Seagoe; the latter two having been converted by the PPP contractor into stormwater storage and transfer facilities to Ballynacor.

It has not been possible to extract sludge tanker import information, from within the organisation, to include within the PEs.

The Reporters Report on AIR09 recommended that NIW correct possible overestimation of total STW loads due to the inclusion of offices/commercial premises.

The majority of the residential and non-residential element of PEs used to calculate tables 17c and 17d was based on Pointer information from MapInfo. However it should be noted that the non-residential element of Pointer is made up of both commercial and unknown properties. At this present time it is not known what proportion of the unknowns are actually residential and which are non-residential and therefore it has been decided to include both elements when calculating the PEs for the band size.

Also due to the rural nature of Northern Ireland a large proportion of the population commute from rural to urban catchments and therefore the potential for overestimation may not be as excessive as other parts of the United Kingdom

It is hoped that a number of flow and load studies should be completed by AIR11 and this should improve confidence in the PEs for these catchments.

Lines 2 - 13 – Confidence Grades

The confidence grades of the data in lines 2 - 4 remain as C3, as although the PE confidence has been re-assessed as C5 there is greater confidence in process categories for the WWTWs, which warrants the raising of grade from C5 to C3.

The confidence grades of the data in lines 5–7 remain as stated in AIR09, as a result of the work carried out with Jacobs (during 2008) who developed a Growth Model for NIW, in line with the model they developed for Scottish Water. Through consultations with Jacobs and their understanding of the theoretical methodology used by both NIW and Jacobs staff during the past year, their informed opinion was that the PEs could warrant only a C5 grading. NIW recognises the need to improve these PEs grades through targeted flow and load surveys, although the PE reviews carried out have been very comprehensive, and was in line with PE values held by others within the organisation, and the broader water industry.

The confidence grades of the data in lines 8, 9 and 11 remain as in AIR09, due to the confidence in the other information associated with the population of these lines.

The confidence grade of lines 10 and 12 should be increased from A2 in AIR09 to A1 in AIR10, as the number of works:

- providing purpose specific nutrient removal (to meet numeric consent conditions relating to limits for total phosphorus and/or total nitrogen in the discharged effluent); and
- providing purpose-specific pathogen removal (to meet consent conditions whether seasonal or all year round. STWs that provide UV irradiation and membrane filtration should be included.)

are known by NIW.

The confidence grade of the data in line 13 should be decreased from A2 in AIR09 to C3 in AIR10, as C5 is viewed as the appropriate grade for NIW's PEs. The grade for this line can thus be increased to C3 to reflect the confidence in process categories for the WWTWs.

Line 2 – Total load receiving secondary treatment

The table below shows the changes in WWTWs receiving secondary treatment since AIR09 for Line 2.

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Aghalee	2394	-7	Pe has been updated since AIR09
Aghanloo (1)	2989	17	Pe has been updated since AIR09
Annahilt (WWTW)	317	399	Pe has been updated since AIR09
Annsborough	2687	4494	Pe has been updated since AIR09
Antrim (WWTW)	1422	8595	Pe has been updated since AIR09
Armagh (WWTW)	2558	-26351	This WWTWs is now a PPP site
Artasooly	2559	-274	This WWTWs is now a pumpaway
Aughnacloy	3007	-5	Pe has been updated since AIR09
Ballybogy	1087	17	Pe has been updated since AIR09
Ballyclare	1467	5	Pe has been updated since AIR09
Ballycoshone	2689	6	This WWTWs has been upgraded for AIR10
Ballycranbeg	218	69	Pe has been updated since AIR09
Ballykelly (L/Derry)	3016	49	Pe has been updated since AIR09
Ballymagorry (WWTW)	3018	187	Pe has been updated since AIR09
Ballymena (WWTW)	1456	-5359	Pe has been updated since AIR09
Ballynacor	2395	-102837	This WWTWs is now a PPP site
Ballynahinch (Down)	311	8	Pe has been updated since AIR09
Ballyronan (WWTW)	1558	21	Pe has been updated since AIR09
Ballyvoy	1177	16	Pe has been updated since AIR09
Banbridge (WWTW)	2102	1474	Pe has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Belfast (WWTW)	345	10310	Pe has been updated since AIR09
Belleek (Fermanagh)	3024	1	Pe has been updated since AIR09
Benburb (WWTW)	2831	274	Pe has been updated since AIR09
Bullays Hill	2398	-51147	This WWTWs is now a PPP pumpaway
Bush	2833	-639	This WWTWs is now a pumpaway
Bushmills (WWTW)	1178	-151	Pe has been updated since AIR09
Carrickfergus (WWTW)	261	61	Pe has been updated since AIR09
Carrickrovaddy	2257	23	This WWTWs has been upgraded for AIR10
Castledawson	1609	-6	Pe has been updated since AIR09
Castleberg (WWTW)	3042	21	Pe has been updated since AIR09
Castlewellan (WWTW)	2694	-4624	This WWTWs is now a pumpaway
Clady (Tyrone)	4149	3	Pe has been updated since AIR09
Clough (WWTW)	296	-16	PE has been updated since AIR09
Coalisland	2828	977	Pe has been updated since AIR09
Conthem Rd	3180	29	This WWTWs is a new site for AIR10.
Cookstown (WWTW)	1582	-105	Pe has been updated since AIR09
Cranagh (WWTW)	3065	63	This WWTWs has been upgraded for AIR10
Cross Lane(2-6)	2911	-9	This WWTWs has been decommissioned for AIR10
Culmore (WWTW)	3071	-6764	Pe has been updated since AIR09
Derryhale	2570	27	Pe has been updated since AIR09
Donaghmore (WWTW)	2840	455	Pe has been updated since AIR09
Donemana	3103	16	Pe has been updated since AIR09
Donnybrewer	3080	36	Pe has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Downpatrick (WWTW)	771	1413	Pe has been updated since AIR09
Draperstown	1615	47	Pe has been updated since AIR09
Dromora (WWTW)	316	13	Pe has been updated since AIR09
Dromore (Down)	2127	237	Pe has been updated since AIR09
Drummack	3094	16	This WWTWs has been upgraded for AIR10
Drumman Hill	2575	-24	This WWTWs is now a pumpaway
Dungannon	2850	14469	Pe has been updated since AIR09
Dungiven	3101	17	Pe has been updated since AIR09
Dunmurry	346	-7778	Pe has been updated since AIR09
Dunnamore	1574	5	Pe has been updated since AIR09
Ederney (WWTW)	3106	-288	Pe has been updated since AIR09
Enniskillen	3218	-361	Pe has been updated since AIR09
Fintona (WWTW)	3112	-1	Pe has been updated since AIR09
Fivemiletown (WWTW)	3113	-159	Pe has been updated since AIR09
Galbally	2844	51	Pe has been updated since AIR09
Garvagh (WWTW)	1154	-28	Pe has been updated since AIR09
Gilford (WWTW)	2162	51	Pe has been updated since AIR09
Glassdrumman (Down)	302	-34	Pe has been updated since AIR09
Glenstall	1109	-1051	Pe has been updated since AIR09
Greenisland (WWTW)	263	-72	Pe has been updated since AIR09
Hilltown (WWTW)	2701	131	Pe has been updated since AIR09
Irvinestown	3137	-254	Pe has been updated since AIR09
Katesbridge Road(79-85)	2110	12	This WWTWs has been upgraded for AIR10
Keady (Armagh)	2553	40	Pe has been updated since AIR09
Kesh (WWTW)	3140	33	Pe has been updated since AIR09
Kilkeel (WWTW)	313	-1506	Pe has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Killinchy (WWTW)	252	301	Pe has been updated since AIR09
Killyleagh (WWTW)	273	337	Pe has been updated since AIR09
Kilmore (Down)	285	34	Pe has been updated since AIR09
Kilrea	1156	-790	Pe has been updated since AIR09
Kinawley	3149	-16	Pe has been updated since AIR09
Larne (WWTW)	2044	-343	Pe has been updated since AIR09
Limavady (WWTW)	3162	-14	Pe has been updated since AIR09
Lisbarnet (WWTW)	239	-503	This WWTWs is now a pumpaway
Lisburn (New Holland)	329	12	Pe has been updated since AIR09
Lisnagade Road(54-56)	2161	6	This WWTWs has been upgraded for AIR10
Lisnaskea (WWTW)	3171	47	Pe has been updated since AIR09
Loughdian	2146	-18	This WWTWs is now a gravity away to Poyntzpass
Loughinisland (WWTW)	298	229	This WWTWs has been upgraded for AIR10
Lower Rashee Road (15-21)	5188	12	This is a new WWTWs for AIR10
Magherafelt (WWTW)	1621	184	Pe has been updated since AIR09
Magheralin	2413	-1875	This WWTWs is now a pumpaway
Magheramason	3177	2	Pe has been updated since AIR09
Markethill	2591	26	Pe has been updated since AIR09
Martinstown	1445	33	Pe has been updated since AIR09
Mayboy	1163	34	Pe has been updated since AIR09
Moira	2429	266	Pe has been updated since AIR09
Monea (WWTW)	3186	14	Pe has been updated since AIR09
Moneymore (WWTW)	1589	4	PE has been updated since AIR09
Moneyneany (WWTW)	1631	64	Pe has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Moneyreagh (WWTW)	337	5	Pe has been updated since AIR09
Moneyslane (WWTW)	2151	-24	Pe has been updated since AIR09
Moy (WWTW)	2859	-1114	Pe has been updated since AIR09
Mullaghbane (Armagh)	2594	29	This WWTWs has been upgraded for AIR10
Mullanahoe (WWTW)	2043	-13	Pe has been updated since AIR09
Mullans (Antrim)	1118	62	Pe has been updated since AIR09
Newcastle (WWTW)	303	32	Pe has been updated since AIR09
Newry (WWTW)	2685	-6549	Pe has been updated since AIR09
Newtownards (Ballyrickard)	241	-50892	This WWTWs is now a PPP site for AIR10
Newtownbreda (WWTW)	342	682	PE has been updated since AIR09
Newtownbutler (WWTW)	3200	7	Pe has been updated since AIR09
Newtownstewart (WWTW)	3202	9	Pe has been updated since AIR09
North Coast (WWTWs)	4150	-536	Pe has been updated since AIR09
Oakland Villas	1711	18	This WWTWs has been upgraded for AIR10
Oghill (1)	3205	-54	This WWTWs is now a gravity away to Culmore
Omagh (WWTW)	3999	-1060	Pe has been updated since AIR09
Orritor (WWTW)	1591	-15	Pe has been updated since AIR09
Plumbridge (WWTW)	3210	-20	Pe has been updated since AIR09
Portaferry (2)	5200	3801	This WWTWs has been upgraded for AIR10
Poundburn	318	-401	This WWTWs is now a pumpaway
Poyntzspass (WWTW)	2156	18	Pe has been updated since AIR09
Randalstown	1425	-6666	This WWTWs is now a pumpaway
Rasharkin	1120	-229	PE has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Rathfriland (WWTW)	2713	-11	Pe has been updated since AIR09
Reaskmore Road	5286	12	This WWTWs is a new site for AIR10.
Redford	2853	-6	Pe has been updated since AIR09
Richill	2597	-3384	This WWTWs is now a PPP site
Ringneill (WWTW)	237	503	PE has been updated since AIR09
Robinsonstown	2419	-31	Pe has been updated since AIR09
Roughfort (WWTW)	1470	-15	Pe has been updated since AIR09
Saintfield (WWTW)	290	8	Pe has been updated since AIR09
Seagoe (WWTW)	2420	-15000	This WWTWs is now a PPP pumpaway
Seahill (WWTW)	774	6795	This WWTWs has been upgraded for AIR10
Springhill Road(1)	1713	14	This WWTWs has been upgraded for AIR10
Stewartstown	1599	-63	Pe has been updated since AIR09
Strabane	3223	-1824	Pe has been updated since AIR09
Strangford	226	268	Pe has been updated since AIR09
Tamnaherin	3226	-54	Pe has been updated since AIR09
Tamnamore (WWTW)	2862	23	Pe has been updated since AIR09
Tandragee	2174	488	Pe has been updated since AIR09
Tempo (WWTW)	3229	-17	Pe has been updated since AIR09
Trillick (WWTW)	3231	1	Pe has been updated since AIR09
Tullynakill Road	5280	31	This WWTWs is a new site for AIR10.
Tulnacross Road(44-46)	1820	6	This WWTWs has been upgraded for AIR10
Warrenpoint (WWTW)	2720	40	Pe has been updated since AIR09
Waterfoot Road (WWTW)	1643	63	Pe has been updated since AIR09
Whitehouse	265	312	Pe has been updated since AIR09
Total		-242366	Change in Line 2 PE since AIR09

It should be noted that due to rounding and summation of PEs the total shown differs slightly from the difference between the AIR10 and AIR09 values for this line.

Line 3 – Total load receiving primary treatment only

The table below shows the changes in WWTWs receiving primary treatment only since AIR09 for Line 3.

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Aghanloo (2)	2989	-940	This WWTWs is now abandoned for AIR10
Ardglass (WWTW)	268	48	Pe has been updated since AIR09
Ballycoshone	2689	-6	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Barnish Road(44-46)	1758	-6	This WWTWs has been decommissioned for AIR10
Carrickrovaddy	2257	-23	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Cloghoge Road	2170	-27	This WWTWs is now a pumpaway for AIR10
Cranagh (WWTW)	3065	-63	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Drummack	3094	-16	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Katesbridge Road(79-85)	2110	-12	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Lisnagade Road(54-56)	2161	-6	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Loughinisland (WWTW)	298	-229	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Mullaghbane (Armagh)	2594	-29	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Oakland Villas	1711	-18	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Seahill (WWTW)	774	-6771	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Springhill Road(1)	1713	-14	This WWTWs has been upgraded for AIR10 and now has secondary treatment
Stramore	2173	-18	This WWTWs is now a gravity away for AIR10
Tulnacross Road(44-46)	1820	-6	This WWTWs has been upgraded for AIR10 and now has secondary treatment
	Total	-8136	Change in Line 3 PE since AIR09

It should be noted that due to rounding and summation of PEs the total shown differs slightly from the difference between the AIR10 and AIR09 values for this line.

Line 4 – Total load receiving preliminary treatment only

The table below shows the changes in WWTWs receiving preliminary treatment only since AIR09 for Line 4.

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Ballycastle (WWTW)	1071	3703	The Pe at this WWTWs has been updated for AIR10
Tully Road Headworks	3975	-27	The Pe at this WWTWs has been updated for AIR10
Total		3676	Change in Line 4 PE since AIR09

It should be noted that due to rounding and summation of PEs the total shown differs slightly from the difference between the AIR10 and AIR09 values for this line.

Line 5 – Total load entering sewerage system

The table below shows the changes in WWTWs since AIR09 that affects load entering the system for Line 5.

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Aghalee	2394	-7	The Pe for this site has been updated since AIR09
Aghanloo (1)	2989	17	The Pe for this site has been updated since AIR09
Aghanloo (2)	2989	-940	This WWTWs has been decommissioned for AIR10
Annahilt (WWTW)	317	399	The Pe for this site has been updated since AIR09
Annalong (WWTW)	300	-45	The Pe for this site has been updated since AIR09
Annsborough	2687	4494	The Pe for this site has been updated since AIR09
Antrim (WWTW)	1422	8595	The Pe for this site has been updated since AIR09
Ardglass (WWTW)	268	48	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Armagh (WWTW)	2558	-26351	This WWTWs is now a PPP site for AIR10
Artasooly	2559	-274	This WWTWs has been pumpaway for AIR10
Aughnacloy	3007	-5	The Pe for this site has been updated since AIR09
Ballybogy	1087	17	The Pe for this site has been updated since AIR09
Ballycastle (WWTW)	1071	3703	The Pe for this site has been updated since AIR09
Ballyclare	1467	5	The Pe for this site has been updated since AIR09
Ballycranbeg	218	69	The Pe for this site has been updated since AIR09
Ballykelly (L/Derry)	3016	49	The Pe for this site has been updated since AIR09
Ballymagorry (WWTW)	3018	187	The Pe for this site has been updated since AIR09
Ballymartin (Retention Tank)	770	-31	The Pe for this site has been updated since AIR09
Ballymena (WWTW)	1456	-5359	The Pe for this site has been updated since AIR09
Ballynacor	2395	-102837	This WWTWs is now a PPP site for AIR10
Ballynahinch (Down)	311	8	The Pe for this site has been updated since AIR09
Ballyronan (WWTW)	1558	21	The Pe for this site has been updated since AIR09
Ballyvoy	1177	16	The Pe for this site has been updated since AIR09
Banbridge (WWTW)	2102	1474	The Pe for this site has been updated since AIR09
Barnish Road(44-46)	1758	-6	This WWTWs has been decommissioned for AIR10
Belfast (WWTW)	345	10310	The Pe for this site has been updated since AIR09
Belleek (Fermanagh)	3024	1	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Benburb (WWTW)	2831	274	The Pe for this site has been updated since AIR09
Blackrock Retention Tank (Down)	306	7	The Pe for this site has been updated since AIR09
Bullays Hill	2398	-51147	This WWTWs is now a PPP pumpaway site for AIR10
Bush	2833	-639	This WWTWs has been pumpaway for AIR10
Bushmills (WWTW)	1178	-151	The Pe for this site has been updated since AIR09
Carrickfergus (WWTW)	261	61	The Pe for this site has been updated since AIR09
Castledawson	1609	-6	The Pe for this site has been updated since AIR09
Castlederg (WWTW)	3042	21	The Pe for this site has been updated since AIR09
Castlewellan (WWTW)	2694	-4624	This WWTWs has been pumpaway for AIR10
Clady (Tyrone)	4149	3	The Pe for this site has been updated since AIR09
Cloghoge Road	2170	-27	This WWTWs has been pumpaway for AIR10
Clough (WWTW)	296	-16	The Pe for this site has been updated since AIR09
Coalisland	2828	977	The Pe for this site has been updated since AIR09
Conthem Rd	3180	29	This WWTWs is a new site for AIR10 as recently adopted by NIW
Cookstown (WWTW)	1582	-105	The Pe for this site has been updated since AIR09
Cross Lane(2-6)	2911	-9	This WWTWs has been decommissioned for AIR10
Culmore (WWTW)	3071	-6764	The Pe for this site has been updated since AIR09
Derryhale	2570	27	The Pe for this site has been updated since AIR09
Donaghmore (WWTW)	2840	455	The Pe for this site has been updated since AIR09
Donemana	3103	16	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Donnybrewer	3080	36	The Pe for this site has been updated since AIR09
Downpatrick (WWTW)	771	1413	The Pe for this site has been updated since AIR09
Draperstown	1615	47	The Pe for this site has been updated since AIR09
Dromora (WWTW)	316	13	The Pe for this site has been updated since AIR09
Dromore (Down)	2127	237	The Pe for this site has been updated since AIR09
Drumman Hill	2575	-24	This WWTWs has been pumpaway for AIR10
Dungannon	2850	14469	The Pe for this site has been updated since AIR09
Dungiven	3101	17	The Pe for this site has been updated since AIR09
Dunmore Cottages	806	-6	The Pe for this site has been updated since AIR09
Dunmurry	346	-7778	The Pe for this site has been updated since AIR09
Dunnamore	1574	5	The Pe for this site has been updated since AIR09
Ederney (WWTW)	3106	-288	The Pe for this site has been updated since AIR09
Enniskillen	3218	-361	The Pe for this site has been updated since AIR09
Fintona (WWTW)	3112	-1	The Pe for this site has been updated since AIR09
Fivemiletown (WWTW)	3113	-159	The Pe for this site has been updated since AIR09
Galbally	2844	51	The Pe for this site has been updated since AIR09
Garvagh (WWTW)	1154	-28	The Pe for this site has been updated since AIR09
Gilford (WWTW)	2162	51	The Pe for this site has been updated since AIR09
Glassdrumman (Down)	302	-34	The Pe for this site has been updated since AIR09
Glenstall	1109	-1051	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Greenisland (WWTW)	263	-72	The Pe for this site has been updated since AIR09
Hilltown (WWTW)	2701	131	The Pe for this site has been updated since AIR09
Irvinestown	3137	-254	The Pe for this site has been updated since AIR09
Keady (Armagh)	2553	40	The Pe for this site has been updated since AIR09
Kesh (WWTW)	3140	33	The Pe for this site has been updated since AIR09
Kilclief (Retention Tank)	269	-268	This WWTWs has been pumpaway for AIR10
Kilkeel (WWTW)	313	-1506	The Pe for this site has been updated since AIR09
Killinchy (WWTW)	252	301	The Pe for this site has been updated since AIR09
Killyleagh (WWTW)	273	337	The Pe for this site has been updated since AIR09
Kilmore (Down)	285	34	The Pe for this site has been updated since AIR09
Kilrea	1156	-790	The Pe for this site has been updated since AIR09
Kinawley	3149	-16	The Pe for this site has been updated since AIR09
Larne (WWTW)	2044	-343	The Pe for this site has been updated since AIR09
Limavady (WWTW)	3162	-14	The Pe for this site has been updated since AIR09
Lisbarnet (WWTW)	239	-503	This WWTWs has been pumpaway for AIR10
Lisburn (New Holland)	329	12	The Pe for this site has been updated since AIR09
Lisnaskea (WWTW)	3171	47	The Pe for this site has been updated since AIR09
Loughdian	2146	-18	This WWTWs is gravitating away for AIR10
Lower Rashee Road (15-21)	5188	12	This WWTWs is a new site for AIR10 as recently adopted by NIW
Magherafelt (WWTW)	1621	184	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Magheralin	2413	-1875	This WWTWs is now a PPP pumpaway site for AIR10
Magheramason	3177	2	The Pe for this site has been updated since AIR09
Markethill	2591	26	The Pe for this site has been updated since AIR09
Martinstown	1445	33	The Pe for this site has been updated since AIR09
Mayboy	1163	34	The Pe for this site has been updated since AIR09
Moira	2429	266	The Pe for this site has been updated since AIR09
Monea (WWTW)	3186	14	The Pe for this site has been updated since AIR09
Moneymore (WWTW)	1589	4	The Pe for this site has been updated since AIR09
Moneyneany (WWTW)	1631	64	The Pe for this site has been updated since AIR09
Moneyreagh (WWTW)	337	5	The Pe for this site has been updated since AIR09
Moneyslane (WWTW)	2151	-24	The Pe for this site has been updated since AIR09
Moy (WWTW)	2859	-1114	The Pe for this site has been updated since AIR09
Mullanahoe (WWTW)	2043	-13	The Pe for this site has been updated since AIR09
Mullans (Antrim)	1118	62	The Pe for this site has been updated since AIR09
Newcastle (WWTW)	303	32	The Pe for this site has been updated since AIR09
Newry (WWTW)	2685	-6549	The Pe for this site has been updated since AIR09
Newtownards (Ballyrickard)	241	-50892	This WWTWs is now a PPP site for AIR10
Newtownbreda (WWTW)	342	682	The Pe for this site has been updated since AIR09
Newtownbutler (WWTW)	3200	7	The Pe for this site has been updated since AIR09
Newtownstewart (WWTW)	3202	9	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
North Coast (WWTWs)	4150	-536	The Pe for this site has been updated since AIR09
Oghill (1)	3205	-54	This WWTWs is gravitating away for AIR10
Omagh (WWTW)	3999	-1060	The Pe for this site has been updated since AIR09
Orritor (WWTW)	1591	-15	The Pe for this site has been updated since AIR09
Plumbridge (WWTW)	3210	-20	The Pe for this site has been updated since AIR09
Portavogie(Retention Tank)	209	-129	The Pe for this site has been updated since AIR09
Poundburn	318	-401	This WWTWs has been pumpaway for AIR10
Poyntzspass (WWTW)	2156	18	The Pe for this site has been updated since AIR09
Randalstown	1425	-6666	This WWTWs has been pumpaway for AIR10
Rasharkin	1120	-229	The Pe for this site has been updated since AIR09
Rathfriland (WWTW)	2713	-11	The Pe for this site has been updated since AIR09
Reaskmore Road	5286	12	This WWTWs is a new site for AIR10 as recently adopted by NIW
Redford	2853	-6	The Pe for this site has been updated since AIR09
Richill	2597	-3384	This WWTWs is now a PPP site for AIR10
Ringneill (WWTW)	237	503	The Pe for this site has been updated since AIR09
Robinsonstown	2419	-31	The Pe for this site has been updated since AIR09
Roughfort (WWTW)	1470	-15	The Pe for this site has been updated since AIR09
Saintfield (WWTW)	290	8	The Pe for this site has been updated since AIR09
Seagoe (WWTW)	2420	-15000	This WWTWs is now a PPP pumpaway site for AIR10
Seahill (WWTW)	774	24	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Stewartstown	1599	-63	The Pe for this site has been updated since AIR09
Strabane	3223	-1824	The Pe for this site has been updated since AIR09
Stramore	2173	-18	This WWTWs is gravitating away for AIR10
Strangford	226	268	The Pe for this site has been updated since AIR09
Tamnaherin	3226	-54	The Pe for this site has been updated since AIR09
Tamnamore (WWTW)	2862	23	The Pe for this site has been updated since AIR09
Tandragee	2174	488	The Pe for this site has been updated since AIR09
Tempo (WWTW)	3229	-17	The Pe for this site has been updated since AIR09
Trillick (WWTW)	3231	1	The Pe for this site has been updated since AIR09
Tully Road Headworks	3975	-27	The Pe for this site has been updated since AIR09
Tullynakill Road	5280	31	This WWTWs is a new site for AIR10 as recently adopted by NIW
Warrenpoint (WWTW)	2720	40	The Pe for this site has been updated since AIR09
Waterfoot Road (WWTW)	1643	63	The Pe for this site has been updated since AIR09
Whitehead (WWTW)	452	-57	The Pe for this site has been updated since AIR09
Whitehouse	265	312	The Pe for this site has been updated since AIR09
	Total	-251157	Change in Line 5 PE since AIR09

It should be noted that due to rounding and summation of PEs the total shown differs slightly from the difference between the AIR10 and AIR09 values for this line.

Line 6 – Equivalent population served (resident)

The table below shows the changes in WWTWs since AIR09 that affects equivalent population served (resident) for Line 6

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Aghalee	2394	-7	The Pe for this site has been updated since AIR09
Aghanloo (1)	2989	17	The Pe for this site has been updated since AIR09
Aghanloo (2)	2989	-940	This WWTWs has been decommissioned for AIR10
Annahilt (WWTW)	317	399	The Pe for this site has been updated since AIR09
Annalong (WWTW)	300	-45	The Pe for this site has been updated since AIR09
Annsborough	2687	4494	The Pe for this site has been updated since AIR09
Antrim (WWTW)	1422	8595	The Pe for this site has been updated since AIR09
Ardglass (WWTW)	268	48	The Pe for this site has been updated since AIR09
Armagh (WWTW)	2558	-26332	This WWTWs is now a PPP WWTWs
Artasooly	2559	-274	This WWTWs is now a pumpaway for AIR10
Aughnacloy	3007	-5	The Pe for this site has been updated since AIR09
Ballybogy	1087	17	The Pe for this site has been updated since AIR09
Ballycastle (WWTW)	1071	3703	The Pe for this site has been updated since AIR09
Ballyclare	1467	5	The Pe for this site has been updated since AIR09
Ballycranbeg	218	69	The Pe for this site has been updated since AIR09
Ballykelly (L/Derry)	3016	49	The Pe for this site has been updated since AIR09
Ballymagorry (WWTW)	3018	187	The Pe for this site has been updated since AIR09
Ballymartin (Retention Tank)	770	-31	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Ballymena (WWTW)	1456	-5359	The Pe for this site has been updated since AIR09
Ballynacor	2395	-102815	This WWTWs is now a PPP WWTWs
Ballynahinch (Down)	311	8	The Pe for this site has been updated since AIR09
Ballyronan (WWTW)	1558	21	The Pe for this site has been updated since AIR09
Ballyvoy	1177	16	The Pe for this site has been updated since AIR09
Banbridge (WWTW)	2102	1474	The Pe for this site has been updated since AIR09
Barnish Road(44-46)	1758	-6	This WWTWs has been decommissioned for AIR10
Belfast (WWTW)	345	10310	The Pe for this site has been updated since AIR09
Belleek (Fermanagh)	3024	1	The Pe for this site has been updated since AIR09
Benburb (WWTW)	2831	274	The Pe for this site has been updated since AIR09
Blackrock Retention Tank (Down)	306	7	The Pe for this site has been updated since AIR09
Bullays Hill	2398	-51139	This WWTWs is now a PPP pumpaway WWTWs
Bush	2833	-639	This WWTWs is now a pumpaway for AIR10
Bushmills (WWTW)	1178	-151	The Pe for this site has been updated since AIR09
Carrickfergus (WWTW)	261	61	The Pe for this site has been updated since AIR09
Castledawson	1609	-6	The Pe for this site has been updated since AIR09
Castledearg (WWTW)	3042	21	The Pe for this site has been updated since AIR09
Castlewellan (WWTW)	2694	-4624	This WWTWs is now a pumpaway for AIR10
Clady (Tyrone)	4149	3	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Cloghoge Road	2170	-27	This WWTWs is now a pumpaway for AIR10
Clough (WWTW)	296	-16	The Pe for this site has been updated since AIR09
Coalisland	2828	977	The Pe for this site has been updated since AIR09
Conthem Rd	3180	29	This is a new WWTWs for AIR10 as this has been recently adopted
Cookstown (WWTW)	1582	-105	The Pe for this site has been updated since AIR09
Cross Lane(2-6)	2911	-9	This WWTWs has been decommissioned for AIR10
Culmore (WWTW)	3071	-6764	The Pe for this site has been updated since AIR09
Derryhale	2570	27	The Pe for this site has been updated since AIR09
Donaghmore (WWTW)	2840	455	The Pe for this site has been updated since AIR09
Donemana	3103	16	The Pe for this site has been updated since AIR09
Donnybrewer	3080	36	The Pe for this site has been updated since AIR09
Downpatrick (WWTW)	771	1413	The Pe for this site has been updated since AIR09
Draperstown	1615	47	The Pe for this site has been updated since AIR09
Dromora (WWTW)	316	13	The Pe for this site has been updated since AIR09
Dromore (Down)	2127	237	The Pe for this site has been updated since AIR09
Drumman Hill	2575	-24	This WWTWs is now a pumpaway for AIR10
Dungannon	2850	14469	The Pe for this site has been updated since AIR09
Dungiven	3101	17	The Pe for this site has been updated since AIR09
Dunmore Cottages	806	-6	The Pe for this site has been updated since AIR09
Dunmurry	346	-7778	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Dunnamore	1574	5	The Pe for this site has been updated since AIR09
Ederney (WWTW)	3106	-288	The Pe for this site has been updated since AIR09
Enniskillen	3218	-361	The Pe for this site has been updated since AIR09
Fintona (WWTW)	3112	-1	The Pe for this site has been updated since AIR09
Fivemiletown (WWTW)	3113	-159	The Pe for this site has been updated since AIR09
Galbally	2844	51	The Pe for this site has been updated since AIR09
Garvagh (WWTW)	1154	-28	The Pe for this site has been updated since AIR09
Gilford (WWTW)	2162	51	The Pe for this site has been updated since AIR09
Glassdrumman (Down)	302	-34	The Pe for this site has been updated since AIR09
Glenstall	1109	-1051	The Pe for this site has been updated since AIR09
Greenisland (WWTW)	263	-72	The Pe for this site has been updated since AIR09
Hilltown (WWTW)	2701	131	The Pe for this site has been updated since AIR09
Irvinestown	3137	-254	The Pe for this site has been updated since AIR09
Keady (Armagh)	2553	40	The Pe for this site has been updated since AIR09
Kesh (WWTW)	3140	33	The Pe for this site has been updated since AIR09
Kilclief (Retention Tank)	269	-268	This WWTWs is now a pumpaway for AIR10
Kilkeel (WWTW)	313	-1506	The Pe for this site has been updated since AIR09
Killinchy (WWTW)	252	301	The Pe for this site has been updated since AIR09
Killyleagh (WWTW)	273	337	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Kilmore (Down)	285	34	The Pe for this site has been updated since AIR09
Kilrea	1156	-790	The Pe for this site has been updated since AIR09
Kinawley	3149	-16	The Pe for this site has been updated since AIR09
Larne (WWTW)	2044	-343	The Pe for this site has been updated since AIR09
Limavady (WWTW)	3162	-14	The Pe for this site has been updated since AIR09
Lisbarnet (WWTW)	239	-503	This WWTWs is now a pumpaway for AIR10
Lisburn (New Holland)	329	12	The Pe for this site has been updated since AIR09
Lisnaskea (WWTW)	3171	47	The Pe for this site has been updated since AIR09
Loughdian	2146	-18	This WWTWs is now a gravity away for AIR10
Lower Rashee Road (15-21)	5188	12	This is a new WWTWs for AIR10 as this has been recently adopted
Magherafelt (WWTW)	1621	184	The Pe for this site has been updated since AIR09
Magheralin	2413	-1875	This WWTWs is now a PPP pumpaway WWTWs
Magheramason	3177	2	The Pe for this site has been updated since AIR09
Markethill	2591	26	The Pe for this site has been updated since AIR09
Martinstown	1445	33	The Pe for this site has been updated since AIR09
Mayboy	1163	34	The Pe for this site has been updated since AIR09
Moira	2429	266	The Pe for this site has been updated since AIR09
Monea (WWTW)	3186	14	The Pe for this site has been updated since AIR09
Moneymore (WWTW)	1589	4	The Pe for this site has been updated since AIR09
Moneyneany (WWTW)	1631	64	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Moneyreagh (WWTW)	337	5	The Pe for this site has been updated since AIR09
Moneyslane (WWTW)	2151	-24	The Pe for this site has been updated since AIR09
Moy (WWTW)	2859	-1114	The Pe for this site has been updated since AIR09
Mullanahoe (WWTW)	2043	-13	The Pe for this site has been updated since AIR09
Mullans (Antrim)	1118	62	The Pe for this site has been updated since AIR09
Newcastle (WWTW)	303	32	The Pe for this site has been updated since AIR09
Newry (WWTW)	2685	-6549	The Pe for this site has been updated since AIR09
Newtownards (Ballyrickard)	241	-50870	This WWTWs is now a PPP WWTWs
Newtownbreda (WWTW)	342	682	The Pe for this site has been updated since AIR09
Newtownbutler (WWTW)	3200	7	The Pe for this site has been updated since AIR09
Newtownstewart (WWTW)	3202	9	The Pe for this site has been updated since AIR09
North Coast (WWTWs)	4150	-536	The Pe for this site has been updated since AIR09
Oghill (1)	3205	-54	This WWTWs is now a gravity away for AIR10
Omagh (WWTW)	3999	-1060	The Pe for this site has been updated since AIR09
Orritor (WWTW)	1591	-15	The Pe for this site has been updated since AIR09
Plumbridge (WWTW)	3210	-20	The Pe for this site has been updated since AIR09
Portavogie(Retention Tank)	209	-129	The Pe for this site has been updated since AIR09
Poundburn	318	-401	This WWTWs is now a pumpaway for AIR10
Poyntzspass (WWTW)	2156	18	The Pe for this site has been updated since AIR09
Randalstown	1425	-6666	This WWTWs is now a pumpaway for AIR10

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Rasharkin	1120	-229	The Pe for this site has been updated since AIR09
Rathfriland (WWTW)	2713	-11	The Pe for this site has been updated since AIR09
Reaskmore Road	5286	12	This is a new WWTWs for AIR10 as this has been recently adopted
Redford	2853	-6	The Pe for this site has been updated since AIR09
Richill	2597	-3384	This WWTWs is now a PPP WWTWs
Ringneill (WWTW)	237	503	The Pe for this site has been updated since AIR09
Robinsonstown	2419	-31	The Pe for this site has been updated since AIR09
Roughfort (WWTW)	1470	-15	The Pe for this site has been updated since AIR09
Saintfield (WWTW)	290	8	The Pe for this site has been updated since AIR09
Seagoe (WWTW)	2420	-15000	This WWTWs is now a PPP pumpaway WWTWs
Seahill (WWTW)	774	24	The Pe for this site has been updated since AIR09
Stewartstown	1599	-63	The Pe for this site has been updated since AIR09
Strabane	3223	-1824	The Pe for this site has been updated since AIR09
Stramore	2173	-18	This WWTWs is now a gravity away for AIR10
Strangford	226	268	The Pe for this site has been updated since AIR09
Tamnaherin	3226	-54	The Pe for this site has been updated since AIR09
Tamnamore (WWTW)	2862	23	The Pe for this site has been updated since AIR09
Tandragee	2174	488	The Pe for this site has been updated since AIR09
Tempo (WWTW)	3229	-17	The Pe for this site has been updated since AIR09
Trillick (WWTW)	3231	1	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Tully Road Headworks	3975	-27	The Pe for this site has been updated since AIR09
Tullynakill Road	5280	31	This is a new WWTWs for AIR10 as this has been recently adopted
Warrenpoint (WWTW)	2720	40	The Pe for this site has been updated since AIR09
Waterfoot Road (WWTW)	1643	63	The Pe for this site has been updated since AIR09
Whitehead (WWTW)	452	-57	The Pe for this site has been updated since AIR09
Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Whitehouse	265	312	The Pe for this site has been updated since AIR09
Total		-251086	Change in Line 6 PE since AIR09

It should be noted that due to rounding and summation of PEs the total shown differs slightly from the difference between the AIR10 and AIR09 values for this line.

Line 7 – Equivalent population served (resident – numerical consents)

The table below shows the changes in WWTWs since AIR09 that affects equivalent population served (resident) with numerical consents for Line 7.

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Aghalee	2394	-7	The Pe for this site has been updated since AIR09
Aghanloo (1)	2989	17	The Pe for this site has been updated since AIR09
Aghanloo (2)	2989	-940	This WWTWs is now decommissioned for AIR10
Annahilt (WWTW)	317	399	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Annsborough	2687	4494	The Pe for this site has been updated since AIR09
Antrim (WWTW)	1422	8595	The Pe for this site has been updated since AIR09
Ardglass (WWTW)	268	48	The Pe for this site has been updated since AIR09
Armagh (WWTW)	2558	-26332	This WWTWs is now a PPP site
Aughnacloy	3007	-5	The Pe for this site has been updated since AIR09
Ballybogy	1087	17	The Pe for this site has been updated since AIR09
Ballycastle (WWTW)	1071	3703	The Pe for this site has been updated since AIR09
Ballyclare	1467	5	The Pe for this site has been updated since AIR09
Ballycranbeg	218	362	This WWTWs has a numeric consent for the first time in AIR10
Ballykelly (L/Derry)	3016	49	The Pe for this site has been updated since AIR09
Ballymagorry (WWTW)	3018	187	The Pe for this site has been updated since AIR09
Ballymena (WWTW)	1456	-5359	The Pe for this site has been updated since AIR09
Ballynacor	2395	-102815	This WWTWs is now a PPP site
Ballynahinch (Down)	311	8	The Pe for this site has been updated since AIR09
Ballyronan (WWTW)	1558	21	The Pe for this site has been updated since AIR09
Ballyvoy	1177	289	This WWTWs has a numeric consent for the first time in AIR10
Banbridge (WWTW)	2102	1474	The Pe for this site has been updated since AIR09
Belfast (WWTW)	345	10310	The Pe for this site has been updated since AIR09
Belleek (Fermanagh)	3024	1	The Pe for this site has been updated since AIR09
Benburb (WWTW)	2831	274	The Pe for this site has been updated since AIR09
Bullays Hill	2398	-51139	This WWTWs is now a PPP pumpaway site

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Bush	2833	-639	This WWTWs is a pumpaway for AIR10
Bushmills (WWTW)	1178	-151	The Pe for this site has been updated since AIR09
Carrickfergus (WWTW)	261	61	The Pe for this site has been updated since AIR09
Castledawson	1609	-6	The Pe for this site has been updated since AIR09
Castlederg (WWTW)	3042	21	The Pe for this site has been updated since AIR09
Castlewellan (WWTW)	2694	-4624	This WWTWs is a pumpaway for AIR10
Clady (Tyrone)	4149	3	The Pe for this site has been updated since AIR09
Clough (WWTW)	296	-16	The Pe for this site has been updated since AIR09
Coalisland	2828	977	The Pe for this site has been updated since AIR09
Cookstown (WWTW)	1582	-105	The Pe for this site has been updated since AIR09
Culmore (WWTW)	3071	-6764	The Pe for this site has been updated since AIR09
Derryhale	2570	27	The Pe for this site has been updated since AIR09
Donaghmore (WWTW)	2840	455	The Pe for this site has been updated since AIR09
Donemana	3103	16	The Pe for this site has been updated since AIR09
Donnybrewer	3080	36	The Pe for this site has been updated since AIR09
Downpatrick (WWTW)	771	1413	The Pe for this site has been updated since AIR09
Draperstown	1615	47	The Pe for this site has been updated since AIR09
Dromora (WWTW)	316	13	The Pe for this site has been updated since AIR09
Dromore (Down)	2127	237	The Pe for this site has been updated since AIR09
Dungannon	2850	14469	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Dungiven	3101	17	The Pe for this site has been updated since AIR09
Dunmurry	346	-7778	The Pe for this site has been updated since AIR09
Dunnamore	1574	312	This WWTWs has a numeric consent for the first time in AIR10
Ederney (WWTW)	3106	-288	The Pe for this site has been updated since AIR09
Enniskillen	3218	-361	The Pe for this site has been updated since AIR09
Fintona (WWTW)	3112	-1	The Pe for this site has been updated since AIR09
Fivemiletown (WWTW)	3113	-159	The Pe for this site has been updated since AIR09
Florencecourt	3114	259	This WWTWs has a numeric consent for the first time in AIR10
Galbally	2844	383	This WWTWs has a numeric consent for the first time in AIR10
Garvagh (WWTW)	1154	-28	The Pe for this site has been updated since AIR09
Garvaghly	3116	105	This WWTWs has a numeric consent for the first time in AIR10
Gilford (WWTW)	2162	51	The Pe for this site has been updated since AIR09
Glassdrumman (Down)	302	-34	The Pe for this site has been updated since AIR09
Glenstall	1109	-1051	The Pe for this site has been updated since AIR09
Greenisland (WWTW)	263	-72	The Pe for this site has been updated since AIR09
Hilltown (WWTW)	2701	131	The Pe for this site has been updated since AIR09
Irvinestown	3137	-254	The Pe for this site has been updated since AIR09
Keady (Armagh)	2553	40	The Pe for this site has been updated since AIR09
Kesh (WWTW)	3140	33	The Pe for this site has been updated since AIR09
Kilkeel (WWTW)	313	-1506	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Killinchy (WWTW)	252	301	The Pe for this site has been updated since AIR09
Killyleagh (WWTW)	273	337	The Pe for this site has been updated since AIR09
Kilmore (Down)	285	420	This WWTWs has a numeric consent for the first time in AIR10
Kilrea	1156	-790	The Pe for this site has been updated since AIR09
Kinawley	3149	381	This WWTWs has a numeric consent for the first time in AIR10
Larne (WWTW)	2044	-343	The Pe for this site has been updated since AIR09
Limavady (WWTW)	3162	-14	The Pe for this site has been updated since AIR09
Lisbarnet (WWTW)	239	-503	This WWTWs is a pumpaway for AIR10
Lisburn (New Holland)	329	12	The Pe for this site has been updated since AIR09
Lisnaskea (WWTW)	3171	47	The Pe for this site has been updated since AIR09
Maghera (Down)	305	340	This WWTWs has a numeric consent for the first time in AIR10
Magherafelt (WWTW)	1621	184	The Pe for this site has been updated since AIR09
Magheralin	2413	-1875	This WWTWs is now a PPP pumpaway site
Magheramason	3177	2	The Pe for this site has been updated since AIR09
Markethill	2591	26	The Pe for this site has been updated since AIR09
Martinstown	1445	33	The Pe for this site has been updated since AIR09
Moira	2429	266	The Pe for this site has been updated since AIR09
Monea (WWTW)	3186	373	This WWTWs has a numeric consent for the first time in AIR10
Moneymore (WWTW)	1589	4	The Pe for this site has been updated since AIR09
Moneyneany (WWTW)	1631	329	This WWTWs has a numeric consent for the first time in AIR10

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Moneyreagh (WWTW)	337	5	The Pe for this site has been updated since AIR09
Moneyslane (WWTW)	2151	380	This WWTWs has a numeric consent for the first time in AIR10
Moy (WWTW)	2859	-1114	The Pe for this site has been updated since AIR09
Mullanahoe (WWTW)	2043	-13	The Pe for this site has been updated since AIR09
Newcastle (WWTW)	303	32	The Pe for this site has been updated since AIR09
Newry (WWTW)	2685	-6549	The Pe for this site has been updated since AIR09
Newtownards (Ballyrickard)	241	-50870	This WWTWs is now a PPP site
Newtownbreda (WWTW)	342	682	The Pe for this site has been updated since AIR09
Newtownbutler (WWTW)	3200	7	The Pe for this site has been updated since AIR09
Newtownstewart (WWTW)	3202	9	The Pe for this site has been updated since AIR09
North Coast (WWTWs)	4150	-536	The Pe for this site has been updated since AIR09
Omagh (WWTW)	3999	-1060	The Pe for this site has been updated since AIR09
Orritor (WWTW)	1591	291	This WWTWs has a numeric consent for the first time in AIR10
Plumbridge (WWTW)	3210	-20	The Pe for this site has been updated since AIR09
Portaferry (2)	5200	3793	This WWTWs has a numeric consent for the first time in AIR10
Portavogie(Retention Tank)	209	-129	The Pe for this site has been updated since AIR09
Poundburn	318	-401	This WWTWs is a pumpaway for AIR10
Poyntzspass (WWTW)	2156	18	The Pe for this site has been updated since AIR09
Randalstown	1425	-6666	This WWTWs is a pumpaway for AIR10
Rasharkin	1120	-229	The Pe for this site has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Rathfriland (WWTW)	2713	-11	The Pe for this site has been updated since AIR09
Redford	2853	278	This WWTWs has a numeric consent for the first time in AIR10
Richill	2597	-3384	This WWTWs is now a PPP site
Robinsonstown	2419	516	This WWTWs has a numeric consent for the first time in AIR10
Roughfort (WWTW)	1470	-15	The Pe for this site has been updated since AIR09
Saintfield (WWTW)	290	8	The Pe for this site has been updated since AIR09
Seagoe (WWTW)	2420	-15000	This WWTWs is now a PPP pumpaway site
Seahill (WWTW)	774	24	The Pe for this site has been updated since AIR09
Stewartstown	1599	-63	The Pe for this site has been updated since AIR09
Strabane	3223	-1824	The Pe for this site has been updated since AIR09
Strangford	226	268	The Pe for this site has been updated since AIR09
Tamnaherin	3226	311	This WWTWs has a numeric consent for the first time in AIR10
Tamnamore (WWTW)	2862	23	The Pe for this site has been updated since AIR09
Tandragee	2174	488	The Pe for this site has been updated since AIR09
Tempo (WWTW)	3229	-17	The Pe for this site has been updated since AIR09
Trillick (WWTW)	3231	1	The Pe for this site has been updated since AIR09
Warrenpoint (WWTW)	2720	40	The Pe for this site has been updated since AIR09
Whitehouse	265	312	The Pe for this site has been updated since AIR09
	Total	-241959	Change in Line 7 PE since AIR09

It should be noted that due to rounding and summation of PEs the total shown differs slightly from the difference between the AIR10 and AIR09 values for this line.

Line 8 – Number of sewage treatment works

The number of WWTWs of 1040, on this line differs from the total of 1058 as shown in Table 17c, as the former does not include the screened outfalls (5 No.) and the unscreened outfalls (13 No.), as per the definition for this line.

The table below shows the changes in numbers of WWTWs since AIR09 for Line 8

Name of Works	CAR ID	Change in Number of Sewage Treatment Works	Comments
Aghanloo (2)	2989	Reduction	This WWTWs has been decommissioned for AIR10
Armagh (WWTW)	2558	Reduction	This WWTWs is now a PPP WWTWs
Artasooly	2559	Reduction	This WWTWs is now a pumpaway for AIR10
Ballynacor	2395	Reduction	This WWTWs is now a PPP WWTWs
Barnish Road(44-46)	1758	Reduction	This WWTWs has been decommissioned for AIR10
Bullays Hill	2398	Reduction	This WWTWs is now a PPP pumpaway WWTWs
Bush	2833	Reduction	This WWTWs is now a pumpaway for AIR10
Castlewellan (WWTW)	2694	Reduction	This WWTWs is now a pumpaway for AIR10
Cloghoge Road	2170	Reduction	This WWTWs is now a pumpaway for AIR10
Conthem Rd	3180	Addition	This is a new WWTWs for AIR10 as this has been recently adopted
Cross Lane(2-6)	2911	Reduction	This WWTWs has been decommissioned for AIR10
Drumman Hill	2575	Reduction	This WWTWs is now a pumpaway for AIR10
Lisbarnet (WWTW)	239	Reduction	This WWTWs is now a pumpaway for AIR10
Loughdian	2146	Reduction	This WWTWs is now a gravity away for AIR10
Lower Rashee Road (15-21)	5188	Addition	This is a new WWTWs for AIR10 as this has been recently adopted
Magheralin	2413	Reduction	This WWTWs is now a PPP pumpaway WWTWs
Newtownards (Ballyrickard)	241	Reduction	This WWTWs is now a PPP WWTWs

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Oghill (1)	3205	Reduction	This WWTWs is now a gravity away for AIR10
Portaferry (2)	5200	Addition	This WWTWs has been upgraded during AIR10
Poundburn	318	Reduction	This WWTWs is now a pumpaway for AIR10
Randalstown	1425	Reduction	This WWTWs is now a pumpaway for AIR10
Reaskmore Road	5286	Addition	This is a new WWTWs for AIR10 as this has been recently adopted
Richill	2597	Reduction	This WWTWs is now a PPP WWTWs
Seagoe (WWTW)	2420	Reduction	This WWTWs is now a PPP pumpaway WWTWs
Stramore	2173	Reduction	This WWTWs is now a gravity away for AIR10
Tullynakill Road	5280	Addition	This is a new WWTWs for AIR10 as this has been recently adopted

Line 9 – Treatment capacity available

The table below shows the changes in Treatment Capacity Available at WWTWs since AIR09 for Line 9.

Name of Works	CAR ID	Change in Design Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Aghanloo (2)	2989	-1700	This WWTWs has been decommissioned for AIR10
Aghory	2547	-34	This site has been upgraded during AIR10
Annahilt (WWTW)	317	1464	This site has been upgraded during AIR10
Annsborough	2687	5634	This site has been upgraded during AIR10
Antrim (WWTW)	1422	45624	This site has been upgraded during AIR10
Ardground	2996	-27	This site has been upgraded during AIR10
Armagh (WWTW)	2558	-38329	This WWTWs is now a PPP WWTWs
Armagh Road(202-206)	2250	1	This site has been upgraded during AIR10
Artasooly	2559	-50	This WWTWs is now a pumpaway for AIR10
Aughnacloy	3007	215	This site has been upgraded during AIR10
Ballybogy	1087	300	This site has been upgraded during AIR10
Ballycoshone	2689	1	This site has been upgraded during AIR10
Ballynacor	2395	-72700	This WWTWs is now a PPP WWTWs
Ballyward	2120	1	This site has been upgraded during AIR10
Barnish Road(44-46)	1758	-6	This WWTWs has been decommissioned for AIR10
Benburb (WWTW)	2831	1347	This site has been upgraded during AIR10
Brockaghboy (WWTW)	1140	145	This site has been upgraded during AIR10
Bullays Hill	2398	-47625	This WWTWs is now a PPP pumpaway WWTWs

Name of Works	CAR ID	Change in Design Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Bush	2833	-398	This WWTWs is now a pumpaway for AIR10
Carrickrovaddy	2257	5	This site has been upgraded during AIR10
Castlecaulfield (WWTW)	2836	529	This site has been upgraded during AIR10
Castlewellan (WWTW)	2694	-2515	This WWTWs is now a pumpaway for AIR10
Clarehill	1039	89	This site has been upgraded during AIR10
Cloghoge Road	2170	-27	This WWTWs is now a pumpaway for AIR10
Clough (WWTW)	296	-468	This site has been upgraded during AIR10
Conthem Rd	3180	50	This is a new WWTWs for AIR10 as this has been recently adopted
Cranagh (WWTW)	3065	105	This site has been upgraded during AIR10
Cross Lane(2-6)	2911	-9	This WWTWs has been decommissioned for AIR10
Crossmaglen	2273	700	This site has been upgraded during AIR10
Dartress	1148	-16	This site has been upgraded during AIR10
Derryaghna	3073	-33	This site has been upgraded during AIR10
Diviny	2403	-20	This site has been upgraded during AIR10
Donnybrewer	3080	4918	This site has been upgraded during AIR10
Downpatrick (WWTW)	771	13990	This site has been upgraded during AIR10
Drapersfield (WWTW)	1571	220	This site has been upgraded during AIR10
Draperstown	1615	2045	This site has been upgraded during AIR10
Dromora (WWTW)	316	300	This site has been upgraded during AIR10

Name of Works	CAR ID	Change in Design Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Drummack	3094	-6	This site has been upgraded during AIR10
Drumman Hill	2575	-24	This WWTWs is now a pumpaway for AIR10
Duneany (WWTW)	1440	-14	This site has been upgraded during AIR10
Dungannon	2850	20534	This site has been upgraded during AIR10
Dunnamore	1574	260	This site has been upgraded during AIR10
Edenderry (Antrim)	343	131	This site has been upgraded during AIR10
Enniskillen	3218	6652	This site has been upgraded during AIR10
Florencecourt	3114	190	This site has been upgraded during AIR10
Gilford (WWTW)	2162	362	This site has been upgraded during AIR10
Glarryford (WWTW)	1441	-13	This site has been upgraded during AIR10
Hamiltonsbawn	2603	1396	This site has been upgraded during AIR10
Kilmood	255	129	This site has been upgraded during AIR10
Kinawley	3149	340	This site has been upgraded during AIR10
Legaghory	3157	-9	This site has been upgraded during AIR10
Lisbarnet (WWTW)	239	-460	This WWTWs is now a pumpaway for AIR10
Lisbellaw (WWTW)	3165	210	This site has been upgraded during AIR10
Lisdoart (1)	3166	133	The Design Pe for this site has been updated in AIR10
Lisdoart (2)	3167	-133	The Design Pe for this site has been updated in AIR10
Lisnagade Road(54-56)	2161	3	This site has been upgraded during AIR10

Name of Works	CAR ID	Change in Design Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Loughdian	2146	-18	This WWTWs is now a gravity away for AIR10
Loughinisland (WWTW)	298	165	This site has been upgraded during AIR10
Lower Rashee Road (15-21)	5188	12	This is a new WWTWs for AIR10 as this has been recently adopted
Maghera (Down)	305	225	This site has been upgraded during AIR10
Magheralin	2413	-1800	This WWTWs is now a PPP pumpaway WWTWs
Magheramason	3177	80	This site has been upgraded during AIR10
Maytown Road	2275	1	This site has been upgraded during AIR10
Milltown (Maghera)	1630	-3	This site has been upgraded during AIR10
Monea (WWTW)	3186	391	This site has been upgraded during AIR10
Mullaghbane (Armagh)	2594	5	This site has been upgraded during AIR10
Mullaghglass (Newry)	2280	33	This site has been upgraded during AIR10
Myroe (WWTW)	3198	106	This site has been upgraded during AIR10
Newtownards (Ballyrickard)	241	-60000	This WWTWs is now a PPP WWTWs
Oakland Villas	1711	2	This site has been upgraded during AIR10
Oghill (1)	3205	-44	This WWTWs is now a gravity away for AIR10
Pomeroy Road	2901	2	This site has been upgraded during AIR10
Portaferry (2)	5200	5287	This WWTWs has been upgraded during AIR10
Poundburn	318	-214	This WWTWs is now a pumpaway for AIR10
Randalstown	1425	-5500	This WWTWs is now a pumpaway for AIR10

Name of Works	CAR ID	Change in Design Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Rasharkin	1120	365	This site has been upgraded during AIR10
Reaskmore Road	5286	28	This is a new WWTWs for AIR10 as this has been recently adopted
Richill	2597	-3353	This WWTWs is now a PPP WWTWs
Ringneill (WWTW)	237	736	This site has been upgraded during AIR10
Rosslea (WWTW)	3213	93	This site has been upgraded during AIR10
Saintfield (WWTW)	290	637	This site has been upgraded during AIR10
Saval More Cottages	2715	-4	This site has been upgraded during AIR10
Scribbagh (WWTW)	3216	2	This site has been upgraded during AIR10
Seagoe (WWTW)	2420	-14497	This WWTWs is now a PPP pumpaway WWTWs
Seahill (WWTW)	774	7825	This site has been upgraded during AIR10
Soldierstown	2431	15	This site has been upgraded during AIR10
Springhill Road(1)	1713	4	This site has been upgraded during AIR10
St Marys Terrace	2718	4	This site has been upgraded during AIR10
Stramore	2173	-6	This WWTWs is now a gravity away for AIR10
Tullynakill Road	5280	36	This is a new WWTWs for AIR10 as this has been recently adopted
Tulnacross Road(44-46)	1820	5	This site has been upgraded during AIR10
Glenravel Road (97)	1789	-6	The site was incorrectly included in the AIR09 treatment Capacity
Gortnagola Road	2889	-6	The site was incorrectly included in the AIR09 treatment Capacity
Katesbridge Road (109-115)	2205	-18	The site was incorrectly included in the AIR09 treatment Capacity
Bay Road (163-179)	1784	-27	The site was incorrectly included in the AIR09 treatment Capacity
Lisacclare	2848	-80	The site was incorrectly included in the AIR09 treatment Capacity
Total		-126110	Change in Line 9 PE since AIR09

Lines 10 - Number of STW's providing nutrient removal

The number of works, 18, with nutrient removal reflects those required by NIEA to have nitrogen or phosphorus removal. This is a reduction of 4 from AIR09 and details can be seen in the table below.

Name of Works	CAR ID	Change in Number of STWs providing nutrient removal	Comments
Armagh (WWTW)	2558	Reduction	This WWTws is a PPP site
Ballynacor	2395	Reduction	This WWTws is a PPP site
Bullays Hill	2398	Reduction	This WWTWs is a PPP Pumpaway site
Seagoe (WWTW)	2420	Reduction	This WWTWs is a PPP pumpaway site

Line 11 – Equivalent population served by STW's providing nutrient removal

The table below shows the changes in Equivalent Population served by STWs providing nutrient removal for Line 11.

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Carrickfergus (WWTW)	261	61	The Pe for this WWTWs has been updated since AIR09
Downpatrick (WWTW)	771	1413	The Pe for this WWTWs has been updated since AIR09
Belfast (WWTW)	345	10310	The Pe for this WWTWs has been updated since AIR09
Dunmurry	346	-7778	The Pe for this WWTWs has been updated since AIR09
Lisburn (New Holland)	329	12	The Pe for this WWTWs has been updated since AIR09
Newtownbreda (WWTW)	342	682	The Pe for this WWTWs has been updated since AIR09
Whitehouse	265	312	The Pe for this WWTWs has been updated since AIR09
Ballyclare	1467	5	The Pe for this WWTWs has been updated since AIR09
Cookstown (WWTW)	1582	-105	The Pe for this WWTWs has been updated since AIR09

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Magherafelt (WWTW)	1621	184	The Pe for this WWTWs has been updated since AIR09
Antrim (WWTW)	1422	8595	The Pe for this WWTWs has been updated since AIR09
Ballymena (WWTW)	1456	-5359	The Pe for this WWTWs has been updated since AIR09
Armagh (WWTW)	2558	-26332	This WWTws is a PPP site
Ballynacor	2395	-102815	This WWTws is a PPP site
Banbridge (WWTW)	2102	1474	The Pe for this WWTWs has been updated since AIR09
Bullays Hill	2398	-51139	This WWTWs is a PPP Pumpaway site
Dungannon	2850	14469	The Pe for this WWTWs has been updated since AIR09
Seagoe (WWTW)	2420	-15000	The Pe for this WWTWs has been updated since AIR09
Tandragee	2174	488	The Pe for this WWTWs has been updated since AIR09
Enniskillen	3218	-361	The Pe for this WWTWs has been updated since AIR09
Lisnaskea (WWTW)	3171	47	The Pe for this WWTWs has been updated since AIR09
	Total	-170836	Change in Line 11 PE since AIR09

It should be noted that due to rounding and summation of PEs the total shown differs slightly from the difference between the AIR10 and AIR09 values for this line.

Note that PEs (Resident) have been used for line 11.

Line 12 - Number of STW's providing pathogen reduction

Newtownards (Ballyrickard) WWTWs is now a PPP site and therefore no longer reported on. Portaferry is the only additional works which has been identified as requiring pathogen reduction i.e. which possess a microbiological standard from EHS i.e. 20,000fc/100ml. This gives a total of 2 WWTWs including Larne.

Lines 13 – Equivalent population served by STW's providing disinfection

The table below shows the changes in Equivalent Population served by STWs providing disinfection at WWTWs since AIR09 for Line 13.

Name of Works	CAR ID	Change in Pe from AIR09 to AIR10 (-ve indicates AIR09 figure larger)	Comments
Larne (WWTW)	2044	-343	The PE for this site has been updated since AIR09
Newtownards (Ballyrickard)	241	-50870	This WWTWs now a PPP WWTWs
Portaferry (2)	5200	3793	This WWTWs provides pathogen reduction for the first time
	Total	-47420	Change in Line 13 PE since AIR09

It should be noted that due to rounding and summation of PEs the total shown differs slightly from the difference between the AIR10 and AIR09 values for this line.

Note that PEs (Resident) have been used for line 13.

Sewage Treatment (PPP)**Line 1 – Total Trade Effluent Load receiving Treatment**

This is the first year the Company has reported PPP related catchments and extracted them from NIW Only for the relevant sites as per Methodology.

Lines 2 – Total load receiving secondary treatment

The increase in Total Load receiving treatment reflects the phased addition of WwTW's being operated by the Omega Contractor across the reporting period. With the agreement of NIAUR, PPP reported the North Down WwTW facility and the Kinnegar Contract only in AIR09. From April 09 the Ballynacor, Ballyrickard, Armagh and Richhill data is now included,

Explanation: As detailed in the Methodology, the Omega Scheme calculates Annual BOD from an averaging calculation as BOD sampling is based on Compliance Sampling. The Kinnegar Scheme samples BOD daily and calculates Annual BOD accordingly. This Contractual Sampling is also utilised to provide evidence against Compliance Sampling requirements. There is no BOD/COD conversion rates applied for any PPP Schemes.

Sludge data input is determined as end figures to ensure that possible double counting is at least minimised.

The reported equivalent Population figures have been calculated as per NIAUR recommendations, and may fluctuate from year to year as the BOD

loading could vary; this could be due to losses from the system, such as or demographic changes or overflows etc.

Lines 3- 4 - Total load receiving primary treatment and preliminary treatment

No Change, as the PPP works all provide secondary treatment as a minimum level of Treatment.

Line 5 – Total load entering sewerage system

PPP is not able to report against this line; the Reporter noted that as the Total load entering the Network was not reported, it could cause an anomaly in regard to the totalisation of the data on the NIW group table. Consideration should be given to prevent this possible outcome. The only report that PPP could place in Table 15 Line 5 would be identical to the figure reported in Line 2; i.e. 8105.2 tonnes derived from the inputs to Line 2. This would attract a very low confidence grade as it would effectively ignore any effect of Network based loading losses. Consequently this line is not applicable.

Line 6 – Equivalent population served (resident)

The increase in the Equivalent Population Served (resident) receiving treatment reflects the addition of WwTW's being operated by the PPP Contractors across the reporting period. The change is four in number namely Ballyrickard, Armagh, Richhill and Ballynacor WwTW's.

Line 7 - Equivalent population served (resident) (numerical consents)

Reported as per Line 6, in that all the PPP WwTW's have numerical consents.

Line 8 – Number of sewage treatment works

Year end data is provided, the change from AIR09 data represents the additional Omega Contract WwTW's (Ballynacor, Ballyrickard, Armagh and Richhill) coming into operation across the reporting period.

Line 9 – Treatment capacity available

Year end data is provided, the change from AIR09 data represents the additional Omega Contract WwTW's (Ballynacor, Ballyrickard, Armagh and Richhill) coming into operation across the reporting period.

Line 10 – Number of sewage STW's providing nutrient removal

Year end data is provided, the change from AIR09 data represents the additional Omega Contract WwTW's (Ballynacor and Armagh) coming into operation across the reporting period.

Line 11 – Equivalent population served by STW's providing nutrient removal

North Down was erroneously reported during the 08/09 reporting period as the works is not required to provide nutrient removal; Kinnegar remains reportable in addition to the new works.

Year end data is provided, the change from AIR09 data represents the additional Omega Contract WwTW's (Ballynacor and Armagh) coming into operation across the reporting period.

Line 12 – Number of STW's providing pathogen reduction

Year end data is provided, the change from AIR09 data represents the additional Omega Contract WwTW (Ballyrickard) coming into operation across the reporting period.

Line 13 - Equivalent population served by STW's providing disinfection

Year end data is provided, the change from AIR09 data represents the additional Omega Contract WwTW (Ballyrickard) coming into operation across the reporting period.

Lines 14 – Percentage unsatisfactory sludge disposal

The data represents the Sludges disposed of by the Contractor for the duration of the reporting period. The Omega contractor only disposed of sludges from 19 February – 31 March. All were disposed of through authorised routes and the % to unauthorised routes is therefore 0.

Line 15 – Total sewage sludge produced

The data represents the amount of sewage sludge produced by the works operated by Glen Water during the reporting period. It includes the Kinnegar, North Down and Ballyrickard sludges for the whole year exported to NIW at Duncrue Street for disposal, prior to the Omega Sludge Disposal Service Commencement Date.

It also includes the Armagh, Richhill, and Ballynacor WWTW Sludges for the whole year as these were exported to NIW at its Ballynacor Sludge Facility (up to 19th February), blended with other indigenous sludges and imported sludges before being 'produced' by NIW and disposed of by NIW. After 19th February Glen Water took over the operation of the Ballynacor Sludge Facility and continued to disposed of by Glen Water.

The gross volumes per year produced by PPP contractors are;

Sites reported AIR09:

Kinnegar: 0.7 ttds to NIW incinerator at Duncrue Street
North Down Ards: 1.65 ttds to NIW Incinerator at Duncrue St

New PPP Sites AIR 10:

Ballyrickard: 1.72 ttds to NIW Incinerator at Duncrue St
Richhill: Sludges transported to NIW at Ballynacor Sludge Facility: 0.21ttds
Armagh:Sludges transported to NIW at Ballynacor Sludge Facility 0.84 ttds
Ballynacor (inc Bullays Hill & Seagoe PS): Sludges transported to NIW at Ballynacor Sludge Facility 2.23 ttds

This line does not include the volumes of sludges produced by NIW from non-PPP sites and disposed of by Glen water at Ballynacor from 19 February (0.61ttds) which is recorded in the 'NIW only' table

Line 16 – Total sewage sludge disposal

As the Omega Sludge Disposal Service did not commence until 31 March 2010 the Sludges produced by the Contractor at the following sites throughout the year were disposed of by NI Water in accordance with the Contracts; Kinnegar, North Down/Ards WwTW, Armagh WwTW, Richhill WwTW, Ballyrickard WwTW, and Ballynacor WwTW. As such they were disposed of by NI Water and are recorded in the NI Water only tables.

The exception to the above is the sludges disposed of by the Contractor at Ballynacor Sludge Facility from 19 February 2010 to 31 March 2010 under a side agreement to the Omega Contracted services.

These sludges are a combination of 1.5 months of Contractor sludges from the following PPP schemes:

Armagh: 0.100 ttds
Richhill: 0.020 ttds
Ballynacor: 0.25 ttds

and a further 0.61 exported by NIW to the Glen Water operated facility.

This is the data (0.980 ttds) reported in Column 4.

Year end data is provided, the change from AIR09 data represents the additional Omega Contract WwTW's coming into operation across the reporting period from AIR 09 which reported North Down and Kinnegar only.

Total Table**Confidence Grades for Total Table - Lines 2 - 13**

The Asset Management Section (AMS) has reviewed the proposed confidence grades pertaining to the 'NIW only' and 'PPP' tables, whilst considering the line values:

- Line 2 - Maintain NIW's C3 as NIW's value contributes to 80% of the total value.
- Line 3 - Maintain NIW's C3 as PPP has no contribution to the total value.
- Line 4 - Maintain NIW's C3 as PPP has no contribution to the total value.
- Line 5 - Maintain NIW's C5 as PPP has no contribution to the total value.
- Line 6 - Maintain NIW's C5 as NIW's value contributes to 80% of total value.
- Line 7 - Maintain NIW's C5 as NIW's value contributes to 80% of total value.
- Line 8 - Maintain NIW's A2 as NIW's value contributes to the greater percentage of the total value.
- Line 9 - Maintain NIW's D3 as NIW's value contributes to the greater percentage of the total value.
- Line 10 - Maintain AI as depicted both by NIW and PPP.
- Line 11 - Maintain NIW's C3 as NIW's value contributes more greatly to the total value.
- Line 12 - Maintain AI as depicted both by NIW and PPP.
- Line 13 - Confidence grade B4 is proposed to allow for NIW's C3 compared to PPP's B3

Line 14 – Percentage unsatisfactory sludge

There is no record of any unsatisfactory disposal.

Line 15 – Total sewage sludge produced

This is the total sewage sludge produced for 2009/10 (tds) as recorded monthly by WW Area Sludge Officers (reconciled using the SLS) and presented in the monthly Sludge Management Report along with sewage sludge produced at PPP sites, cake to incineration and an estimated quantity of WwTW's grit & screenings removed as part of the treatment process and disposed of under Tender C018.

Line 16- Total sewage sludge disposal

As Line 15.

Line 17 – Additional sludge

There has been no significant increase in the quantity of sewage sludge produced from new quality obligations during 2009/10.

Table 16 - Non Financial Measures - Sewerage service activities (NIW only)**General**

The Reporter recommended consolidation of Table 16 methodologies to improve visibility and avoid possible conflicts, to this end the Asset Management Section (AMS) has co-ordinated the input into this table from a number of sources.

NIW has been endeavouring to ensure that GIS can provide a single source of data for lines such as 1, 2, 3, 7, 8, 11, 14 and 15 as recommended by the Reporter. Apart from lines 1 and 2 being extracted from the previous AIR Table 16 (lines 14 and 15); NIW has managed to populate lines 14 and 15 from GIS. However due to current software and NIW business procedures, other information for other lines such as 3, 7, 8 and 11 is sourced from others within the organisation.

Line 1 – Total length of sewers at 1 April

The value of 14465.23km has been extracted from line 14 of the AIR09 Table 16.

Line 2 – Total length of ‘critical’ sewers at 1 April

The value of 2889.1 km has been extracted from line 15 of the AIR09 Table 16.

Lines 3 – 11 – Changes during reporting year

Asset Management Section has compiled submitted data from EP Procurement Business Unit and from Networks Water Operations to populate the values for these lines.

B	CHANGES DURING REPORT YEAR				
3	New "critical" sewers	km	2	14.30	B4
8	New "non-critical" sewers	km	2	153.48	B2

The confidence grades have been reviewed by AMS, taking into consideration those proposed by both NIW sections, as follows:

The confidence grade for line 3 has been averaged to a B4, as the EP portion of the overall total for this line is 64%, and due to the range of the respective proposed grades.

The confidence grade for line 8 has been averaged to a B2, as the Operations Services' portion of the overall total for this line is 64%, and due to the range of the respective proposed grades.

Lines 5, 6, 7, 9, 10 and 11 - the confidence grades as submitted by EP have not been altered by AMS as Operations Services has stated no entry against these lines.

B	CHANGES DURING REPORT YEAR					
4	"Critical" sewers - inspection by CCTV/man entry	km	2		40.43	C4

The confidence grade for line 4 has been maintained at the Networks Sewerage proposed C4, as their portion of the overall total, (i.e. 35.65m of 40.43m), for this line is 88%.

Commentary from EP Procurement Business Unit for Lines 3 - 11

B	CHANGES DURING REPORT YEAR					
3	New "critical" sewers	km	2		9.10	A2
4	"Critical" sewers - inspection by CCTV/man entry	km	2		4.78	A2
5	"Critical" sewers - renovated	km	2		0.81	A2
6	"Critical" sewers - replaced	km	2		5.07	A2
7	Abandoned "critical" sewers and other changes	km	2		0	A2

8	New "non-critical" sewers	km	2		55.10	A2
9	"Non-critical" sewers - renovated	km	2		1.38	A2
10	"Non-critical" sewers - replaced	km	2		6.19	A2
11	Abandoned "non-critical" sewers and other changes	km	2		0.49	A2

General

NIW is targeting investment in the sewerage infrastructure to maintain and achieve stable serviceability – e.g. the Belfast Sewers Project – Sewer Rehab. The work carried out to date has been almost exclusively the repair of collapsed or partially collapsed sewers.

Critical sewers are identified using standard industry definitions – WRc Sewer Rehabilitation Manual Category 4 and 5. The Reporter recommended consistent definitions for Critical Sewers and as a result a drop down menu has been developed from the WRc Manual and has been incorporated into the sewerage infrastructure monthly return form on Captrax, to enable project managers to select the reason for a sewer being classified as critical. This has improved the consistency of reporting critical and non-critical sewers.

The only sewer cleaning work carried out under the Belfast Sewers Project – Sewer Rehab was what was considered necessary to allow CCTV surveys to be conducted or where a relining technique required it.

Lines 3 – 7 – ‘Critical’ sewers

All information is compiled from EP sewerage infrastructure monthly returns. This is an accurate measurement of the actual lengths of critical sewers laid, renovated or replaced, and abandoned, compiled from contractor's on-site records. The information is collated from each individual contract on a monthly basis and aggregated into an overall annual figure.

The overall confidence grade has been assessed as A2, to take account of inconsistent interpretation of the definition of a critical sewer and some very slight reservations as to the completeness of compliance with the reporting procedure.

Line 4 – ‘Critical’ sewers – inspection by CCTV/man entry

The figure for critical sewer inspection by CCTV may include surveys outside the reporting period – either sewers surveyed before 1 April 2009 but constructed in 09/10 and sewers surveyed in 09/10 but not due for construction until after 31 March 10.

Lines 8 – 11 – ‘Non-critical’ sewers

All information is compiled from EP sewerage infrastructure monthly returns. This is an accurate measurement of the actual lengths of non-critical sewers laid, renovated or replaced, and abandoned, compiled from contractor’s on-site records. The information is collated from each individual contract on a monthly basis and aggregated into an overall annual figure.

The overall confidence grade has been assessed as A2, to take account of inconsistent interpretation of the definition of a critical sewer and some very slight reservations as to the completeness of compliance with the reporting procedure.

The totals reported for new critical, new non-critical and non-critical replaced include an amount of sewers laid during the AIR09 reporting period. Notification of these sewers was not received to enable inclusion in the AIR09 submission. They have been included in the AIR10 totals to provide a true figure for the asset balance.

Commentary from Operations Directorate for Lines 3 - 12

Line 4 – ‘Critical’ sewers – inspection by CCTV/man entry

Work has progressed during the year to identify critical and lateral sewers these layers have been recently added to NIW’s Corporate Asset Register.

Work is also progressing on identifying sewer repairs as a result of CCTV surveys. Because of this work NIW should be in a better position for AIR11 to report on whether collapses or blockages have occurred in a private lateral, public lateral or public main sewer.

Calculation Process for Table 16 Line 4

Data gathering and calculation is as described below:

- Table 16: Line 14: Total length of sewers at 31 March 2010
- Table 16: Line 15: Total length of ‘critical’ sewers at 31 March 2010
- Total length of sewers inspected by CCTV.

B	CHANGES DURING REPORT YEAR					
4	"Critical" sewers - inspection by CCTV/man entry	km	2		35.65	C4

This information is gathered by Networks Sewerage Field managers using checked and paid invoices from the Sewer Maintenance Contractor and submitted through line management on an excel spreadsheet to Networks Sewerage Business Unit on a monthly basis.

The percentage length of critical sewers against the total length of sewers is calculated by using the total length of critical sewer divided by the total length of sewer $(T16L15/T16L14*100) = \text{percentage}\%$

The total length of all sewers inspected by CCTV is then multiplied by this percentage. This figure will equal in rough terms to the length of 'Critical' sewer inspected by CCTV.

Lines 5, 6, 7, 9, 10 & 11- 'Critical' Sewers

B	CHANGES DURING REPORT YEAR				
5b	"Critical" sewers - renovated (Ops only)	km	2		n/a
6b	"Critical" sewers - replaced (Ops only)	km	2		n/a
7b	Abandoned "critical" sewers and other changes (Ops only)	km	2		n/a
9b	"Non-critical" sewers - renovated (Ops only)	km	2		n/a
10b	"Non-critical" sewers - replaced (Ops only)	km	2		n/a
11b	Abandoned "non-critical" sewers and other changes (Ops only)	km	2		n/a

Note – line numbers have been suffixed with a 'b' to indicate input from Operations Directorate

Background

Within the Operations Directorate, three functions have been identified as having the potential to be involved in one or more of the sewerage service activities covered by Lines 3b to 11b of Table 16. The three functions are Networks Sewerage, the Operations Contract Management Centre (OCMC) and Tactical Asset Management (TAM).

Each function was asked if it would have any involvement in the list of activities. As a result of this exercise, Networks Sewerage confirmed that the only activity it would have any involvement in would be Line 4b: 'Critical' sewers – inspection by CCTV/man entry (Ops) whilst TAM confirmed that the only activities it would have any involvement in would be Line 3b: New 'critical' sewers (Ops) and Line 8b: New 'non-critical' sewers (Ops). The identification of these providers of information within Ops enabled NI Water to make a more complete return on Lines 3, 4 and 8 in 2008/09.

There remain a number of activities covered by lines in Table 16 in which no function within Ops has any involvement. Operations Services has agreed to take on the role of author/reviewer/approver of these lines for AIR10.

Figures

Ops Services has input "not applicable" against lines 5b, 6b, 7b, 9b, 10b and 11b. This implies that sewerage service activities relating to renovated, replaced and abandoned critical and non-critical sewers are not applicable to Ops and reflects the responses from the three functions.

Ops Services cannot input "0" because the suggestion would be that the activities apply to Ops but no work was undertaken in 2009/10. And Ops cannot input "not counted" because the suggestion would be that work was undertaken by Ops but wasn't measured.

Lines 3 and 8 – New sewers

B	CHANGES DURING REPORT YEAR				
3	New "critical" sewers	km	2	5.198	D3
8	New "non-critical" sewers	km	2	98.376	B3

Introduction

Sewers are adopted under the provisions of Article 161 of the Water and Sewerage Services (Northern Ireland) Order 2006. The basis of this is that a developer i.e. any person constructing or proposing to construct a sewer can enter into an agreement under Article 161 for the future adoption of sewers, subject to the conditions of the Order.

Existing sewers, lateral drains and works may also be offered for adoption under Article 159 of the Order

Procedure for Agreeing Sewers for Future Adoption

The Company operates a 'sewers for adoption' procedure as set out in the Developers Information Pack, copies of which have been issued to most developers and developers agents. The information is also on the Company's web page. Sewer construction should comply with the current edition of the Sewers for Adoption manual used by the Company.

At the commencement of the process, a developer submits his drainage layout to Developers Services for assessment of the proposed system of sewers that will service the development and be offered for adoption at a later date. The hydraulic calculations are checked and the point of connection to the public sewerage system confirmed. When all aspects of the proposed drainage layout, including confirmation of any relevant approval to discharge to a watercourse and if appropriate a water order consent the Article 161 Agreement is authorised.

The sewerage system is constructed at the developer's own expense and vested in the Company. NI Water applies fees and charges in respect of the inspection and adoption process. Charges are in line with the rates set out by the Water Research Council (WRc) and adopted by the NI Utility Regulator.

Process for Adoption of Sewers, associated Lateral Drains and Works

When the sewers have been constructed to a prescribed standard, the developer will make a written request to NI Water to have the sewers adopted. Developers Services arrange an inspection of the sewerage system and if in order a Preliminary Certificate of Adoption is issued. The Company may require a 12 month maintenance period after which a Final Certificate of Adoption will be issued.

Length of Sewers and Associated Infrastructure for Adoption

The adoption process requires the developer to provide 'as built' drawings of the sewerage system. The length of sewers, number of manholes and any associated works such as waste water pumping stations or package waste water treatment works are recorded by regional teams.

The Final Adoption Certificate records the length and diameter of sewers that are at a suitable standard for adoption by the Company. The sewers and associated lateral drains and works are maintainable by the Company effective from the date of the adoption certificate.

Details are issued to the Asset Information Development for placing on the Geographical Information System (GIS).

Copies of Final Adoption Certificates are kept on the Developers Services file. Details are also recorded in a Final Adoptions book, and captured in a sewers adopted spreadsheet.

Developers Services use a Technical Services Database which is being currently upgraded to meet the information needs of the 2006 Order legislation. This is under test and will electronically log all details including the length of sewers, lateral drains and works adopted by the Company.

Line 12 – Sewer collapses per 1,000km**Calculation process**

Data gathering and calculation is as described below:

- Table 16a: Line 1: Total number of rising main failures
- Table 16a: Line 2: Total number of gravity sewer collapses
- Table 16: Line 14: Total length of sewers at 31 March 2009

The number of rising main failures and the number of gravity sewer collapses are summated to give the total number of sewer collapses.

The total number of sewer collapses is divided by the total length of sewers at 31 March 2010 to give the number of sewer collapses per kilometre.

The number of sewer collapses per kilometre is multiplied by 1000 to give the number of sewer collapses per 1,000km.

Due to the method of gathering the data on Sewer Collapses, see Line-Specific Methodology Statement, the regulatory instructions for calculating figures for Table 16 Line 12 and Table 16a Lines 1 and 2 must be reversed.

Table 16: line 12 has been calculated using the figure reported for table 16a Lines 1 and 2 and the total length of sewers figure reported for Table 16 line 14.

Line 13 – Sewer blockages per 1,000km

Calculation process

Data gathering and calculation is as described below:

- Table 16a: Line 3: Total number of sewer blockages
- Table 16: Line 14: Total length of sewers at 31 March 2009

The number of sewer blockages is divided by the total length of sewers at 31 March 2010 to give the number of sewer blockages per kilometre. The number of sewer blockages per kilometre is multiplied by 1000 to give the number of sewer blockages per 1,000km.

Due to the method of gathering the data on Sewer Collapses, see Line-Specific Methodology Statement, the regulatory instructions for calculating figures for Table 16 Line 13 and Table 16a Line 3 must be reversed.

Table 16: line 13 has been calculated using the figure reported for table 16a Line 3 and the total length of sewers figure reported for Table 16 line 14.

Line 14 – Total length of sewers at 31 March

The value of 14745.61km has been extracted from NI Water digital data which is held in the Asset Mapper GIS.

There has been no change to the structure of the data reported on this year from the previous years that would directly affect the totals provided. The same queries have been used to extract the data from the Corporate Asset Register and have been checked to ensure that they are still relevant. The confidence grade of the data will remain the same as the previous year. There have been no significant improvements in data quality since the AIR09 reports. Any new data will have adhered to the NIW Code of Practice for the submission of asset data ensuring that data quality levels have been maintained throughout the year.

Line 15 - Total length of 'critical' sewers at 31 March

The value of 3653.62km has been extracted from NI Water digital data which is held in the Asset Mapper GIS.

There has been a substantial increase in the total critical sewer lengths this year compared to last year due to improvements in the analysis technique used to identify critical sewers. In the AIR 09 returns the critical sewer total was calculated based solely on the attributes of the sewer and did not take into account the location of the sewer in regards to structures, roads and other transport infrastructure. In line with the Reporter's recommendation a consistent definition of 'critical sewers' has been established.

A recent desktop exercise utilising geospatial technology was carried out by Atkins on behalf of NIW to assess the criticality of the NIW sewer network. This exercise assessed the sewer criticality on both their attributes and location. This has led to a higher number of sewers being identified as critical. The methodology selected for this exercise is as stated within the WRc Sewer Rehabilitation Manual 4th edition. A copy of Atkins report on the Critical Sewer assessment can be obtained on request.

In line with the Reporter's recommendation issues such as 'Sewers' with upstream depth of 2 to 3m and an unknown downstream depth are being defined as 'unknown' sewers', and those with upstream depth <2m and unknown downstream depth have been excluded. These have been addressed as a result of the revised critical sewer methodology.

In light of this the confidence grade has been upgraded from C4 to C3.

The Reporter recommended additional breakdown of sewer lengths, however due to current software and NIW business procedures, further details of the additional breakdown of sewer lengths for lines 14 and 15 cannot be provided.

Lines 16a & 16b – Unsatisfactory intermittent discharges

In AIR09 this line was reported as the number of UIDs which had been classified to date – and a query was submitted to NIAUR seeking confirmation that this was the correct interpretation. The reply from NIAUR stated that they instead would like the return to be an estimate of the number of UIDs following completion of the classification process by NIEA. As a consequence the current return complies with that interpretation.

Since the return is an attempt to predict the number of discharges which will ultimately be classified as unsatisfactory by NIEA the confidence grade is correspondingly low at C2.

However the corresponding numbers of UIDs as recognised by NIEA for classification **to date** are:

- The number of unsatisfactory intermittent discharges excluding CSOs (EHS) - 80 UIDs;
- The number of unsatisfactory intermittent discharges CSOs (EHS) - 219 UIDs; and
- 117 of these UIDs are scheduled to be improved within the PC10 period.

**Line 17a - Number of intermittent discharges excluding CSO's and
Line 17 b – Number of CSO's**

**Table A - Depicting differences between the sewerage system overflows
between AIR09 and AIR10**

Intermittent Discharges	AIR09 Number	Preliminary AIR10 Number	AIC & APT Rationalisation exercise identified	AIR10 Number (after AIC & APT Rationalisation exercise)	Difference between AIR09 & AIR10 (after AIC & APT Rationalisation exercise)
Combined Storm Overflows (CSOs)	814	819	-68	751	-63
Sewage Pumping Stations (SPSs)	925	951	-18	933	8
Total Number of Intermittent Discharges	1739	1770	-86	1684	-55

Hence for AIR10 the total number of Sewerage System Overflows is 751 + 933 i.e. 1684

There has been a preliminary net increase of 5 No: CSOs since AIR09. This is made up of 9 No: new CSOs minus 4 No: CSOs that have been removed.

In addition there has been a preliminary net increase of 26 No: SPS since AIR09. This is made up of 29 No: new SPSs minus 3 No: SPSs that have been removed.

(For a further breakdown see Table B - Changes in Intermittent Discharges by Drainage Area below).

However the Asset Performance Team has been seeking to improve its overall confidence grading of intermittent discharge information for AIR10 and carried out an exercise to rationalise our data with the Asset Information Centre (AIC).

This resulted in 86 No: sewerage system overflows being withdrawn since AIR09 which do not fall within the industry standard for reporting purposes.

The number of withdrawn sewerage system overflows have been categorised into the following:

- 44 No: Dual Manholes;
- 10 No: Bifurcation Manholes;
- 32 No: Duplicate Assets
(Consisting of 18 No: SPS overflows & 14 No: CSOs)

(For further details see Tables C, D & E below).

Overall this equates to a:

Net increase of 31 No:	sewerage system overflows since AIR09
Plus:	<u>1739 No: sewerage system overflows identified in AIR09</u>
Sub Total:	1770 No: sewerage system overflows
Minus:	<u>86 No: Overflows withdrawn after rationalisation exercise</u>
Total:	1684 No: sewerage system overflows identified for AIR10

Further analysis of the APT and AIC rationalisation exercise of intermittent discharges, has highlighted assets requiring further investigation for AIR11, i.e.

- 7 assets have been identified by APT with more than one overflow that does not align with AIC data – Included in APT ID list
- 7 No: assets indicated as consented by APT but not by AIC – Included in APT ID list
- 16 No: assets indicated as consented by AIC that are within WWTWs boundaries and therefore not an intermittent Discharge. These have are included in APT WWTW overflow discharges – Not included in APT ID list
- 13 No: assets indicated as consented by AIC but not by APT – Not included in APT ID list
- 30 No: assets indicated as abandoned by AIC but not by APT – Included in APT ID list
- 13 No: assets indicated as demolished by AIC but not by APT – Included in APT ID list
- 7 No: assets indicated as out of service by AIC but not by APT – Included in APT ID list

In total 93 No: assets between APT and AIC do not align. There are 16 No: assets indicated as consented by AIC that are within WWTWs boundaries and therefore are not an intermittent discharge. These are incorporated in the APT WWTW overflow discharges.

Therefore, 64 No: assets, which are included within the AIR10 APT ID list, will require further investigation for AIR11, in addition to the 13 assets listed by AIC as consented, but not recorded in the APT list.

Table B - Changes in Intermittent Discharges by Drainage Area

Drainage Area	No of CSO's added since AIR09	No of CSO's removed since AIR09	No of SPS's added since AIR09	No of SPS's removed since AIR09	Comments
Clougher (200's)	1	0	0	0	Ballymagowan Rd CSO, within Clogher catchment. Details of CSO received from NIW Ops and added to the application CC 01/10/09. CAR ID: NM001104307
Edenderry (200's)	1	0	0	0	New application as catchment for WWTW's previously did not contain any CSO's or Pumping Stations. CAR ID: CO002857412
Antrim	1	0	1	0	CSO at Massereene Bridge added Randalstown SPS added (CAR ID: SP002872783)
Killyleagh	2	0	0	0	CSO's added as result of pollution incident. CAR ID: NM001319270 & NM001318865
East Belfast	1	0	0	0	Details of Cherryvalley CSO were added to the application following information received from ERS. CAR ID: NM001149599
Larne	1	0	2	0	Details of two previously uncommented assets added to the application – Drains Bay SPS and Blackarch CSO. CAR ID: CO00098466 & SP002022812 Mike Collins, EP, confirmed that as well as the CSO Blackarch also has an overflow from the SPS.i.e. Blackarch SPS CAR ID: SP002022817
Limavady	2	0	1	0	CSO at Alexander Road & CSO at Main Street added. CAR ID: CO000984143. Coolissan SPS added. CAR ID: SP002021708
Clough/Seaforde (200's)	0	0	1	0	Seaforde SPS CAR ID: WW002064063 & Pinetrees SPS (Car id SP002870070 formerly known as Seaforde SPS)
Creagh (200's)	0	0	1	0	Application updated with details of Creagh Industrial Park SPS. This SPS highlighted as unconsented by NIEA and details received from Brendan McNeil of Ops. CAR ID: SP002022909

Drainage Area	No of CSO's added since AIR09	No of CSO's removed since AIR09	No of SPS's added since AIR09	No of SPS's removed since AIR09	Comments
Florencecourt (200's)	0	0	2	0	Florencecourt Caravan Park SPS (CAR id SP002022004) & Drumlaghy SPS (CAR id SP002022000)
Park (200's)	0	0	1	0	Park PS CAR ID: SP002021898
Ringneill (200's)	0	0	1	0	Details of SPS supplied by Z Shields. Lisbarnet WWTW abandoned and converted to SPS and pumped to Ringneill. CAR ID: WW002064138
Annahilt	0	0	1	0	Details of Poundburn SPS added to application. Poundburn changed from WWTW's to SPS and pumped to Annahilt. CAR ID: SP02870006
Armagh	0	0	1	0	New SPS constructed to replace Drumman Hill WWTW's. CAR ID: SP002870019
Ballyclare	0	0	0	1	Information from NIEA the consent for Huntingdale Green SPS was removed.
Banbridge	0	0	2	0	All data pertaining to SPS supplied by O'Dwyer Ltd Consultants. SPS 15 pumps directly to SPS 16 and then on to Banbridge WWTW's. CAR ID: SP002022440 & SP002823750
Belfast	0	0	1	0	Carrington St SPS added.
Ballynacor	0	0	0	1	Details of Seagoe SPS removed from the application as this is now under the ownership of Glen Water, PPP, as off Tuesday 6th October. Therefore they now own the consent
Bullays Hill	0	0	0	1	Ann SPS removed as now part of PPP as per instruction of Zara Shields 16/11/2009 BA.
Castledearg	0	0	1	0	Environmental Regulation section highlighted the location of an unconsented SPS within Castledearg. This was Castledearg (SPS 1). CAR ID: SP002021848
Coalisland	0	0	3	0	Details of Annagher , Bush & Bracken SPS's added. CAR IDs: SP002021795, SP002856140 & SP002021796. Name of Bracken Court CSO changed to Bracken Court SPS

Drainage Area	No of CSO's added since AIR09	No of CSO's removed since AIR09	No of SPS's added since AIR09	No of SPS's removed since AIR09	Comments
Downpatrick	0	1	1	0	Cathedral View SPS added. CAR ID: SP002022502 Ardglass CSO removed from application
Dungannon	0	0	1	0	Killyman SPS added. CAR ID: WW002063477
Glenavy	0	0	1	0	Killulagh SPS added. CAR ID: SP002638807
Culmore	0	0	2	0	Pennyburn SPS added. CAR ID: SP002021944 Lettershendony (2) SPS added: CAR ID: SP002021892
Maghera (L/Derry)	0	0	1	0	Crewe Rd SPS added. CAR ID: SP002840300
Newry	0	3	0	0	CSO1a, CSO5a and CSO6a have been closed and therefore removed from the application.
North Coast	0	0	2	0	Ballycairn SPS added. CAR ID: SP002023024 Hezlett School SPS added. CAR ID: SP002022978
Omagh	0	0	1	0	Killyclogher SPS added. CAR ID: SP002021851
Tandragee	0	0	1	0	Clare SPS added. CAR ID: SP002829448
Total Number of intermittent discharges added or removed since AIR09	9	4	29	3	
Net Increase in CSO's since AIR09	5				There has been a net increase of 5 No: CSOs since AIR09. This is made up of 9 No: new CSOs minus 4 No: CSOs that have been removed.
Net increase in SPS's since AIR09			26		There has been a net increase of 26 No: SPS since AIR09. This is made up of 29 No: new SPSs minus 3 No: SPSs that have been removed.

Table C - Dual Manholes withdrawn since AIR09 due to APT & AIC Rationalisation Exercise

Name of Sewer System	Car Id	Easy reference of asset from Consent of Discharge Map	Dual Manholes (To be Withdrawn)	Total No: of Dual Manholes per drainage area
Antrim	CO002586738	Caulside Park	Y	1
Bangor	NM001126465	CSO 3C	Y	1
Ballyrickard	NM001129028	CSO 08	Y	9
Ballyrickard	NM001129122	CSO 07	Y	
Ballyrickard	NM001130491	CSO 03	Y	
Ballyrickard	NM001130495	CSO 06	Y	
Ballyrickard	NM001130588	CSO 09	Y	
Ballyrickard	NM001130596	CSO 05	Y	
Ballyrickard	NM001130603	CSO 04	Y	
Ballyrickard	NM001134760	CSO 11	Y	
Ballyrickard	NM001138941	CSO 10	Y	
Lurgan	NM001229100	CSO 30	Y	
Lurgan	NM001229426	CSO 35	Y	
	NM001230688	CSO 31	Y	
Lurgan	NM001231354	CSO 34	Y	
Lurgan	NM001231355	CSO 33	Y	
Lurgan	NM001231583	CSO 32	Y	
Lurgan	NM001232930	CSO 36	Y	
Lurgan	NM001234366	CSO 39	Y	
Lurgan	NM001278775	CSO 38	Y	
Lurgan	NM001278776	CSO 37	Y	
Lurgan	NM001280565	CSO 41	Y	
Lurgan	NM001281577	CSO 54	Y	
Lurgan	NM001282390	CSO 42	Y	
Lurgan	NM001282868	CSO 45	Y	
Lurgan	NM001283755	CSO 46	Y	
Whitehouse	NM001339615	Whitehouse CSO UH 02	Y	17
Whitehouse	NM001339619	Whitehouse CSO UH01	Y	
Whitehouse	NM001340884	Whitehouse CSO UH 03	Y	
Whitehouse	NM001340886	Whitehouse CSO TG01	Y	
Whitehouse	NM001340887	Whitehouse CSO TG02	Y	
Whitehouse	NM001345599	CSO 18 Manse Road HA04 CSO (2)	Y	
Whitehouse	NM001345603	Whitehouse CSO HP01	Y	
Whitehouse	NM001346012	Whitehouse CSO GP01	Y	
Whitehouse	NM001347238	Whitehouse CSO GO10	Y	
Whitehouse	NM001348440	CSO 12 Manse Road EM05 CSO(1)	Y	

Name of Sewer System	Car Id	Easy reference of asset from Consent of Discharge Map	Dual Manholes (To be Withdrawn)	Total No: of Dual Manholes per drainage area
Whitehouse	NM001349241	Whitehouse CSO DM16	Y	
Whitehouse	NM001349313	Whitehouse CSO XJ03	Y	
Whitehouse	NM001349319	Whitehouse CSO W103	Y	
Whitehouse	NM001349320	Whitehouse CSO W101	Y	
Whitehouse	NM001349658	Whitehouse AJ01	Y	
Whitehouse	NM001349670	Whitehouse AK01	Y	
Whitehouse	NM001350136	Whitehouse CSO VH01	Y	
Desertmartin	NM001445776		Y	1
Total No: of Dual Manholes withdrawn since AIR09 due to APT & AIC Rationalisation Exercise				44

Table D - Bifurcation Manholes withdrawn since AIR09 due to APT & AIC Rationalisation Exercise

Name of Sewer System	Car Id	Easy reference of asset from Consent of Discharge Map	Bifurcation Manhole (To be Withdrawn)	Total No: of Bifurcation Manholes per drainage area
Enniskillen	NM001076519	Lakeview Park CSO	Y	1
Donaghadee	NM001109593	CS 28	Y	1
Bangor	NM001127144	CSO 8	Y	1
Ballyrickard	NM001143381	CSO 13	Y	1
East Belfast	NM001149057	CSO 84	Y	1
Greencastle	NM001170174	CSO 01 DOWNVIEW AVENUE CSO	Y	1
Waringstown	NM001238461	CS 06	Y	2
Waringstown	NM001238462	CS 10	Y	
Rathfriland	NM001291669	CSO 02	Y	1
Carrickfergus	NM001353097	CSO 01	Y	1
Total No: of Bifurcation Manholes withdrawn since AIR09 due to APT & AIC Rationalisation Exercise				10

Table E - Duplicate Manholes withdrawn since AIR09 due to APT & AIC Rationalisation Exercise

Name of Sewer System	Car Id	Easy reference of asset from Consent of Discharge Map	Duplicate Assets (To be Withdrawn)	Total No: of Duplicate Assets per drainage area
Limavady	CO000984145	CSO 50	Y	1
Upper Falls Road	CO000984208	CSO 05	Y	2
Upper Falls Road	SP002022130	PS 01	Y	
Greencastle	CO000984373	CSO 04 FORTWILLIAM PARK NO.2 CSO	Y	7
Greencastle	CO000984373	CSO 11 SHORE ROAD NO.2 CSO	Y	
Greencastle	CO000984374	CSO 07 LOWWOOD PARK CSO	Y	
Greencastle	CO000984375	CSO 08 MOUNT VERNON CSO	Y	
Greencastle	CO000984377	CSO 03 FORTWILLIAM PARK NO.1 CSO	Y	
Greencastle	CO000984378	CSO 02 DUNLAMBERT PARK CSO	Y	
Greencastle	CO000984380	CSO 06 LANDSDOWNE ROAD CSO	Y	
Castlewellan	CO000984454	CSO1	Y	4
Castlewellan	CO000984455	CSO2	Y	
Castlewellan	CO000984457	CSO4	Y	
Castlewellan	SP002022529	PS 01	Y	
Upper Falls Road	CO000984510	CSO 01	Y	1
Whitehouse	CO000984647	CSO 2a	Y	1
Limavady	SP002021708	SPS 2A	Y	1
Donnybrewer (Eglinton)	SP002021880	SPS 4a	Y	5
Donnybrewer (Eglinton)	SP002021886	SPS 3a	Y	
Donnybrewer (Eglinton)	SP002021887	SPS 2a	Y	
Donnybrewer (Eglinton)	SP002021888	SPS 5a	Y	
Donnybrewer (Eglinton)	SP002021891	SPS 1a	Y	
New Buildings	SP002021939	PS 01	Y	2
New Buildings	SP002021940	PS 02	Y	
Lurgan	SP002022218	NE PS	Y	1
Belfast	SP002022349	SPS 12a	Y	1
Newry	SP002022593	SPS 20a	Y	2
Newry	SP002022606	SPS 24a	Y	
Greenisland	SP002022781	SPS 5A	Y	2
Greenisland	SP002022784	SPS 3A	Y	
Antrim	SP002022840	SPS 12A	Y	2
Antrim	SP002022852	St James PS	Y	
Total No: of Duplicate Manholes withdrawn since AIR09 due to APT & AIC Rationalisation Exercise				32

AIR10 Comments ref Overflows from within WWTWs**Table F - Total number of Overflows within WWTWs**

	AIR09 Number	AIR 10 Number
Total number of Overflows from within WWTWs	466	522

Hence for AIR10 the total number of overflows within WWTWs is 522.

The overall number of WWTW overflows from AIR09 to AIR10 has had a net increase of 56 overflows. With regards to the number of additional and withdrawn overflows and further changes to the designation of the type of overflow listed (see Tables G to O below).

The increase in WWTW overflows in AIR10 is mainly due to works being upgraded and the roll out of the Rural Wastewater Investment Plan (RWWIP), which has resulted in numerous small works now having an overflow facility.

The changes in the number of overflows within WWTWs since AIR09 are as follows:

- 21 No: overflows within WWTWs withdrawn since AIR09.
(See Table G, H, I, J & K below)
- 77 No: Additional overflows within WWTWs since AIR09.
(See Table L, M & N below)
- A net increase of 56 overflows since AIR09.

Table G - Overflows within WWTWs withdrawn since AIR09 due to works becoming a pump away in AIR10

Name of Works	CAR ID	Status in AIR10	Withdrawn O/Fs Since AIR09
Lisbarnet (WWTW)	239	Pump away to Ringneil WWTW	-1
Poundburn	318	Pump away to Annahilt WWTW	-2
Randalstown	1425	Pump away to Antrim WWTW	-2
Artasooly	2559	Pump away to Milltown WWTW	-1
Bush	2833	Pump away to Coalisland WWTW	-1
Castlewellan (WWTW)	2694	Pump away to Annsborough WWTW	-2
Total No of overflows withdrawn since AIR09 due to the WWTWs becoming a pump away			-9

Table H - Overflows within WWTWs withdrawn since AIR09 due to works being upgraded

Name of Works	CAR ID	Status in AIR10	Withdrawn O/Fs Since AIR09
Downpatrick (WWTW)	771	Works Upgraded	-1
Seahill (WWTW)	774	Works Upgraded	-1
Portaferry (2)	383	Works Upgraded	-1
Total No of overflows withdrawn since AIR09 due to the works being upgraded			-3

Table I - Overflows within WWTWs withdrawn since AIR09 due to works becoming PPP sites

Name of Works	CAR ID	Status in AIR10	Withdrawn O/Fs Since AIR09
Newtownards (Ballyrickard)	241	PPP	-2
Armagh (WWTW)	2558	PPP	-1
Bullays Hill	2398	PPP	-1
Seagoe (WWTW)	2420	PPP	-1
Total No of Overflows withdrawn since AIR09 due to works becoming PPP sites			-5

Table J – Withdrawn Overflows within WWTWs due to incorrect designation in AIR09

Name of Works	CAR ID	Status in AIR10	Withdrawn O/Fs Since AIR09
Aghnagar	2830	Incorrect no of overflows designated in AIR09.	-1
Ballynure (WWTW)	1469	Incorrect no of overflows designated in AIR09.	-1
Point Road(29-33)	1813	Incorrect no of overflows designated in AIR09	-1
Newpoint Transfer SPS	2733	Incorrect no of overflows designated in AIR09	-1
Total No of Withdrawn Overflows due to incorrect designation in AIR09			-4

Table K – Summary of the total number of Overflows withdrawn since AIR09

Total No of overflows withdrawn since AIR09 due to the works becoming a pump away	-9
Total No of overflows withdrawn since AIR09 due to the works being upgraded	-3
Total No of Overflows withdrawn since AIR09 due to works becoming PPP sites	-5
Total No of Withdrawn Overflows due to incorrect designation in AIR09	-4
Combined Total No: of overflows within WWTWs withdrawn since AIR09	-21

Table L - Additional overflows within WWTWs since AIR09 due to WWTW upgrades

Name of Works	CAR ID	Status in AIR10	Overflows for AIR10 from Process Info	Additional O/Fs Since AIR09
Annahilt (WWTW)	317	Works Upgraded	F'A' Overflow FFT Overflow to Storm Tank (OF from storm tank) ERO from Outlet PS	2
Dromora (WWTW)	316	Works Upgraded	F'A' OF FFT Overflow ERO from Inlet PS	1
Edenderry (Antrim)	343	Works Upgraded	F'A' Overflow	1
Strangford	226	Works Upgraded	Works upgraded in AIR09 but APT did not receive updated info until August 09. Therefore O/Fs should be: 1 - FA O/F, 1 - FFT with Storm Retention	1
Kilmood	255	Works Upgraded	F'A' OF FFT OF with Storm	2
Maghera (Down)	305	Works Upgraded	F'A' OF FFT OF	1
Ringneill (WWTW)	237	Works Upgraded	FFT OF with Storm	1
Saintfield (WWTW)	290	Works Upgraded	F'A' OF FFT OF with Storm	1
Ballybogy	1087	Works Upgraded	F'A' OF FFT OF (To Storm Tank)	1
Brockaghboy (WWTW)	1140	Works Upgraded	F'A' OF FFT OF	2
Dartress	1148	Works Upgraded	F'A' OF FFT OF	2
Draperstown	1615	Works Upgraded	F'A' OF FFT to Storm Tank Inlet PS OF	2
Duneany (WWTW)	1440	Works Upgraded	F'A' OF FFT OF	1
Glarryford (WWTW)	1441	Works Upgraded	F'A' OF FFT OF	1
Oakland Villas	1711	Works Upgraded	F'A' OF FFT OF	2
Springhill Road(1)	1713	Works Upgraded	F'A' OF FFT OF with Storm	2
Tulnacross Road(44-46)	1820	Works Upgraded	FFT OF with Storm	1
Aghory	2547	Works Upgraded	F'A' OF FFT OF	2
Annsborough	2687	Works Upgraded	F'A' Overflow FFT Overflow to Storm Tank (OF from storm tank)	1
Ballycoshone	2689	Works Upgraded	FFT OF with Storm	1
Benburb (WWTW)	2831	Works Upgraded	F'A' Overflow FFT Overflow to Storm Tank	1

Name of Works	CAR ID	Status in AIR10	Overflows for AIR10 from Process Info	Additional O/Fs Since AIR09
Carrickrovaddy	2257	Works Upgraded	F'A' OF FFT OF	2
Castlecaulfield (WWTW)	2836	Works Upgraded	F'A' OF FFT OF	2
Crossmaglen	2273	Works Upgraded	F'A' Overflow FFT Overflow to storm	1
Diviny	2403	Works Upgraded	F'A' OF FFT OF with Storm	2
Gilford (WWTW)	2162	Works Upgraded	F'A' OF FFT OF	2
Hamiltonsbawn	2603	Works Upgraded	F'A' OF FFT OF to Storm Tank, ERO from Inlet PS to Storm Tank	3
Lower Ballinderry	2410	Works Upgraded	F'A' OF FFT OF to Storm Tank	1
Mullaghbane (Armagh)	2594	Works Upgraded	FFT OF with Storm	1
Mullaghglass (Newry)	2280	Works Upgraded	F'A' OF FFT OF	2
Pomeroy Road	2901	Works Upgraded	F'A' OF FFT Of with Storm	2
Saval More Cottages	2715	Works Upgraded	F'A' OF FFT OF with Storm	2
Lisnagade Road(54-56)	2161	Works Upgraded	FFT OF with Storm	1
Soldierstown	2431	Works Upgraded	F'A' OF FFT OF	2
Ardground	2996	Works Upgraded	F'A' OF FFT OF	2
Cranagh (WWTW)	3065	Works Upgraded	F'A' OF FFT OF (To Storm Tank)	2
Derryaghna	3073	Works Upgraded	F'A' OF FFT OF with Storm	2
Donnybrewer	3080	Works Upgraded	FFT OF (to Storm tank) Final Effluent PS ERO	1
Drummack	3094	Works Upgraded	FFT OF with Storm F'A' OF Inlet PS OF	2
Florencecourt	3114	Works Upgraded	F'A' OF FFT OF with Storm Final Effluent SPS EO	3
Kinawley	3149	Works Upgraded	F'A' OF FFT OF with Storm	1
Legaghory	3157	Works Upgraded	F'A' OF FFT OF	2
Myroe (WWTW)	3198	Works Upgraded	F'A' OF FFT OF	2
Scribbagh (WWTW)	3216	Works Upgraded	F'A' OF FFT OF	2
Total No: of additional overflows since AIR09 due to WWTWs being upgraded				71

Table M - Additional overflows within WWTWs due to incorrect designation in AIR09

Name of Works	CAR ID	Status in AIR10	Changes in Overflows for AIR10 from Process Info	Additional O/Fs Since AIR09
Kilkeel (WWTW)	313	Incorrect no of overflows designated in AIR09.	AIC correct regarding no of overflows, However type of O/F should be : 1 No FFT O/F to Storm Retention 1 No Additional Overflow-pumping station E/O (from final effluent PS to storm tank)	1
Whitehouse	265	Incorrect no of overflows designated in AIR09.	AIC correct regarding no of overflows, However type of O/F should be : 1 - No FA O/F 1 - FFT O/F with Storm Retention 1 -Inlet PS E/O 1 -Interstage PS O/F	1
Cloughmills (WWTW)	1096	Incorrect no of overflows designated in AIR09.	AIC correct regarding no of overflows. Therefore 1 No additional emergency O/F in AIR10	1
Derrykeighan	1101	Incorrect no of overflows designated in AIR09.	AIC correct regarding no of overflows. Therefore 1 No additional emergency O/F in AIR10	1
Acton	2111	Incorrect no of overflows designated in AIR09.	AIC correct regarding no of overflows. Therefore 1 No additional FFT O/F in AIR10	1
Attical (WWTW)	2688	Incorrect no of overflows designated in AIR09.	AIC correct regarding no of overflows. Therefore 1 No additional FFT O/F in AIR10	1
Totals No: of additional overflows within WWTWs due to incorrect designation in AIR09				6

For AIR10 - 4 No: Overflows have been withdrawn (see Table J) and 6 No: additional Overflows within WWTWs (see Table M above) have been included due to overflows being incorrectly being designated in AIR09.

This equates to a net increase of 2 No: overflows in AIR10 due to overflows being wrongly designated in AIR09.

Table N – Summary of additional overflows within WWTWs since AIR09

Total No: of additional overflows since AIR09 due to works being upgraded	71
Totals No: of additional overflows within WWTWs due to incorrect designation in AIR09	6
Combined Total: of Additional overflows within WWTWs since AIR09	77

Table O – Summary of Overflow type within WWTWs

Overflow Type	AIR09 Overflows from WWTWs	AIR09 Overflows listed for comparison purposes with AIR08	AIR10 Overflows from WWTWs	AIR10 Overflows listed for comparison purposes with AIR09	Difference between AIR09 & AIR10 (Negative figure signifies an decreased figure from 09)
Formula "A" O/Fs only	96	106	129	140	34
Formula "A" O/Fs (which also act as PS E/O)	9		10		
Formula "A" O/Fs with Storm (which also act as PS E/O)	1		1		
FFT O/Fs only	149	228	142	254	26
FFT O/Fs (which also act as PS E/O)	14		17		
FFT O/Fs with Storm Retention	54		84		
FFT O/Fs with Storm Retention (which also act as PS E/O)	11		11		
3 DWF	23	23	20	20	-3
Additional Overflows-storm	10	109	7	108	-1
Additional Overflows-other structures	7		6		
Additional Overflows-pumping station E/O	92		95		
Total No of WWTWs Overflows	466	466	522	522	56

Since AIR09 the Asset Performance Team has reviewed their summary information from Water Order Consent applications to increase the confidence for the AIR10 data. This has resulted in greater confidence in the designation of overflows from AIR09.

In addition it should be noted that Atkins are carrying out a rationalisation exercise to ascertain any additional sewerage system overflows, which may exist, and for which NIW has not applied for a Water Order Consent. This work is still ongoing, and hence has not been used in any way for the AIR10 data. Hence the confidence grades have not been changed for lines 17a and 17b.

Hence the value for line 17a i.e. 'Number of intermittent discharges excluding CSOs' (i.e. number of PS overflows in Sew. System 933, and the total number of overflows within WWTWs of 522) is 1455.

Comparison between AIR09 & AIR10 - Intermittent discharges excluding CSOs

The number of intermittent discharges excluding CSOs in **AIR09 was 1391**. This is made up 466 WWTW O/Fs + 925 SPS O/Fs.

In comparison the number of intermittent discharges excluding CSOs in **AIR10 has increased by 64 No: intermittent discharges to 1455**. This is made up of 522 WWTW O/Fs + 933 SPS O/Fs.

The net increase in the number of intermittent discharges excluding CSOs is due to a net increase of 56 No: WWTW overflows and a net increase of 8 No: SPS overflows since AIR09. As previously discussed this is mainly due to works being upgraded and the roll out of the Rural Wastewater Investment Plan (RWWIP), which has resulted in numerous small works now having an overflow facility.

The value for line 17b i.e. 'Number of CSOs' (i.e. the number of CSOs in the Sew. System) is 751.

Comparison between AIR09 & AIR10 – CSOs in the Sewerage System

The number of CSOs in the sewerage system has had a **net decrease of 63 No: CSOs since AIR09** i.e. 814 (AIR09) – 751 (AIR10).

This net decrease previously discussed is mainly due to the APT and AIC Rationalisation exercise which identified duplicate assets, bifurcation and dual manholes which have now been removed.

Lines 18 – 22 Drainage area plans

Drainage Area Study Programme

NI Water has an ongoing programme of Drainage Area Studies which commenced in 1995. The programme relates to those drainage areas with residential population greater than one thousand and includes 109 drainage areas.

The status of the 109 networks within the programme is summarised in the schedule attached.

Each Drainage Area Study has used the full investigation procedure set out in the Sewerage Rehabilitation Manual, 4th Edition (WRc), including a CCTV survey targeted at surveying all critical sewers within the network.

More recently, networks with less than 5000 population have been subject to a scoping-study which seeks to identify the needs within the network, and allows a decision to be made as to whether a full DAS is justified.

It is NI Water practice to review each Study on a 5-year cycle and, if necessary, to commission an update of the Study. A number of updates of older studies have been completed and others have commenced.

NI Water intends to implement a review of the current Drainage Area Study format – the review to be informed by our acquired knowledge of the regulatory process, and by the development of the Asset Performance section within NI Water. In particular, it is envisaged that greater emphasis will be placed upon:

- The evolving DG5 Register;
- A formal classification of UIDs by NIEA;
- The incorporation of the principles within the new Sewerage Risk Management (WRc).

Line 18 – Cumulative number of drainage area plans completed

The number of completed studies has increased from 54 to 70, principally because of the completion of 13 Scoping Studies of smaller networks in the report year.

Line 20 – Total sewerage drainage areas

Within AIR09 the 'total number of drainage areas' was restricted to the number within the DAS programme i.e. 109. The definition for the line is not clear. NIW believes that it would be misleading to include all public sewer networks, no matter how small. For AIR10, we have included all networks with population equivalent greater than 250 i.e. 269 (including the 6 PPP WWTWs networks).

Line 22 – Percentage population/properties covered by completed studies

The confidence grade is necessarily that which is attached to the input population i.e. C4.

DRAINAGE AREA STUDY PROGRAMME**STATUS AT APRIL 2010**

CATEGORY A. DASs COMPLETED SINCE 2003

Initial DAS

Catchment	Domestic population*	DAP date
Magheralin	1427	July 05
Tandragee	3523	June 05
Waringstown	3015	June 05
Draperstown	1983	June 06
Maghera	3950	June 06
Money more	1800	June 06
Greyabbey	1148	Feb 06
Kircubbin	1056	Feb 06
Portaferry	2514	Feb 06
Ballyhalbert	602	Aug 06
Ballywalter	1675	Aug 06
Cloughey	927	Aug 06
Portavogie	2320	Aug 06
Castledawson	1244	Nov 06
Magherafelt	9817	Nov 06
Portglenone	1206	Oct 06
Castlewellan	2049	Oct 06
Dromore	6305	Nov 06
Maghaberry	1653	Nov 06

Catchment	Domestic population*	DAP date
Donaghadee	6470	March 06
Millisle	2331	March 06
Whitehead	3880	March 06
Newcastle	9050	Dec 05
Annalong	2554	June 06
Dundrum	1291	July 06
Kilkeel	6993	July 06
Downpatrick	10146	Sept 05
Ardglass	1631	Oct 06
Upper Falls	27683	April 09
Bushmills	2015	April 09
Portballintrae	1785	April 09
Ballyrickard	36814	Nov 08

Revisited DAS

Catchment	Domestic population*	DAP date
East Belfast	100,000	February 10
Greenisland	6477	April 10
Lisburn	42563	October 09
Ballymoney	5017	Oct 04
Seahill	2831	April 06
Dunmurry	31958	Nov 03
Hillsborough	2503	Aug 03
Ballyclare	12,286	July 04
Coleraine	22,730	Nov 06

Revisited DAS

Catchment	Domestic population*	DAP date
Moira	4367	April 03
Lurgan	26512	April 03
Rathfriland	2827	Nov 03
Bessbrook	3000	Feb 04
Richhill	3225	Feb 04
Limavady	14744	Sept 03
Strabane	14365	Sept 03
Londonderry	90707	Nov 06
Carrickfergus	27327	Aug 03
Randalstown	5734	Mar 08
Antrim	31983	Mar 08
Ballycastle	5493	June 05
Portadown	30,154	Nov 06
Craigavon	16,281	Nov 06
Armagh	21053	April 09
Warrenpoint	6000	April 09

CATEGORY B. CATCHMENTS SUBJECT TO COMPLETED SCOPING STUDIES

Annahilt	1183
Saintfield	3344
Crossgar	1892
Ballykelly	2196
Dungiven	3135
Eglinton	3165
Greysteel	1230
Ballygowan	2507
Killyleagh	3276
Fintona	1534
Fivemiletown	1340
Irvinestown	2219
Lisnaskea	2949

CATEGORY C: DASs CURRENTLY IN PROGRESS

Initial DAS

Coalisland	6590
Gilford	2227
Markethill	1744
Castleberg	3106
Newbuildings	4500
Newtownstewart	1866
Sion Mills	3174
Castlerock	1883

Bellaghy	940
Garvagh	1273
Kilrea	1554
Ballycarry	1025
Ballystrudder	890
Crossmaglen	1717
Dungannon	14886
Keady	3592
Glenavy	1041
Ballynahinch	5601

Revisited DAS

Whitehouse	60874
Greencastle	8500
Bangor	59813
Omagh	23093
East Belfast	100,000
Cookstown	12645
Ballymena	28367
Belfast	190000

CATEGORY D. DAS YET TO COMMENCE

Newtownbreda	24574
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CATEGORY E. DASs WHICH WERE 'IMPLEMENTED'

Larne	19928
Cushendall	2298
Glenarm	375
Cushendun	474
Portrush	7588
Portstewart	9563
Newry	24485
Banbridge	16074
Rostrevor	2500
Enniskillen	16174
Helens Bay	1410

CATEGORY F. DASs REQUIRING REVISIT

Crumlin	4260
Holywood	12000

*Residential populations, extracted from NIAMP2 (2002)

PPP Section – Intermittent Discharges

It should be noted that neither the AIR10 Table 16 nor the Chapter 16 NIAUR Guidance had made reference to the reporting of PPP intermittent discharges. To ensure comprehensive reporting, and to reflect changes in NIW's Intermittent Discharges since AIR09 (due to works transferring to PPP etc), the full list of PPP outfalls and overflows are listed below.

NDA WwTW

1. Briggs Rock new outfall to Irish Sea

NDA WwTW Treated Effluent

2. Briggs Rock old outfall (1) to Irish Sea

Briggs Rock screened settled storm discharge
Briggs Rock emergency screened settled wastewater
Briggs Rock screened storm formula A overflow

3. Briggs Rock old outfall (2) to Irish Sea

Briggs Rock screened wastewater emergency
Orlock PS screened wastewater emergency

4. Millisle outfall to Irish Sea

Millisle screened settled storm discharge
Millisle screened settled wastewater emergency

5. Donaghadee outfall to Irish Sea

Donaghadee screened settled storm discharge
Donaghadee screened settled wastewater emergency

Ballynacor WwTW

6. Lough Neagh outfall

BNC WwTW treated effluent
BNC settled storm discharge
BNC SDP treated effluent

7. Closset River

BNC settled storm discharge

Ballyrickard WwTW

8. Newton Burn (1)

BRK WwTW treated effluent

9. Newton Burn (2)

BRK WwTW settled storm discharge.

Armagh WwTW

10. Callan River

ARM WwTW final effluent
ARM settled storm discharge
ARM settled wastewater emergency

Richill WwTW

11. River Tall (1)

RHL WwTW treated effluent

12. River Tall (2)

RHL settled storm discharge

13. River Tall (3)

RHL settled wastewater emergency

Bullays Hill WwTW

14. Woodville River

BHL screened settled storm discharge

BHL settled wastewater

Seagoe WwTW

15. River Bann (1)

SEA screened settled storm discharge

SEA screened settled wastewater emergency

16. River Bann (2)

SEA screened storm discharge

SEA screened wastewater emergency.

Kinnegar WwTW

17. Belfast Lough

KIN treated effluent

KIN above 6DWF screened storm discharge

KIN screened and settled storm discharge

KIN screened and settled wastewater emergency.

Table 16a

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 16A NON FINANCIAL MEASURES
SEWERAGE SERVICE SERVICEABILITY INDICATORS (TOTAL)**

DESCRIPTION				UNITS	DP	1	
						2009-10	CG
A	SEWERS - MAINTENANCE						
1	Total number of rising main failures			nr	0	25	B3
2	Total number of gravity sewer collapses			nr	0	988	B3
3	Total number of sewer blockages			nr	0	26409	B3
4	Total number of equipment failures repaired			nr	0	10882	B2

Table 16a – Non Financial Measures – Sewerage Service Serviceability Indicators**Lines 1 - 3 – Number of Rising main failures, gravity sewer collapses and sewer blockages.****Calculation Process**

The data required for table 16a lines 1-3 is gathered by Networks Sewerage Field managers using checked and paid invoices from the Sewer Maintenance Contractor and submitted through their line management (Area Managers), for quality control on an excel spreadsheet to Networks Sewerage Business Unit on a monthly basis.

This information per area is transferred to a composite Excel spreadsheet to enable a Networks Sewerage total to be calculated and the information to be presented in the format as required for the AIR return.

Because of nature of the collecting of the information for lines 2 and 3 the data for these lines is purely input and not calculated.

Changes during report year

Work has progressed during the year to identify critical and lateral sewers these layers have been recently added to NIW's Corporate Asset Register. Work is also progressing on identifying sewer repairs as a result of CCTV surveys. Because of this work NIW should be in a better position for AIR11 to report on whether collapses or blockages have occurred in a private lateral, public lateral or public main sewer.

Confidence Grading

Because NIW are using data from checked and paid invoices the confidence grade for the AIR10 remains B3. NIW expect this to improve further as we move forward into AIR11 as report building continues with the single Sewer Maintenance Contractor.

Line 4: Total number of equipment failures**Reporting Restrictions**

The MWM records do not incorporate instances of non-electromechanical devices such as storage tanks or hydrobrakes.

The failure of a pump, for example, on MWM will be recorded but not the outcome associated with this failure. It is therefore not possible to identify in isolation those equipment failures which resulted in "a detrimental impact on service to customers or the environment" since the vast majority of pumping stations possess an acceptable level of redundancy which mitigates the impact of failure on the customer.

These figures need not relate directly to equipment failures associated with M&E Services. In the vast majority of cases, for example, in SPS jobs the attendance is due to unblocking of pumpsets rather than pumpset failure.

There is therefore a danger that the figures are incorrectly perceived as M&E equipment failures rather than as a result of external circumstances e.g. flash-flooding leading to blockages.

The return has been allocated a confidence grading of B2. This is due to two main factors i.e.

- Data is manually filtered to remove duplicate entries associated with “two-man” jobs. Given the manual element of this exercise there is some potential for error; and
- Out of hours work may not all be captured using the current system which relies on all jobs being recorded on the MWM system. Given the company’s current operating model this does not occur in all instances.

Suggested Improvements/Actions

1. NIW needs to collate separately data relating to other attendances at site to ensure that all equipment failures are recorded. Whilst it has been noted that the emphasis is clearly upon establishing those instances where a pumping station has been unable to deliver suitable forward flow there are current limitations relating to the specific design parameters for installations which prevent the correct interpretation at present. These specifically relate to information surrounding the design flows and pumping regimes at individual sites. Consequently it is recommended that detailed analysis of each pumping station is performed to enable only those instances where the design flow is not delivered to be recorded. This will involve establishment of the pumping control methodology i.e. duty/standby or duty/assist.
2. An alternative may be to utilise the telemetry data relating to high level alarms since this will indicate situations where the inlet flow has exceeded the discharge rate. However this method does not take account of excessive rainfall which has resulted in the design throughput of the station being exceeded and for which a consented emergency discharge is available.
3. NIW should alternatively develop a reporting database which requires each high level exceedance recorded via telemetry to be associated with a specific cause and incident as per the equipment failure categories identified in Chapter 16a definitions manual.

Table 16b

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 16B NON FINANCIAL MEASURES
SEWERAGE SERVICE SERVICEABILITY INDICATORS (NIW Only)**

DESCRIPTION				1		2		3		4	
				NUMBER OF STW's		PERCENTAGE OF STW's WHERE THERE ARE NO BOD EVENTS FORECAST FOR THE CURRENT YEAR				CG	
				UNITS	DP	UNITS		DP			
				nr	0	%		1			
A SEWAGE TREATMENT WORKS - BOD PERFORMANCE						EVENT (a) Max > 2		EVENT (b) 95%ile > 1		EVENT (c) Mean > 0.5	
1	Equivalent population band 3 to 6					180	93.7	88.9	89.5	A2	
2	Excluded STWs			nr	0	64					
3	Total STWs			nr	0	244					
B SEWAGE TREATMENT WORKS - SS PERFORMANCE						EVENT (a) Max > 2		EVENT (b) 95%ile > 1		EVENT (c) Mean > 0.5	
4	Equivalent population band 3 to 6					180	95.3	91.8	93.2	A2	
5	Excluded STWs			nr	0	64					
6	Total STWs			nr	0	244					
C SEWAGE TREATMENT WORKS - NH3 PERFORMANCE						EVENT (a) Max > 2		EVENT (b) 95%ile > 1		EVENT (c) Mean > 0.5	
7	Equivalent population band 3 to 6					94	92.2	86.5	93.7	A2	
8	Excluded STWs			nr	0	26					
9	Total STWs			nr	0	120					

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 16B NON FINANCIAL MEASURES
SEWERAGE SERVICE SERVICEABILITY INDICATORS (PPP Only)

DESCRIPTION	UNITS	DP	1	2	3	4	CG	
			NUMBER OF STW's	PERCENTAGE OF STW's WHERE THERE ARE NO BOD EVENTS FORECAST FOR THE CURRENT YEAR				
			UNITS	DP	UNITS	DP		
			nr	0	%	1		
A SEWAGE TREATMENT WORKS - BOD PERFORMANCE					EVENT (a) Max > 2	EVENT (b) 95%ile > 1	EVENT (c) Mean > 0.5	
1	Equivalent population band 3 to 6		4		92.9	87.8	80.7	A2
2	Excluded STWs	nr	2					
3	Total STWs	nr	6					
B SEWAGE TREATMENT WORKS - SS PERFORMANCE					EVENT (a) Max > 2	EVENT (b) 95%ile > 1	EVENT (c) Mean > 0.5	
4	Equivalent population band 3 to 6		4		92.9	92.9	92.9	A2
5	Excluded STWs	nr	2					
6	Total STWs	nr	6					
C SEWAGE TREATMENT WORKS - NH3 PERFORMANCE					EVENT (a) Max > 2	EVENT (b) 95%ile > 1	EVENT (c) Mean > 0.5	
7	Equivalent population band 3 to 6		1		71.7	71.7	100.0	A2
8	Excluded STWs	nr	2					
9	Total STWs	nr	3					

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 16B NON FINANCIAL MEASURES
SEWERAGE SERVICE SERVICEABILITY INDICATORS (Total)

DESCRIPTION	UNITS	DP
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A SEWAGE TREATMENT WORKS - BOD PERFORMANCE		UNITS	DP
1	Equivalent population band 3 to 6		
2	Excluded STWs	nr	0
3	Total STWs	nr	0

B SEWAGE TREATMENT WORKS - SS PERFORMANCE		UNITS	DP
4	Equivalent population band 3 to 6		
5	Excluded STWs	nr	0
6	Total STWs	nr	0

C SEWAGE TREATMENT WORKS - NH3 PERFORMANCE		UNITS	DP
7	Equivalent population band 3 to 6		
8	Excluded STWs	nr	0
9	Total STWs	nr	0

1		2		3		4		
NUMBER OF STW's		PERCENTAGE OF STWs WHERE THERE ARE NO BOD EVENTS FORECAST FOR THE CURRENT YEAR						CG
UNITS	DP	UNITS		DP				
nr	0	%		1				

	EVENT (a) Max > 2	EVENT (b) 95%ile > 1	EVENT (c) Mean > 0.5	
184	93.7	88.9	89.3	A2
66				
250				

NUMBER OF STW's		PERCENTAGE OF STWs WHERE THERE ARE NO SS EVENTS FORECAST FOR THE CURRENT YEAR						CG
UNITS	DP	UNITS		DP				
nr		%		1				

	EVENT (a) Max > 2	EVENT (b) 95%ile > 1	EVENT (c) Mean > 0.5	
184	95.2	91.8	93.2	A2
66				
250				

NUMBER OF STW's		PERCENTAGE OF STWs WHERE THERE ARE NO NH3 EVENTS FORECAST FOR THE CURRENT YEAR						CG
UNITS	DP	UNITS		DP				
nr		%		1				

	EVENT (a) Max > 2	EVENT (b) 95%ile > 1	EVENT (c) Mean > 0.5	
95	92.0	86.4	93.8	A2
28				
123				

Table 16b – Non Financial Measures - Sewerage Service Serviceability Indicators**Background – Year on Year**

The Strategic Business Plan aims to undertake a significant number of schemes to upgrade a number of works with numeric standards which are currently failing. For AIR09 Northern Ireland Water (NIW) has reported on the previous 3 year results as, due to the delivery of the Capital Works Program, the numbers and compliance of many of the major Waste Water Treatment Works (WWTWs) has stabilised. For example, over the last 3 years, a significant number of the major WWTWs and numerous smaller WWTWs have been constructed to meet Environmental Needs Standards – these works serving approximately 25% of the Northern Ireland total population. A second group of WWTWs are subject to interim standards until the Capital Works Program is complete, at which time Environmental Needs Standards will apply. The works are currently passing the interim standards, so there should be no impact on results prediction.

Derivation of Data

Unlike the AIR08 return which used only 2 years data, the calculations for both the AIR09 and AIR10 returns have been based on the full 3 years data as this is now representative of future compliance and more accurately reflects the sites / schemes in place. Using only 2 years data for AIR08 meant that the final submission figures were not replicable against AIR09 and AIR 10. As such, the AIR08 figures have not been included in the year-on-year performance graphs herein.

The methodology for statistical calculations produced involved the use of the analytical results that are used for reporting to the Environmental Regulator. These samples are held in NI Water's LIMS (Laboratory Information Management System) and are representative, scheduled audit samples. No operational results were used for calculations. The calculations were carried out in accordance with the guidance notes for Table 16b.

For 2009 the Population Equivalent (PEs) used for scheduling were the PEs agreed between NI Water's Asset Management section (AMS), Environmental Regulation section and Environment and Heritage Service (EHS). These PEs were used for the scheduling of samples for 2009. In accordance with the AIR09's reporter recommendation however, the works for this submission have been assessed using the information (PEs and PE Bands) supplied by NI Water's AMS for its AIR10 return.

For the purpose of these calculations, sea outfalls have been included, although not listed in Table 15 line 8.

For each of the lines a number of sites held on LIMS with available results were excluded for a variety of reasons ranging from their PE being in Bands 1-2 or the site being out of service at 31st March due to the consent for that parameter having been revoked during the reporting period or the site pumped away to another WWTW. These reasons are detailed herein.

A number of sites exist in the AMS data set which are not held in the NIW LIMS, mainly as they are too small to fall into the sampling requirements or are small sea outfalls. These sites have no analytical data to determine likelihood of failure and as such have not been included in this submission. These sites are detailed separately at the end of this commentary.

Line 1, 2, 3 – BOD Performance – Equivalent Population Bands 3 – 6

For the reporting period 180 NI Water Sites were identified, 4 PPP sites were identified with 66 sites being excluded from the assessment.

2009 NIW Sites Excluded from BOD Assessment

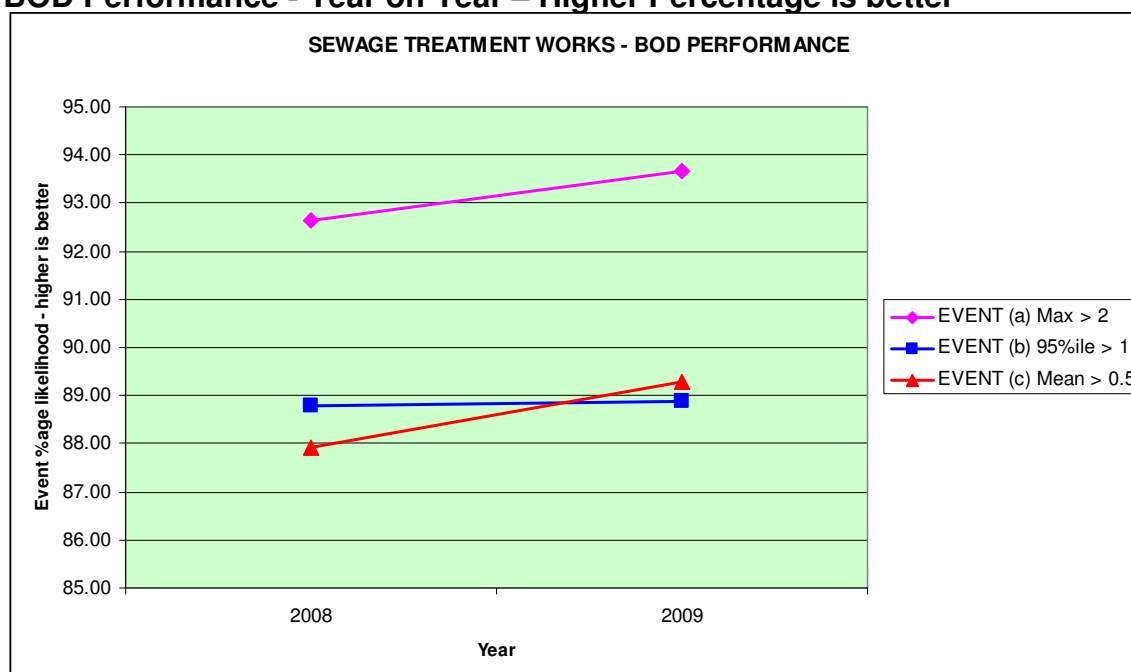
Site Code	Site Name	2009 LIMS PE	2009-10 AMS PE	PE Band	Reason for Exclusion
S13AJ	Clogh WWTW	300	370	2	Band 2
S13AU	Moorfields WWTW	300	317	2	Band 2
S13CN	Derrychrin WWTW	324	403	2	Band 2
S13DQ	Rock WWTW	137	137	1	Out of service @ 31/03/10
S13FT	Desertmartin WWTW	327	361	2	Band 2
S13GD	Knockloughrim WWTW	286	269	2	Band 2
S15AS	Randalstown WWTW	6450	#N/A	4	Out of service @ 31/03/10
S15AT	Roughfort WWTW	650	431	2	Band 2
S17BC	Liscolman WWTW	317	266	2	Band 2
S17CM	Clarehill WWTW	291	337	2	Band 2
S17ES	Mosside WWTW	450	421	2	Band 2
S23AA	Ballynacor WWTW	50000	#N/A	6	Out of service @ 31/03/10
S23AB	Bullays Hill WWTW	45000	#N/A	6	Out of service @ 31/03/10
S23AD	Seagoe WWTW	21400	#N/A	5	Out of service @ 31/03/10
S23AK	Blackskull WWTW	315	495	2	Band 2
S23AN	Derrytrasna WWTW	300	431	2	Band 2
S23AR	Maghery WWTW	265	290	2	Band 2
S23AW	Upper Ballinderry WWTW	283	308	2	Band 2
S23BK	Derrymore WWTW	250	370	2	Band 2
S25AL	Annaghmore WWTW	483	478	2	Band 2
S25AR	Bush WWTW	433	#N/A	3	Out of service @ 31/03/10
S25AY	Darkley WWTW	950	368	2	Band 2
S25CD	Brockagh Terrace (Mountjoy Dungannon)WWTW	253	452	2	Band 2
S27AG	Castlewellan WWTW	3352	#N/A	4	Out of service @ 31/03/10
S27AR	Belleeks WWTW	350	472	2	Band 2
S27AW	Cullaville WWTW	297	265	2	Band 2
S27AY	Drumintee WWTW	383	332	2	Band 2
S27BE	Kilcoo WWTW	381	498	2	Band 2
S27BL	Lurganare WWTW	300	407	2	Band 2
S35AK	Lisbarnet WWTW	469	#N/A	2	Out of service @ 31/03/10
S35AM	Loughries WWTW	245	262	2	Band 2
S35AV	Portaferry New WWTW	5287	#N/A	4	Insufficient samples
S35BC	Portavogie R/T WWTW	3333	#N/A	4	Insufficient samples
S36AG	Ardglass WWTW	3700	#N/A	4	Insufficient samples
S36AI	Annacloy WWTW	358	383	2	Band 2

Site Code	Site Name	2009 LIMS PE	2009-10 AMS PE	PE Band	Reason for Exclusion
S36BG	Glassdrumman WWTW	405	209	1	Band 1
S36BI	Maghera (Down) WWTW	110	340	2	Band 2
S37AN	Mullaghglass 1 WWTW	143	184	1	Band 1
S37AO	Drumlough WWTW	128	115	1	Band 1
S37AP	Edenderry WWTW	377	458	2	Band 2
S37AQ	Poundburn WWTW	380	#N/A	2	Out of service @ 31/03/10
S43BA	Ballymonie WWTW	479	489	2	Band 2
S43BF	Bonnaboigh WWTW	306	286	2	Band 2
S43BG	Benone WWTW	3833	205	4	Band 1
S43CB	Carrowclare WWTW	251	148	1	Band 1
S43DA	Dernaflaw WWTW	351	347	2	Band 2
S43EJ	Gortnaghey WWTW	305	370	2	Band 2
S45AE	Ardstraw WWTW	260	285	2	Band 2
S45FD	Greencastle WWTW	298	379	2	Band 2
S45FJ	Killen WWTW	292	467	2	Band 2
S45IC	Plumbridge WWTW	497	449	2	Band 2
S45IG	Seskinore WWTW	240	261	2	Band 2
S45KG	Bready WWTW	218	305	2	Band 2
S47BA	Ballycassidy WWTW	450	476	2	Band 2
S47BD	Bellanaleck WWTW	507	#N/A	3	Out of service @ 31/03/10
S47BI	Castle Archdale WWTW	888	29	3	Band 1
S47CA	Clabby WWTW	309	308	2	Band 2
S47CJ	Donagh WWTW	241	221	1	Band 1
S47FH	Lack WWTW	179	267	2	Band 2
S47GC	Lisnarrick WWTW	237	277	2	Band 2
S47HJ	Tamlaght WWTW	390	475	2	Band 2

2009 PPP Sites Excluded from BOD Assessment

Site Code	Site Name	Reason for Exclusion	2009 PE
S23BN	Ballynacor PPP WWTW	Insufficient samples	102837
S35BR	North Down/Ards PPP WWTW	Insufficient samples	50000

BOD Performance - Year on Year – Higher Percentage is better



Line B4, 5, 6 – SS Performance – Equivalent Population Bands 3 – 6

For the reporting period 180 NI Water Sites were identified, 4 PPP sites were identified with 66 sites being excluded.

2009 NIW Sites Excluded from SS Assessment

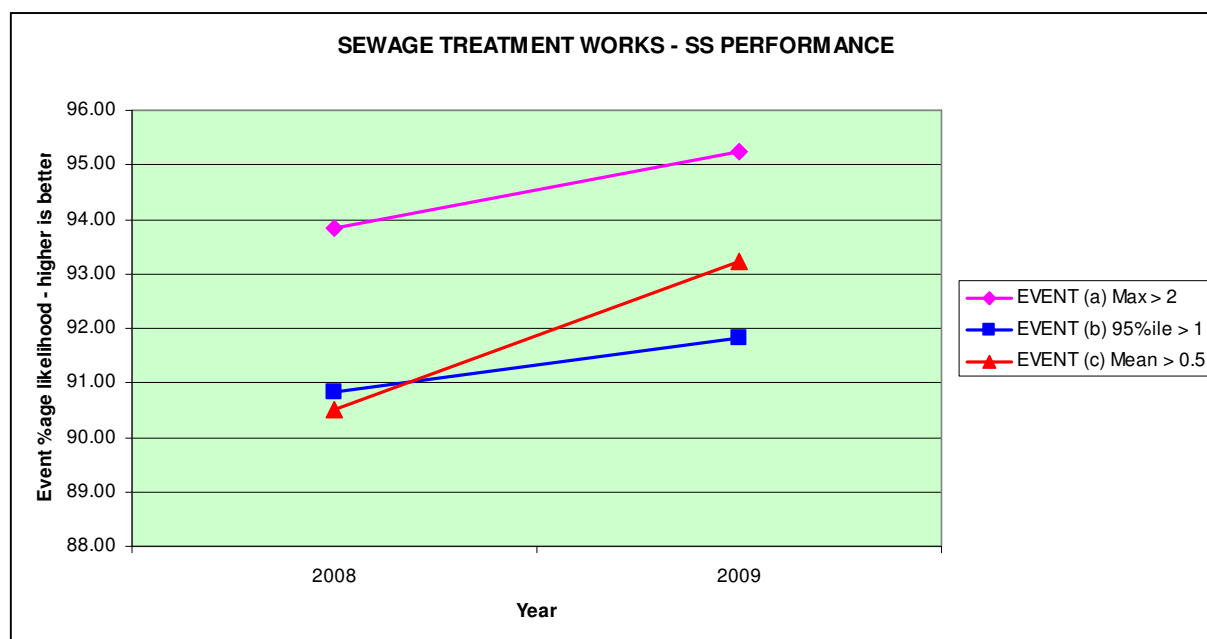
Site Code	Site Name	2009 LIMS PE	2009-10 AMS PE	PE Band	Reason for Exclusion
S13AJ	Clogh WWTW	300	370	2	Band 2
S13AU	Moorfields WWTW	300	317	2	Band 2
S13CN	Derrychrin WWTW	324	403	2	Band 2
S13DQ	Rock WWTW	137	137	1	Out of service @ 31/03/10
S13FT	Desertmartin WWTW	327	361	2	Band 2
S13GD	Knockloughrim WWTW	286	269	2	Band 2
S15AS	Randalstown WWTW	6450	#N/A	4	Out of service @ 31/03/10
S15AT	Roughfort WWTW	650	431	2	Band 2
S17BC	Liscolman WWTW	317	266	2	Band 2
S17CM	Clarehill WWTW	291	337	2	Band 2
S17ES	Mosside WWTW	450	421	2	Band 2
S23AA	Ballynacor WWTW	50000	#N/A	6	Out of service @ 31/03/10
S23AB	Bullays Hill WWTW	45000	#N/A	6	Out of service @ 31/03/10
S23AD	Seagoe WWTW	21400	#N/A	5	Out of service @ 31/03/10
S23AK	Blackskull WWTW	315	495	2	Band 2
S23AN	Derrytrasna WWTW	300	431	2	Band 2
S23AR	Maghery WWTW	265	290	2	Band 2
S23AW	Upper Ballinderry WWTW	283	308	2	Band 2
S23BK	Derrymore WWTW	250	370	2	Band 2
S25AL	Annaghmore WWTW	483	478	2	Band 2
S25AR	Bush WWTW	433	#N/A	3	Out of service @ 31/03/10
S25AY	Darkley WWTW	950	368	2	Band 2
S25CD	Brockagh Terrace (Mountjoy Dungannon)WWTW	253	452	2	Band 2
S27AG	Castlewellan WWTW	3352	#N/A	4	Out of service @ 31/03/10
S27AR	Belleeks WWTW	350	472	2	Band 2
S27AW	Cullaville WWTW	297	265	2	Band 2
S27AY	Drumintee WWTW	383	332	2	Band 2
S27BE	Kilcoo WWTW	381	498	2	Band 2
S27BL	Lurganare WWTW	300	407	2	Band 2
S35AK	Lisbarnet WWTW	469	#N/A	2	Out of service @ 31/03/10
S35AM	Loughries WWTW	245	262	2	Band 2
S35AV	Portaferry New WWTW	5287	#N/A	4	Insufficient samples
S35BC	Portavogie R/T WWTW	3333	#N/A	4	Insufficient samples
S36AG	Ardglass WWTW	3700	#N/A	4	Insufficient samples
S36AI	Annacloy WWTW	358	383	2	Band 2
S36BG	Glassdrumman WWTW	405	209	1	Band 1
S36BI	Maghera (Down) WWTW	110	340	2	Band 2
S37AN	Mullaghglass 1 WWTW	143	184	1	Band 1
S37AO	Drumlough WWTW	128	115	1	Band 1
S37AP	Edenderry WWTW	377	458	2	Band 2
S37AQ	Poundburn WWTW	380	#N/A	2	Out of service @ 31/03/10
S43BA	Ballymonie WWTW	479	489	2	Band 2

Site Code	Site Name	2009 LIMS PE	2009-10 AMS PE	PE Band	Reason for Exclusion
S43BF	Bonnaboigh WWTW	306	286	2	Band 2
S43BG	Benone WWTW	3833	205	4	Band 1
S43CB	Carrowclare WWTW	251	148	1	Band 1
S43DA	Dernaflaw WWTW	351	347	2	Band 2
S43EJ	Gortnaghey WWTW	305	370	2	Band 2
S45AE	Ardstraw WWTW	260	285	2	Band 2
S45FD	Greencastle WWTW	298	379	2	Band 2
S45FJ	Killen WWTW	292	467	2	Band 2
S45IC	Plumbridge WWTW	497	449	2	Band 2
S45IG	Seskinore WWTW	240	261	2	Band 2
S45KG	Bready WWTW	218	305	2	Band 2
S47BA	Ballycassidy WWTW	450	476	2	Band 2
S47BD	Bellanaleck WWTW	507	#N/A	3	Out of service @ 31/03/10
S47BI	Castle Archdale WWTW	888	29	3	Band 1
S47CA	Clabby WWTW	309	308	2	Band 2
S47CJ	Donagh WWTW	241	221	1	Band 1
S47FH	Lack WWTW	179	267	2	Band 2
S47GC	Lisnarrick WWTW	237	277	2	Band 2
S47HJ	Tamlaght WWTW	390	475	2	Band 2

2009 PPP Sites Excluded from SS Assessment

Site Code	Site Name	Reason for Exclusion	2009 PE
S23BN	Ballynacor PPP WWTW	Insufficient samples	102837
S35BR	North Down/Ards PPP WWTW	Insufficient samples	50000

SS Performance - Year on Year – Higher Percentage is better



Line 7, 8, 9 – Ammonia Performance – Equivalent Population Bands 3 – 6

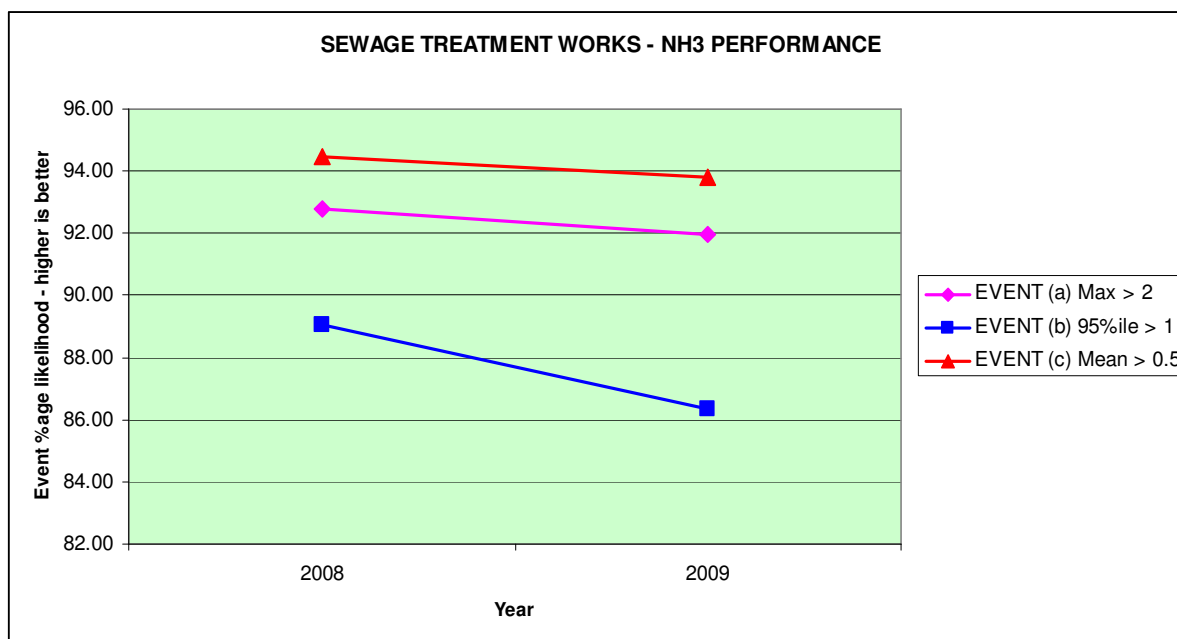
For the reporting period 94 NI Water Sites were identified, 1 PPP sites was identified with 28 sites being excluded.

2009 NIW Sites Excluded from Ammonia Assessment

Site Code	Site Name	2009 LIMS PE	2009-10 AMS PE	PE Band	Reason for Exclusion
S13CN	Derrychrin WWTW	324	403	2	Band 2
S13DQ	Rock WWTW	137	137	1	Out of service @ 31/03/10
S15AT	Roughfort WWTW	650	431	2	Band 2
S17BC	Liscolman WWTW	317	266	2	Band 2
S17CM	Clarehill WWTW	291	337	2	Band 2
S23AA	Ballynacor WWTW	50000	#N/A	6	Out of service @ 31/03/10
S23AB	Bullays Hill WWTW	45000	#N/A	6	Out of service @ 31/03/10
S23AN	Derrytrasna WWTW	300	431	2	Band 2
S25AR	Bush WWTW	433	#N/A	3	Out of service @ 31/03/10
S25AY	Darkley WWTW	950	368	2	Band 2
S27AR	Belleeks WWTW	350	472	2	Band 2
S27AY	Drumintee WWTW	383	332	2	Band 2
S27BE	Kilcoo WWTW	381	498	2	Band 2
S27BL	Lurganare WWTW	300	407	2	Band 2
S35AK	Lisbarnet WWTW	469	#N/A	2	Out of service @ 31/03/10
S36AI	Annacloy WWTW	358	383	2	Band 2
S36BI	Maghera (Down) WWTW	110	340	2	Band 2
S37AN	Mullaghglass 1 WWTW	143	184	1	Band 1
S37AQ	Poundburn WWTW	380	#N/A	2	Out of service @ 31/03/10
S43EJ	Gortnaghey WWTW	305	370	2	Band 2
S45FD	Greencastle WWTW	298	379	2	Band 2
S45FJ	Killen WWTW	292	467	2	Band 2
S47CA	Clabby WWTW	309	308	2	Band 2
S47FH	Lack WWTW	179	267	2	Band 2
S47HJ	Tamlaght WWTW	390	475	2	Band 2

2009 PPP Sites Excluded from Ammonia Assessment

Site Code	Site Name	Reason for Exclusion	2009 PE
S23BN	Ballynacor PPP WWTW	Insufficient samples	102837
S25EB	Richill PPP WWTW	Insufficient samples	3384

NH3 Performance - Year on Year – Higher Percentage is better**2009 AMS Sites which do not exist on NIW's LIMS and not reported on**

WWTWs	CAR ID	2009-10 AMS PE	PE Band
3 Sisters	S04027	18	Band 1
Abbacoy Road	S03947	42	Band 1
Aghory	S02547	65	Band 1
Agivey Road(199-201)	S01755	6	Band 1
Altishane	S02993	12	Band 1
Altmore WTW (Septic Tank)	S02778	3	Band 1
Annaghmore Road(28)	S02016	18	Band 1
Annaghquinn Road(49)	S01718	6	Band 1
Anville Crescent	S02391	42	Band 1
Ardess	S02995	66	Band 1
Ardlough Road (40-42)	S04095	6	Band 1
Ardrass (WWTW)	S02557	90	Band 1
Armagh Road(144-146)	S02249	6	Band 1
Armagh Road(189-193)	S02251	9	Band 1
Armagh Road(202-206)	S02250	9	Band 1
Aughanduff	S02262	12	Band 1
Aughnavallog	S02114	36	Band 1
Backlower Road(111-115)	S01791	9	Band 1
Ballee Road	S03009	15	Band 1
Ballee Road (75-83)	S04091	9	Band 1
Balleevy	S02122	12	Band 1
Ballinderry Road (45-49) Antrim	S04877	9	Band 1
Ballinlea Road(81)	S01748	9	Band 1
Ballinrees WTW(Septic Tank)	S00931	6	Band 1
Ballinteer	S01131	24	Band 1
Ballintemple WTW (Septic Tank)	S02243	3	Band 1
Ballsmill	S02258	12	Band 1
Ballyagan	S01132	24	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Ballyalton Rd (20-22)	S00849	6	Band 1
Ballyardel	S02727	12	Band 1
Ballyavelin Road (133-135)	S04123	12	Band 1
Ballybarnes Road (80-82)	S00776	3	Band 1
Ballybentragh(66-72)	S01760	6	Band 1
Ballybogie Road(7-9)	S04875	6	Band 1
Ballybrick	S02115	18	Band 1
Ballycairn (Down)	S00336	37	Band 1
Ballycleagh	S01175	6	Band 1
Ballycorr Grove	S01468	28	Band 1
Ballycoshone	S02689	6	Band 1
Ballycreelly Road (38-40)	S00333	12	Band 1
Ballycrochan Road	S00833	6	Band 1
Ballydermot Road(7-9)	S01792	6	Band 1
Ballydonaghy Cottages (1-4)	S01763	12	Band 1
Ballydrain Road (39-43)	S00238	12	Band 1
Ballyeastborough Road (15-17)	S00221	6	Band 1
Ballyfrench Road(1-3)	S00220	6	Band 1
Ballygalget Road(1)	S00840	6	Band 1
Ballygarvigan	S00228	42	Band 1
Ballygowan Road (140-142)Banbridge	S02890	6	Band 1
Ballygowan Road(102-104)	S00251	6	Band 1
Ballygowan Road(41-47)	S00243	12	Band 1
Ballygowans	S03014	12	Band 1
Ballygruby	S01557	17	Band 1
Ballyhacket	S01133	18	Band 1
Ballyheather Road (121-123)	S04112	6	Band 1
Ballyhome (WWTW)	S01134	77	Band 1
Ballyhornan Outfall	S04090	911	Band 3
Ballykeel Cottages(1-4)	S00834	13	Band 1
Ballykelly (DOWN)	S02169	21	Band 1
Ballylintagh (New)	S01135	59	Band 1
Ballylumford Cottages	S00260	61	Band 1
Ballymacallion (WWTW)	S03017	18	Band 1
Ballymacawley	S02560	22	Band 1
Ballymacnab	S02561	30	Band 1
Ballymaconaghy Road	S02690	6	Band 1
Ballymaconaghy WTW (Septic Tank)	S02369	3	Band 1
Ballymacormick	S01089	18	Band 1
Ballymaderphy	S02728	66	Band 1
Ballymaguire Road(33-35)	S02031	6	Band 1
Ballymarlagh	S01430	39	Band 1
Ballymartin (Retention Tank)	S00770	637	Band 3
Ballymiscaw road (37-41)	S00256	9	Band 1
Ballymore	S02117	15	Band 1
Ballymoyer	S02252	42	Band 1
Ballynadolly	S00327	138	Band 1
Ballynafie	S01431	70	Band 1
Ballynagalliagh (Armagh)	S02562	27	Band 1
Ballynagard (Antrim)	S01173	9	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Ballynahaye Road(3)	S04115	6	Band 1
Ballynamullan	S03011	12	Band 1
Ballynamullan Road(32-34)	S01764	6	Band 1
Ballynashee Road(71-77)	S01765	12	Band 1
Ballynease	S01604	18	Band 1
Ballynease Road(160-164)	S01793	9	Band 1
Ballyquinn (WWTW)	S03021	100	Band 1
Ballyrainey Road (65-67)	S00847	6	Band 1
Ballyrashane Road(21)	S01731	6	Band 1
Ballyrashane Road(37-39)	S01126	6	Band 1
Ballyrock	S01136	47	Band 1
Ballyroney Road (WWTW)	S02118	18	Band 1
Ballyrussell	S02691	24	Band 1
Ballysallagh WTW (Septic Tank)	S00006	3	Band 1
Ballytrim	S00276	33	Band 1
Ballyutoag	S01417	6	Band 1
Ballyvarley (WWTW)	S02119	18	Band 1
Ballyveely	S01090	6	Band 1
Ballyvelton Road(23)	S01734	15	Band 1
Ballyvelton Road(45-51)	S04037	12	Band 1
Ballyward	S02120	6	Band 1
Bankside Shinn	S02692	71	Band 1
Bar Hall	S00229	27	Band 1
Battery Road(43-45)	S01802	6	Band 1
Beagh	S01605	36	Band 1
Bearney Road(55-61)	S04143	12	Band 1
Beech Hill South	S05182	54	Band 1
Belfast Road(207-209)	S00856	6	Band 1
Belfast Road(56-58)	S04142	6	Band 1
Belleek (WTW) Septic Tank	S03494	3	Band 1
Bells Hill	S00291	17	Band 1
Bells hill(63-65)	S01795	6	Band 1
Bellshill Road(83-85)	S01794	6	Band 1
Beltrim (WWTW)	S03025	15	Band 1
Benvardin Road	S01093	6	Band 1
Blackstaff (Septic Tank)	S00219	30	Band 1
Blaney	S03028	18	Band 1
Boghill (WWTW)	S01138	12	Band 1
Boghill Road(52-54)	S01127	6	Band 1
Bohulkin	S03029	9	Band 1
Bolea (WWTW)	S03030	93	Band 1
Boleran Road (Garvagh)	S02059	12	Band 1
Bonds Glen Road (149-151)	S04105	6	Band 1
Bonds Glen Road (65-67)	S04099	6	Band 1
Bovean	S02793	30	Band 1
Boveedy	S01139	75	Band 1
Bovevagh Road (37-41)	S04121	6	Band 1
Brantry	S02832	18	Band 1
Breaside Cottages(1-6)	S02049	18	Band 1
Bregagh Road(56-58)	S01742	6	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Bregagh Road(60-62)	S01743	6	Band 1
Bregagh Road(68-70)	S01744	6	Band 1
Bresagh	S00332	30	Band 1
Brisland Road(3-5)	S04141	6	Band 1
Broagh	S01607	33	Band 1
Buckna (WWTW)	S01432	40	Band 1
Burnquarter	S01094	42	Band 1
Burren Road	S02686	12	Band 1
Caheney	S01141	12	Band 1
Capecastle	S01179	55	Band 1
Cargin Road	S01322	30	Band 1
Carmean	S01608	51	Band 1
Carmean Road(42-46)	S01796	9	Band 1
Carnalbanagh	S01459	60	Band 1
Carnalea Road	S03036	15	Band 1
Carnally	S02255	9	Band 1
Carnan	S01559	71	Band 1
Carnanbane	S03037	42	Band 1
Carnbeg	S01434	15	Band 1
Carnduff (Retention Tank)	S01180	79	Band 1
Carneyhough	S02682	6	Band 1
Carnlough Road	S01435	9	Band 1
Carnteel Road (122-124)	S04162	6	Band 1
Carran Hill (WWTW)	S02256	3	Band 1
Carricklongfield Road (21-23)	S04093	6	Band 1
Carricknaveagh (WWTW)	S00283	17	Band 1
Carrickrovaddy	S02257	23	Band 1
Carrig Place	S02254	18	Band 1
Carrigenagh (WWTW)	S00314	12	Band 1
Carrontreemall	S03040	39	Band 1
Carrowdore Road(38-40)	S00832	6	Band 1
Carrowreagh Road(68-70)	S04100	6	Band 1
Castlemellan Lower	S03043	18	Band 1
Castlemellan Upper	S03044	18	Band 1
Castlenagree	S01181	33	Band 1
Castletown (WWTW)	S03046	15	Band 1
Castlevennon	S02121	3	Band 1
Castlevennon Road(49-51)	S02113	6	Band 1
Castlewellan Road (Dromore)	S02892	6	Band 1
Castor Bay	S02380	24	Band 1
Caugh Hill (WWTW)	S03047	9	Band 1
Causeway Road(122)	S01723	6	Band 1
Causeway Road(15)	S01726	6	Band 1
Causeway Road(180)	S01730	6	Band 1
Causeway Road(30)	S01736	6	Band 1
Cavanagrow	S02565	38	Band 1
Charlestown	S02399	76	Band 1
Chatham Road	S02023	6	Band 1
Cherryvalley Road(24)	S01766	9	Band 1
Church Hill	S03050	69	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Churchfield Road	S01182	21	Band 1
Clare	S01560	47	Band 1
Clarehill Road	S02428	12	Band 1
Clattering Ford Road (12-16)	S00249	9	Band 1
Clay Lake	S02531	3	Band 1
Coagh Road(20-22)	S02033	6	Band 1
Cogry Road(25-27)	S01767	6	Band 1
Comber Road(102-106)	S00848	9	Band 1
Commons School Road(8-10)	S02897	6	Band 1
Concession Road	S02260	21	Band 1
Coneyisland (WWTW)	S00274	99	Band 1
Connaught Road(21)	S01768	15	Band 1
Coole Glebe	S01143	24	Band 1
Coolkeeran	S01098	9	Band 1
Coolnagoppoge (WWTW)	S01176	37	Band 1
Coolsythe Road(23)	S01769	6	Band 1
Coragh	S03058	18	Band 1
Corbally Road(45)	S02021	6	Band 1
Corbrackey Road	S02392	12	Band 1
Corchoney Lane (2-4)	S01563	6	Band 1
Corcreechy Road	S02696	9	Band 1
Corgary Cottages (New)	S02724	18	Band 1
Corickbeg Road(15-17)	S04136	6	Band 1
Corickmore	S03062	18	Band 1
Corkill (Fermanagh)	S03059	18	Band 1
Corkill (Tyrone)	S02032	6	Band 1
Cornakessagh	S03060	9	Band 1
Cornamuck	S03061	27	Band 1
Corrinure	S02261	6	Band 1
Corry (WWTW)	S03063	12	Band 1
Corvanaghan (WWTW)	S01565	6	Band 1
Craigaroddan Road(6-8)	S00227	6	Band 1
Craigaruskey Road (66-68)	S00254	6	Band 1
Craigavole (WWTW)	S01144	21	Band 1
Craigdarragh Road(85-87)	S00836	8	Band 1
Craigmore Road(139 - 145)	S01725	12	Band 1
Craigmore Road(18-20)	S01124	6	Band 1
Craignasasonagh	S00308	17	Band 1
Cranagh (WWTW)	S03065	63	Band 1
Crankill	S01438	9	Band 1
Creaghcor	S03066	30	Band 1
Crebarkey	S03067	24	Band 1
Creevangar	S03068	12	Band 1
Creggan Road(27)	S01770	6	Band 1
Crew Bridge	S03069	18	Band 1
Crilly	S02903	9	Band 1
Cross Lane(9-22)	S02427	24	Band 1
Crosskeys Road	S01439	9	Band 1
Crossnamoyle	S02568	18	Band 1
Culbane (WWTW)	S01145	21	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Cullion (Bready)	S03070	83	Band 1
Cullyramer	S01147	6	Band 1
Culmore Point	S03334	18	Band 1
Culnady Road(46-50)	S01798	9	Band 1
Culramoney Road(5)	S01740	6	Band 1
Curglasson	S01566	62	Band 1
Cushleake Road(37-39)	S01783	6	Band 1
Davagh Park	S02030	18	Band 1
Deerpark Road(92)	S01771	18	Band 1
Deffrick	S01184	71	Band 1
Demoan Villas	S02299	18	Band 1
Dempsey Park	S01100	69	Band 1
Derg (WTW) Septic Tank	S03499	3	Band 1
Derryaghna	S03073	18	Band 1
Derryanvil	S03911	12	Band 1
Derrygortrevy	S02837	24	Band 1
Derryhaw	S02571	10	Band 1
Derrymagowan	S02572	6	Band 1
Derrynoose	S02605	18	Band 1
Derryork Road(33-35)	S04140	6	Band 1
Diamond cottages(1)	S01772	30	Band 1
Diamond Road(73-79)	S02124	12	Band 1
Diviny	S02403	17	Band 1
Doan Place	S02839	18	Band 1
Donaghey (1)	S01568	6	Band 1
Donaghey (2)	S01569	51	Band 1
Donard View	S00280	37	Band 1
Donnelly Park	S01103	36	Band 1
Donnybrewer Road(98)	S03278	6	Band 1
Donnybrewer Road(99)	S03277	6	Band 1
Doogary	S02573	17	Band 1
Doorless	S01570	12	Band 1
Dorsy	S02267	39	Band 1
Dougan place	S02164	36	Band 1
Drapersfield (WWTW)	S01571	96	Band 1
Dree Hill	S02125	12	Band 1
Dreenan Road(38-40)	S02028	6	Band 1
Drennans Road(6)	S01773	6	Band 1
Dromara Road (Lacken)	S02126	12	Band 1
Dromore Highlands	S03085	126	Band 1
Dronehill Road	S02128	12	Band 1
Drones	S01104	48	Band 1
Drumagarner	S01149	18	Band 1
Drumagarner Road(148-150)	S02026	6	Band 1
Drumagarner Road(212-218)	S02027	12	Band 1
Drumalig Road (62-64)	S04161	6	Band 1
Drumalig Road(9-11)	S04158	6	Band 1
Drumane	S01150	18	Band 1
Drumaran Road	S02129	9	Band 1
Drumard (Antrim)	S01616	15	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Drumard (Tyrone)	S02860	12	Band 1
Drumard Primate (WWTW)	S02404	37	Band 1
Drumaroad (WTW)	S00115	3	Band 1
Drumavoley Road(39-41)	S02022	6	Band 1
Drumavoley Road(83)	S01749	6	Band 1
Drumbolg Road(98-100)	S01800	6	Band 1
Drumconvis Road(16-18)	S01801	3	Band 1
Drumcroon (WWTW)	S01151	6	Band 1
Drumenny	S03088	98	Band 1
Drumenny Road(120-128)	S02034	9	Band 1
Drumflugh Road (75-77)	S04101	6	Band 1
Drumgay (1)	S03090	11	Band 1
Drumgay (2)	S03091	39	Band 1
Drumgooland	S02131	6	Band 1
Drumgreavagh	S02697	6	Band 1
Drumhillery	S02574	75	Band 1
Drumhirk	S00246	24	Band 1
Drumilly	S02268	60	Band 1
Drumkee	S02841	17	Band 1
Drumlegagh Church Road	S03987	92	Band 1
Drumlegagh Church Road (63-65)	S04098	6	Band 1
Drumlegagh Road South	S03093	12	Band 1
Drummack	S03094	16	Band 1
Drummond	S03095	22	Band 1
Drumnacannon Road(20-22)	S01803	6	Band 1
Drumnakilly	S03096	122	Band 1
Drumnascamph	S02698	38	Band 1
Drumneechy	S03097	24	Band 1
Drumraighland	S03099	95	Band 1
Drumreagh	S01106	6	Band 1
Drumreagh Road(9-11)	S00248	6	Band 1
Drumshambo	S01572	12	Band 1
Drumsum Road (234-238)	S04120	9	Band 1
Dunboe Road(75-77)	S01747	6	Band 1
Duncastle Road (52-60)	S04113	15	Band 1
Dundrum (Armagh)	S02576	23	Band 1
Duneany (WWTW)	S01440	72	Band 1
Dungonnell WTW (Septic Tank)	S01472	3	Band 1
Dungorbery	S01107	6	Band 1
Dunmore Cottages	S00806	51	Band 1
Dunmullan	S03102	58	Band 1
Dunnyboe Road (85-93)	S04103	12	Band 1
Dunore WTW (Septic Tank No1)	S02057	3	Band 1
Dunore WTW (Septic Tank No2)	S02057	3	Band 1
Dunore WTW (Septic Tank No3)	S02057	3	Band 1
Dunronan Road(25-27)	S01804	6	Band 1
Dunserverick (Retention Tank)	S01185	89	Band 1
Dyan	S02842	52	Band 1
Edencrannon (WWTW)	S02858	90	Band 1
Edenderry (Tyrone)	S03104	58	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Edendoit Road(107-109)	S01598	6	Band 1
Edendoit Road(22-32)	S01805	18	Band 1
Edenmore Road	S03105	12	Band 1
Edenreagh Road(39-41)	S04094	15	Band 1
Edentiroory	S02132	9	Band 1
Edergoole Road (87-89)	S04104	6	Band 1
Eglis (Armagh)	S02578	87	Band 1
Ervey Road	S03107	15	Band 1
Eskragh	S03201	33	Band 1
Fallahogy	S01617	27	Band 1
Farmacaffley	S02579	62	Band 1
Farranflugh	S01420	6	Band 1
Faughan	S03109	9	Band 1
Ferris Bay (50)	S04084	15	Band 1
Feumore (WWTW)	S02406	75	Band 1
Fincarn	S03111	85	Band 1
Fofanny WTW(Septic Tank)	S02677	3	Band 1
Foffanybane WTW (Septic Tank)	S02678	3	Band 1
Ford Road(27)	S01806	6	Band 1
Foreglen Road (51-53)	S04097	6	Band 1
Forked Bridge WTW (Septic Tank)	S00003	3	Band 1
Fourmile	S02699	18	Band 1
Gallrock	S02433	17	Band 1
Garryduff Church	S02024	9	Band 1
Garryduff Road(112- 122)	S01715	18	Band 1
Garvetagh	S03117	81	Band 1
Giants Causeway (Retention Tank)	S01186	46	Band 1
Glarryford (WTW) Septic Tank	S01210	3	Band 1
Glascar Road(28-30)	S02887	6	Band 1
Glaskerbeg Road (11)	S04088	3	Band 1
Glasmullen (WWTW)	S01187	9	Band 1
Glassdrummond	S00282	21	Band 1
Glen Cottages (1-6)	S00835	17	Band 1
Glen View (Down)	S02700	12	Band 1
Glenabbey (WWTW)	S03119	45	Band 1
Glenagorland	S03120	18	Band 1
Glenanne	S02259	9	Band 1
Glenavy Road (Antrim)	S00324	6	Band 1
Glenbush Road(31)	S01737	6	Band 1
Glenedra Road (109-111)	S04116	6	Band 1
Glenhead Road	S02133	12	Band 1
Glenhordial WTW (Septic Tank)	S03504	3	Band 1
Glenleary Road(22)	S01733	3	Band 1
Glenmakeeran	S01188	6	Band 1
Glenshesk Road(127)	S01724	3	Band 1
Glenstaghey Road(11)	S01787	6	Band 1
Goragh Road	S02287	6	Band 1
Gorran Road(84)	S01750	6	Band 1
Gortaclady (WWTW)	S01575	17	Band 1
Gortatray	S01576	12	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Gortereghy	S01110	17	Band 1
Gortin Road(12)	S01720	6	Band 1
Gortnacross	S01577	15	Band 1
Gortnagallon Cottages(1-4)	S01777	12	Band 1
Gortnagola Road	S02889	6	Band 1
Gortnagross Road (38-40)	S04114	6	Band 1
Gortnaskea Road(45-47)	S01807	6	Band 1
Gortscreagan	S03127	82	Band 1
Gosheden (1)	S03128	30	Band 1
Gosheden (2)	S03129	67	Band 1
Gracehill Road(28)	S01735	6	Band 1
Grange Blundel	S02581	18	Band 1
Grangemore	S02580	42	Band 1
Gransha Park(25-27)	S03130	6	Band 1
Gransha Road(26-28)	S00829	3	Band 1
Greenan	S02171	12	Band 1
Greenans	S01189	9	Band 1
Greenhill (WWTW)	S01155	12	Band 1
Greenville	S03133	24	Band 1
Grove Park	S01443	27	Band 1
Grove Road(21-23)	S04873	6	Band 1
Hazelbank	S02134	24	Band 1
Hillcrest (Antrim)	S01111	24	Band 1
Hillhead Road (Down)	S02135	6	Band 1
Hillhead Road(127-131)	S01808	9	Band 1
Hillside Road(121)	S01722	6	Band 1
Hillside Road(7-9)	S04145	6	Band 1
Hilltown Road	S02702	15	Band 1
Hollybank Road(10)	S01774	6	Band 1
Hollybank Road(54)	S01775	15	Band 1
Horse Park (5-7)	S04086	6	Band 1
Hunter Bungalows	S03136	18	Band 1
Inishargy Road(10-12)	S00210	6	Band 1
Inishargy Road(2-8)	S00212	12	Band 1
Inishargy Road(36-48)	S00211	29	Band 1
Inishmagh	S02845	15	Band 1
Jacksons Crescent (1-6)	S04106	18	Band 1
Jacksons Crescent (7-8)	S04107	6	Band 1
Jacksons Crescent (9-10)	S04108	6	Band 1
Jennys Lane	S02408	17	Band 1
Jerrettspass (WWTW)	S02297	39	Band 1
Katesbridge Road(79-85)	S02110	12	Band 1
Keady (Fermanagh)	S03138	18	Band 1
Kearney(Retention Tank)	S00225	66	Band 1
Keenaghan (1)	S01578	6	Band 1
Keenaghan (2)	S01579	12	Band 1
Keenaghan (Tyrone)	S03139	18	Band 1
Kilbroney Park(1-4)	S02725	12	Band 1
Kilcarn Road(7-9)	S00250	6	Band 1
Kilclean Road (80-82)	S04102	6	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Kildress Terrace	S01580	18	Band 1
Kilgarrett	S03141	12	Band 1
Killaloo	S03142	88	Band 1
Killaughey Road(252-254)	S00837	6	Band 1
Killea WTW(Septic Tank)	S03505	3	Band 1
Killeen (Armagh)	S02294	97	Band 1
Killinchy Road(96-100)	S04146	9	Band 1
Killogue	S01112	18	Band 1
Killycurry Road(30-32)	S04138	6	Band 1
Killygore	S01444	50	Band 1
Killylane WTW(Septic Tank)	S01317	3	Band 1
Killymuck	S01583	244	Band 1
Killyneese Road(14-16)	S01809	6	Band 1
Killysavan	S02137	30	Band 1
Kilmachugh	S02583	27	Band 1
Kilmood	S00255	169	Band 1
Kilnacart	S02861	12	Band 1
Kilross	S01622	74	Band 1
Kilskeery	S03148	91	Band 1
Kiltubbrid (WWTW)	S02588	33	Band 1
Kinego Cottages	S02856	12	Band 1
Kinneyglass Road(87-89)	S01751	6	Band 1
Kinturk	S01584	18	Band 1
Knock Terrace	S02139	36	Band 1
Knockanroe	S01585	12	Band 1
Knockans (WWTW)	S01114	6	Band 1
Knockbrack	S03151	22	Band 1
Knockmoyle	S03152	95	Band 1
Knocknagore (WWTW)	S02409	15	Band 1
Knocknarea Road	S02432	15	Band 1
Knocknatavanna	S01190	22	Band 1
Knockonny	S03153	18	Band 1
Largy Cottages(1)	S01776	30	Band 1
Laurelvale Road	S02140	12	Band 1
Leeke Road	S04092	32	Band 1
Legacurry (Down)	S00321	124	Band 1
Legacurry (Tyrone)	S03156	19	Band 1
Legaghory	S03157	30	Band 1
Legatirriff	S02430	23	Band 1
Lessans	S00281	18	Band 1
Letterbin (WWTW)	S03158	60	Band 1
Letterbreen	S03160	88	Band 1
Letterkeen	S03161	12	Band 1
Limestone (1)	S03164	6	Band 1
Limestone (2)	S03163	6	Band 1
Lisbane Road(38-40)	S00839	6	Band 1
Lisbarnet Road (47-53)	S00245	12	Band 1
Liscorrán Road(3-5)	S02389	6	Band 1
Lisdoart (1)	S03166	58	Band 1
Lisdoart (2)	S03167	16	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Lisdown	S02585	22	Band 1
Lislea Terrace	S01624	18	Band 1
Lismoyle	S01625	24	Band 1
Lisnadill (WWTW)	S02586	22	Band 1
Lisnagade Road(54-56)	S02161	6	Band 1
Lisnagalt	S01157	6	Band 1
Lisnagat Road(34)	S01738	6	Band 1
Lisnagat Road(64)	S01745	6	Band 1
Lisnagunogue	S01192	95	Band 1
Lisnahall	S01587	50	Band 1
Lisnakilly	S03168	33	Band 1
Lisnalea	S02274	72	Band 1
Lisnamorrow	S01810	15	Band 1
Lisnamuck (Coleraine)	S01158	24	Band 1
Lisnamuck (Magherafelt)	S01626	49	Band 1
Lisnaragh	S03169	24	Band 1
Lisnevanagh	S01421	31	Band 1
Lisnisk	S01159	15	Band 1
Lisowan	S00287	51	Band 1
Longfield (Moorside Villas)	S01627	95	Band 1
Longs Glebe	S01160	78	Band 1
Lough Bradan WTW (Septic Tank)	S03507	3	Band 1
Lough Fea (WwTW)	S04087	3	Band 1
Lough Island Reavy WTW (Septic Tank)	S02670	3	Band 1
Lough Macrory WTW (Septic Tank)	S03509	3	Band 1
Lough Road(29-31)	S04139	9	Band 1
Loughan Road (Tyrone)	S03175	27	Band 1
Lower Grange Road(20-26)	S01811	12	Band 1
Lower Rashee Road (15-21)	S05188	12	Band 1
Luney	S01628	17	Band 1
Lurgancahone Road(35-39)	S02707	9	Band 1
Lurgancahone Road(57-59)	S02708	6	Band 1
Magee Terrace	S02292	15	Band 1
Magheracoltan	S03176	21	Band 1
Magheramore Road(89)	S01753	9	Band 1
Magheramourne (WWTW)	S01464	85	Band 1
Magheraville	S02589	12	Band 1
Maghernarhar	S01193	12	Band 1
Maglion Terrace	S02147	36	Band 1
Main Road Cloughy (103-111)	S00223	15	Band 1
Managher	S01162	15	Band 1
Manor House	S02590	12	Band 1
Manse Road (Antrim)	S01710	6	Band 1
Manse Road (Down)	S02148	12	Band 1
Marlaco Road	S02149	28	Band 1
Mayoghill (WWTW)	S01164	6	Band 1
Maytown Road	S02275	6	Band 1
McCandless Terrace	S02150	36	Band 1
McCleary	S01165	6	Band 1
McKinley Park	S02276	45	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
McNally Park(1-6)	S04124	18	Band 1
Middle Braniel Road(80-90)	S00857	18	Band 1
Milltown (Burndennet)	S03184	45	Band 1
Milltown (Maghera)	S01630	20	Band 1
Milltown(Artigarvan)	S03183	12	Band 1
Minterburn Road(115-117)	S04134	6	Band 1
Molenan	S03185	36	Band 1
Moneybrannon Road(89)	S01754	6	Band 1
Moneycanon	S03188	37	Band 1
Moneycarrie (WWTW)	S01166	15	Band 1
Moneydig	S01167	61	Band 1
Moneynick Road(118)	S01757	12	Band 1
Moneynick Road(94)	S01761	12	Band 1
Moneyreagh Road (51-55)	S00338	9	Band 1
Moneyreagh Road(139-141)	S00852	6	Band 1
Moneyscalp	S02710	21	Band 1
Monmurry	S03189	24	Band 1
Moorfield	S03190	18	Band 1
Moss Road(36-38)	S00853	3	Band 1
Moss Road(76-78)	S00244	6	Band 1
Mossvale Terrace	S02153	36	Band 1
Mount Ida	S02154	6	Band 1
Mountain View (Drumintee)	S02278	36	Band 1
Mountain View (Tullymurry)	S02712	36	Band 1
Mountcastle	S03191	12	Band 1
Movenis Road(17)	S01728	6	Band 1
Movilla Road(136-140)	S00232	9	Band 1
Moyagall Road(115-117)	S01799	6	Band 1
Moyarget Road(178)	S01729	6	Band 1
Mulderg (WWTW)	S03194	55	Band 1
Mullaghboy Road(136-138)	S01812	6	Band 1
Mullahead Road (WWTW)	S02418	9	Band 1
Mullan Road(35)	S01739	6	Band 1
Mullans (Fermanagh)	S03196	6	Band 1
Mullynaburtlan	S03197	18	Band 1
Mullyroddan	S02851	21	Band 1
Munie (WWTW)	S01466	33	Band 1
Murdocks Lane(1-6)	S00850	17	Band 1
Navery Road	S01119	12	Band 1
New Road(37-39)	S00830	6	Band 1
Newcastle Road(18-20)	S00841	6	Band 1
Newmills Road(70-72)	S01128	6	Band 1
Newry Road Rathfriland (80-83)	S02726	6	Band 1
Noones Vale	S01632	53	Band 1
Oakland Villas	S01711	18	Band 1
Oaklands (Broughshane)	S01207	3	Band 1
Old Green	S01448	17	Band 1
Old Holywood Road(190-196)	S00340	12	Band 1
Oldstone Terrace(8)	S01779	24	Band 1
Oliver Plunkett Park	S02284	84	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Oneill Terrace	S02263	33	Band 1
Orahilly Park	S02283	37	Band 1
Orritor Craigs	S01592	6	Band 1
Orritor Road(182)	S02017	12	Band 1
Owenbeg (WWTW)	S03206	30	Band 1
Parsonage Road(110-120)	S00831	18	Band 1
Pharis Road(15)	S01727	12	Band 1
Point Road(29-33)	S01813	15	Band 1
Pomeroy Road	S02901	20	Band 1
Pomeroy Road(47-49)	S01814	6	Band 1
Portadown Road (Tandragee)	S02175	12	Band 1
Portaferry Road(96-100)	S00231	9	Band 1
Priestland	S01169	85	Band 1
Priestland Road (51-53)	S04096	6	Band 1
Procklis	S01450	73	Band 1
Quarter Road	S00222	9	Band 1
Racavan	S01451	37	Band 1
Railway view(3)	S01785	6	Band 1
Rathfriland Road	S02157	12	Band 1
Rathlin (Retention Tank)	S00902	150	Band 1
Ravara Road (9-19)	S00242	18	Band 1
Rehaghy Road(64-66)	S04144	6	Band 1
Rickamore Road(36-38)	S01780	6	Band 1
Ringneill Road(1-5)	S00240	9	Band 1
Ringsend	S01170	76	Band 1
Ringsend Road	S02158	6	Band 1
Ritchies Villas	S01634	12	Band 1
Riverside(16-20)	S02029	12	Band 1
Rock Cottages	S02172	21	Band 1
Rocktown	S01635	17	Band 1
Rornashane	S01121	42	Band 1
Rosevale Road	S02176	12	Band 1
Rosscolban	S03211	3	Band 1
Rosscor	S03212	15	Band 1
Rousky	S03214	33	Band 1
Saval More Cottages	S02715	19	Band 1
Scotstown Road (7-9)	S04117	6	Band 1
Scribbagh (WWTW)	S03216	14	Band 1
Seagahan	S02530	24	Band 1
Sentry Box Road (20-22)	S02165	6	Band 1
Seven Mile Straight(177)	S01781	12	Band 1
Seven Mile Straight(78)	S02018	6	Band 1
Seven Mile Straight(82)	S02019	6	Band 1
Seven Mile Straight(86)	S02020	6	Band 1
Shaneoguestown Road(38)	S01782	6	Band 1
Sherrigrim	S01596	18	Band 1
Shinn Road	S02716	18	Band 1
Shinny Road(20-22)	S01125	6	Band 1
Shore Road (Castle View)	S01797	12	Band 1
Silent Valley (Septic Tank 1)	S00174	3	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Silent Valley (Septic Tank 2)	S00174	3	Band 1
Silent Valley (Septic Tank 3)	S00174	3	Band 1
Silent Valley (Septic Tank 4)	S00174	3	Band 1
Silent Valley (Septic Tank 5)	S00174	3	Band 1
Skernahergney	S01597	12	Band 1
Skerry View	S01452	33	Band 1
Soldierstown	S02431	32	Band 1
Springfield	S03222	83	Band 1
Springhill Road(1)	S01713	14	Band 1
Springwell Crescent(1-6)	S04135	21	Band 1
St Annes Terrace	S02722	18	Band 1
St Bridgids Villas	S02286	27	Band 1
St Johns Terrace (Kilcoo)	S02717	30	Band 1
St Marys Terrace	S02718	18	Band 1
St Patricks Villas	S02719	27	Band 1
Staffordstown Road	S01426	6	Band 1
Stangmore (WWTW)	S02854	18	Band 1
Station Road(155-157)	S00854	6	Band 1
Stradreagh (Septic Tank)	S03131	12	Band 1
Straid (Ballymena)	S01455	53	Band 1
Straid Road(111)	S01719	6	Band 1
Straid Road(12)	S01721	6	Band 1
Stranagard	S01815	6	Band 1
Tamnadeese Road(7-9)	S01816	6	Band 1
Tartaraghan	S02421	50	Band 1
Tattysallagh	S03227	84	Band 1
Teeraw	S02598	12	Band 1
The Demesne	S00289	6	Band 1
The Loup (WWTW)	S01588	239	Band 1
The Skeagh	S02163	9	Band 1
Thorney Glen	S00284	50	Band 1
Tibaran Cottages	S04127	24	Band 1
Tirquin	S03230	24	Band 1
Toberkeagh	S01195	27	Band 1
Tobermore Road(144-146)	S01817	6	Band 1
Torr Head	S01196	6	Band 1
Trench Road (66-70)	S04118	9	Band 1
Tromra	S01197	33	Band 1
Tubber Road (10-16)	S00207	12	Band 1
Tullaghmore Road(41-43)	S01818	6	Band 1
Tully (WWTW)	S03232	46	Band 1
Tully Road Headworks	S03975	2136	Band 4
Tullyard(Tyrone)	S03233	12	Band 1
Tullyelmer (WWTW)	S02599	6	Band 1
Tullygrawley	S01457	33	Band 1
Tullyhubbert Road(75-81)	S00258	12	Band 1
Tullyleek	S02855	24	Band 1
Tullymore Road (43-45)	S04119	6	Band 1
Tullyreavy	S01600	18	Band 1
Tullyroan	S02600	36	Band 1

WWTWs	CAR ID	2009-10 AMS PE	PE Band
Tullyveagh Road(2-4)	S01819	6	Band 1
Tulnacross Road(44-46)	S01820	6	Band 1
Tummery	S03234	24	Band 1
Tureagh	S01198	27	Band 1
Turraloskin	S01199	23	Band 1
Tursallagh	S03235	18	Band 1
Upper Ballygelagh Road(12-18)	S00845	12	Band 1
Upper Cranlome Road	S02893	6	Band 1
Upper Malone Road	S04026	24	Band 1
Victoria Road (277-279)	S04111	6	Band 1
Whin Road (21-23)	S04122	6	Band 1
Whitechurch Road (45-53)	S00213	15	Band 1
Whitegate Road	S02167	9	Band 1
Whitelough Road(29-31)	S04137	6	Band 1
Whitepark Road(211)	S01732	6	Band 1
Whitepark Road(56)	S01741	12	Band 1
Whitepark Road(71)	S01746	6	Band 1
Windmill Road(24-32)	S00235	15	Band 1
Windmill Road(71-73)	S04159	6	Band 1
Woaghternerry	S03239	30	Band 1
Woburn Road (63-69)	S00234	12	Band 1
Woodburn/Dorisland WTW (Septic Tank)	S00011	3	Band 1

Table 17a

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 17a SEWERAGE EXPLANATORY FACTORS
SEWERAGE SUB - AREA EXPLANATORY FACTORS (TOTAL)**

DESCRIPTION	UNITS	DP	1	2	3	4	5	6	7	8	9	
			AREA 1 CG	AREA 2 CG	AREA 3 CG	AREA 4 CG	AREA 5 CG	AREA 6 CG	AREA 7 CG	AREA 8 CG	Total CG	
A SEWERAGE SUB AREAS GENERAL												
Area name:-												
1	Annual average resident connected population	000	1								1434.3	C4
2	Annual average non-resident population	000	1								19.3	C3
3	Volume of sewage collected (daily average)	MI/d	1								343.2	C3
4	Total connected properties	nr	0								654120	C3
5	Area of Sewerage District	km ²	0								13520	B2
B SEWERAGE DATA												
6	Total length of sewer	km	0								14746	B3
C Costs												
7	Sewerage: Direct Costs	£000	0								17135	
8	Sewerage: Power Costs	£000	0								5567	
9	Sewerage: Service Charges	£000	0								0	
10	Sewerage: General & Support Expenditure	£000	0								9535	
11	Sewerage: Functional Expenditure	£000	0								26670	

Table 17a Sewerage Explanatory Factors- Sewerage Sub-Area Explanatory Factors**Line 1 - Annual average resident connected population (Total)**

AIR09	Confidence Grade	AIR10	Confidence Grade
1,335.7 x 10 ³ reported 1,392.8 x 10 ³ recalculated	C4	1,434.3 x 10 ³	C4

The guidance for Table 17a includes the following text:

“Companies must check that the following data are consistent. Companies must explain in the commentary any reasons why this data is not consistent.

- *Annual average resident connected population in table 17a (line 2, 'total' column) plus annual average non-resident population in table 17a (line 3, 'total' column) should equal the total connected population in table 13 (line 10)”*

NI Water has not calculated the Total Annual Average Resident Connected Population independently of the Total Annual Average Non-Resident Population and the Total Connected Population. Instead, the Company has used the consistency check (above) to derive the Total Annual Average Resident Connected Population.

- According to AIR10: Table 13: Line 10, the total connected population (comprising resident and non-resident population) was 1,453.610 x 10³.
- According to AIR10: Table 17a: Line 3, the annual average non-resident population was 19.279 x 10³.
- By calculation, the annual average resident connected population

$$= 1,453.610 \times 10^3 - 19.279 \times 10^3 = \mathbf{1,434.331 \times 10^3}.$$

Recalculation of AIR09 Value

In AIR09, a Table 17a: Line 1 value of 1,335.7 x 10³ was reported. This figure was based on a Table 13: Line 10 value of 1,366.33 x 10³. The Table 13: Line 10 value was later updated and reported as 1,423.48 x 10³, giving a recalculated Table 17a: Line 1 value of 1,392.8 x 10³.

Significant year on year changes in reported figures including an explanation of any factors that may have influenced the figure

The AIR10 figure of 1,434.3x 10³ is 41.5 x 10³ higher than the AIR09 recalculated figure of 1,392.8 x 10³. This represents an increase of 3.0% and is attributed to a decrease in annual average non-resident connected sewerage population of 11.4 x 10³ and an increase in total connected sewerage population of 30.1 x 10³.

Confidence Grade

There are two figures associated with the calculation of AIR10: Table 17a: Line 1: Column 9. The first figure is derived from AIR10: Table 13: Line 10 and was allocated a confidence grade of C4. The second figure is derived from AIR10: Table 17a: Line 2: Column 9 and was allocated a confidence grade of C3. Since the larger of the two figures in this calculation has been allocated a confidence grade of C4, a **C4** confidence grade will be allocated to Table 17a: Line 1: Column 9.

Implementation of Reporter's Recommendations

NI Water has adopted a consistent approach for population figures as explained in the commentary.

Line 2: Column 9: Annual average non-resident population (Total)

AIR09	Confidence Grade	AIR10	Confidence Grade
30.6 x 10 ³	C3	19.3 x 10 ³	C3

NI Water has included holiday and tourist population connected to the sewerage system, averaged over the year.

NI Water has not included any allowance for daily commuters or day visitors.

Statement detailing estimation method used including date of data on which estimate is made

NI Water obtained a copy of the "GB and Overseas Visitors to Northern Ireland Summary for January - August 2009" from the Research section of the NI Tourist Board website¹.

The report was based on data from NITB's Passenger Survey and Fáilte Ireland's Survey of Overseas Travellers.

- According to the publication, the number of non-resident visitor nights for Northern Ireland (Jan-Aug 09) was 4,892,000.

NI Water obtained copies of Monthly Hotel Occupancy Reports and Monthly Guesthouse and Bed and Breakfast Occupancy Reports from the Research section of the NI Tourist Board website.

- According to the occupancy reports, 1,721,400 hotel bed-spaces and 393,073 guesthouse/B&B bed-spaces were sold (Jan-Aug 09) totalling 2,114,473.

¹ www.nitb.com

- The number of bed-spaces sold from Jan-Aug 09 (2,114,473) as a percentage of the total number of bed-spaces sold in 2009 (3,041,473) was 69.52%.
- The number of non-resident visitor nights for Northern Ireland (Jan-Dec 09) was estimated as follows:

$$(4,892,000 / 69.52) \times 100 = 7,036,824$$

- The annual average non-resident population was estimated as follows:

$$7,036,824 / 365 \text{ nights} = \mathbf{19,279}.$$

In obtaining the estimated number of visitor nights, NI Water has avoided the assumption specified in the guidance of “a two-thirds occupancy rate of estimated bed-spaces available for non-residents for four months in the year”.

Changes in Methodology

In previous years, this calculation was based on an estimated annual number of non-resident visitor nights for Northern Ireland, published in NI Tourist Board’s “Preliminary Visitor Tourism Forecast”. According to the publication, the estimate was based on January to August data from both the Northern Ireland Passenger Survey (NITB) and the Survey of Overseas Travellers (Fáilte Ireland).

This year, NI Tourist Board has published the actual number of non-resident visitor nights (Jan-Aug 09) in their “GB and Overseas Visitors to Northern Ireland Summary”. The annual number was estimated by NI Water on the basis that the percentage bed-spaces sold for hotel, guesthouse and bed and breakfast establishments (Jan-Aug 09) was 69.52%.

Significant year on year changes in reported figures including an explanation of any factors that may have influenced the figures

Since the only variable that features in the calculation of AIR: Table 17a: Line 2: Column 9 is the number of visitor nights, any change in reported figures can be directly attributed to fluctuations in tourism levels.

A comparison of the estimated numbers of visitor nights in 2008 (11,214,000) and 2009 (7,036,824) reveals there has been a decrease in tourism. The “Northern Ireland Visitor Performance Year End Estimates 2009” states that 2009 brought one of the toughest years for tourism worldwide and despite the weakness of sterling against other currencies, visits from other Eurozone countries and North America did not increase. Overall, the business tourism sector saw significant declines, and the Visiting Friends and Relatives sector also struggled in the uncertain economic climate.

Confidence Grade

The annual average non-resident population is an estimate based on several sources of information.

1. The GB and Overseas Visitors to Northern Ireland Summary provides the actual number of non-resident visitor nights for Northern Ireland but only for Jan-Aug 09. The number is based on surveys conducted by both NITB and Fáilte Ireland. An annual equivalent is only obtainable through extrapolation.
2. The Hotel and Guesthouse/B&B Occupancy Reports provide the numbers of bed-spaces sold. However, the numbers are based on the extrapolation of data for a representative sample group of establishments.

NI Water has assigned a confidence grade of **C3** to account for known deficiencies in the reliability and accuracy of the reported figure.

Line 4 – Total Connected Properties

Northern Ireland Water's (NIW) property data is provided from the RapidXtra Property Summary Report, provided by Echo and validated through the Contract Office.

The confidence grade has remained at C3 and ensures consistency with Table 13. (As per Reporters AIR09 recommendation).

We would expect this confidence grade to improve as the benefits of the data quality programme are realised.

Line 5 - Area of sewage district

Differences in data between current and previous year

The figure provided equates to the total land mass of Northern Ireland excluding major bodies of inland water. The same LPS product has been used to determine the Area of Sewerage District. There remains only one sewer district for all of Northern Ireland. The confidence grade of the data will remain the same as the previous year.

Line 6 – Total length of sewer

Differences in data between current and previous year

There has been no change to the structure of the data reported on this year from the previous years that would directly affect the totals provided. The same queries have been used to extract the data from the Corporate Asset Register and have been checked to ensure that they are still relevant. The confidence grade of the data will remain the same as the previous year. There have been no significant improvements in data quality since the AIR09 reports. Any new data will have adhered to the NIW Code of Practice for the submission of asset data ensuring that data quality levels have been maintained throughout the year.

Lines 7-11 – Costs

The overall approach and allocation process for Table 17a has not changed since AIR08. There are still some limitations and it has not been possible to fully complete the Information Returns for 2010. Work is on going for AIR11,

through the Cost to Serve Project, on the sewerage areas the costs will be split between. The figures to population Column 9 have been taken from Table 22 (NIW only).

Line 7 – Direct Costs

It is not yet possible to split the costs into areas, however, work is on going for AIR11. A total figure has been supplied in Column 9 which agrees to the direct sewerage costs in Table 22, Line 9 Column 1. See Table 22 commentary. Direct Costs have reduced by circa £13.4M, primarily as a result of the changes in methodology on allocation of general & support costs as agreed with the Utility Regulator. See Table 22 commentary for further explanation.

Line 8 – Power Costs

The figure for Power costs agrees to Table 22, Line 2 Column 1. See Table 22 commentary. Power costs have reduced by circa £0.4M from AIR09.

Line 9 – Services Charges

There are no services charges.

Line 10 – General & Support

The figure for General & Support costs agrees to Table 22, Line 10 Column 1. See Table 22 commentary and methodology. This is £7.6M higher than AIR09 primarily due to the change in methodology on the allocation of General & support costs in Table 22 agreed with the Utility Regulator (see Table 22 commentary).

Line 11 – Functional Expenditure

This is a calculated cell and is the total of Line 7 and Line 10. This figure agrees to Table 22, Line 11 Column 1. The costs in this line have decreased by circa £5.8M from AIR09.

Table 17b - Sewerage Explanatory Factors – Sewerage Treatment Works – Large Works Information Database

NI Water has a number of sites which fall into the Band 6 category and are to be reported within this submission. The sites differ from the AIR09 submission as 3 of the named sites have now been transferred to PPP concessionaire. The WWTW to be reported on for AIR10 are:

AIR10 Table 17b Band 6 Sites for Submission

LIMS Code	LIMS Name	Confirmed PE from AMS	AIR10 Band
S13BE	Tullagherley WWTW	113769	Band 6
S15AO	Milltown WWTW	65005	Band 6
S15BS	Larne WWTW	27967	Band 6
S17HF	North Coast (Craigtownmore) WWTW	65320	Band 6
S25AC	Moygashel WWTW	61180	Band 6
S27AC	Newry WWTW	63832	Band 6
S34AD	Newtownbreda WWTW	40109	Band 6
S34AE	Whitehouse WWTW	88373	Band 6
S34AG	Carrickfergus WWTW	32034	Band 6
S34AK	Belfast WWTW	364794	Band 6
S37AA	New Holland WWTW	63012	Band 6
S37AB	Dunmurry WWTW	45795	Band 6
S43CI	Culmore WWTW	130834	Band 6
S45IB	Omagh/Mountjoy WWTW	48765	Band 6

AIR09 Table 17b Band 6 Sites removed from Submission

LIMS Code	LIMS Name	Confirmed PE from AMS	AIR10 Band
S23AA	Ballynacor WWTW	50000	Band 6
S23AB	Bullay's Hill WWTW	51147	Band 6
S25AA	Armagh WWTW	30300	Band 6

All consents reported have both BOD and SS as part of the consent as issued by Northern Ireland Environment Agency (NIEA).

There are no consents for ammonia by itself without accompanying BOD and SS consents.

The consent conditions as issued by NIEA are based on 95%ile limits.

As listed above Ballynacor, Bullays Hill and Armagh WWTW transferred to a PPP concessionaire in 2009, and NI Water has requested NIEA to revoke the respective consents.

The PE information and confidence grading was provided by Asset Performance Team, as part of their AIR10 return as at 31st March 2010.

The classification of treatment works was provided by Asset Performance Team.

No assumptions have been made for the return.

For reference, the works in Band 5 which have the potential to be included in subsequent returns are listed here:

AIR10 Table 17b Band 5 Sites for Reference

LIMS Code	LIMS Name	Confirmed PE from AMS	AIR10 Band
S13CH	Cookstown WWTW	20659	Band 5
S13GK	Magherafelt WWTW	14630	Band 5
S15AA	Ballyclare WWTW	18708	Band 5
S17BP	Glenstall WWTW	17889	Band 5
S25AB	Coalisland WWTW	12095	Band 5
S27AA	Banbridge WWTW	23194	Band 5
S27AD	Warrenpoint WWTW	14939	Band 5
S36AA	Downpatrick Aeration WWTW	18446	Band 5
S36BB	Kilkeel WWTW	11089	Band 5
S36BO	Newcastle WWTW	12221	Band 5
S43GI	Limavady WWTW	16061	Band 5
S45JA	Strabane WWTW	20766	Band 5
S47HK	Enniskillen New WWTW	24269	Band 5

Lines 9-15 - Costs

There was a small change to the approach to populating the figures in Table 17b from AIR08 and AIR09, M & E Costs coded to Activity 510 have been removed and included as general & support as recommended by the Utility Regulator. Power costs at WWTWs have been split between sludge treatment and sewage treatment, improved coding by operational staff has resulted in a clearer split between sludge and sewage treatment and a definition and list of terminal pumping stations have been agreed and the WWTWs they feed into.

The costs are a further breakdown by location of the Band 6 expenditure detailed in Table 17f line 6 and are populated with the information available for the year ended 31st March 2010 as at 3rd June 2010. The Population Equivalent (PE) information used to complete this table was received by management accounts on 17th May 2010. The transfer of Ballyrickard WWTW's in April 2009 to PPP has reduced the number of sites included in Table 17b (NIW only). The PPP sites North Down and Kinnegar have also not been included in this table.

Line 9 – Direct Costs

Direct Costs include Power 521X, Contractors 531X, Other Contractors 532X, Materials 541X, Chemicals 548X and Direct Labour (611X and 612X-Wages overheads).

18 WWTW's fall into Band 6 in accordance with the regulatory guidance for Table 17f and each of these have their own separate finance location – i.e. W location code.

There remains one meter at each WWTWs; so as in AIR09, the Wastewater Field managers provided a percentage estimate of power costs between sewage treatment and sludge treatment at each of the WWTWs where there are both activities. These percentages were applied to the power costs to populate Line 9. There is one electricity meter at Duncrue Street which includes the costs for the Belfast WWTWs (W10) and the Incinerator (W01). The power team supplied an estimated 60:40 split between the Belfast WWTWs and the Incinerator which has been used to calculate the amount relating to sewage treatment at Belfast. The estimated split is the same as AIR09.

The costs have reduced from AIR09 by £4.1M partly a result of the exclusion of Ballyrickard which transferred to PPP and received service commencement in April 2009. There are also reduced costs at Armagh WWTW's as this works transferred to PPP and received service commencement in August 2009. Ballinacor and Bullays Hill WWTW's have cost less during 0910 as the WWTW's are due to transfer at the beginning of 2010/11 financial year and the sites were operated by the contractor for part of the 2009/10 year. The change in methodology on the apportionment of general & support as agreed with the Utility Regulator has had the most significant impact on the direct costs in this line.

Line 10 – Power Costs

Power costs show an increase by circa £0.4M from AIR09.

Line 11 – Service Charges

There are no service charges.

Line 12 – General & Support

The total general & support expenditure was taken from Table 22 Line 10 Column 2 (see Table 22 methodology and commentary). This figure does not include the general & support costs for NIW PPP staff. This figure was allocated across all the WWTWs in this table based on direct labour costs (611X – Costed Wages Charge and 612X - Wages overheads). No Costs have been allocated to the PPP site North Down and Ballyrickard.

The figure has increased by £2.4M from AIR09 primarily as a result of the changes in methodology on allocation of general & support costs between sewerage, sewage treatment and sludge treatment and disposal, as agreed with the Utility Regulator. For further explanation see Table 22 commentary.

Line 13 – Functional Expenditure

This is a calculated line and is the total of Line 9 and Line 12. The total in the workings agrees to Table 22 (NIW Only) Column 2 Line 11. Costs have decreased by circa £1.7M since AIR09.

Line 14 – Terminal Pumping Costs

This information was populated in the same way as AIR09. The power costs relating to the terminal pumping station of each WWTWs has been included where possible. Not all WWTWs have terminal pumping station power costs because some are gravity fed. Three of the works (Ballymena, Newry and Omagh) include the pumping station cost in the W location code, therefore are in Line 10, and some have no direct feeds i.e. the pumping station feeds the public sewer and this feeds the WWTWs.

Line 15 – Sludge Costs

Sludge treatment is a separate activity in the accounts and the direct costs are not included in Line 9 to Line 13. This line was incorrectly populated in AIR09 with Sludge treatment costs which are recorded under a separate activity code – 621.

Table 17c - Sewerage Explanatory Factors - Sewage Treatment Works Numbers**General**

The Asset Management Section (AMS) has co-ordinated information from PPP for the population of 'Table17c – PPP' table and the completion of 'Table 17c – total' table, and the associated commentary from PPP.

NIW Only

It should be noted that the banding of the WWTWs is based on the latest Populations Equivalents minus tourist PEs. Since AIR09, PEs for 143 WWTWs have been updated.

Changes regarding WWTWS from the AIR09 period are as follows:

- a. 12 WWTWs have been rationalised either pumped away or gravitated to larger WWTWs in last financial year.
- b. 3 WWTWs have been decommissioned.
- c. 6 WWTWs have been designated as PPP sites (with another NIW WWTWs now pumping to a PPP site).
- d. There are 4 new additions for sites recently adopted by NIW.

This is a net decrease of 18 WWTWs from AIR09 reporting.

We have assumed the Bands to be:

Small works

- a. Size band 1 ≤ 15 kg BOD5/day (population equivalent: 0 - 250)
- b. Size band 2 >15 but ≤ 30 kg BOD5/day (population equivalent: 251 - 500)
- c. Size band 3 >30 but ≤ 120 kg BOD5/day (population equivalent: 501 – 2,000)
- d. Size band 4 >120 but ≤ 600 kg BOD5/day (population equivalent: 2,001 –10,000)
- e. Size band 5 >600 but ≤ 1500 kg BOD5/day (population equivalent: 10,001 – 25,000)

Large Works

- i. Size band 6 > 1500 kg BOD5/day (population equivalent: $> 25,000$)

The total number of WWTWs in Table 17C line 7 is the total of all works in this table i.e. 1058 including the screened outfalls (5 No.) and the unscreened outfalls (13 No). It should be noted that when the Asset Information Centre was requested to query NIW's Corporate Asset Register for NIW's number of WWTWs, it revealed 1059. However CAR lists Ballyhalbert WWTWs twice as the works is on two different sites although it is one single works.

The Reporters report for AIR09 recommended that the difference in total population used to calculate the size bands and the population given in Table 13 Line 10 should be investigated and consideration given to a harmonised

approach. The table below shows the AIR10 comparison between the two figures.

Total Residential Population used to Calculate Table 17C for AIR10	1205727
Total Population connected to the sewerage system based on Table 13 Line 10 for AIR10	1452886
Difference	247159

As can be seen there is a difference of 247159. However the Table 17c information does not include the residential population within PPP catchments which equates to approximately 308294. (Please note this is based on APT information updated from AIR09 and may differ from information held by the PPP section).

If this figure is added to the 17c figure then the total is 1514021 this is 61135 greater than the figure held in Table 13 Line 10, approximately 4.2% larger.

A further comparison was carried out based on PPP PEs for AIR10 and subtracting all non-residential elements held by APT. The details can be seen in the table below.

Name of Treatment Works	Equivalent Population (From PPP Section)	APT Non-Residential Pe held against PPP Catchments (Includes Non-Residential, Trade, Schools, Large water Consumers)	Residential Population (Based on PPP Equivalent Population)
North Down WWTW	72750	12905	59845
Armagh WWTW	30717	12613	18104
Richhill WWTW	2150	447	1703
Newtownards (Ballyrickard)	40533	13751	26782
Ballynacor WWTW	133866	68282	65584
Kinnegar	90,000	37635	52365
Total	370,016	145632	224384

As can be seen the residential population for the PPP sites is now 224384 if this is added to the 17c figure then the total is 1430111 this is 22775 less than the figure held in Table 13, approximately 1.57% smaller.

The Table 17c figure is based upon PEs held against the individual WWTWs catchments whereas the Table 13 figure is based on the Customer Services billing database (RAPID) which looks at Northern Ireland as a whole. To align this information would involve the analysis of all 1058 catchments in conjunction with RAPID, which is not feasible in the timeframe from AIR09 to AIR10. However based on the confidence ratings of both tables a discrepancy of either 4.2% or 1.57% (depending of which figure is used) does not seem unreasonable.

The Reporters report for AIR09 recommended that a consistent approach for population figures used in the 17 series tables should be adopted. The population figures used in Table 17c are the same as in 17d. These figures have also been supplied to the other parts of the business who populate Tables 17 a and b, hence population figures should be consistent.

The table below highlights the changes in band sizes from AIR09 to AIR10

Name of WWTWs	Car Id	AIR09 Band Size	AIR10 Band Size	Comment
Newtownards (Ballyrickard)	241	Band 6	PPP	This WWTWs is now a PPP site
Kilclief (RT)	269	Band 2	Pumpaway	This now pumps to Strangford
Lisbarnet (WWTW)	239	Band3	Pumpaway	This now pumps to Ringneil
Poundburn	318	Band2	Pumpaway	This now pumps to Annahilt
Ringneil (WWTW)	237	Band 1	Band 3	Pe increased from 170 to 673 as Lisbarnet now pumps to this WWTWs
Barnish Road (44-46)	1758	Band 1	Decommissioned	Individual septic tanks installed at the properties served by this WWTWs
Ballycastle (WWTW)	1071	Band 4	Band 5	Pe increased from 8414 to 12117 following a flow & load survey
Mullans (Antrim)	1118	Band 1	Band 2	Pe increased from 199 to 261 following an onsite house count by APT
Randalstown	1425	Band 4	Pumpaway	This now pumps to Antrim
Armagh (WWTW)	2558	Band 6	PPP	This WWTWs is now a PPP site
Artasooly	2559	Band 2	Pumpaway	This now pumps to Benburb
Ballynacor	2395	Band 6	PPP	This WWTWs is now a PPP site
Bullays Hill	2398	Band 6	PPP	This WWTWs is now a PPP site
Bush	2833	Band 3	Pumpaway	This now pumps to Coalisland
Castlewellan (WWTW)	2694	Band 4	Pumpaway	This now pumps to Annsborough
Cloghoge Road	2170	Band 1	Pumpaway	This now pumps to Tandragee
Cross Lane (2-6)	2911	Band 1	Decommissioned	Individual septic tanks installed at the properties served by this WWTWs

Name of WWTWs	Car Id		AIR09 Band Size	AIR10 Band Size	Comment
Donaghmore (WWTW)	2840	Band 3	Band 4		Pe increased from 1696 to 2151 following an increase in trade discharging in area
Drumman Hill	2575	Band 1	Pumpaway		This now pumps to Armagh
Loughdian	2146	Band 1	Gravity Away		This WWTWs now gravitates to Poyntzpass
Magheralin	2413	Band 3	PPP		This WWTWs is now a pumpaway to a PPP site
Richill	2597	Band 4	PPP		This WWTWs is now a PPP site
Seagoe (WWTW)	2420	Band 5	PPP		This WWTWs is now a PPP site
Stramore	2173	Band 1	Gravity Away		This WWTWs now gravitates to Gilford
Aghanloo (2)	2989	Band 3	Decommissioned		This works served a factory which is now closed
Oghill (1)	3205	Band 1	Gravity Away		This WWTWs now gravitates to Culmore
Lower Rashee Road (15-21)	5188		Band 1		This was previously an unconsented WWTWs
Conthem Rd	3180		Band 1		This site was adopted from NIHE
Tullynakill Road	5280		Band 1		This site was adopted from a private developer
Reaskmore Road	5286		Band 1		This site was adopted from NIHE

The table below highlights the changes in treatment category from AIR09 to AIR10.

Name of WWTWs	Car Id	AIR09 Treatment Category	AIR10 Treatment Category	Comment
Newtownards (Ballyrickard)	241	Sec Bio	PPP	This WWTWs is now a PPP site
Downpatrick (WWTW)	771	Sec Act	Ter A1	WWTWs upgraded since AIR09
Kilclief (Retention Tank)	269	Sea Out Screen	Pump Away	This now pumps to Strangford
Lisbarnet (WWTW)	239	Sec Act	Pump Away	This now pumps to Ringneil
Loughinisland (WWTW)	298	Prim	Sec Bio	WWTWs upgraded since AIR09
Maghera (Down)	305	Sec Act	Sec Bio	WWTWs upgraded since AIR09

Name of WWTWs	Car Id	AIR09 Treatment Category	AIR10 Treatment Category	Comment
Poundburn	318	Sec Bio	Pump Away	This now pumps to Annahilt
Ringneill (WWTW)	237	Sec Act	Ter A1	WWTWs upgraded since AIR09
Saintfield (WWTW)	290	Sec Bio	Sec Act	WWTWs upgraded since AIR09
Seahill (WWTW)	774	Prim	Sec Act	WWTWs upgraded since AIR09
Barnish Road(44-46)	1758	Prim	Decommissioned	Individual septic tanks installed at the properties served by this WWTWs
Draperstown	1615	Ter A1	Sec Act	WWTWs upgraded since AIR09
Oakland Villas	1711	Prim	Sec Bio	WWTWs upgraded since AIR09
Randalstown	1425	Sec Bio	Pumpaway	This now pumps to Antrim
Springhill Road(1)	1713	Prim	Sec Bio	WWTWs upgraded since AIR09
Tulnacross Road(44-46)	1820	Prim	Sec Bio	WWTWs upgraded since AIR09
Annsborough	2687	Ter B1	Sec Act	WWTWs upgraded since AIR09
Armagh (WWTW)	2558	Ter A2	PPP	This WWTWs is now a PPP site
Artasooly	2559	Sec Bio	Pump Away	This now pumps to Benburb
Ballycoshone	2689	Prim	Sec Bio	WWTWs upgraded since AIR09
Ballynacor	2395	Ter A2	PPP	This WWTWs is now a PPP site
Bullays Hill	2398	Ter B2	PPP	This WWTWs is now a PPP site
Bush	2833	Ter B1	Pump Away	This now pumps to Coalisland
Carrickrovaddy	2257	Prim	Sec Bio	WWTWs upgraded since AIR09
Castlewellan (WWTW)	2694	Ter B1	Pump Away	This now pumps to Annsborough
Cloghoge Road	2170	Prim	Pump Away	This now pumps to Tandragee

Name of WWTWs	Car Id	AIR09 Treatment Category	AIR10 Treatment Category	Comment
Cross Lane(2-6)	2911	Prim	Decommissioned	Individual septic tanks installed at the properties served by this WWTWs
Diviny	2403	Sec Act	Sec Bio	WWTWs upgraded since AIR09
Drumman Hill	2575	Sec Bio	Pump Away	This now pumps to Armagh
Hamiltonsbawn	2603	Ter B2	Sec Act	WWTWs upgraded since AIR09
Katesbridge Road(79-85)	2110	Prim	Sec Bio	WWTWs upgraded since AIR09
Loughdian	2146	Sec Bio	Gravity Away	This WWTWs now gravitates to Poyntzpass
Lower Ballinderry	2410	Sec Bio	Ter B2	WWTWs upgraded since AIR09
Magheralin	2413	Sec Bio	PPP	This WWTWs is now a pumpaway to a PPP site
Mullaghbane (Armagh)	2594	Prim	Sec Bio	WWTWs upgraded since AIR09
Mullaghglass (Newry)	2280	Sec Act	Sec Bio	WWTWs upgraded since AIR09
Richill	2597	Ter B1	PPP	This WWTWs is now a PPP site
Seagoe (WWTW)	2420	Ter B2	PPP	This WWTWs is now a PPP site
Lisnagade Road(54-56)	2161	Prim	Sec Bio	WWTWs upgraded since AIR09
Soldierstown	2431	Sec Act	Sec Bio	WWTWs upgraded since AIR09
Stramore	2173	Prim	Gravity away	This WWTWs now gravitates to Gilford
Aghanloo (2)	2989	Prim	Abandoned	This works served a factory which is now closed
Cranagh (WWTW)	3065	Prim	Sec Bio	WWTWs upgraded since AIR09
Drummack	3094	Prim	Sec Bio	WWTWs upgraded since AIR09
Myroe (WWTW)	3198	Sec Act	Sec Bio	WWTWs upgraded since AIR09
Oghill (1)	3205	Sec Bio	Gravity Away	This WWTWs now gravitates to Culmore

Name of WWTWs	Car Id	AIR09 Treatment Category	AIR10 Treatment Category	Comment
Portaferry (2)	5200	Sea Out Screen	Sec Act	WWTWs upgraded since AIR09
Lower Rashee Road (15-21)	5188	Not listed in AIR09	Sec Bio	This was previously an unconsented WWTWs
Conthem Rd	3180	Not listed in AIR09	Sec Bio	This site was adopted from NIHE
Tullynakill Road	5280	Not listed in AIR09	Sec Bio	This site was adopted from a private developer

**Difference between AIR09 and AIR10 for total in Table 17c
(Column 11, row 7)**

Total Number of Works for AIR09 -	1076
Total Number of Works for AIR 10 -	1058
Total Difference -	18

Note: PPP WWTWs are not included in this return for AIR10 (as being reported by PPP section).

With reference to lines 8 and 9, data regarding the ammonia consents of the Small WWTWs was obtained from a spreadsheet of standards obtained from the Environmental Regulation Team.

Changes to lines 8 and 9 of this table, from AIR09 to present are summarised below:

Line	Number Reported AIR09	Number Reported AIR10	Difference	Comment
8	46	48	2	7 new sites- Ballycastle, Orritor, Hilltown, Dromore (Tyrone), Enniskillen, Greencastle (Tyrone), Park 5 sites removed- Annahilt, Poundburn, Aghanloo 1, Aghanloo 2, Derrylin
9	35	41	6	12 new sites- Annahilt, Ballycranbeg, Ballyvoy, Crossmaglen, Dromore (Down), Galbally, Robinsonstown, Florencecourt, Irvinestown, Kinawley, Monea, Tamnaherin 6 sites removed – Lisbarnet, Bush, Killyman, Magheralin, Belleek (Fermanagh), Greencastle (Tyrone)

Table 17c PPP

Introduction: To define the Treatment Category of the relevant Treatment Works.

General

A number of the Omega PPP Facilities were in transition from NIW Operation to PPP Service during the reporting period. For the purpose of Table 17 the reporting is based on the following principles:

Non Financial Information (NFI) Tables 17b, c & d

Irrespective of whether or not the Facility was in Service, it is treated as a PPP Facility (Scheme) for the Reporting Period over which the Concessionaire held the Water Order Consent as the operator and retained the data. Consequently, NFI is reported as 'PPP Only' and not 'NIW Only' for the following:

1. Kinnegar WWTW
2. North Down Ards WWTW
3. Richhill WWTW
4. Ballyrickard WWTW
5. Armagh WWTW
6. Ballynacor (including Bullays Hill PS and Seagoe PS) WWTW

Lines 1 - 3 – Size bands 1 to 3

Nil Return.

Line 4 - Size band 4

Column 4 refers to the Richhill WwTW which is a Secondary Activated Treatment process which has been operated by the Omega PPP Contractor during the reporting period. This is an increase on 1 from last year.

Line 6 – Size band 6

Column 2 refers to the Kinnegar WwTW as Secondary Activated Treatment processes; has been operated by the PPP Contractor (CCWL) during the reporting period. There is no increase from last year.

Column 5 refers to the Armagh, Ballyrickard, North Down and Ballynacor WwTW's which are Secondary Activated Treatment process which has been operated by the Omega PPP Contractor during the reporting period. This is an increase on 3 from last year.

Line 8 – Small STW's with ammonia consents (5-10 mg/l)

Nil return.

Line 9 - Small STW's with ammonia consents (<=5 mg/l)

Refers to Richhill WwTW which is a small works with an ammonia consent of 2mg/l 95%ile and 10mg/l UTL. This is an increase on 1 from last year.

Table 17d - Sewage treatment works loads**General**

The Asset Management Section (AMS) has co-ordinated information from PPP for the population of 'Table 17c – PPP' table and the completion of 'Table 17d – total' table, and the associated commentary from PPP.

NIW Only

It should be noted that the banding of the WWTWs for this table is on the same basis as that used for Table 17c. It is based on the latest set of Populations Equivalents i.e. PEs (minus the allowance for the tourist population) held by the Asset Performance Team. Since AIR09 PEs for 143 WWTWs have been updated.

Trade effluent information was obtained from NIW's Trade Effluent Section, for each individual consented trader, which enabled easy conversion to PEs. The COD : BOD conversion factor of 2:1 was not used as more accurate flow based information was available to the Trade Effluent Section.

The allowance for the tourist population, which has been deducted for the purposes of band size determination, has been the proportion of PE allocated to hotels, and caravan and tent pitches only.

The loads reported in this table are the sums of the loads received by each WWTWs or outfall in each particular category, and hence include the proportion of PE allocated to hotels, and caravan and tent pitches.

1076 WWTWs were reported on in Table 17d for AIR09. Hence there has been an overall net reduction of 18 in the number of WWTWs being reported on, which is summarised as follows:

2. 12 WWTWs (Kilclief RT, Lisbarnet, Poundburn, Randalstown, Artasooly, Bush, Castlewellan, Cloghoge Road and Drumman Hill were pumped to other works. Loughdian, Stramore and Oghill (1) (gravitated away) have been rationalised with larger WWTWs.
3. 7 WWTWs are now the responsibility of the PPP consortium, namely Newtwnards (Ballyrivckard), Armagh, Ballynacor and Richill. Bullays Hill, Seagoe WWTWs and Magheralin WWTWs have been converted to pumping stations which now pump to Ballynacor PPP WWTWs).
4. 3 WWTWs (Barnish Road (44-46), Cross Lane (2-6) & Aghanloo (2)) have been decommissioned.
5. 4 WWTWs (Lower Rashee Road (15-21), Conthem Road, Tullynakill Road & Reaskmore Road) are now included in AIR10, which have come to the attention of NIW during the past year.

We have assumed the Bands to be:

Small works

- a. size band 1 <= 15kg BOD5/day (population equivalent: 0 - 250)
- b. size band 2 >15 but <= 30kg BOD5/day (population equivalent: 251 - 500)
- c. size band 3 >30 but <= 120kg BOD5/day (population equivalent: 501–

- 2,000)
- d. size band 4 >120 but <= 600kg BOD5/day (population equivalent: 2,001 –10,000)
 - e. size band 5 >600 but <= 1500kg BOD5/day (population equivalent: 10,001 – 25,000)

Large Works

- f. size band 6 > 1500kg BOD5/day (population equivalent: > 25,000)

The total number of WWTWs in Table 17C line 7 is the total of all works in this table i.e. 1058 including the screened outfalls (5 No.) and the unscreened outfalls (13 No.).

The Reporters Report on AIR09 recommended that NIW correct possible overestimation of total WWTWs loads due to the inclusion of offices/commercial premises. The majority of the residential and non-residential element of PEs used to calculate tables 17c and 17d was based on Pointer information from MapInfo. However it should be noted that the non-residential element of Pointer is made up of both commercial and unknown properties. At this present time it is not known what proportion of the unknowns are actually residential and which are non-residential and therefore it has been decided to include both elements when calculating the PEs for the band size.

Also due to the rural nature of Northern Ireland a large proportion of the population commute from rural to urban catchments and therefore the potential for overestimation may not be as excessive as other parts of the United Kingdom.

It is hoped that a number of flow and load studies should be completed by AIR11 and this should improve confidence in the PEs for these catchments.

The table below highlights all the 143 WWTWs for which PEs have been updated for AIR10.

The confidence grades of the data in lines 2 - 4 remain as C3, as although the PE confidence has been re-assessed as C5 there is greater confidence in process categories for the WWTWs, which warrants the raising of grade from C5 to C3.

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Difference between AIR10 & AIR09 Actual Pe (-ve indicates AIR10 Figure Smaller)	AIR09 Band Sizes	AIR10 Band Sizes	Change Band Size from AIR09
Aghalee	2394	1212	1205	-7	Band 3	Band 3	
Aghanloo (1)	2989	523	540	17	Band 3	Band 3	
Aghanloo (2)	2989	940	Abandoned	-940	Band 3		Y
Annahilt (WWTW)	317	1356	1756	399	Band 3	Band 3	
Annalong (WWTW)	300	3089	3044	-45	Band 4	Band 4	
Annsborough	2687	2383	6877	4494	Band 4	Band 4	
Antrim (WWTW)	1422	56570	65165	8595	Band 6	Band 6	
Ardglass (WWTW)	268	3366	3414	48	Band 4	Band 4	
Armagh (WWTW)	2558	26351	PPP	-26351	Band 6	PPP	Y
Artasooly	2559	274	Pumpaway	-274	Band 2		Y
Aughnacloy	3007	1906	1901	-5	Band 3	Band 3	
Ballybogy	1087	631	648	17	Band 3	Band 3	
Ballycastle (WWTW)	1071	10312	14015	3703	Band 4	Band 5	Y
Ballyclare	1467	18703	18708	5	Band 5	Band 5	
Ballycranbeg	218	293	362	69	Band 2	Band 2	
Ballykelly (L/Derry)	3016	4764	4813	49	Band 4	Band 4	
Ballymagorry (WWTW)	3018	709	896	187	Band 3	Band 3	
Ballymartin (Retention Tank)	770	668	637	-31	Band 3	Band 3	
Ballymena (WWTW)	1456	119184	113825	-5359	Band 6	Band 6	
Ballynacor	2395	102837	PPP	-102837	Band 6	PPP	Y
Ballynahinch (Down)	311	7988	7996	8	Band 4	Band 4	
Ballyronan (WWTW)	1558	968	989	21	Band 3	Band 3	
Ballyvoy	1177	273	289	16	Band 2	Band 2	
Banbridge (WWTW)	2102	21730	23204	1474	Band 5	Band 5	

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Difference between AIR10 & AIR09 Actual Pe (-ve indicates AIR10 Figure Smaller)	AIR09 Band Sizes	AIR10 Band Sizes	Change Band Size from AIR09
Barnish Road (44-46)	1758	6	Decommissioned	-6	Band 1		Y
Belfast (WWTW)	345	355556	365866	10310	Band 6	Band 6	
Belleek (Fermanagh)	3024	1688	1689	1	Band 3	Band 3	
Benburb (WWTW)	2831	546	820	274	Band 3	Band 3	
Blackrock Retention Tank (Down)	306	242	249	7	Band 1	Band 1	
Brookeborough (WWTW)	3032	800	664	-136	Band 3	Band 3	
Bullays Hill	2398	51147	Pumpaway	-51147	Band 6	PPP	Y
Bush	2833	639	Pumpaway	-639	Band 3		Y
Bushmills (WWTW)	1178	2804	2653	-151	Band 4	Band 4	
Carrickfergus (WWTW)	261	32030	32091	61	Band 6	Band 6	
Castledawson	1609	1304	1298	-6	Band 3	Band 3	
Castledearg (WWTW)	3042	4852	4873	21	Band 4	Band 4	
Castlewellan (WWTW)	2694	4624	Pumpaway	-4624	Band 4		Y
Clady (Tyrone)	4149	754	757	3	Band 3	Band 3	
Cloghoge Road	2170	27	Pumpaway	-27	Band 1		Y
Clough (WWTW)	296	618	602	-16	Band 3	Band 3	
Coalisland	2828	11118	12095	977	Band 5	Band 5	
Conthem Rd	3180		29	29		Band 1	Y
Cookstown (WWTW)	1582	20822	20717	-105	Band 5	Band 5	
Cross Lane(2-6)	2911	9	Abandoned	-9	Band 1		Y
Culmore (WWTW)	3071	137951	131187	-6764	Band 6	Band 6	
Derryhale	2570	1124	1151	27	Band 3	Band 3	
Donaghmore (WWTW)	2840	1696	2151	455	Band 3	Band 4	Y

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Difference between AIR10 & AIR09 Actual Pe (-ve indicates AIR10 Figure Smaller)	AIR09 Band Sizes	AIR10 Band Sizes	Change Band Size from AIR09
Donemana	3103	925	941	16	Band 3	Band 3	
Donnybrewer	3080	5139	5175	36	Band 4	Band 4	
Downpatrick (WWTW)	771	17033	18446	1413	Band 5	Band 5	
Draperstown	1615	3247	3294	47	Band 4	Band 4	
Dromora (WWTW)	316	1375	1388	13	Band 3	Band 3	
Dromore (Down)	2127	7429	7666	237	Band 4	Band 4	
Drumman Hill	2575	24	Pumpaway	-24	Band 1		Y
Dungannon	2850	46711	61180	14469	Band 6	Band 6	
Dungiven	3101	4743	4760	17	Band 4	Band 4	
Dunmore Cottages	806	57	51	-6	Band 1	Band 1	
Dunmurry	346	53605	45827	-7778	Band 6	Band 6	
Dunnamore	1574	307	312	5	Band 2	Band 2	
Ederney (WWTW)	3106	1111	823	-288	Band 3	Band 3	
Enniskillen	3218	24726	24365	-361	Band 5	Band 5	
Fintona (WWTW)	3112	1980	1978	-1	Band 3	Band 3	
Fivemiletown (WWTW)	3113	2293	2134	-159	Band 4	Band 4	
Galbally	2844	332	383	51	Band 2	Band 2	
Garvagh (WWTW)	1154	2285	2257	-28	Band 4	Band 4	
Gilford (WWTW)	2162	2429	2480	51	Band 4	Band 4	
Glassdrumman (Down)	302	243	209	-34	Band 1	Band 1	
Glenstall	1109	18945	17894	-1051	Band 5	Band 5	
Greenisland (WWTW)	263	9641	9569	-72	Band 4	Band 4	
Hilltown (WWTW)	2701	2017	2148	131	Band 4	Band 4	
Irvinestown	3137	3461	3207	-254	Band 4	Band 4	

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Difference between AIR10 & AIR09 Actual Pe (-ve indicates AIR10 Figure Smaller)	AIR09 Band Sizes	AIR10 Band Sizes	Change Band Size from AIR09
Keady (Armagh)	2553	4539	4579	40	Band 4	Band 4	
Kesh (WWTW)	3140	2669	2702	33	Band 3	Band 3	
Kilclief (RT)	269	268	Pumpaway	-268	Band 2		Y
Kilkeel (WWTW)	313	12610	11104	-1506	Band 5	Band 5	
Killinchy (WWTW)	252	2810	3111	301	Band 4	Band 4	
Killyleagh (WWTW)	273	7216	7553	337	Band 4	Band 4	
Kilmore (Down)	285	386	420	34	Band 2	Band 2	
Kilrea	1156	3551	2761	-790	Band 4	Band 4	
Kinawley	3149	397	381	-16	Band 2	Band 2	
Larne (WWTW)	2044	28571	28228	-343	Band 6	Band 6	
Limavady (WWTW)	3162	16191	16177	-14	Band 5	Band 5	
Lisbarnet (WWTW)	239	503	Pumpaway	-503	Band 3		Y
Lisburn (New Holland)	329	63000	63012	12	Band 6	Band 6	
Lisnaskea (WWTW)	3171	6394	6441	47	Band 4	Band 4	
Loughdian	2146	18	Gravity away	-18	Band 1		Y
Lower Rashee Road (15-21)	5188		12	12		Band 1	Y
Magherafelt (WWTW)	1621	14460	14644	184	Band 5	Band 5	
Magheralin	2413	1875	Pumpaway	-1875	Band 3	To PPP	Y
Magheramason	3177	598	600	2	Band 3	Band 3	
Markethill	2591	2827	2853	26	Band 4	Band 4	
Martinstown	1445	578	611	33	Band 3	Band 3	
Mayboy	1163	158	192	34	Band 1	Band 1	
Moira	2429	5115	5381	266	Band 4	Band 4	
Monea (WWTW)	3186	359	373	14	Band 2	Band 2	

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Difference between AIR10 & AIR09 Actual Pe (-ve indicates AIR10 Figure Smaller)	AIR09 Band Sizes	AIR10 Band Sizes	Change Band Size from AIR09
Money more (WWTW)	1589	2800	2804	4	Band 4	Band 4	
Moneyneany (WWTW)	1631	265	329	64	Band 2	Band 2	
Moneyreagh (WWTW)	337	2269	2274	5	Band 4	Band 4	
Moneyslane (WWTW)	2151	404	380	-24	Band 2	Band 2	
Moy (WWTW)	2859	5084	3970	-1114	Band 4	Band 4	
Mullanahoe (WWTW)	2043	1172	1159	-13	Band 3	Band 3	
Mullans (Antrim)	1118	199	261	62	Band 1	Band 2	Y
Newcastle (WWTW)	303	16229	16261	32	Band 5	Band 5	
Newry (WWTW)	2685	70464	63915	-6549	Band 6	Band 6	
Newtownards (Ballyrickard)	241	50892	PPP	-50892	Band 6	PPP	Y
Newtownbreda (WWTW)	342	39517	40199	682	Band 6	Band 6	
Newtownbutler (WWTW)	3200	1728	1735	7	Band 3	Band 3	
Newtownstewart (WWTW)	3202	2168	2177	9	Band 4	Band 4	
North Coast (WWTWs)	4150	76651	76115	-536	Band 6	Band 6	
Oghill (1)	3205	54	Gravity Away	-54	Band 1		Y
Omagh (WWTW)	3999	49851	48791	-1060	Band 6	Band 6	
Orritor (WWTW)	1591	306	291	-15	Band 2	Band 2	
Plumbridge (WWTW)	3210	469	449	-20	Band 2	Band 2	
Portavogie(Retention Tank)	209	3405	3276	-129	Band 4	Band 4	
Poundburn	318	401	Pumpaway	-401	Band 2		Y
Poyntzspass (WWTW)	2156	862	880	18	Band 3	Band 3	
Randalstown	1425	6666	Pumpaway	-6666	Band 4		Y
Rasharkin	1120	1780	1551	-229	Band 3	Band 3	
Rathfriland (WWTW)	2713	3466	3455	-11	Band 4	Band 4	

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Difference between AIR10 & AIR09 Actual Pe (-ve indicates AIR10 Figure Smaller)	AIR09 Band Sizes	AIR10 Band Sizes	Change Band Size from AIR09
Reaskmore Road	5286		12	12		Band 1	Y
Redford	2853	284	278	-6	Band 2	Band 2	
Richill	2597	3384	PPP	-3384	Band 4	PPP	Y
Ringneill (WWTW)	237	170	673	503	Band 1	Band 3	Y
Robinsonstown	2419	547	516	-31	Band 3	Band 3	
Roughfort (WWTW)	1470	446	431	-15	Band 2	Band 2	
Saintfield (WWTW)	290	4425	4433	8	Band 4	Band 4	
Seagoe (WWTW)	2420	15000	Pumpaway	-15000	Band 5	PPP	Y
Seahill (WWTW)	774	6771	6795	24	Band 4	Band 4	
Stewartstown	1599	1167	1104	-63	Band 3	Band 3	
Strabane	3223	22606	20782	-1824	Band 5	Band 5	
Stramore	2173	18	Gravity away	-18	Band 1		Y
Strangford	226	968	1236	268	Band 3	Band 3	
Tamnaherin	3226	365	311	-54	Band 2	Band 2	
Tamnamore (WWTW)	2862	611	634	23	Band 3	Band 3	
Tandragee	2174	7864	8352	488	Band 4	Band 4	
Tempo (WWTW)	3229	840	823	-17	Band 3	Band 3	
Trillick (WWTW)	3231	602	603	1	Band 3	Band 3	
Tully Road Headworks	3975	2191	2164	-27	Band 4	Band 4	
Tullynakill Road	5280		31	31		Band 1	Y
Warrenpoint (WWTW)	2720	14899	14939	40	Band 5	Band 5	
Waterfoot Road (WWTW)	1643	124	187	63	Band 1	Band 1	
Whitehead (WWTW)	452	4593	4536	-57	Band 4	Band 4	
Whitehouse	265	88098	88410	312	Band 6	Band 6	
			Total	-251158			

The change in Pe equates to a difference in load of 15069.48kg/d from AIR09 to AIR10.

Difference between AIR10 and AIR09 for the total load entering WWTWs as shown in Table 17d - column 11, row 7

Total Load Received at WWTWs for AIR09 -	127209
Total Load Received at WWTWs for AIR 10 -	112140
Total Difference -	15069

The interpretation of the treatment categories is as below:-

AIR09 Treatment Category	Highest Form of Treatment at WWTWs	Treatment Category Abbreviation
Primary	Primary Settlement Septic Tank	Prim
Secondary Activated Sludge (Whether followed by Final settlement or not)	Oxidation Ditch Extended Aeration Activated Sludge SAF BAF MBR SBR	Sec Act
Secondary Biological (Whether followed by Final settlement or not)	Biological Filter RBC RBC Package Bioclere Package ; Reed Bed (If used as secondary treatment stage)	Sec Bio
Tertiary A1	Secondary Activated Sludge processes whose treatment methods also include prolonged settlement in conventional lagoons or raft lagoons, irrigation over grassland, constructed wetlands, root zone treatment (where used as a tertiary stage), drum filters, microstrainers, slow sand filters, tertiary nitrifying filters, Lockertex screens, gravel clarifiers, wedge wire clarifiers or Clariflow installed in humus tanks, where used as a tertiary treatment stage;	Ter A1
Tertiary A2	Secondary Activated Sludge processes whose methods also include phosphorous reduction, rapid-gravity sand filters, moving bed filters, pressure filters, nutrient control using physico-chemical and biological methods, disinfection, hard COD and colour removal and MBRs where used as a tertiary treatment stage;	Ter A2

AIR09 Treatment Category	Highest Form of Treatment at WWTWs	Treatment Category Abbreviation
Tertiary B1	Secondary Biological processes whose treatment methods also include prolonged settlement in conventional lagoons or raft lagoons, irrigation over grassland, constructed wetlands, root zone treatment (where used as a tertiary stage), drum filters, microstrainers, slow sand filters, tertiary nitrifying filters, Lockertex screens, gravel clarifiers, wedge wire clarifiers or Clariflow installed in humus tanks, where used as a tertiary treatment stage;	Ter B1
Tertiary B2	Secondary Biological processes whose methods also include phosphorous reduction, rapid-gravity sand filters, moving bed filters, pressure filters, nutrient control using physico-chemical and biological methods, disinfection, hard COD and colour removal and MBRs where used as a tertiary treatment stage;	Ter B2
Sea Outfalls	Where a load is discharged to sea having received only Preliminary treatment (including Grit removal and screenings conditioning) or simple screening (Bar Screen) or no screening or no treatment (Includes Retention Tanks)	Sea Out Prel Sea Out Screen Sea Out Unscreen

Changes in Line 8 - Small Works with Ammonia Consent (between 5 and 10) from AIR09 to AIR10.

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Change in Overall Pe from 08 to 09 (-ve signifies a decrease)	Comments
Annahilt (WWTW)	317	1356	1756	-1356	This WWTWs no longer has a ammonia consent greater than 5 and equal to or less than 10
Poundburn	318	401	Pumpaway	-401	This WWTWs is now a pumpaway
Ballycastle (WWTW)	1071	10312	14015	14015	This WWTWs now has a ammonia consent greater than 5 and equal to or less than 10
Orritor (WWTW)	1591	306	291	291	This WWTWs now has a ammonia consent greater than 5 and equal to or less than 10
Hilltown (WWTW)	2701	2017	2148	2148	This WWTWs now has a ammonia consent greater than 5 and equal to or less than 10
Aghanloo (1)	2989	523	540	-523	This WWTWs no longer has a ammonia consent greater than 5 and equal to or less than 10
Aghanloo (2)	2989	940	Abandoned	-940	This WWTWs has been abandoned
Derrylin (WWTW)	3075	915	915	-915	This WWTWs no longer has a ammonia consent greater than 5 and equal to or less than 10
Dromore (Tyrone)	3083	2032	2032	2032	This WWTWs now has a ammonia consent greater than 5 and equal to or less than 10
Enniskillen	3218	24726	24365	24365	This WWTWs now has a ammonia consent greater than 5 and equal to or less than 10
Greencastle (Tyrone)	3132	379	379	379	This WWTWs now has a ammonia consent greater than 5 and equal to or less than 10
Park (WWTW)	3207	766	766	766	This WWTWs now has a ammonia consent greater than 5 and equal to or less than 10
Dromora (WWTW)	316	1375	1388	13	PE has been updated since AIR09

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Change in Overall Pe from 08 to 09 (-ve signifies a decrease)	Comments
Ballyronan (WWTW)	1558	968	989	21	PE has been updated since AIR09
Magherafelt (WWTW)	1621	14460	14644	184	PE has been updated since AIR09
Coalisland	2828	11118	12095	977	PE has been updated since AIR09
Derryhale	2570	1124	1151	27	PE has been updated since AIR09
Donaghmore (WWTW)	2840	1696	2151	455	PE has been updated since AIR09
Markethill	2591	2827	2853	26	PE has been updated since AIR09
Ederney (WWTW)	3106	1111	823	-288	PE has been updated since AIR09
Fintona (WWTW)	3112	1980	1978	-1	PE has been updated since AIR09
Kesh (WWTW)	3140	2669	2702	33	PE has been updated since AIR09
Lisnaskea (WWTW)	3171	6394	6441	47	PE has been updated since AIR09
Newtownstewart (WWTW)	3202	2168	2177	9	PE has been updated since AIR09
Strabane	3223	22606	20782	-1824	PE has been updated since AIR09
			Total	39539	

Total Load rec'd by small WWTWs with NH3 consents (5-10mg/l) for AIR09-	6740.1
Total Load rec'd by small WWTWs with NH3 consents (5-10mg/l) for AIR10-	9112.5
Total Difference -	2372.4

Changes in Line 9 - Small Works with Ammonia Consent (between 5 and 10) from AIR09 to AIR10.

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Change in Overall Pe from 08 to 09 (-ve signifies a decrease)	Comments
Annahilt (WWTW)	317	1356	1756	1756	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Ballycranbeg	218	293	362	362	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Lisbarnet (WWTW)	239	503	Pumpaway	-503	This WWTWs is now a pumpaway
Ballyvoy	1177	273	289	289	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Bush	2833	639	Pumpaway	-639	This WWTWs is now a pumpaway
Crossmaglen	2273	2908	2908	2908	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Dromore (Down)	2127	7429	7666	7666	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Galbally	2844	332	383	383	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Killyman	2847	948	948	-948	This WWTWs no longer has a ammonia consent greater than 0 and equal to or less than 5
Magheralin	2413	1875	Pumpaway	-1875	This WWTWs is now a pumpaway
Robinsonstown	2419	547	516	516	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Belleek (Fermanagh)	3024	1688	1689	-1688	This WWTWs no longer has a ammonia consent greater than 0 and equal to or less than 5
Florencecourt	3114	289	289	289	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5

Name of Works	CAR ID	AIR09 Actual Pe	AIR10 Actual Pe	Change in Overall Pe from 08 to 09 (-ve signifies a decrease)	Comments
Greencastle (Tyrone)	3132	379	379	-379	This WWTWs no longer has a ammonia consent greater than 0 and equal to or less than 5
Irvinestown	3137	3461	3207	3207	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Kinawley	3149	397	381	381	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Monea (WWTW)	3186	359	373	373	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Tamnaherin	3226	365	311	311	This WWTWs now has a ammonia consent greater than 0 and equal to or less than 5
Ballynahinch (Down)	311	7988	7996	8	PE has been updated since AIR09
Downpatrick (WWTW)	771	17033	18446	1413	PE has been updated since AIR09
Killinchy (WWTW)	252	2810	3111	301	PE has been updated since AIR09
Moneyreagh (WWTW)	337	2269	2274	5	PE has been updated since AIR09
Ballybogy	1087	631	648	17	PE has been updated since AIR09
Ballyclare	1467	18703	18708	5	PE has been updated since AIR09
Garvagh (WWTW)	1154	2285	2257	-28	PE has been updated since AIR09
Cookstown (WWTW)	1582	20822	20717	-105	PE has been updated since AIR09
Banbridge (WWTW)	2102	21730	23204	1474	PE has been updated since AIR09
Moira	2429	5115	5381	266	PE has been updated since AIR09
Poyntzspass (WWTW)	2156	862	880	18	PE has been updated since AIR09
Rathfriland (WWTW)	2713	3466	3455	-11	PE has been updated since AIR09
Tandragee	2174	7864	8352	488	PE has been updated since AIR09
Newtownbutler (WWTW)	3200	1728	1735	7	PE has been updated since AIR09
			Total	16266	

Total Load rec'd by small WWTWs with NH3 consents (0-5mg/l) for AIR09-	8548.4
Total Load rec'd by small WWTWs with NH3 consents (0-5mg/l) for AIR10-	9524.4
Total Difference -	976

PPP

General

A number of the Omega PPP Facilities were in transition from NIW Operation to PPP Service during the reporting period. For the purpose of Table 17 the reporting is based on the following principles:

Non Financial Information (NFI) Tables 17b, c & d

Irrespective of whether or not the Facility was in Service, it is treated as a PPP Facility (Scheme) for the Reporting Period over which the Concessionaire held the Water Order Consent as the operator and retained the data. Consequently, NFI is reported as 'PPP Only' and not 'NIW Only' for the following:

1. Kinnegar WWTW
2. North Down Ards WWTW
3. Richhill WWTW
4. Ballyrickard WWTW
5. Armagh WWTW
6. Ballynacor (including Bullays Hill PS and Seagoe PS) WWTW

Financial Information (FI) Table 17f

The Financial Information (FI) is reported on 'PPP Only' Tables as NIW Water costs (excluding payments to Concessionaires) for Facilities (Schemes) which were in service for any part of the year, being:

1. Kinnegar WWTW
2. North Down Ards WWTW
3. Richhill WWTW
4. Ballyrickard WWTW
5. Armagh WWTW

NIW Financial Data for Ballynacor WWTW (including Bullays Hill WWTW and Seagoe WWTW) is included in 'NIW Only' tables.

Lines 1 – 3 Load received by STWs in size band 1 - 3

Nil Return – No PPP operated sites in these size bands.

Line 4 – Load received by STWs in size band 4

Column 4 refers to the Richhill WwTW which is a Tertiary A1 type Secondary Activated Treatment process which has been operated by the Omega PPP Contractor during the reporting period. The data represents the load received for the full reporting period, even though formal Service Commencement was not granted until 8 April 2009, as the Contractor was operating the works for the entire period, under the Contractor's own Water Order Consent as part of the Testing & Commissioning of the Facility 129 kg BOD/day consistent with Table 43. Not reported in AIR 09 as it was not a PPP operated site.

Line 6 – Load received by STWs in size band 6

Column 5 refers to the Armagh WwTW, Ballyrickard, North Down and Ballynacor WwTW's which are Tertiary A2 type works. These are Secondary Activated Treatment processes, with nutrient removal, and in some instances disinfection;

which were operated by the Omega PPP Contractor during the reporting period. Total 16,672 kg BOD/day consistent with Table 43 but significantly higher than the AIR09 data of 4097 kg BOD/day which was only for North Down WWTW.

North Down: 4365 kg BOD/day consistent with Table 43 and comparable with the AIR 09 data of 4097 kg BOD/day (which was for May 08 – March 09 rather than a full year of PPP operation).

Armagh: The data represents the load received for the full reporting period, even though formal Service Commencement was not granted until 27 August 2009, as the Contractor was operating the works for the entire reporting period, under the Contractor's own Water Order Consent as part of the Testing & Commissioning of the Facility. 1843kg BOD/day consistent with Table 43. Not reported in AIR 09 as it was not a PPP operated site.

Ballyrickard: The data represents the load received for the full reporting period, even though formal Service Commencement was not granted until 20 April 2009, as the Contractor was operating the works for the entire reporting period, under the Contractor's own Water Order Consent as part of the Testing & Commissioning of the Facility. 2432kg BOD/day consistent with Table 43. Not reported in AIR 09 as it was not a PPP operated site.

Ballynacor: The data represents the load received for the full reporting period, even though formal Service Commencement was not granted during the entire reporting period as the Contractor was operating the works for the entire reporting period, under the Contractor's Water Order Consent as part of the Testing & Commissioning of the Facility. In addition, the data represents the load received (and reported in AIR09) for Ballynacor WWTW, Bullay's Hill WWTW and Seagoe PS, which the PPP contractor delivered as a rationalised Facility solution at Ballynacor, with the old Bullay's Hill WWTW and Seagoe WWTW operated by NI Water becoming redundant on 16 March and 10 October respectively. 8032kg BOD/day consistent with Table 43. Not reported in AIR 09 as it was not a PPP operated site.

Column 2 refers to the Kinnegar WwTW as Secondary Activated Treatment processes; which has been operated by the PPP Contractor (CCWL) during the reporting period. The data represents the load received for the full reporting period, as the Contractor was operating the works for the entire period, under his own Water Order Consent. 5405kg BOD/day consistent with Table 43. The data for AIR 09 was comparable at 5030 kg BOD/day.

Line 8 – Load received by small STW with ammonia consent (5 – 10 mg/l)
Nil return.

Line 9 - Load received by small STW with ammonia consent (<=5 mg/l)
Refers to Richhill WwTW which is a small works with an NH₃ consent of 2mg/l 95%ile and 10mg/l UTL as evidenced by the Concessionaire's Water Order Consent. 129 kg BOD/day consistent with Table 43 and not reported in AIR 09 as it was not a PPP operated site in that period.

Table 17f

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 17f SEWERAGE EXPLANATORY FACTORS
SEWAGE TREATMENT WORKS - COSTS (NIW Only)

DESCRIPTION	UNITS	DP	1	2	3	4	5	6	7	8	9	10	11	
			TREATMENT CATEGORY										TOTAL	
			PRIMARY	SECONDARY		TERTIARY			SEA OUTFALLS					
			ACTIVATED SLUDGE	BIOLOGICAL	A1	A2	B1	B2	PRELIMINARY TREATMENT	SCREENED	UNSCREENED			
A SMALL WORKS														
1	Direct costs of STWs in size band 1	£000	3	82.955	106.874	391.385	2.382	0.000	4.581	8.051	0.000	0.000	17.704	613.933
2	Direct costs of STWs in size band 2	£000	3	0.000	126.334	227.989	46.979	0.000	53.218	0.000	5.780	25.023	0.000	485.324
3	Direct costs of STWs in size band 3	£000	3	8.640	737.735	994.010	128.217	98.301	236.008	97.192	17.937	0.051	68.158	2386.249
4	Direct costs of STWs in size band 4	£000	3	87.315	2121.498	507.416	104.374	286.346	268.276	142.372	63.406	58.486	27.377	3666.867
5	Direct costs of STWs in size band 5	£000	3	0.000	869.456	17.225	182.279	997.071	0.000	196.318	143.904	0.000	0.000	2406.254
B LARGE WORKS														
6	Direct costs of STWs in size band 6	£000	3	0.000	3573.271	0.000	1311.886	2060.745	0.000	14.038	0.000	0.000	0.000	6959.941
C ALL WORKS														
7	Total direct costs of STWs - all sizes	£000	3	178.910	7535.169	2138.026	1776.117	3442.463	562.084	457.972	231.028	83.561	113.239	16518.569
8	Sludge Treatment and Disposal Adjustments	£000	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	Sewage Treatment: Direct costs	£000	3	178.910	7535.169	2138.026	1776.117	3442.463	562.084	457.972	231.028	83.561	113.239	16518.569
10	Sewage Treatment: Power costs	£000	3	103.421	4355.802	1235.913	1026.708	1989.960	324.920	264.737	133.549	48.304	65.459	9548.772
11	Sewage Treatment: service charges	£000	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	Sewage Treatment: General and Support	£000	3	227.261	4080.482	2275.777	1535.823	1185.064	595.831	445.323	222.664	101.829	150.159	10820.213
13	Sewage Treatment: Functional Expenditure	£000	3	406.171	11615.651	4413.803	3311.940	4627.527	1157.915	903.295	453.692	185.390	263.398	27338.782

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 17f SEWERAGE EXPLANATORY FACTORS
SEWAGE TREATMENT WORKS - COSTS (PPP only)

DESCRIPTION	UNITS	DP	1	2	3	4	5	6	7	8	9	10	11
			TREATMENT CATEGORY										TOTAL
			PRIMARY	SECONDARY		TERTIARY			SEA OUTFALLS				
	ACTIVATED SLUDGE	BIOLOGICAL	A1	A2	B1	B2	PRELIMINARY TREATMENT	SCREENED	UNSCREENED				
A SMALL WORKS													
1 Direct costs of STWs in size band 1	£000	3	-	-	-	-	-	-	-	-	-	-	0.000
2 Direct costs of STWs in size band 2	£000	3	-	-	-	-	-	-	-	-	-	-	0.000
3 Direct costs of STWs in size band 3	£000	3	-	-	-	-	-	-	-	-	-	-	0.000
4 Direct costs of STWs in size band 4	£000	3	-	-	-	-	-	-	-	-	-	-	0.000
5 Direct costs of STWs in size band 5	£000	3	-	-	-	0.000	-	-	-	-	-	-	0.000
B LARGE WORKS													
6 Direct costs of STWs in size band 6	£000	3	-	0.000	-	-	0.000	-	-	-	-	-	0.000
C ALL WORKS													
7 Total direct costs of STWs - all sizes	£000	3		0.000		0.000	0.000						0.000
8 Sludge Treatment and Disposal Adjustments	£000	3		0.000		0.000	0.000						0.000
9 Sewage Treatment: Direct costs	£000	3		0.000		51.000	1058.000						1109.000
10 Sewage Treatment: Power costs	£000	3		0.000		51.000	1058.000						1109.000
11 Sewage Treatment: service charges	£000	3		1.000		0.000	0.000						1.000
12 Sewage Treatment: General and Support (NIW)	£000	3		42.000		130.000	520.000						692.000
13 Sewage Treatment: Functional Expenditure	£000	3		42.000		181.000	1578.000						1801.000

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 17f SEWERAGE EXPLANATORY FACTORS
SEWAGE TREATMENT WORKS - COSTS (Total)

DESCRIPTION	UNITS	DP	1	2	3	4	5	6	7	8	9	10	11
			TREATMENT CATEGORY										TOTAL
			PRIMARY	SECONDARY		TERTIARY				SEA OUTFALLS			
			ACTIVATED SLUDGE	BIOLOGICAL	A1	A2	B1	B2	PRELIMINARY TREATMENT	SCREENED	UNSCREENED		
A SMALL WORKS													
1 Direct costs of STWs in size band 1	£000	3	82.955	106.874	391.385	2.382	0.000	4.581	8.051	0.000	0.000	17.704	613.933
2 Direct costs of STWs in size band 2	£000	3	0.000	126.334	227.989	46.979	0.000	53.218	0.000	5.780	25.023	0.000	485.324
3 Direct costs of STWs in size band 3	£000	3	8.640	737.735	994.010	128.217	98.301	236.008	97.192	17.937	0.051	68.158	2386.249
4 Direct costs of STWs in size band 4	£000	3	87.315	2121.498	507.416	104.374	286.346	268.276	142.372	63.406	58.486	27.377	3666.867
5 Direct costs of STWs in size band 5	£000	3	0.000	869.456	17.225	182.279	997.071	0.000	196.318	143.904	0.000	0.000	2406.254
B LARGE WORKS													
6 Direct costs of STWs in size band 6	£000	3	0.000	3573.271	0.000	1311.886	2060.745	0.000	14.038	0.000	0.000	0.000	6959.941
C ALL WORKS													
7 Total direct costs of STWs - all sizes	£000	3	178.910	7535.169	2138.026	1827.117	4500.463	562.084	457.972	231.028	83.561	113.239	17627.569
8 Sludge Treatment and Disposal Adjustments	£000	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9 Sewage Treatment: Direct costs	£000	3	178.910	7535.169	2138.026	1827.117	4500.463	562.084	457.972	231.028	83.561	113.239	17627.569
10 Sewage Treatment: Power costs	£000	3	103.421	4355.802	1235.913	1077.708	3047.960	324.920	264.737	133.549	48.304	65.459	10657.772
11 Sewage Treatment: service charges	£000	3	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
12 Sewage Treatment: General and Support	£000	3	227.261	4122.482	2275.777	1665.823	1705.064	595.831	445.323	222.664	101.829	150.159	11512.213
13 Sewage Treatment: Functional Expenditure	£000	3	406.171	11657.651	4413.803	3492.940	6205.527	1157.915	903.295	453.692	185.390	263.398	29139.782

Table 17f – Sewerage Explanatory Factors - Sewage Treatment Works – Costs (NIW only)

An updated Population Equivalent (PE) database with treatment type by WWTW's was sent from Asset Management on the 17th May 2010 which was used to populate Line 1-6. Ballyrickard transferred to PPP in April 2009 and is therefore no longer included in Size Band 6 – Line 6. Ballycastle WWTW's now falls into Band 5 – Line 5. Ballycastle does not have a separate W finance location code. However, it is included in an X code and these costs have been apportioned. The Cost to Serve project will provide costs for Ballycastle in AIR11.

Table 17f has been completed based on the figures available for the year ended 31st March 2010 as at 19th May 2010, for sewage treatment – Activity 510.

A Small Works**Lines 1- 4 – Size bands 1- 4**

Lines 1 - 4 were not completed across all columns in AIR09, this has improved for AIR10. Each WWTW's was assigned a finance location code, W or X. W codes are for a specific works and direct costs can be identified separately. X codes include the costs of a number of small works and these costs were apportioned across the appropriate WWTW's based on PE. There was a further apportionment across all works for the costs recorded under the M & E workshop location; this was based on direct labour.

Direct Costs include Power 521X, Contractors 531X, Other Contractors 532X, Materials 541X, Chemicals 548X and Direct Labour (611X and 612X-Wages overheads).

As with all Lines 1-10, power costs for sewage treatment are based on percentage splits provided by the wastewater field managers. There remains one meter at each WWTW; so the Wastewater Field managers provided a percentage estimate of power costs between sewage treatment and sludge treatment at each of the WWTW's where there are both activities. These percentages were applied to the total power costs at each site. There is one electricity meter at Duncrue Street which includes the costs for the Belfast WWTW's (W10) and the Incinerator (W01). The power team supplied an estimated 60:40 split between the Belfast WWTW's and the Incinerator which has been used to calculate the amount relating to sewage treatment at Belfast. This is consistent with AIR09.

The type of treatment at each WWTW's was provided by Asset Management and this was used to assign costs to Column 1-10.

In total the costs have decreased in Lines 1-4 from AIR09 by circa £4.0M due to Ballycastle now being reported under Line 5 and the change in methodology on the apportionment of general & support as agreed with the Utility Regulator (see Table 22 commentary for further explanation).

Line 5 – Size band 5

Direct costs for sewage treatment, at each location in Size Band 5, were recorded and matched to the appropriate type of treatment. Ballycastle is an additional WWTW's that is now included in this line. There is no separate W finance location

code for Ballycastle, it is included under X25 – Ballymena Area, and therefore the costs were apportioned in the same manner as Line 1-4.

The costs against this line have decreased by circa £0.2M primarily due to the change in methodology on the apportionment of general & support as agreed with the Utility Regulator. There have also been reduced costs at Seagoe WWTW's as this site is due to transfer to PPP and receive service commencement in 2011. The contractor operated Seagoe for part of the 09/10 year.

B Large Works

Line 6 – Size band 6

This line agrees with Line 9 in Table 17b. No PPP sites have been included.

The costs have reduced from AIR09 by circa £2.8M partly a result of the exclusion of Ballyrickard which transferred to PPP and received service commencement in April 2009. There are also reduced costs at Armagh WWTW's as this works transferred to PPP and received service commencement in August 2009. Ballinacor and Bullays Hill WWTW's have cost less as the WWTW's are due to transfer at the beginning of 2011 and was operated by the contractor for part of the 0910 year. The change in methodology on the apportionment of general & support as agreed with the reporter has had the most significant impact on the direct costs in this line.

Power costs at Ballymena, Omagh and Newry include the terminal pumping costs as there is one electric meter at each site.

C All Works

Line 7 – Total Direct Costs

This is a calculated line and it's the total of Line 1-6. This is an improvement since AIR09 as Line 1-4 could not be split across columns. This figure agrees with Table 22, Column 2 Line 9.

The total direct costs have reduced since AIR09 by circa £7.0M due to the exclusion of the PPP sites that have received service commencement, the reduced costs at the PPP sites that are due to receive service commencement in 2011 and the change in methodology on the apportionment of general & support as agreed with the Utility Regulator.

Line 8 – Sludge Treatment & Disposal Adjustment

These costs are not included in the total of Line 7 therefore this line is zero.

Line 9 – Direct Costs

This line is equal to Line 7 and is the total direct costs for each type of treatment. This is an improvement from AIR09 as Line 1-4 could not be split across columns. This figure agrees with Table 22, Column 2 Line 9.

Line 10 – Power Costs

Power costs relating to Sewage Treatment were apportioned across the columns based on total direct costs and is an improvement on AIR09.

In total the power figure has increased by circa £0.7M. This figure agrees with Table 22, Column 2 Line 2.

Line 12 – General & Support

The Total General & Support expenditure was taken directly from Table 22 (NIW only) Line 10 Column 2 (see Table 22 commentary) and apportioned across the locations based on direct costs. No Costs have been allocated to the PPP sites. This is and improvement from AIR09 where only Column 11 was populated.

The increase in this figure from AIR09 of circa £5.9M is primarily a result of the change in methodology on the apportionment of general & support as agreed with the Utility Regulator.

Line 13 – Functional Expenditure

This is a calculated line and is the total of Line 9 and Line 12. The total agrees to Table 22 (NIW Only) Column 2 Line 11. The total costs have reduced from AIR09 by circa £1.0M for all the reasons mentioned under the lines above. Refer to Table 22 commentary.

Table 17f – Sewerage Explanatory Factors – Costs (PPP Only)**General**

A number of the Omega PPP Facilities were in transition from NIW Operation to PPP Service during the reporting period. For the purpose of Table 17f the reporting is based on the following principles:

Financial Information (FI) Table 17f:

The Financial Information (FI) is reported on 'PPP Only' Tables as NIW Water costs (excluding payments to Concessionaires) for Facilities (Schemes) which were in service for any part of the year, being:

1. Kinnegar WWTW
2. North Down Ards WWTW
3. Richhill WWTW
4. Ballyrickard WWTW
5. Armagh WWTW

NIW Financial Data for Ballynacor WWTW (including Bullays Hill WWTW and Seagoe WWTW) is included in 'NIW Only' tables other than the G&S NIW which includes the cost of contract managing Ballynacor WWTW.

Lines 1- 4 – Size bands 1- 4

There are no PPP sites sized within these categories. Therefore, this is a nil return for these size bands.

Line 5 – Size band 5

No Direct Costs associated with Richill

Line 6 – Size band 6

AIR 09 reported on Operating Contractor Costs at Kinnegar and North Down, and has no relation to the AIR10 data being for NIW Direct Costs – being zero.

Line 9 - Direct Costs:

This refers to power only. See comments on Line 10 below.

Line 10 - Power

Kinnegar (SAS) remains unreported as power costs are not incurred by NIW directly but through the Concessionaire payments. This is consistent between AIR09 and AIR 10.

TA2 in AIR 09 referred to power at North Down only £622k. North Down power has increased to £795k and the line also now reports power for Armagh (£85k) and Ballyrickard (£178k)

Line 12 – General & Support

The company has altered its methodology for calculating G&S Expenditure to reflect the relevant whole cost of the Contracts Management Team and its Professional Advisors for the construction and service periods of the Wastewater PPP's, as set out in the Methodology. Only a theoretical cost was calculated for staff involvement on the Kinnegar and North Down service contracts in AIR 09. Hence the difference

from £156k total in AIR 09 to the £692k in AIR 10. The £692k reconciles for the G&S attributed to the WWTW sites as per Table 22 and Table 43.

Table 17f - Sewage Treatment Works – Total

Table 17f has been completed based on the figures available for the year ended 31st March 2010 as at 3rd June 2010.

The PPP only table was provided by PPP function and NIW only was provided by Management Accounts.

The figures in Column 11 in the NIW Total table agree with Table 22(NIW Total) Column 2.

Refer to commentary on NIW only and PPP only Individual tables for explanation of changes from AIR09.

NIW only plus PPP only equals NIW Total with the exception of Line 7, Total Direct Costs, where PPP only does not have any figures input but £1.1M is included in Table 22 PPP only. PPP only table does not have all lines completed.

Table 17 g

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 17g SEWERAGE EXPLANATORY FACTORS
SLUDGE TREATMENT AND DISPOSAL INFORMATION (NIW Only)**

DESCRIPTION	UNITS	DP	1		2		3		4		5		6		7		8		9		10	
			FARMLAND UNTREATED	CG	FARMLAND CONVENTIONAL	CG	FARMLAND ADVANCED	CG	INCINERATION	CG	TO PPP	CG	LANDFILL	CG	COMPOSTED	CG	LAND RECLAMATION	CG	OTHER	CG	TOTAL	CG
1 Resident population served	000	1	0.0	A1	0.0	A1	597.2	C4	637.7	C4	14.4	C4	24.1	C4	0.0	A1	99.6	C4	60.5	C4	1434.3	C4
2 Amount of sewage sludge	ttds	1	0.0	A1	0.0	A1	15.8	B2	16.9	B2	0.4	B2	0.6	B2	0.0	A1	2.6	B2	1.6	B2	37.9	B2
3 Sludge treatment: direct costs	£000	3	-		-		-		3890.617		-		-		-		-		3413.461		7304.078	
4 Sludge disposal: direct costs	£000	3	-		-		5916.317		283.408		-		3.423		-		878.399		2547.910		9629.456	
5 Sludge treatment & disposal: direct costs	£000	3	-		-		5916.317		4174.024		-		3.423		-		878.399		5961.371		16933.534	
6 Sludge treatment & disposal: power costs	£000	3	-		-		-		1518.847		-		-		-		-		1979.685		3498.532	
7 Sludge treatment & disposal: service charges	£000	3	-		-		-		-		-		-		-		-		-		-	
8 Sludge treatment & disposal: general & support exp.	£000	3	-		-		-		3454.181		-		-		-		-		2372.516		5826.697	
9 Sludge treatment & disposal: functional expenditure	£000	3	-		-		5916.317		7628.205		-		3.423		-		878.399		8333.888		22760.231	

Table 17g – Sewerage Explanatory Factors - Sludge Treatment and Disposal Information**Line 1 – Resident population served**

Columns 1 - 8 have been estimated using a pro-rata value based on the total sewage sludge disposal data from SLS and the WW Sludge Management monthly report. The pro-rata population figures have been assigned CGs of C4 accordingly based on the C4 CG of the base population data.

Columns 9: The resident population served is that reported in T17a:L1 as required in the Utility Regulator's guidance documentation.

Line 2 – Amount of sewage sludge

Columns 1 – 8 have been based on the total sewage sludge disposal data from SLS and the WW Sludge Management monthly report; CGs vary based on accuracy of data for each disposal method.

Columns 9: This is the total sewage sludge produced for 2009/10 (tds) as recorded monthly by WW Area Sludge Officers (reconciled using the SLS) and presented in the monthly Sludge Management Report (copy attached) along with sewage sludge produced at PPP sites, cake to incineration and an estimated quantity of WWTW's grit & screenings removed as part of the treatment process and disposed of under Tender C018.

Lines 3 - 9 - Costs

The same method as AIR09 was used to populate this table in AIR10.

There has been a change the volumes of sludge transported through the various disposal routes in AIR10 and there have been changes to the Sludge transport contractor. The volumes transported through the various disposal routes have changed as a result Northern Ireland Legislation and operation of the second Incinerator by the PPP contractor. The second incinerator operated by PPP, has been running towards the later part of 09/10 and has taken test sludge over a number of months at a significantly lower price than the other disposal routes. This cost cannot be separately identified and has been included under Column 9.

The costs in Table 17g are populated with the information available for the year ended 31st March 2010 as at 3rd June 2010.

Line 3 – Sludge treatment direct costs

Expenditure has been input in Column 4 and 8.

Column 4

Sludge treatment costs for Incineration are coded using activity 636 and can be separately identified. Direct Costs include Power 521X, Contractors 531X, Other Contractors 532X, Materials 541X, Chemicals 548X and Direct Labour (611X and 612X-Wages overheads).

Power costs were treated differently as there is one electricity meter at Duncrue Street which includes the costs for the Belfast WWTW's (W10) and the Incinerator

(W01). The usage estimated, by the power team, is a 60:40 split between Belfast and the Incinerator. This percentage was used to calculate the power costs for Sludge treatment at the Incinerator. This is consistent with AIR09.

These costs have increased from AIR09 by circa £0.2M and the main reason is the increase in power costs. During the year additional oil was used at the Incinerator due to the poor quality sludge and resource limitations.

Column 9

Sludge treatment costs for WWTW's are coded using activity 621 and can be separately identified. M & E costs coded to 621 have been removed as in AIR10 they are included under General & Support as recommended by the Utility Regulator.

Power costs are apportioned based on estimates from the field managers. There is one electric meter at each site and all the power costs are coded to each individual works to sewage treatment. The Field Managers responsible for each WWTW's estimated the percentage use for sludge treatment and sewage treatment at each site. This was multiplied by the Power costs at the site to calculate the portion relating to sludge treatment. This is consistent with AIR09.

The costs of sludge treatment has increased by circa £0.7M partly a result of the change in methodology on the allocation of general & support costs (see Table 22 commentary) and also a result of improved coding by field managers using activity 621. The improved coding has increased Employment Costs and Hired and Contracted costs for Sludge Treatment.

Line 4 - Sludge disposal direct costs

Column 3, 4, 6, 8 & 9 have been populated in this line. Costs have decreased by £2.4M in total due to change in disposal routes for e.g. less sludge has been transported to Land Restoration in England compared to AIR09 (column 8). A new sludge contract was agreed for major to minor transportation in August 2009 which reduced costs in this area (Column 9). The second Incinerator operated by PPP, has been running towards the later part of 0910 and has taken test sludge over a number of months at a significantly lower price than the other disposal routes. The change in methodology on the allocation of general & support costs (see Table 22 commentary) agreed with the Utility Regulator has also had a significant impact on these costs.

Line 5 - Sludge treatment & disposal direct costs

This is a calculated line and is the total of Line 3 and Line 4. The figure agrees with Table 22 (NIW only) Column 3 Line 8. Costs have decreased by circa £1.4M from AIR09.

Line 6 – Sludge treatment & disposal power costs

Power costs are associated with incineration and sludge treatment (Column 4 and 8). The power team supplied a split between the incinerator and Belfast WWTW's which was used apportion a cost to the incinerator. This is consistent with AIR09.

There is only one electric metre at each WWTW's so an estimate was received for each WWTW's from the wastewater field mangers so that a split could be calculated

at each works between sludge and sewage treatment at the sites where both activities occur. This is included under Column 8.

Line 8 - Sludge treatment & disposal General & Support

This figure was taken directly from Table 22 (NIW only) Column 3 Line 10 and apportioned across the columns in Table 17g based on direct labour costs. There has been a change to the methodology on the allocation of general & support costs (see Table 22 commentary) agreed with the Utility Regulator, which has been a major factor in the circa £4.7M increase from AIR09.

Line 9 – Functional expenditure

This is a calculated line and is the total of Line 5 and Line 8. Total costs have increased by circa £3.3M from AIR09. Sludge volumes in total have not changed significantly from AIR09, however, the volume reported under each of the disposal routes are different which has impacted on costs.

Table 18

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 18 REGULATORY ACCOUNTS (HISTORICAL COST ACCOUNTING)
PROFIT AND LOSS ACCOUNT FOR YEAR ENDING 31 MARCH**

DESCRIPTION		UNITS	DP	1	2	3
				2007-08	2008-09	2009-10
1	Turnover	£m	3	294.056	327.395	347.569
2	Operating costs (excluding HCD)	£m	3	-219.063	-241.458	-234.938
3	Historical cost depreciation	£m	3	-12.343	-17.767	-25.055
4	Operating income	£m	3	-0.031	0.094	0.264
5	Operating profit	£m	3	62.619	68.264	87.840
6	Other income	£m	3	0.000	0.000	0.000
7	Net interest receivable less payable	£m	3	-7.113	-20.142	-37.716
8	Profit on ordinary activities before taxation	£m	3	55.506	48.122	50.124
9	Current tax	£m	3	0.000	0.000	0.000
10	Deferred tax	£m	3	-15.562	-13.531	-14.273
11	Profit on ordinary activities after taxation	£m	3	39.944	34.591	35.851
12	Extraordinary items	£m	3	0.000	0.000	0.000
13	Profit for the year	£m	3	39.944	34.591	35.851
14	Dividends	£m	3	-33.538	0.000	-34.537
15	Retained profit for the year	£m	3	6.406	34.591	1.314

Table 18 – HC Profit and Loss account for the year ending 31 March 2010

- Results of unappointed activities are shown separately in the published regulatory accounts.
- There are no exceptional charges or income.
- Accounting treatments under Historical Cost and Current Cost are the same.
- There are no minority interests.
- PPP charges for 2009/10 can be analysed as follows:

	Gross Charge	Residual interest credit	Lease repayment	Capital maintenance	CC Depreciation	Net P&L Charge
	£m	£m	£m	£m	£m	£m
Alpha	15.857	0.000	(2.906)	(0.224)	3.247	15.974
Omega	15.156	(1.932)	0.000	0.000	0.000	13.224
Kinnegar	2.249	(0.232)	0.000	0.000	0.000	2.017
Total	33.262	(2.164)	(2.906)	(0.224)	3.247	31.215

- PPP elements of line 2 'Operating Costs' are £27.968m. Additionally within Line 3 'HCD' there are depreciation costs for the Alpha Project of £3.247m (see Table 33).
- The current tax charge is zero and this is explained as follows:

Factors affecting the tax charge for the current period

The current tax charge for the period is lower than the standard rate of corporation tax in the UK (28%). The differences are explained below

Current tax reconciliation

	£m
Profit on ordinary activities before tax	51.834*
Current tax at 28%	14.514

Effects of:

Expenses not deductible for tax purposes	1.292
Capital allowances for period in excess of depreciation	(34.866)
Other timing differences	(2.976)
Trade losses carried forward	22.036
Total current tax charge	0.000

* The tax computation is based on the profit for both appointed and unappointed activities.

(This reconciliation is based on Note 10 to the statutory accounts).

- The deferred tax charge of £14.273m is based on the statutory accounts charge of £14.543m less an allocation of £0.270m deferred tax to unappointed activities.

The statutory accounts deferred tax charge of £14.543m can be shown as follows:

Deferred tax

	£m
Origination/ reversal of timing differences	13.166
FRS 17 pension adjustments	2.178
Adjustment in respect of previous years	(0.801)
Total deferred tax charge	14.543
Tax charge on profit on ordinary activities	14.543

Table 19 shows a deferred tax liability on the balance sheet of £42.713m. This reconciles to the statutory accounts balance at 31 March 2010 of £43.408m after an allocation of £0.695m of the final balance to unappointed activities. The statutory balance of £43.408m can be summarised as follows:

	2010 £m	2010 £m	2010 £m
	Excluding FRS 17	FRS 17	Total
Opening liability	31.044	2.310	33.354
Current year deferred tax charge/ (credit) to profit and loss account	13.165	2.178	15.343
Prior year deferred tax charge/(credit) to P&L	(0.801)	0.000	(0.801)
Current year deferred year tax charge to the Statement of Total Recognised Gains and Losses	0.000	(3.600)	(3.600)
Closing liability	<u>43.408</u>	<u>0.888</u>	<u>44.296</u>

The FRS 17 aspect of deferred tax is shown separately and rolled up into the balance shown within the pension asset on the balance sheet as follows:

	2010 £m
Benefit obligation at end of year	(94.115)
Fair value of plan assets at end of year	<u>97.289</u>
Surplus	3.174
Less deferred tax	<u>(0.888)</u>
Pension asset after deferred tax	<u>2.286</u>

The actuarial assumptions underpinning the FRS 17 valuation of the NIW defined benefit scheme assets and liabilities can be shown as follows:

Weighted average assumptions used to determine benefit obligations at:

	31-Mar-10	31-Mar-09
Discount rate	5.75%	6.75%
Rate of compensation increase	4.75%	4.50%
Rate of increase in pensions in payment	3.75%	3.50%
Rate of increase in pensions in deferment	3.75%	3.50%
Inflation	3.75%	3.50%

Weighted average assumptions used to determine net pension cost for year ended:

	31-Mar-10	31-Mar-09
Discount rate	6.75%	6.00%
Expected long-term return on plan assets	6.04%	5.94%
Rate of compensation increase	3.50%	5.00%
Rate of increase in pensions in payment	3.50%	3.50%
Inflation	3.50%	3.50%

Any changes to the assumptions from 2009 to 2010 have been advised by the independent actuaries.

There is a pension asset at 31 March 2010 of £2.286m (after deferred tax) and therefore there are currently no contributions relating to funding a deficit position. Contributions to the fund in 2009/10 were 29.3% of pensionable pay from April 2009 to September 2009 and 26.9% of pensionable pay from October 2009 to March 2010. (2008/09: 29.3%).

Of significance in comparing 2009/10 and 2008/09 is the fact that a dividend of £35.006m was proposed and approved in 2009/10 and thus there is a dividend in Table 18 for the current year.

The full dividend for 2009/10 was £35.006m with £34.537m apportioned to appointed activities and £0.469m apportioned to unappointed activities (based on turnover).

Operating Costs

The following table shows a reconciliation between the operating costs as reported in the regulatory historic cost accounts (Table 18 line 2) and regulatory current cost accounts (Table 20 line 2).

Operating Costs	£000
Table 18 Line 2	(234.938)
Add back HC amortisation of grants and contributions	(0.590)
CC amortisation of grants and contributions	2.806
CC depreciation	(96.202)
Table 20 line 2	(328.924)

Cost components in Operating Costs

The following cost components of Line 2 (£234.938m) exceed £5m in 2009-10:

Wages and Salaries	42.872m
Other pension costs	10.999m
Electricity	36.254m
Rates	14.445m
Contractors	26.817m
Out sourced billing	15.976m
PPP Operating Charges –Omega	15.157m
Total	162.520m
	(69% of total Operating Costs)

Interest

Interest received and payable can be summarised as follows:

	£m	£m
Interest received		
Bank Interest	0.249	
Other finance income*	0.288	
Total Interest received		0.537
Interest Payable:		
On bank loans	(0.024)	
On all other loans	(26.904)	
On PPP finance lease	(11.325)	
Total Interest Payable		(38.253)
Net Interest		(37.716)

*Other finance income (£0.288m) relates to post employment costs and the finance credit calculated by the actuaries on the pension fund at year end.

Capitalisation of costs

During 2009/10 £11.895m of costs were capitalised from the profit and loss account. This can be broken down as follows:

Cost	£m
Staff Costs	9.319
Materials	0.159
Labour charge	0.076
Vehicles and plant	0.007
Overheads capitalised	2.334
Total	11.895

The majority of costs capitalised relate to staff costs and overheads. These costs relate to the NIW staff who spend their time on capital projects e.g. Engineering Procurement or Asset Management staff. These costs will add to the value of the completed asset and are categorised in the statutory accounts as 'own work capitalised'.

Comparison to prior year and the SBP

A comparison to 2008/09 and to the SBP can be shown as follows:

	Actual	Actual	SBP
	2009 -2010	2008 -2009	2009 -2010
	£m	£m	£m
Sales	347.569	327.395	385.406
Expenditure	(259.729)	(259.131)	(291.223)
Net Operating Profit	87.840	68.264	94.183
Operating Margin	25.3%	20.9%	24.4%
Interest payable	(37.716)	(20.142)	(30.712)
Deferred tax	(14.273)	(13.531)	(19.041)
Profit for the year	35.851	34.591	44.430
Net Profit Margin	10.3%	10.6%	11.5%

Explanation of variances on sales, operating profit and interest payable are outlined in the commentary to Table 20.

Systems and controls

The company uses the Oracle financial system to produce monthly and annual accounting information. The Oracle General Ledger produces a trial balance and the detailed accounts are summarised to produce the year end statutory accounts. A series of spreadsheets are then used to analyse appointed and non appointed sales and costs to produce the financial information for the Regulatory Accounts and AIR Tables.

The company is progressing a major project to develop a costing system. In terms of regulatory reporting the main tables requiring costing information are Tables 21 and 22 and the commentaries for these tables detail how an interim costing solution is being used to populate these tables until the new costing system is in place.

This new costing solution is also intended to provide better information for the allocation of costs to non appointed activities which is currently based on a set of high level costing assumptions.

Internal Controls

The company continues to place great emphasis on internal financial controls throughout the organisation. Particular work has been ongoing on revenue assurance with a cross organisational working group engaged in workshops to ensure controls across all revenue streams are examined and plans are in place to ensure that all revenue processes are mapped. Internal audit has been involved in this project and will continue to monitor progress in this area.

Prior Year Adjustment

A prior year adjustment has been reflected in the financial statements the reasons for which are outlined in Table 19 and Table 25.

This prior year adjustment has had the following impact on the Regulatory Accounts HC Profit and Loss Account:

HC Depreciation –Appointed activities

Regulatory Accounts 2008-09	£17.767m
2008-09 comparator in 2009-10 Regulatory Accounts	£18.385m
Difference – increase in depreciation charge	£ 0.618m

This represents the element of the prior year adjustment attributable to 2008-09.

However the Table 18 comparator for 2008-09 has not been amended to reflect this.

Table 18c

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 18c REGULATORY ACCOUNTS (HISTORICAL COST ACCOUNTING)
STATEMENT OF TOTAL RECOGNISED GAINS AND LOSSES

DESCRIPTION		UNITS	DP	1	2	3
				2007-08	2008-09	2009-10
A	CAPITAL EXPENDITURE CATEGORIES					
1	Profit for the year	£m	3	39.944	34.591	35.851
2	Actuarial gains/losses on post employment plans	£m	3	14.962	1.666	-9.255
3	Other gains and losses	£m	3	0.000	0.000	0.000
4	Total recognised gains and losses for the year	£m	3	54.906	36.257	26.596

Table 18c – STRGL (HCA)

There are no other recognised gains or losses for the year.

The STRGL in the historic cost accounts includes a prior year adjustment of £6.387m which impacts on total reserves. However this is not included within recognised gains and losses for the year.

Table 18d

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 18d REGULATORY ACCOUNTS (HISTORICAL COST ACCOUNTING)
ALLOCATION OF CAPITAL EXPENDITURE FOR TAX PURPOSES (TOTAL)**

DESCRIPTION		UNITS	DP	1	2	3
				2007-08	2008-09	2009-10
A DIVIDEND ANALYSIS						
1	Dividends in respect of a financial re-organisation	£m	3	0.000	0.000	0.000
2	Other ordinary dividends	£m	3	-33.538	0.000	-34.537
3	Total dividends	£m	3	-33.538	0.000	-34.537
B INTEREST ANALYSIS						
4	Interest receivable/payable on intercompany balances	£m	3	0.000	0.000	0.000
5	Interest receivable/payable in respect of a financial re-organisation	£m	3	0.000	0.000	0.000
6	Indexation element of index-linked bonds	£m	3	0.000	0.000	0.000
7	Preference share dividends	£m	3	0.000	0.000	0.000
8	Other interest receivable	£m	3	2.208	1.813	0.249
9	Other interest payable	£m	3	-9.741	-17.899	-26.928
10	Other finance charges - post employment costs	£m	3	0.420	0.137	0.288
11	Other finance charges	£m	3	0.000	-4.193	-11.325
12	Total net interest	£m	3	-7.113	-20.142	-37.716

Table 18d – Analysis of dividends and interest charges

There has been no financial reorganisation during the year.

A dividend was proposed and approved in 2009/10 and this is shown on line 2. The full dividend for 2009/10 was £35.006m with £34.537m apportioned to appointed activities and £0.469m apportioned to unappointed activities (based on turnover).

Interest receivable (£0.249m) relates to monies held on deposit.

Interest payable (£26.928m) relates to the Loan Notes held with DRD and increased by £9.029m (50.4%) primarily due to the drawdown of £170m additional loan notes in 2009/10. The interest payable will rise year on year as the outstanding liability steadily rises. This occurs as new loans are taken out to cover in year capital expenditure whilst at the same time the loans are not repayable until 2027.

Other finance income (£0.288m) relate to post employment costs and the finance credit calculated by the actuaries on the pension fund at year end.

During 2009/10 an amount of £11.325m (2008/09: £4.193m) has been included as other finance charges. This relates to the imputed interest on the finance lease underpinning the on balance sheet Alpha PPP Project.

The following table compares the actual net interest payable and balance of loan notes with the 2009/10 budget and the SBP:

	Actual	Budget	SBP
	£m	£m	£m
Net Interest payable	26.679	27.814	30.712
Loan notes	627.560	647.560	696.244

The drawdown of loans is £68.684m less than the SBP projected for 2009/10. This is primarily driven by a lower working capital requirement than was anticipated particularly for capital creditors.

Table 19

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 19 REGULATORY ACCOUNTS (HISTORICAL COST ACCOUNTING)
BALANCE SHEET AS AT 31 MARCH (Total)**

DESCRIPTION	UNITS	DP	1	2	3
			2007-08	2008-09	2009-10
A FIXED ASSETS					
1 Tangible fixed assets	£m	3	1103.597	1435.239	1619.770
2 Investment - loan to group company	£m	3	0.000	0.000	0.000
3 Investment - other	£m	3	0.106	0.106	0.106
4 Total fixed assets	£m	3	1103.703	1435.345	1619.876
B CURRENT ASSETS					
5 Stocks	£m	3	2.400	1.896	1.864
6 Debtors	£m	3	30.570	29.706	40.885
7 Cash	£m	3	2.843	3.554	0.349
8 Short term deposits	£m	3	54.000	19.000	10.000
9 Infrastructure renewals prepayment	£m	3	0.000	0.091	1.452
10 Total current assets	£m	3	89.813	54.247	54.550
C CREDITORS: AMOUNTS FALLING DUE WITHIN ONE YEAR					
11 Overdrafts	£m	3	0.000	0.000	0.000
12 Infrastructure renewals accrual	£m	3	-9.695	0.000	0.000
13 Creditors	£m	3	-110.408	-131.461	-136.701
14 Borrowings	£m	3	0.000	0.000	0.000
15 Corporation tax payable	£m	3	0.000	0.000	0.000
16 Ordinary share dividends payable	£m	3	-33.538	0.000	0.000
17 Preference share dividends payable	£m	3	0.000	0.000	0.000
18 Total creditors	£m	3	-153.641	-131.461	-136.701
19 Net current assets	£m	3	-63.828	-77.214	-82.151
D CREDITORS: AMOUNTS FALLING DUE AFTER MORE THAN ONE YEAR					
20 Borrowings	£m	3	-307.560	-457.560	-627.560
21 Other creditors	£m	3	-3.422	-110.808	-106.137
22 Total creditors	£m	3	-310.982	-568.368	-733.697
E PROVISION FOR LIABILITIES AND CHARGES					
23 Deferred tax provision	£m	3	-16.566	-30.653	-42.713
24 Deferred income - grants and contributions	£m	3	-9.757	-15.099	-15.730
25 Post employment asset / (liabilities)	£m	3	5.619	5.942	2.286
26 Other provisions	£m	3	-15.131	-20.638	-32.884
F PREFERENCE SHARE CAPITAL					
27 Preference share capital	£m	3	0.000	0.000	0.000
28 Net assets employed	£m	3	693.058	729.315	714.987
G CAPITAL AND RESERVES					
29 Called up share capital	£m	3	500.000	500.000	500.000
30 Share premium	£m	3	0.000	0.000	0.000
31 Profit and loss account	£m	3	21.368	57.625	43.297
32 Other reserves	£m	3	171.690	171.690	171.690
33 Capital and reserves	£m	3	693.058	729.315	714.987

Table 19 – HC Balance Sheet as at 31 March 2009

The balance sheet in the published regulatory accounts includes a separate analysis of unappointed activities.

There are no Group companies.

The retained profit for the year is £1.314m (post dividend).

The P&L reserves in the Balance Sheet move by £14.328m and this movement can be shown as follows:

Retained profit for the year	£1.314m
Pension scheme loss net of deferred tax	(£9.255m)
Prior year adjustment *	(£6.387m)
Movement in P&L Account	(£14.328m)

*A prior year adjustment of £6.387m has been recognised in the current year in relation to the valuation of land and buildings. This has arisen through work undertaken as part of the Company's price control review which identified a number of sites where a decision had been taken in prior years to decommission them at a future date. As a result, adjustments were required to accelerate the depreciation on the sites, or impair the asset from the date of the decision to decommission to the decommissioning date, to reflect residual value at that date (see also commentary to Table 25).

The effect of the adjustments on the Company's regulatory HC balance sheet at 31 March 2009 was as follows:

	As previously stated £'000	Effect £'000	As restated £'000
Fixed assets	1,435,496	(6,387)	1,429,109
Opening reserves	22,051	(5,769)	16,282
Total recognised gains and losses for the year	37,189	(618)	36,571
	59,240	(6,387)	52,853

As shown the effect of the adjustment was a decrease in Profit and Loss reserves at 1 April 2008 of £5.769m and an increase in depreciation and a decrease in the reported profit for the year ended 31 March 2009 of £0.618m giving a total change in reserves in 2009-10 of £6.387m.

The Balance Sheet for the year ended 31 March 2010 within the Regulatory Accounts includes the impact of this adjustment to the 2008-09 comparator year.

However within Table 19 the comparator for 2008-09 has not been amended to reflect this.

No minority interests exist.

The elements of PPP included in the table are as follows:

Line 1 - Tangible Fixed Assets

	Alpha	Omega	Kinnegar	Total
	£m	£m	£m	£m
Gross	111.932 *	3.529	1.986	117.447
Acc. Deprec	(3.247)	-	-	(3.247)
NBV	108.685	3.529	1.986	114.200

	£m
* Initial expenditure	111.708
2008-09 additions to Capital Maintenance fund	0.254
Correction of 2008-09 additions to Capital Maintenance fund	(0.254)
Additions to Capital Maintenance fund	<u>0.224</u>
	<u>111.932</u>

(The correction of £0.254m was needed due to the figure for capital maintenance for 2008-09 being extracted in error from the Alpha financial model).

Line - 13 Creditors falling due within one year

	Alpha	Omega	Kinnegar	Total
	£m	£m	£m	£m
Lease obligation due < 1 yr	2.313	-	-	2.313
Accruals	3.007	3.707	1.857	8.571
Total	5.320	3.707	1.857	10.884

Line 21 - Other creditors falling due after more than one year

	Alpha
	£m
Lease obligation due > 1 yr	105.805

Line 26 - Other provisions

	Omega
	£m
Provisions	9.519

Significant features and movements**Fixed Assets**

Increased broadly in line with additions of approximately £255m in year.

Debtors

Increased by £11.179m from £29.706m to £40.885m (37.6%). This is primarily due to:

- Measured debtors increase by £6.6m as measured sewerage customers now being billed fully for this service from 2009-2010;
- rechargeable debtors increased by £1.4m in 2009-10 driven partly by increased year end debtors from DRD and DARD;
- a debtor balance of £1m arising in connection with the PPP Alpha contract;
- Accrued income increased by £3.6m (29%) over the period; and
- A fall in VAT receivable debtors of £0.9m.

Cash and Short term deposits

Cash has decreased by £3m from £3.554m to £0.349m (90.2%) and Short term deposits have decreased by £9m from £19m to £10m (47.4%).

The cashflow statement in Table 28 illustrates the uses of these cash and deposit monies in contributing to meeting the non opex expenditure needs for the year. This can be summarised as follows:

Non opex expenditure

Capex	£245m
Net Interest paid	£ 38m
Dividend paid	£ 34m
PPP Lease payments	£ 3m
Total	£320m

Funded by:

Generated from operations	£138m
Loans	£170m
Reduction in deposit monies	£ 9m
Reduction of cash	£ 3m
Total	£ 320m

Deferred tax

The deferred tax balance has increased from £30.653m to £42.713m. An explanation for this has been included in the commentary to Table 18.

Borrowings > 1 year

Borrowings have increased by £170m from £457.56m to £627.56m. The additions to capital expenditure during the year were £255m. The increase in borrowings were used to partly fund these additions to capital expenditure with the balance of capital being financed through working capital.

Post employment asset/(liabilities)

Decreased from £5.942m to £2.286m (61.5%).

This can be shown as follows:

	£m
Opening balance at 1.4.09	5.942
Current Service Costs	(7.793)
Past Service Costs	(3.207)
Contributions	18.491
Finance Credit	0.288
Actuarial Loss (net of deferred tax)	(9.256)
Deferred tax	(2.179)
Closing balance 31.3.10	<u>2.286</u>

Other provisions

Increased from £20.638m to £32.884m (59.3%).

This increase of 12.3m can be summarised as follows:

Decrease in Public and Employer Liability claims	(3.7m)
Decrease in Environmental liability	(1.1m)
Increase in Contractor claims	16.6m
Other	0.5m
Total	12.3m

**PPP – Infrastructure renewals charge (IRC) and expenditure (IRE)
– Capital Maintenance**

The table below summarises the IRC, IRE and capital maintenance during 2009/10 in relation to the PPP projects:

	Alpha	Omega	Kinnegar	Total
	£m	£m	£m	£m
IRE	-	-	-	-
IRC	-	-	-	-
Capital maintenance	0.224	-	-	0.224

Alpha

Alpha is treated as 'on balance sheet' and an amount of the unitary charge for Alpha is deemed to be related to the carrying out of capital maintenance by the operator. For 2009-10 this is confirmed by the operator to be £224k. This amount is credited to the Profit and Loss account and debited to Alpha fixed assets.

This capital maintenance is assumed to be 100% non infrastructure and there are no infrastructure additions to Alpha in 2009-10 (2008-09: £4.924m). There has therefore been no apportionment of IRC in 2009-10 (2008-09: £3.405m).

Omega and Kinnegar

Both Omega and Kinnegar are treated as 'off balance sheet' and the additions in year relate to the residual interest asset with no related IRE, IRC or capital maintenance aspects.

Table 19a - Analysis of Borrowings Due After More Than One Year

At 31 March 2010 NIW borrowings related to Capital Loan notes issued under a £1,280,200,000 Fixed Coupon Unsecured Loan note 2027. Further loan notes may be issued under this facility in the period to 31 March 2014. This facility is available to provide finance for capital investment only.

The loan notes in issue before 31 March 2010 carry a fixed rate of interest of 5.25%. Loan notes issued after this date carry fixed interest rates based on a margin of 0.85% above the reference gilt rate published by UK HM Government Debt Management Office on the date of issue of the loan note. At 31 March 2010 the gilt reference rate was 4.4103% (31 March 2009: 3.9666%) equating to an equivalent borrowing rate of 5.2603% (31 March 2009: 4.8166%).

In 2009/10 Capital loan notes were accounted for as held to maturity borrowings.

In addition to the capital loan note instrument NIW has committed facilities available in a £20m overdraft facility and a £55m Revolving Credit facility. These facilities were not utilised at 31 March 2010.

The **Overdraft facility**, for £20m, provides financing for working capital requirements of NIW. This is available until 31 March 2014 at a cost of Libor + 0.35%.

The **Revolving credit facility (RCF)** was established to finance unanticipated costs incurred by NIW.

The facility is split into two tranches:

- Facility A which provides finance for costs classed as notifiable to the Regulator and recoverable from users, on which interest is charged at Market rate Libor + 0.35%; and
- Facility B which provides finance for costs classed as unrecoverable from users, on which interest is charged at Market rate LIBOR +2.0%.

This facility is available until 31 March 2014, increasing from a commitment of £34m in 2007/08 to £55m for 2008/09 to 2013/14.

Table 20

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 20 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING)
 PROFIT AND LOSS ACCOUNT FOR YEAR ENDING 31 MARCH 2010 (TOTAL)

DESCRIPTION				1	2	3
				2007-08	2008-09	2009-10
1	Turnover	£m	3	294.056	327.395	347.569
2	Current cost operating costs (including CCD & IRC)	£m	3	-278.250	-315.427	-328.924
3	Operating income	£m	3	-0.056	-0.050	0.005
4	Working capital adjustment	£m	3	1.327	-0.292	4.313
5	Current cost operating profit	£m	3	17.077	11.626	22.963
6	Other income	£m	3	0.000	0.000	0.000
7	Net interest receivable less payable	£m	3	-7.113	-20.142	-37.716
8	Financing adjustment	£m	3	6.543	-1.044	25.217
9	Current cost profit before taxation	£m	3	16.507	-9.560	10.464
10	Current tax	£m	3	0.000	0.000	0.000
11	Deferred tax	£m	3	-15.562	-13.531	-14.273
12	Current cost profit on ordinary activities	£m	3	0.945	-23.091	-3.809
13	Extraordinary items	£m	3	0.000	0.000	0.000
14	Current cost profit attributable to shareholders	£m	3	0.945	-23.091	-3.809
15	Dividends	£m	3	-33.538	0.000	-34.537
16	Current cost profit retained	£m	3	-32.593	-23.091	-38.346

Table 20 – CC Profit and Loss account for year ending 31 March 2010

There are no exceptional charges or income. Atypical and reorganisation costs are shown separately in the commentary to Table 21 and 22.

The calculation of the financing adjustment excludes dividends payable.

There are no minority interests.

PPP charges within operating costs line 2 can be summarised as follows:

	Gross Charge	Residual interest credit	Lease repayment	Capital maintenance	CC Depreciation	Net P&L Charge
	£m	£m	£m	£m	£m	£m
Alpha	15.857*	0.000	(2.906)	(0.224)	3.247	15.974
Omega	15.156	(1.932)	0.000	0.000	0.000	13.224
Kinnegar	2.249	(0.232)	0.000	0.000	0.000	2.017
Total	33.262	(2.164)	(2.906)	(0.224)	3.247	31.215

* includes lease interest of £11.325m.

Line 7 Net interest receivable less payable includes £11.325m interest payable on Alpha PPP finance lease.

Comparison with prior year results

	2009-2010	2008-2009	Variance
	£m	£m	%
Turnover	347.569	327.395	6.2%
CC Operating profit	22.963	11.626	97.5%
CC (loss) / profit attributable to shareholders	(3.809)	(23.091)	83.5%
Dividends	(34.537)	-	-
CC loss retained	(38.346)	(23.091)	(66.1)%

Sales have increased in 2010 by £20.2m (6.2%) due to:

- Increase in household water and sewerage income £21.0m
- Decrease in non household sewerage income (£ 7.5m)
- Increase in Road drainage income £ 2.5m
- Increase in Measured Water income £ 4.6m
- Other (decrease) (£ 0.4m)

However operating costs have only risen by £13.5m (4.3%) over the same period and this has subsequently raised the CC operating profit margin from 3.6% to 6.6%. The overall focus on cost reduction throughout the business in 2009-10 was evidenced by lower proportionate rises in expenditure compared to the increase in turnover. Some of the main changes in operating costs in 2010 include:

- Lower tariffs for Power in 2009-10 compared to 2008-09;
- More efficient process around materials due to stores rationalisation and increased focus on materials issued;
- Rates higher in 2009-10 compared to 2008-09; and
- CCD up from £77m to £96m.

The profit attributable to shareholders has increased by approximately £19m due mostly to:

- Sales up by £20.2m with operating costs only up £13.5m;
- Working capital and Financing adjustments increase by £4.5m and £26m respectively;
- Net interest payable up by £18m; and
- Deferred tax up by £0.7m.

There was a dividend declared and approved for 2008/09 of £35.006m (accounted for in 2009-10) with £34.537m attributed to appointed activities.

Cost components in Operating Costs

The following cost components of Line 2 (£328.924m) exceed £5m in 2009-10:

Wages and Salaries	42.872m
Other pension costs	10.999m
Electricity	36.254m
Rates	14.445m
Contractors	26.817m
Out sourced billing	15.976m
PPP Operating Charges –Omega	15.157m
Current cost depreciation	96.202m
Total	258.722m
	<i>(79% of total Operating Costs)</i>

Voluntary Early Retirement and Pension

The VER schemes in 2007/08, 2008/09 and 2009/10 can be summarised as follows:

	2009-2010	2008-2009	2007-2008
Number	34*	89*	32
Non pension element	£0.409m	£0.770m	£0.600m
Pension element	£3.207m	£6.773m	£3.800m
Total	£3.616m	£7.543m	£4.400m

* including 7 ill health retirees (2008/09 14).

The above figures are for VER only and do not include the impact of the Voluntary Severance (VS) scheme in 2009/10 or 2008/09.

The future schemes are still being finalised.

The total costs, payments and accruals for VER are as follows:

	2009-2010	2008-2009	2007-2008
Total Cost	£3.616m	£7.543m	£4.400m
Payments in year	nil	£0.234m	-
Accrual at year end due to employees	£0.409m	£0.536m	£0.600m
Accrual at year end due to pension fund	£3.207m	£6.773m	£3.800m

The entries for the pension related elements of VER and the change in the pension asset (before deferred tax) over the year can be summarised as follows:

	BS	BS	BS	P&L	P&L	P&L	P&L
	A/C	A/C	A/C	A/C	A/C	A/C	TOTAL
	2956	1752	3119	5117	5115	4511	
	£m	£m	£m	£m	£m	£m	£m
Opening Surplus-pension	8.251						
Current Service Costs	(7.792)			3.814	3.978		7.792
Past Service Costs	(3.207)				3.207		3.207
Paid	18.491	(18.491)					
Net Finance income	0.288					(0.288)	(0.288)
Actuarial Loss	(12.857)		12.857				
Closing Surplus-pension	3.174						10.711

Key to Account codes

Code		
2956	BS	Pension
1752	BS	Bank
3119	BS	STRGL
5117	P&L Acct	Superannuation – Industrial
5115	P&L Acct	Superannuation – Non Industrial
5140	P&L Acct	Retirement –movement in provision
4511	P&L Acct	Interest Received

The non pension related lump sum entries for 2009/10 are as follows:

Dr 5140 Retirement movement in provision	£0.409m
Cr 2313 Accruals	£0.409m

(Ignoring any opening accrual from 2008-09).

NIW Pension Fund

The Options exercise was completed in February 2009 and 25% by headcount (20% as a percentage of liabilities) of Water Service PCSPS(NI) members opted to transfer their accrued benefits to the NIW Pension Scheme.

The Statutory Accounts at 31 March 2010 and 31 March 2009 Note 25 show a full disclosure of the impact of the options exercise on the NIW pension fund. An extract of this is shown below:

Movements in fair value of plan assets

	Scheme year to 31 March 2010 £000	Estimated bulk transfer year to 31 March 2010 £000	Total year to 31 March 2010 £000
At the beginning of the year	23,478	44,117	67,595
<i>Movement in year</i>			
Expected return on assets	1,860	2,647	4,507
Contributions by plan participants	818	-	818
Contributions by employer	18,491	-	18,491
Actuarial gain/(loss)	6,042	2,742	8,784
Benefits paid	(2,270)	-	(2,270)
Settlement in relation to the Alpha bulk transfer	(57)	-	(57)
Settlement in relation to the admission of Northgate as a participating employer	(579)	-	(579)
	<hr/> 47,783	<hr/> 49,506	<hr/> 97,289 <hr/>

Movement in present value of defined benefit obligations

	Scheme year to 31 March 2010 £000	Estimated bulk transfer year to 31 March 2010 £000	Total year to 31 March 2010 £000
At the beginning of the year	23,919	35,425	59,344
<i>Movement in year</i>			
Actuarial (gains) / losses as a result of change in Bulk transfer uptake	-	-	-
Current service cost	7,773	-	7,773
Interest on scheme liabilities	1,844	2,375	4,219
Past service costs	3,207	-	3,207
Actuarial (gain)/loss	9,685	11,955	21,640
Contributions by plan participants	818	-	818
Benefits paid	(1,791)	(479)	(2,270)
Settlement in relation to the Alpha bulk transfer	(57)	-	(57)

Settlement in relation to the admission of Northgate as a participating employer

	(208)	(351)	(559)
	45,190	48,925	94,115

Scheme assets and liabilities

	Scheme at 31 March 2010 £000	Estimated bulk transfer at 31 March 2010 £000	Total at 31 March 2010 £000
Equities	20,900	-	20,900
Corporate bonds	9,164	-	9,164
Gilts	16,182	-	16,182
Other	1,537	-	1,537
Bulk transfer	-	49,506	49,506
Total market value of assets	47,783	49,506	97,289
Actuarial value of liabilities	(45,190)	(48,925)	(94,115)
Surplus/ (deficit) in the scheme - pension asset / (liability)	2,593	581	3,174
Related deferred tax asset / (liability)	(726)	(162)	(888)
Net pension asset / (liability)	1,867	419	2,286

The year end pension asset as shown above before deferred tax is £3.174m.

There have been no pension costs allocated to non appointed costs as the information is currently not available to separate these costs from the appointed costs.

Business Improvement costs

Business improvement costs are not analysed through the Oracle financial system but are separately identified at month end for reporting purposes only. These costs are included within line 2 – current cost operating costs and can be summarised as follows:

	£m
Salaries	1.430
Other staff costs	0.033
Hired and contracted	4.783
Materials and equipment	0.050
Other costs of employment	0.014
Other expenses	0.096
Total	6.406

Reprofiling of costs may occur during the year as part of the quarterly reforecasting process.

Capitalisation of costs

During 2009/10 £11.895m of costs were capitalised from the profit and loss account. This can be broken down as follows:

Cost	£m
Staff Costs	9.319
Materials	0.159
Labour charge	0.076
Vehicles and plant	0.007
Overheads capitalised	2.334
Total	11.895

The majority of costs capitalised relate to staff costs and overheads. These costs relate to the NIW staff who spend their time on capital projects e.g. Engineering Procurement or Asset Management staff. These costs will add to the value of the completed asset and are categorised in the statutory accounts as 'own work capitalised'.

Prior Year Adjustment

A prior year adjustment has been reflected in the financial statements the reasons for which are outlined in Table 19 and Table 25.

This prior year adjustment has had the following impact on the Regulatory Accounts CC Profit and Loss Account:

CC operating costs

Regulatory Accounts 2008-09	£315.427m
2008-09 comparator in 2009-10 Regulatory Accounts	£316.045m
Difference – increase in CC depreciation charge	£ 0.618m

This represents the element of the prior year adjustment attributable to 2008-09.

The Table 20 comparator for 2008-09 has not been amended to reflect this.

AIR10 Table 21

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 21 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING) ACTIVITY COSTING ANALYSIS - WATER SERVICE (NIW Only)

DESCRIPTION	UNITS	DP	1	2	3	
			WATER RESOURCES & TREATMENT	WATER DISTRIBUTION	WATER SERVICE TOTAL	
SERVICE ANALYSIS - WATER						
A DIRECT COSTS						
1	Employment costs	£m	3	3,234	10,480	13,714
2	Power	£m	3	5,972	4,764	10,735
3	Agencies	£m	3	0.000	0.000	0.000
4	Hired and contracted services	£m	3	1,991	5,410	7,400
5	Associated companies	£m	3	0.000	0.000	0.000
6	Materials and consumables	£m	3	3,810	1,000	4,810
7	Service charges	£m	3	0.000	0.000	0.000
8	Bulk supply imports	£m	3	0.000	0.000	0.000
9	Other direct costs	£m	3	0.444	-0.134	0.310
10	Total direct costs	£m	3	15,450	21,519	36,969
11	General and support expenditure	£m	3	7,795	11,282	19,076
12	Functional expenditure	£m	3	23,245	32,801	56,046
B OPERATING EXPENDITURE						
13	Customer services	£m	3			8,197
14	Scientific services	£m	3			1,332
15	Other business activities	£m	3			1,233
16	Total business activities	£m	3			10,762
17	Rates	£m	3			4,102
18	Doubtful debts	£m	3			0,648
19	Exceptional items	£m	3			0,000
20	Total opex less third party services	£m	3			71,558
21	Third party services - opex	£m	3			0,204
21a	PPP Unitary Charges (Opex element)	£m	3			0,000
22	Total operating expenditure	£m	3			71,762
22a	Payment by concessionaire to operator	£m	3	0.000	0.000	0.000
C REACTIVE AND PLANNED MAINTENANCE (INCLUDING OPEX)						
23	Reactive and planned maintenance infrastructure	£m	3	0.000	8,153	8,153
24	Reactive and planned maintenance non-infrastructure	£m	3	0.843	7,093	7,936
D CAPITAL MAINTENANCE						
25	Infrastructure renewals charge (excluding third party services)	£m	3	0.000	0.000	27,171
26	Current cost depreciation (allocated)	£m	3	21,356	21,414	42,770
27	Amortisation of deferred credits	£m	3			-1,137
28	Amortisation of intangible assets	£m	3			0.000
29	Business activities current cost depreciation (non-allocated)	£m	3			0.094
30	Capital maintenance excluding third party services	£m	3			68,898
31	Third party services - current cost depreciation	£m	3			0.000
32	Third party services - infrastructure renewals charge	£m	3			0.000
33	Total capital maintenance	£m	3			68,898
34	Total operating costs	£m	3			140,660

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 21 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING)
ACTIVITY COSTING ANALYSIS - WATER SERVICE - (PPP Only)

DESCRIPTION		UNITS	DP	1 WATER RESOURCES & TREATMENT	2 WATER DISTRIBUTION	3 WATER SERVICE TOTAL
SERVICE ANALYSIS - WATER						
A	DIRECT COSTS					
1	Employment costs	£m	3			0.000
2	Power	£m	3	6.473	0.000	6.473
3	Agencies	£m	3			0.000
4	Hired and contracted services	£m	3			0.000
5	Associated companies	£m	3			0.000
6	Materials and consumables	£m	3			0.000
7	Service charges	£m	3			0.000
8	Bulk supply imports	£m	3			0.000
9	Other direct costs	£m	3			0.000
10	Total direct costs	£m	3	6.473	0.000	6.473
11	General and support expenditure (NIW Only)	£m	3	0.234	0.000	0.234
12	Functional expenditure	£m	3	6.707	0.000	6.707
B	OPERATING EXPENDITURE					
13	Customer services	£m	3			
14	Scientific services	£m	3			0.000
15	Other business activities	£m	3			
16	Total business activities	£m	3			0.000
17	Rates	£m	3			2.835
18	Doubtful debts	£m	3			
19	Exceptional items	£m	3			
20	Total opex less third party services	£m	3			9.542
21	Third party services - opex	£m	3			
21a	PPP Unitary Charges (Opex element)	£m	3			1.402
22	Total operating expenditure	£m	3			10.944
22a	Payment by concessionaire to operator	£m	3			
C	REACTIVE AND PLANNED MAINTENANCE (INCLUDING OPEX)					
23	Reactive and planned maintenance infrastructure	£m	3			
24	Reactive and planned maintenance non-infrastructure	£m	3			
D	CAPITAL MAINTENANCE					
25	Infrastructure renewals charge (excluding third party services)	£m	3			
26	Current cost depreciation (allocated)	£m	3	3.247		3.247
27	Amortisation of deferred credits	£m	3			
28	Amortisation of intangible assets	£m	3			
29	Business activities current cost depreciation (non-allocated)	£m	3			
30	Capital maintenance excluding third party services	£m	3			
31	Third party services - current cost depreciation	£m	3			
32	Third party services - infrastructure renewals charge	£m	3			
33	Total capital maintenance	£m	3			3.247
34	Total operating costs	£m	3			14.191

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 21 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING)
ACTIVITY COSTING ANALYSIS - WATER SERVICE - (TOTAL)

DESCRIPTION		UNITS	DP	1 WATER RESOURCES & TREATMENT	2 WATER DISTRIBUTION	3 WATER SERVICE TOTAL
SERVICE ANALYSIS - WATER						
A	DIRECT COSTS					
1	Employment costs	£m	3	3.234	10.480	13.714
2	Power	£m	3	12.445	4.764	17.208
3	Agencies	£m	3	0.000	0.000	0.000
4	Hired and contracted services	£m	3	1.991	5.410	7.400
5	Associated companies	£m	3	0.000	0.000	0.000
6	Materials and consumables	£m	3	3.810	1.000	4.810
7	Service charges	£m	3	0.000	0.000	0.000
8	Bulk supply imports	£m	3	0.000	0.000	0.000
9	Other direct costs	£m	3	0.444	-0.134	0.310
10	Total direct costs	£m	3	21.923	21.519	43.442
11	General and support expenditure	£m	3	8.029	11.282	19.310
12	Functional expenditure	£m	3	29.952	32.801	62.753
B	OPERATING EXPENDITURE					
13	Customer services	£m	3			8.197
14	Scientific services	£m	3			1.332
15	Other business activities	£m	3			1.233
16	Total business activities	£m	3			10.762
17	Rates	£m	3			6.937
18	Doubtful debts	£m	3			0.648
19	Exceptional items	£m	3			0.000
20	Total opex less third party services	£m	3			81.100
21	Third party services - opex	£m	3			0.204
21a	PPP Unitary Charges (Opex element)	£m	3			1.402
22	Total operating expenditure	£m	3			82.706
22a	Payment by concessionaire to operator	£m	3			
C	REACTIVE AND PLANNED MAINTENANCE (INCLUDING OPEX)					
23	Reactive and planned maintenance infrastructure	£m	3	0.000	8.153	8.153
24	Reactive and planned maintenance non-infrastructure	£m	3	0.843	7.093	7.936
D	CAPITAL MAINTENANCE					
25	Infrastructure renewals charge (excluding third party services)	£m	3	0.000	0.000	27.171
26	Current cost depreciation (allocated)	£m	3	24.603	21.414	46.017
27	Amortisation of deferred credits	£m	3			-1.137
28	Amortisation of intangible assets	£m	3			0.000
29	Business activities current cost depreciation (non-allocated)	£m	3			0.094
30	Capital maintenance excluding third party services	£m	3			72.145
31	Third party services - current cost depreciation	£m	3			0.000
32	Third party services - infrastructure renewals charge	£m	3			0.000
33	Total capital maintenance	£m	3			72.145
34	Total operating costs	£m	3			154.851

AIR10 Table 22

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 22 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING) ACTIVITY COSTING ANALYSIS - SEWERAGE SERVICE (NIW Only)

DESCRIPTION		UNITS	DP	1 SEWERAGE	2 SEWAGE TREATMENT	3 SLUDGE TREATMENT & DISPOSAL	4 SEWERAGE SERVICE TOTAL
SERVICE ANALYSIS - SEWERAGE							
A DIRECT COSTS							
1	Employment costs	£m	3	3.496	3.975	1.904	9.374
2	Power	£m	3	5.567	9.549	3.499	18.614
3	Agencies	£m	3	0.000	0.000	0.000	0.000
4	Hired and contracted services	£m	3	7.392	1.743	9.965	19.100
5	Associated companies	£m	3	0.000	0.000	0.000	0.000
6	Materials and consumables	£m	3	0.254	0.681	1.258	2.193
7	Service charges	£m	3	0.000	0.000	0.000	0.000
8	Other direct costs	£m	3	0.427	0.572	0.308	1.307
9	Total direct costs	£m	3	17.135	16.518	16.934	50.587
10	General and support expenditure	£m	3	9.535	10.820	5.827	26.182
11	Functional expenditure	£m	3	26.670	27.339	22.760	76.769
B OPERATING EXPENDITURE							
12	Customer services	£m	3				10.361
13	Scientific services	£m	3				1.628
14	Other business activities	£m	3				1.558
15	Total business activities	£m	3				13.547
16	Rates	£m	3				7.020
17	Doubtful debts	£m	3				0.463
18	Exceptional items	£m	3				0.000
19	Total opex less third party services	£m	3				97.799
20	Third party services - opex	£m	3				0.008
20a	PPP Unitary Charges (Opex element)	£m	3				0.001
21	Total operating expenditure	£m	3				97.808
21a	Payment by concessionaire to operator	£m	3				
C REACTIVE AND PLANNED MAINTENANCE (INCLUDING OPEX)							
22	Reactive and planned maintenance infrastructure	£m	3	5.528	0.000	0.000	5.528
23	Reactive and planned maintenance non-infrastructure	£m	3	11.920	3.883	0.000	15.802
D CAPITAL MAINTENANCE							
24	Infrastructure renewals charge (excluding third party services)	£m	3	0.000		0.000	9.864
25	Current cost depreciation (allocated)	£m	3	1.824	45.628	2.357	49.809
26	Amortisation of deferred credits	£m	3				-1.667
27	Amortisation of intangible assets	£m	3				0.000
28	Business activities current cost depreciation (non-allocated)	£m	3				0.282
29	Capital maintenance excluding third party services	£m	3				58.288
30	Third party services - current cost depreciation	£m	3				0.000
31	Third party services - infrastructure renewals charge	£m	3				0.000
32	Total capital maintenance	£m	3				58.288
33	Total operating costs	£m	3				156.096

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 22 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING)
ACTIVITY COSTING ANALYSIS - SEWERAGE SERVICE (PPP Only)

DESCRIPTION		UNITS	DP	1	2	3	4
				SEWERAGE	SEWAGE TREATMENT	SLUDGE TREATMENT & DISPOSAL	SEWERAGE SERVICE TOTAL
SERVICE ANALYSIS - SEWERAGE							
A DIRECT COSTS							
1	Employment costs	£m	3				0.000
2	Power	£m	3	0.000	1.109	0.000	1.109
3	Agencies	£m	3				0.000
4	Hired and contracted services	£m	3				0.000
5	Associated companies	£m	3				0.000
6	Materials and consumables	£m	3				0.000
7	Service charges	£m	3				0.000
8	Other direct costs	£m	3	0.000	0.000	0.000	0.000
9	Total direct costs	£m	3	0.000	1.109	0.000	1.109
10	General and support expenditure (NIW Only)	£m	3	0.000	0.692	0.390	1.082
11	Functional expenditure	£m	3	0.000	1.801	0.390	2.191
B OPERATING EXPENDITURE							
12	Customer services	£m	3				
13	Scientific services	£m	3				0.056
14	Other business activities	£m	3				
15	Total business activities	£m	3				0.056
16	Rates	£m	3				0.487
17	Doubtful debts	£m	3				
18	Exceptional items	£m	3				
19	Total opex less third party services	£m	3				2.734
20	Third party services - opex	£m	3				
20a	PPP Unitary Charges (Opex element)	£m	3				15.241
21	Total operating expenditure	£m	3				17.975
21a	Payment by concessionaire to operator	£m	3				
C REACTIVE AND PLANNED MAINTENANCE (INCLUDING OPEX)							
22	Reactive and planned maintenance infrastructure	£m	3				
23	Reactive and planned maintenance non-infrastructure	£m	3				
D CAPITAL MAINTENANCE							
24	Infrastructure renewals charge (excluding third party services)	£m	3				
25	Current cost depreciation (allocated)	£m	3				
26	Amortisation of deferred credits	£m	3				
27	Amortisation of intangible assets	£m	3				
28	Business activities current cost depreciation (non-allocated)	£m	3				
29	Capital maintenance excluding third party services	£m	3				
30	Third party services - current cost depreciation	£m	3				
31	Third party services - infrastructure renewals charge	£m	3				
32	Total capital maintenance	£m	3				
33	Total operating costs	£m	3				17.975

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 22 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING)
ACTIVITY COSTING ANALYSIS - SEWERAGE SERVICE (Total)

DESCRIPTION		UNITS	DP	1	2	3	4
				SEWERAGE	SEWAGE TREATMENT	SLUDGE TREATMENT & DISPOSAL	SEWERAGE SERVICE
SERVICE ANALYSIS - SEWERAGE							
A DIRECT COSTS							
1	Employment costs	£m	3	3.496	3.975	1.904	9.374
2	Power	£m	3	5.567	10.658	3.499	19.723
3	Agencies	£m	3	0.000	0.000	0.000	0.000
4	Hired and contracted services	£m	3	7.392	1.743	9.965	19.100
5	Associated companies	£m	3	0.000	0.000	0.000	0.000
6	Materials and consumables	£m	3	0.254	0.681	1.258	2.193
7	Service charges	£m	3	0.000	0.000	0.000	0.000
8	Other direct costs	£m	3	0.427	0.572	0.308	1.307
9	Total direct costs	£m	3	17.135	17.627	16.934	51.696
10	General and support expenditure	£m	3	9.535	11.512	6.217	27.264
11	Functional expenditure	£m	3	26.670	29.140	23.150	78.960
B OPERATING EXPENDITURE							
12	Customer services	£m	3				10.361
13	Scientific services	£m	3				1.684
14	Other business activities	£m	3				1.558
15	Total business activities	£m	3				13.604
16	Rates	£m	3				7.507
17	Doubtful debts	£m	3				0.463
18	Exceptional items	£m	3				0.000
19	Total opex less third party services	£m	3				100.534
20	Third party services - opex	£m	3				0.008
20a	PPP Unitary Charges (Opex element)	£m	3				15.242
21	Total operating expenditure	£m	3				115.784
21a	Payment by concessionaire to operator	£m	3	0.000	0.000	0.000	0.000
C REACTIVE AND PLANNED MAINTENANCE (INCLUDING OPEX)							
22	Reactive and planned maintenance infrastructure	£m	3	5.528	0.000	0.000	5.528
23	Reactive and planned maintenance non-infrastructure	£m	3	11.920	3.883	0.000	15.802
D CAPITAL MAINTENANCE							
24	Infrastructure renewals charge (excluding third party services)	£m	3	0.000		0.000	9.864
25	Current cost depreciation (allocated)	£m	3	1.824	45.628	2.357	49.809
26	Amortisation of deferred credits	£m	3				-1.667
27	Amortisation of intangible assets	£m	3				0.000
28	Business activities current cost depreciation (non-allocated)	£m	3				0.282
29	Capital maintenance excluding third party services	£m	3				58.288
30	Third party services - current cost depreciation	£m	3				0.000
31	Third party services - infrastructure renewals charge	£m	3				0.000
32	Total capital maintenance	£m	3				58.288
33	Total operating costs	£m	3				174.072

Tables 21 & 22 Activity Costing Analysis – Water & Sewerage Service

After consultation with the Utility Regulator a new methodology was agreed for AIR10 and the corresponding AIR09 Tables 21 and 22 have now been restated using the same methodology. The restated AIR09 Tables form the basis of this commentary.

The costs in Tables 21 & 22 are populated with the updated information available at 3 June 2010 for the year ended 31 March 2010.

1 Allocation of costs between expenditure types

Expenditure is classified as capital expenditure if it satisfies the following criteria:

- it exceeds the threshold limit set at £3,000 (Note: land has a capital threshold of zero) and,
- it was used for one of the following purposes:
 1. Initial construction or purchase of a fixed asset (e.g. land, buildings, vehicles, plant, computers);
 2. Extension of a fixed asset which increases its size or operating capacity;
 3. Improvement of a fixed asset beyond the assets original condition on construction or acquisition;
 4. To substantially extend the original life of a fixed asset;
 5. To renew or replace an existing fixed asset; and
 6. Contributions paid to another body towards the cost of work that would be fixed asset expenditure were it undertaken by NI Water, provided that the resultant ownership of the assets is vested in NI Water.

Some items, individually, may be valued at less than £3,000 but because they form part of an operational configuration they should be capitalised; for example workstations which comprise a monitor, keyboard, central processor, mouse and printer should be capitalised.

Cost includes own work capitalised comprising the direct costs of materials, labour and applicable overheads. Interest costs relating to the acquisition of fixed assets have not been capitalised.

Fixed assets comprise:

- Infrastructure assets
Infrastructure assets comprise a network of systems consisting of mains and sewers, impounding and pumped raw water storage reservoirs, sludge pipelines and sea outfalls. The infrastructure renewals charge for infrastructure assets is included in Tables 21 and 22 and is the estimated level of annual expenditure required to maintain the operating capability of the network, which is based on the Company's Asset Management Plan.

- Other assets
Other assets comprise a) land and non operational buildings, b) operational assets (compromising sites used for water and wastewater treatment, pumping or storage where not classified as infrastructure) and c) vehicles, mobile plant and equipment.

Allocation of costs between service areas

All costs entered to NI Waters Oracle general ledger (GL) have a 5-segment coding combination (account, cost centre, service activity, location and project). For the purpose of Tables 21 & 22 opex costs from the general ledger have been allocated between water and sewerage services and between service areas within the water and sewerage activities by mapping NI Water's Oracle general ledger to the tables using the coding structure.

Expense Groups are mapped to the NIAUR cost categories – **appendix 1** provides details of this mapping. The Services Activities segment is mapped to the NIAUR service areas – **appendix 2** provides details of this mapping.

The only exception to this is indirect General & Support expenditure, which can relate to more than one service area or activity. These costs are collated into 4 separate 'overhead pots' and are apportioned either on the basis of the directly coded spend or on the basis of the total direct costs. The apportionment of the general Overhead Pots has reduced significantly from the restated AIR09 to AIR10. An explanation of the reduction is outlined later in the commentary. The table below shows the basis of apportionment of 'indirect' general and support expenditure between service activities.

Allocation of General and Support	Water		Sewerage			Comments
	R&T	Distribution	Sewerage	Sewage Treatment	Sludge Treatment & Disp	
BASIS - Total Direct Costs	21.2%	22.1%	19.0%	20.9%	16.7%	
G&S Overhead Pot 1	21.2%	22.1%	19.0%	20.9%	16.7%	Non ops general spend. Excludes CS, SS & Regulation
G&S Overhead Pot 2a - Water	48.9%	51.1%	0.0%	0.0%	0.0%	Water related activities only
G&S Overhead Pot 2b - Sewerage	0.0%	0.0%	33.6%	36.9%	29.5%	Sewerage activities only
G&S Overhead Pot 3	21.2%	22.1%	19.0%	20.9%	16.7%	Water and sewerage networks spend only

The percentage splits have not changed significantly from restated AIR09. No allocation within the G&S overhead pot 1, which contains the vast majority of the cost, changing by more than 2.5%. The apportionment of pot 1 to Water has reduced by circa 1.5% in AIR 10 whilst Sewerage has increased by circa 1.5%.

It was agreed with the Utility Regulator that Mechanical & Electrical Maintenance (M&E) be treated as General & Support costs as opposed to being split across the other direct cost lines. M&E costs are not apportioned on the allocations set out in the table above, but rather upon the direct coding to Service Activities for the M&E function in the General Ledger. Service Activities are mapped to the NIAUR service areas in **Appendix 2**. This was consistently applied to both AIR09 restated and AIR10.

Allocation of costs to business activities and rates

All costs which relate to business activities e.g. customer services, scientific services and other, were collated using the relevant cost centre segment from the Oracle General Ledger. The total expenditure attributable to these activities is apportioned to water and sewerage on the basis of the directly coded spend. This basis has not changed since the AIR08 return. The percentage splits have not changed significantly from restated AIR09 where Water was allocated 45.7% and Sewerage 54.3%. The table below shows the basis of apportionment for AIR10.

Apportionment of business activities	Water		Sewerage		
	R&T	Distribution	Sewerage	Sewage Treatment	Sludge Treatment & Disp
DESCRIPTION					
BASIS - Total spend (Includes general & Support)	20.9%	23.3%	18.8%	20.6%	16.4%
Apportionment					
Water / Sewerage split	44.2%		55.8%		

Rates were allocated between Table 21 and Table 22 using the rates bills. The rates charge for water treatment can be specifically identified from the rates bill. The remainder of the rates charge is allocated to Table 22.

Allocation of costs to unappointed activities

A final allocation of costs has been made to unappointed activities based on an assumption that these activities are either charged on a full cost recovery basis, and thus costs broadly mirror income generated, or the income does not give rise to any additional operational costs (e.g. rents received or fishing rights). This is consistent treatment since the AIR08 return.

Atypical costs and provisions:

Freeze thaw incident

During December and January 2010 the prolonged adverse weather conditions resulted in a major incident for NIW. The additional operating expenditure incurred amounted to approximately £0.5M primarily in Hired & Contracted Services.

Reorganisation costs

Reorganisation costs included within reported totals on Tables 21 and 22 are provided in the table below:

Description	Amount	Table 21/22 location
Business Improvement programme	£6.4M	General & support – all activities
Voluntary Early Retirement Scheme \ Voluntary Severance (VER \ VS)	£5.1M	General & support – all activities
Total	£11.5M	

Business Improvement Programme

The Business Improvement Programme (“BIP”) is fundamental to the restructuring and modernisation of the water industry in Northern Ireland. Spanning over three years through to March 2010, the Programme is designed to improve working practices, increase efficiency and put service at the forefront of all NI Water’s operations. More information on the BIP is contained within the Annual Report. The corresponding charge for AIR09 was £8.4M. Any amounts outstanding at the end of the financial year are expected to be settled within 12 months.

Voluntary Early Retirement

During 2009/10 NI Water further reduced the workforce resulting in the release of Voluntary Early Retirement (VER) and Voluntary Severance (VS) schemes. Further details on the staff reduction programme is contained within the Annual Report.

The cost of £5.1m shown above can be broken down as follows:

Pension related VER past service costs	£3.2M
Non pension lump sums	£0.4M
VS scheme payments	<u>£1.5M</u>
Total	£5.1M

Of the above costs relating to the 2009/10 scheme there were no amounts paid during 2009-2010. The entire liability was accounted for in the pension liability and accruals at year end. It is expected that these payments will be made within the next financial year. The corresponding charge for AIR09 was £11.7M.

Other Provisions

There are several other provisions relating to claims arising from contractual arrangements with suppliers.

Employment Costs

Staff costs for total NIW come to circa £54M as detailed below. These costs include the £5.1M VER\VS costs outlined above. Only circa £23M is included in Employment Costs (Line 1) in Tables 21 & 22 (AIR09 restated circa £27M). The table below provides the reconciliation between these amounts:

Description	Amount	Table 21/22 location
Industrial Wages	£21.1M	
Salaries	£26.9M	
Temporary Staff	£2.4M	
Other Costs of Employment	£1.9M	
Staff Expenses	£1.6M	
Total NIW staff costs	£53.9M	
Less:		
Customer Services	(£4.1M)	Customer Services
Scientific Services	(£1.6M)	Scientific Services
Third Party Opex	(£0.1M)	Third Party Opex
Regulation	(£0.4M)	Other Business Activities
Unallocated	(£24.6M)	General & Support
Total Employment Costs	£23.1M	£13.7M Table 21 and £9.4M Table 22

The unallocated amount of circa £25M is included in General & Support and has been apportioned between Table 21 and 22, across each of the columns, based on total direct costs, with the exception of M&E which is directly coded to each column using the service activity mapping. Employment costs have decreased by approximately £4M from the restated AIR09 primarily due to the reduction in staff numbers. The main expenditure in temporary support staff in the 09/10 financial year was in the Operations and Asset Management directorates (£1.0M and £0.9M respectively).

Hired & Contracted

Hired and Contracted Services of circa £26M in Table 21 and 22 are split out in the table below. The corresponding charge in the restated AIR09 was circa £24M.

Hired & Contracted Services:	£M		
	Table 21	Table 22	TOTAL
Operational Contractors	£6.7M	£18.4M	£25.1M
Other Contractors	£0.7M	£0.7M	£1.4M
Consultants	£0.0M	£0.0M	£0.0M
TOTAL	£7.4M	£19.1M	£26.5M

Within the Operational Contractors costs of £6.7M in Table 21, circa £2M relates to the cost of contractors for Water Treatment with the balance being the cost for the hire of plant and contractors to facilitate the maintenance of the networks. In Table 22 Operational Contractors of the total of £18.4M, circa £10M is for the cost of the various Sludge Disposal Routes, circa £7M is for the maintenance of the Sewerage network and the balance relates to the costs of Sewage Treatment (includes the costs of Skip Hire etc.).

There are no Consultants Fees in Table 21 and 22 in the financial year due to the completion of the Business Improvement projects that were on-going in the previous financial year.

Hired and Contracted Services have increased by £2M from the restated AIR 09. The main area of increase is in Water Distribution where the increase is £1.6M. Approximately £0.5M of this relates to the Freeze Thaw incident and there was a further increase of approximately £0.7M on new water connections. The increase is as a result of the work activity being carried out by the contractor as opposed to the in-house workforce and the increase in the cost of carrying out a new connection due to new Street Works Licensing requirements.

General & Support Costs

General & Support costs have reduced by circa £18M from the restated AIR09 to AIR10 due to the significant reduction in VER costs, reduced pension costs, reduction in BI costs, reduction in M&E costs, other efficiencies and improved allocation of costs by the Finance Business Partners across all directorates. The principal costs in this expenditure line are:

Description	Amount	Table 21/22 location
Unallocated Employment Costs	£24.6M	Included in General & Support (Removed from Employment Costs)
Unallocated Power	£0.1M	Included in General & Support (Removed from Power Costs)
Unallocated Hired & Contracted Costs	£13.7M	Included in General & Support (Removed from Hired & Contracted)
Unallocated Materials & Consumables	£2.1M	Included in General & Support (Removed from Materials & Consumables)
Unallocated Other Direct Costs	£0.1M	Included in General & Support (Removed from Other Direct Costs)
Communication	£1.2M	General & Support
Mobile V&P Charges & Repairs	£3.0M	General & Support
Staff Training	£0.6M	General & Support
Audit & Environmental Regulatory Costs	£1.1M	General & Support
Other	£0.1M	General & Support
Total	£46.6M	£19.3M Table 21 and £27.3M Table 22

General & Support costs were apportioned across Table 21 & Table 22 based on the total direct costs allocated to each column, with the exception of M&E which follows the direct coding to Service Activities for the M&E function in the General Ledger. Service Activities are mapped to the NIAUR service areas in **Appendix 2**. This was consistently applied to both AIR09 restated and AIR10. See the **Allocation of costs between service areas** section at the start of the commentary.

Cost performance

Changes in costs

During the 2009/10 financial year Customer Field Services, which was part of Customer Services, was set-up as a new Function within the Operations Directorate. Its responsibility is meter readers and water regulations. Upon discussion with the Utility Regulator it was agreed that this should be excluded expenditure in line with the Reporting Requirements Chapter 22, B.12.

Further to discussions with the Utility Regulator it was agreed that the following costs should be classified as General and Support (G&S) expenditure:

- Chief Executive & Commercial Directorates (except for PPP staff which will be split based on the unitary charge)
- Operations Head Office
- The Finance & Regulation Directorate
- The Secretariat Directorate
- HR and The Learning and Development Centre
- The TMG function which is responsible for maintaining the fleet of vehicles
- Materials storage

- Operational and Technical support
- Mechanical and electrical maintenance (M&E)
- General and Support buildings

AIR09 Tables 21 & 22 have been restated in line with the assumptions used in AIR10 and the restated AIR09 has been used as the basis to complete this commentary.

Table 21 – NIW Total**A - Direct Costs**

Total Functional Expenditure has decreased by over £10M from the restated AIR09 to AIR10. This is primarily due to the reduced general and support costs, other efficiencies and the increase in volumes of water produced by the PPP providers but is explained on a line by line basis below;

- Line 1: Employment costs have decreased in Water Resources & Treatment (WRT) by circa £0.9M and in Water Distribution (WD) by circa £1.9M. The decrease in costs is primarily due to the reduction in staff numbers.
- Line 2: Power costs include electricity costs and fuel costs for power generation. The costs have increased in AIR10 primarily due to circa 5% increase on the fixed price element of the unit price as the ESB contract moves into its 2nd annual term. The total power costs include circa £6.5M for PPP sites paid for by NIW.
- Line 3: Agencies – there are no costs in this line.
- Line 4: Hired and Contracted have increased by circa £1.7M, split £0.1M increase in WRT and £1.6M increase in WD. This is primarily due to the costs for the Freeze Thaw, an increase in the cost of road reinstatements and the cost of New Connections as detailed above.
- Line 5: Associated companies– there are no costs in this line.
- Line 6: Materials & Consumables have reduced by circa £0.9M from AIR09. WRT has reduced their costs by £0.4M while WD have decreased by £0.5M. WD has decreased due to a reduction in the use of chemicals during the year. WRT has reduced the costs of materials due to the contractor doing more of the new connections with which they provide their own materials and improved stock control has resulted in better utilisation of the stock.
- Line 7: Service Charges– there are no costs in this line.
- Line 8: Bulk Supply imports – there are no costs in this line.
- Line 9: Other Direct Costs have decreased by circa £0.5M. In WRT the main reduction was due to the rationalisation of vehicles and plant which resulted in a lesser internal charge. WD's has a significantly reduced charge in AIR10 due to an increase in the income from new connections which is offset in the P&L against overheads capitalised.
- Line 10: Total Direct Costs – this is a calculated line and is the total of Line 1-9. AIR10 direct costs are only £1M higher than the restated AIR09. This is driven by the increased power costs.
- Line 11: General & Support expenditure has reduced by over £11M from the restated AIR09. It has fallen from circa £31M to circa £19M in AIR10 due to the significant reduction in VER costs, the reduced pension costs, reduction in BI costs, reduction in M&E costs, other efficiencies and improved allocation of costs by the Finance Business Partners across all directorates. These factors reduced the General & Support expenditure which is allocated across the columns on a percentage basis of total direct costs, with the exception of M&E which follows the direct coding to Service Activities for the M&E function in the General Ledger. Service Activities are mapped to the NIAUR service areas in **Appendix 2**. This was consistently applied to both AIR09 restated and AIR10.

See the **Allocation of costs between service areas** section at the start of the commentary. The NIW Total costs include circa £0.2M for the PPP table.

- Line 12: This is the calculated total line for functional expenditure which has decreased by over £10M mainly due to the £11M reduction in general and support costs (Line 11) as described above.

B - Operating Expenditure

- Line 13: Customer services costs have increased by circa £0.4M compared to the restated AIR09. This is primarily due to changes in contractual arrangements. Customer services costs are apportioned based on the percentage of direct costs from Table 21 & 22. In AIR10 the percentage split was calculated at 44.2% Table 21 and 55.8% Table 22. In AIR09 the percentage split was 45.7% and 45.8% between Table 21 & 22 respectively.
- Line 14: Scientific Services costs have fallen marginally from the restated AIR09. Scientific Services costs have been split using the same percentage as Customer services as detailed above in Line 13.
- Line 15: Other Business Activities – Regulatory costs have reduced from the restated AIR09 mainly due to decreased regulator fees in the 0910 financial year. These costs are apportioned on the same basis as Line 13 and Line 14.
- Line 16: Total Business Activities – this is a calculated line and is the total of Line 13, 14 and 15.
- Line 17: Local authority rates have increased slightly in AIR10 and agree with the rates bills from LPS (Land & Property Services). Rates charges increased in the year as a result of the increase in the non domestic council rates. The rates charge for water treatment can be specifically identified from the rates bill which is consistent with AIR09.
- Line 18: Doubtful debts have decreased from the restated AIR09 position of £2.1M to £0.6 in AIR10. The total Doubtful debts were split between Table 21 and 22 by a percentage split calculated by the Customer Services Finance Business Partner based on the 'measured water income' and the 'non-domestic metered sewerage' income.
 1. Customer Services have worked closely with Echo, the external billing supplier, to resolve and recover the outstanding debt issues which resulted in lower than expected bad debts in 2009/10. The bad debt charge in Customer Services in 2009/10 was £0.8M in respect of non-domestic billing;
 2. Rechargeables – the bad debt charge in respect of rechargeable items in 2009/10 amounted to £0.3M.

These costs have been split between Table 21 and 22 using the percentage split of 58.4% and 41.6% respectively.

- Line 19: Exceptional items– there are no costs in this line.
- Line 20: Total opex less third party services – this is a calculated line and is the total of Line 12,16,17,18 and 19.
- Line 21: Third party services have risen marginally due to an increase in rechargeable works.
- Line 21a: Total PPP Unitary Charge has increased marginally by circa £0.1M. In AIR09 the company reported the opex element of Alpha from the dates of

Service Commencement. The costs for AIR09 therefore reflected only a part year total at £1.3M. For AIR10 the opex represents a full year total at £1.4M. This total also recognises that, unlike the Wastewater PPP's, the Alpha Concessionaire has recognised in excess of £0.7M in performance deductions in Unitary Charge invoicing and this is accounted for in the £1.4M opex charge

- Line 22: Total operating expenditure, this is a calculated line and is the total of line 20, 21 and 21a. This line has decreased by over £11M from the restated AIR09 mainly due to the decrease in General & Support expenditure (see Line 11). This agrees to Table 35 line 24.

C Reactive & Planned Maintenance

- Line 23: Infrastructure, this figure has reduced slightly due to significantly improved coding by the operational staff throughout the Networks Water Function.
- Line 24: Non-infrastructure, this figure hasn't changed dramatically at total level in Line 24.

PPP – Alpha

A contract with Dalriada Water Ltd. was signed on 30 May 2006 for the provision of bulk drinking water supplies. This has a capital cost in the region of £111 million. The service provision has commenced roll-out from 2008. The contract is for 25 years with an end date of 29 May 2031.

Charge to the profit and loss

This transaction is treated as an on balance sheet PFI transaction and the unitary charge is thus accounted for in the following components:

- In 2009/10 the net charge to the profit and loss account in respect of the service element of the Alpha unitary payments was £1.4M (2008/09 £1.3M).
- In 2009/10 the charge to the profit and loss account in respect of the finance charge element of the Alpha unitary payments was £11.3M (2008/09 £4.2M).
- In 2009/10 an amount of £2.9M (2008/09 £0.4M) of the unitary charge was debited to the balance sheet as it related to the repayment of the notional finance lease underpinning this on-balance sheet transaction.
- In 2009/10 an amount of £0.2M (2008/09 nil) of the unitary charge was debited to the balance sheet as it related to the additions to the capital maintenance asset for Alpha.
- In the period there was also a depreciation charge of £3.3m (2008/09 £1.2M).

Leakage costs

Operating costs relating to leakage amounted to £3.8M in 2009/10 which is consistent with AIR09. Capital expenditure has increased slightly from £6.4M to £6.8M.

Table 22 – NIW Total**A - Direct Costs**

Total Functional Expenditure has decreased by over £5M from restated AIR09 to AIR10. This is primarily due to the decrease in general and support expenditure and staff costs and is explained on a line by line basis below:

- Line 1: Employment costs have decreased in Sewerage (S) by circa £0.6M, Sewage Treatment (ST) by circa £1.3M and increased in Sludge Treatment and Disposal (ST&D) by circa £0.7M. The overall decrease of over £1M is primarily due to the reduction in staff numbers.
- Line 2: Power costs include electricity costs and fuel costs for power generation. The costs have increased in AIR10 primarily due to a circa 5% increase on the fixed price element of the unit price as the ESB contract moves into its 2nd annual term.

In AIR10 the Wastewater Field managers provided a percentage estimate of power costs between sewage treatment and sludge treatment at each of the WWTWs where there are both activities. These percentages were applied to the power costs to calculate the costs for each activity. This is the same rationale as AIR09.

There is one electricity meter at Duncrue Street which includes the costs for the Belfast WWTWs and the Incinerator. The power team supplied an estimated 60:40 split between the Belfast WWTWs and the Incinerator which has been used to calculate the amount relating to sewage treatment at Belfast and sludge treatment at the Incinerator. This is consistent with AIR09

- Line 3: Agencies – there are no costs in this line.
- Line 4: Hired and Contracted have increased slightly by circa £0.6M, circa £0.2M in Sewerage, circa £0.5M in Sewage Treatment and reduced by circa £0.1M in Sludge treatment & disposal.
- Line 5: Associated companies– there are no costs in this line.
- Line 6: Materials & Consumables have remained virtually unchanged from the restated AIR09 to AIR10.
- Line 7: Service Charges– there are no costs in this line.
- Line 8: Other Direct Costs have decreased by circa £0.2M which is mainly in Sewerage. The main reason is due to the rationalisation of vehicles and plant which has resulted in a lesser internal charge.
- Line 9: Total Direct Costs – this is a calculated line and is the total of lines 1-8. AIR10 direct costs are only £1M higher than the restated AIR09. This is driven by the increased power costs.
- Line 10: The General & Support expenditure has significantly reduced from the restated AIR09. It has fallen from circa £34M to circa £27M in AIR10 due to the significant reduction in VER costs, the reduced pension costs, reduction in BI costs, reduction in M&E costs, other efficiencies and improved allocation of costs by the Finance Business Partners across all directorates. These factors reduced the General & Support expenditure which is allocated across the columns on a percentage basis of total direct costs, with the exception of

M&E which follows the direct coding to Service Activities for the M&E function in the General Ledger. Service Activities are mapped to the NIAUR service areas in **Appendix 2**. This was consistently applied to both AIR09 restated and AIR10. See the **Allocation of costs between service areas** section at the start of the commentary. The NIW Total costs include circa £1.1M for the PPP table.

- Line 11: This is the calculated total line for functional expenditure which has decreased by over £5M in total and there are more accurate allocations across each of the columns. The most significant decrease is within Line 10 General & Support as already mentioned above.

B - Operating Expenditure

- Line 12: Customer services costs have increased by over £1M against the restated AIR09. This is primarily due to changes in contractual arrangements. Customer services costs are apportioned based on the percentage of direct costs from Table 21 & 22. In AIR10 the percentage split was calculated at 44.2% Table 21 and 55.8% Table 22. In AIR09 the percentage split was 45.7% and 54.3% between Table 21 & 22 respectively.
- Line 13: Scientific Services costs have increased marginally from the restated AIR09. Scientific Services costs have been split using the same percentage as Customer Services as detailed above in Line 12.
- Line 14: Other Business Activities – Regulatory costs have reduced from the restated AIR09 mainly due to decreased regulator fees in the 0910 financial year. These costs are apportioned on the same basis as Line 13 and Line 14.
- Line 15: Total Business Activities – this is a calculated line and is the total of Line 12, 13 and 14.
- Line 16: Local authority rates have increased by £1.7M from the restated AIR09. The following PPP sites for Omega ie Richhill, Ballyrickard and Armagh plus Kinnegar and North Down (approx £0.5M) are paid by NIW and have been removed in the NIW (only) Table 22 as they relate to the PPP site not NIW. This is consistent with AIR09. Rates have increased due to the increase in numbers of works covered by the rates bills.
- Line 17: Doubtful debts have decreased from the restated AIR09 position of circa £1.0M to circa £0.5M. The total Doubtful debts were split between Table 21 and 22 by a percentage split calculated by the Customer Services Finance Business Partner based on the 'measured water income' and the 'non-domestic metered sewerage' income.
 1. Customer Services have worked closely with Echo, the external billing supplier, to resolve and recover the outstanding debt issues which resulted in lower than expected bad debts in 2009/10. The bad debt charge in Customer Services in 2009/10 was £0.8M in respect of non-domestic billing;
 2. Rechargeables – the bad debt charge in respect of rechargeable items in 2009/10 amounted to £0.3M.

These costs have been split between Table 21 and 22 using the percentage split of 58.4% and 41.6% respectively.

- Line 18: Exceptional items– there are no costs in this line.
- Line 19: Total opex less third party services – this is a calculated line and is the total of Line 11, 15, 16, 17 and 18.
- Line 20: Third party services have remained constant.
- Line 20a: Total PPP Unitary Charge has increased by circa £6M as a result of increased use of PPP sites.
- Line 21: Total operating expenditure, this is a calculated line and is the total of line 19, 20 and 20a. This line has increased by circa £2.4M from the restated AIR09. This is primarily due to the increased PPP unitary charge and power costs counteracted by the decrease in General & Support expenditure (Line 10). This agrees to Table 36 line 21.

C - Reactive & Planned Maintenance

- Line 22: Infrastructure, this figure has reduced due to significantly improved coding by the operational staff throughout the Networks Sewerage Function and the use of the Super-bundle contract.
- Line 23: Non-infrastructure, this figure has remained consistent with the restated AIR09.

PPP**Kinnegar**

A contract with Coastal Clearwater Ltd was signed on 30 April 1999 for the provision of sewerage treatment which covered the upgrading of the Kinnegar Waste Treatment Works with a capital cost in the region of £11m. The contract is for 25 years with an end date of 30 April 2024.

The PFI property involved is not an asset of NIW but the assets will revert to NIW at the end of the contract. In 2009/10 the charge to the Operating Costs Statement in respect of Kinnegar was £2.0M (2008/09 £1.2M). The gross charge was £2.2M (2008/09 £1.5M) with £0.2M (2008/09 £0.2M) capitalised in relation to the residual interest asset

Omega

A contract with Glen Water Ltd was signed on 6 March 2007 for the provision of sewerage treatment and sludge disposal at five sites with a capital cost in the region of £122M. The contract is for 25 years with an end date of 5 March 2032.

The PFI property involved is not an asset of NIW but since the assets will revert to NIW at the end of the contract part of the unitary charge has been capitalised as a residual interest asset. In 2009/10 the charge to the Operating Costs Statement in respect of Omega was £6.9M (2008/09 £8.1M). The gross charge was £8.8M (2008/09 £9.4M) with £1.9M (2008/09 £1.3M) capitalised in relation to the residual interest asset.

An amount of £6.4M was charged to the Profit and Loss Account in 2009/10 in respect of an increased provision for claims from Glenwater giving rise to a total Profit and Loss Account charge for Omega for 2009/10 of £13.2M.

Reactive and planned maintenance

The overall approach and allocation process for Tables 21 and 22 has remained consistent with AIR09. However there still remain some limitations to the coding which means that some expenditure, for example building and ground maintenance, cannot be split separately.

Pensions

Total pension costs of £10.7M (AIR09 £17.2M) which amounts to £11.0M net of interest credit (AIR09 £17.1M) were charged to the profit and loss account. This is made up of current service costs of £7.8M (AIR09 £10.5M) and past service costs of £3.2M (AIR09 £6.7M). These costs have been included in general and support costs and employment costs in Tables 21 and 22 on the basis outlined in the cost allocation section above.

The total employer pension contributions for the year were £18.5M (AIR09 £15.2M) including £7.5M relating to payment of 2008-09 past service costs.

These costs have been included in general and support costs and employment costs in Tables 21 and 22. Pension costs for those employees who can be directly attributed to service or business activities will be mapped directly to these areas via the wages and salaries codes as outlined in the cost allocation methodology. Pension costs that relate to either employees not engaged directly on service/business activities or that relate to past service costs (i.e. VER provision) will be apportioned to activities in line with the treatment of general and support expenditure as detailed in the cost methodology.

From April to October 09 the actual percentage contribution level was approx. 29.3% of pensionable pay within the profit and loss account. Upon agreement between the Trustees and the company the rate was reduced to 26.9% from October 09 to the year-end.

Pensions costs and finance charges associated with employees involved with unappointed activities have not been specifically excluded from pension figures within the profit and loss account. However as noted in the costing section above an estimate of the costs of unappointed activities has been adjusted for during the costs allocation process and it has been assumed that an element of this allocation would cover pension costs.

There is no deficit payments associated with the pension fund as the scheme has been in surplus since inception.

Further disclosures on pensions are contained in the statutory accounts which are based on the company's actuarial report at 31 March 2010.

Third party costs

Third party costs relate primarily to services recharged to third parties. These costs include labour, materials, vehicles and overheads to reflect a best estimate of the full

cost to the company of supplying these services. These services include unplanned work (e.g. repairs to rectify damage by third parties to company assets) and planned work (requests for the company to carry out small works). The associated income is reported in Table 23 as third party income.

Infrastructure Renewals Charge (IRC)

See Commentary for Table 33.

System Controls

Internal audit carried out a review of the AIR returns and suggested recommendations regarding sign offs, password protection of files and process notes. Where possible these recommendations have been implemented.

Table 21 – Water Service (PPP only)**Line 2 - Power Costs**

AIR 09 Reported on the Alpha sites for a part year only at £2.32M from the dates of Service for each Facility (Scheme).

The increase to £6.473M reflects a full year of Service for all Facilities (Schemes)

Line 8 - Other Direct Costs:

No variation. No Costs incurred.

Line 10 - NIW only General & Support Expenditure

The NIW only General & Support Expenditure was reported in AIR09 as the portion of Commercial Contracts Management Team costs attributable to administering Facilities (Schemes) in service. This was an approximation of such NIW staff costs for its Contract Management Team staff costs for a part year of Alpha Service. (£0.074M)

For AIR10, the company has refined its methodology to G&SE Costs to include apportionment of staff costs, overheads and PPP consultancy. This gives a more accurate costing of the G&SE for water PPP's, when reflected against the current imbalance of staff and consultancy time on the construction phase of the Omega Contract. The resultant cost is considerably more accurate than AIR 09 at £0.234M.

Line 14 - Scientific Services

Whilst the company has started to bear the cost of bacteriological sampling and analysis from February 2010 following a Contract Change after the Dunore Pt Boil Notice in April 2009, this was off set by an equal reduction in the payment to the Concessionaire. The Company's accounts reflect this as a netting of the total amount payable to the Concessionaire, and the cost is therefore reflected in line 21(a), and not recorded in Line 13. Line 13 is therefore zero. (The Company will correctly allocate such amounts to Line 14 for 2010/11).

Line 16 - Rates

Rates for PPP sites were not requested in AIR 09. The rates for the relevant Facilities (Schemes) in Service are now provided. Rates at water supply sites are based on water volumes. In order to allocate a proportion of the rates bill to the Alpha sites the volume of water supplied at each PPP site was taken as a percentage of the total NIW water supplied and this figure was multiplied by the total NIW rates cost.

Line 21a - PPP Unitary Charges (Opex)

This line data is drawn directly with the Company's accounts. No additional reconciliation is required.

In AIR09 the Company reported the opex element of Alpha from the dates of Service Commencement. The costs for AIR 09 therefore reflected only a part year total at [REDACTED].

For AIR10 the opex represents a full year total at [REDACTED]. This total also recognises that, unlike the wastewater PPP's, the Alpha Concessionaire has recognised in excess of [REDACTED] in performance deductions in Unitary Charge invoicing and this is accounted for in the [REDACTED] opex charge.

Line 22(a) - Payments from Concessionaire to Operators

This line is equivalent to Line 10 (PPP) in AIR 09, where the data then represented the payments to the operating subcontractor for a part year as provided by the Concessionaire [REDACTED]

The AIR 10 data represents payments for these Facilities for a full year in accordance with the line guidance as set out in the methodology [REDACTED]

The operating company is entitled to receive costs in relation to the following items as agreed in the contract between the Concessionaire and Operating Company

[REDACTED]

The invoices presented from the operating company to the concessionaire are limited only to these categories of costs .No other information is available in relation to the payments made by Concessionaire to the Operating Company.

Also over the period from 1st April 2009 to 31st March 2010 the Concessionaire would have made payments to the Operator for the construction of the assets but these have been excluded on the basis that they do not represent routine direct costs attributable to the treatment and distribution of water and hence would not support the Primary Purpose of "Informing relative performance and efficiency assessments".

Table 22 - Sewerage Service (PPP only)**Line 2 - Power Costs**

AIR 09 Reported on Omega North Down Ards WWTW only £0.622M

The increase in Omega costs reflects:

The variation in North Down Ards WWTW power costs to £0.795M

The addition of the Richhill WWTW: £0.051

The addition of Ballyrickard WWTW: £0.178

The addition of Armagh WWTW: £0.085M

Kinnegar: Power costs are not recorded as (i) they are not paid by the Company and (ii) they are part of the Unitary Charge payment to the Concessionaire and in addition cannot be determined directly as the Concessionaire is not obliged to report on AIR matters from this early PFI Contract.

Line 8 - Other Direct Costs:

In AIR 09 the Company overlooked the payment to NCC Escrow for the secure retention of the Kinnegar Project Documents. (In Omega and Alpha, these costs are borne by the Concessionaire). The value is £1k per annum, and is properly reported in AIR10

Line 10 - NIW only General & Support Expenditure

The NIW only General & Support Expenditure was reported in AIR09 as the portion of Commercial Contracts Management Team costs attributable to administering Facilities (Schemes) in service. There was an approximation of such NIW staff costs for administration of North Down and Kinnegar only. £0.074M

For AIR10, the company has refined its methodology to G&SE Costs to include apportionment of staff costs, overheads and PPP consultancy. This gives a more accurate costing of the G&SE for wastewater PPP's.

However, the revised approach spreads the expenditure across all Facilities (Schemes) whether in Service or in Construction Phases. This is more representative as a large proportion of the staff and consultancy support time has been spent on PPP Construction issues during the period.

Consequently, whilst the Ballynacor WWTW, Ballynacor Sludge Facility and Duncrue St Sludge Facilities were all in construction, (along with the Ballynacor Lagoon Remediation), and not in Service, the costs have had to be allocated to these Schemes to reconcile with the PPP Accounts Code. Thus, costs of £0.130M in Column 2 and 3 x £0.130M in Column 3 are provided for as part of the £1.081M cost of managing the wastewater PPPs.

Line 13 - Scientific Services

Scientific Services costs reflect the contract sampling and analysis costs borne by the Company in providing its sampling and analytical contractual obligations to the Kinnegar and Omega Facilities in Service: Kinnegar, North Down, Richhill, Ballyrickard, and Armagh.

AIR 09 overstated the costs attributable to Kinnegar and North Down, as at the time the company was carrying out operational sampling for North Down in addition to the Contract sampling. The operational sampling costs were subsequently recharged to the contractor.

Line 16 - Rates

Rates for PPP sites were not requested in AIR 09. The rates for the relevant Facilities (Schemes) in Service are now provided. The rates figure for Omega sites Richhill, Ballyrickard and Armagh were taken directly from the rates bills received from LPS and apportioned for part of the year where necessary. Kinnegar was also taken directly from the Rates Bill. North Down was not included in the original 0910 rates bill however has been included in a draft additional bill from LPS which was accrued at the year end. The figure for North Down agrees to the estimate from LPS.

Line 20a - PPP Unitary Charges (Opex)

This line data is drawn directly with the Company's accounts. No additional reconciliation is required.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Line 21(a) - Payments from Concessionaire to Operators

This line is equivalent to Line 10 (PPP) in AIR 09, where the data then represented the payments to Operating Subcontractors for Kinnegar and North Down only.

The AIR 10 data represents payments for these Facilities and those of Armagh, Ballyrickard and Richhill.

The Kinnegar data has been derived from the Concessionaires Monthly Invoices to the Company where the payments to Operator are individually itemised.

The Omega data has been provided directly by the Omega Contractor, advising this is provided from the Operators accounts.

A breakdown of the payments per Facility (Scheme) is as per Table 43. The sludge figure is not Unitary Charge but the initial Milestone payments No.1 and No.2 for the Ballynacor Sludge Lagoon Remediation Work.

Appendix 1 – Expense group mapping

Expense Group	Description	Table 21 & 22 mapping
511X	Industrial Wages	1 Employment
513X	Other Wage Costs	1 Employment
514X	Other Costs of Employment	1 Employment
515X	Salaries	1 Employment
516X	Non-Industrial Expenses	1 Employment
517X	Temporary Support Staff	1 Employment
611X	Costed Wages Charge	1 Employment
612X	Wages Overheads	1 Employment
613X	Costed Wages Recovery	1 Employment
614X	Costed Wages Overhead Recovery	1 Employment
521X	Power	2 Power
531X	Operational Contractors	4 Hired and Contracted
532X	Other Contractors	4 Hired and Contracted
534X	Out sourcing	4 Hired and Contracted
538X	Consultants Fees	4 Hired and Contracted
541X	Materials and Equipment	6 Materials & consumables
544X	Non Operations Materials	6 Materials & consumables
547X	Stock Adjustments	6 Materials & consumables
548X	Chemicals	6 Materials & consumables
536X	Office and Computer Services	9 other direct costs
537X	Legal and other professional fees	9 other direct costs
551X	Accommodation	9 other direct costs
553X	Insurance - Premiums	9 other direct costs
553Y	Insurance - Claims	9 other direct costs
554X	Public Liability	9 other direct costs
555X	Employer's Liability	9 other direct costs
616X	Vehicle and Plant Charges	9 other direct costs
695X	Management Task	9 other direct costs
759X	Overheads Capitalised	9 other direct costs
518X	Staff Training & Hospitality	11 General & support
533X	V&P repairs	11 General & support
539X	Audit	11 General & support
546X	Mobile V&P Charges	11 General & support
552X	Communication	11 General & support
556X	Other Grants and Subscriptions	11 General & support
557X	Advertising and Publicity	11 General & support
641X	Intra Departmental Notionals	11 General & support
651X	Inter Departmental Notionals	11 General & support
775X	Discount Allowed	13 Customer services
556Y	Regulatory Costs	15 Other Business Activities
558X	Rates	17 Rates
772X	Bad Debts	18 Doubtful debts
534Y	PPP	20/21a PPP unitary charge

Appendix 2 – Service activity mapping

Section 2 Chapter 21 & 22

NIW Service Activity	Service Activity description	Table 21/22 Mapping
310	Pumping (Inc Highlift at WTW)	Water - Distribution
311	Service Resv Wat Tower Tanks	
312	Service Resv cleaning	
313	Distribution and Water Operations	
320	Repair and Maintenance (Mains Repair)	
321	Repair and Maintenance (Service Repair)	
322	Repair and Maintenance (Hydrant & Valve Repairs)	
324	Repair and Maintenance (Mains Cleansing)	
326	Repair and Maintenance (Lead Replacement)	
331	Repair and Maintenance of 'Street Furniture' (Water)	
340	Leakage - Monitoring	
341	Leakage - Detection	
351	Consumer Meter Repair & Maintenance	
360	Investigations	
362	Customer Contacts excluding meter query	
363	Regulatory Plumbing Inspection	
380	'In House' Investigations and Attendance	
385	Health & Safety - Networks	
391	Networks Function Activity - Query	
399	Networks Stores	
920	Connection (Water)	
110	Impounding Reservoir	Water - Resource & Treatment
111	Loughs	
112	River Intakes	
113	Boreholes, Springs & Wells	
120	Repairs & Maint A/duct/Main	
140	Recreation & Amenity	
150	Water Treatment	
151	Water Sludge Treatment	
152	Water Sludge Disposal	
185	Health & Safety - Supply	
190	Supply Function Activity	
191	Supply Function Activity - Query	
822	Instrumental Control Activity M & E Water Supply	
410	Repair & Maintenance of Sewers	Sewerage - Sewerage
411	Blockage	
412	Desilting	
413	Inspection of Sewers	
414	Repair and Maintenance of 'Street Furniture' (Sewerage)	
415	Sewerage Tankering	
430	Pumping (Foul & Combined)	
431	Pumping (Surface Water)	
460	'In House' Investigations and Attendance	
462	Rodent Control	
940	Rechargeable (Sewerage)	
950	Connection (Sewerage)	
510	Sewage Treatment	Sewerage - Sewage Treatment
591	Waste Water Function Activity - Query	
620	Sludge Treatment - Tankering Between Works	Sewerage - Sludge Treatment
621	Sludge Treatment	
630	Sludge Disposal to Agricultural Land Transportation	
631	Instrumental Control Activity M & E WasteWater	
632	Sludge Cake Transportation to Landfill	
633	Sludge Cake Disposal to Landfill	
635	Sludge Logger Maintenance (Contract)	
636	Incinerator Sludge Treatment	
637	Sludge Disposal Tankering from Strategic Collection Centres to Dewatering Centres	
638	Sludge Cake Disposal to Incinerator	
639	Incinerator Ash Disposal to Landfill	
640	Private Septic Tank Desludging	Customer Services
710	General	
711	Customer Services (Meter Read & Customer Queries)	
712	Disconnection / Reconnection	
714	Consumer Meters Repair And Maintenance	
790	790	
730	Water Analysis	Scientific Services
731	Sewerage General	
732	Labs Water & Sewerage General	
733	Sampling	
734	Labs Sewage Sampling	
003	Rates DRC - Water	Rates
013	Rates DRC - Sewerage	
910	Rechargeable Work	Third Party Opex
000	Default	Overhead Pot 1 - General
021	GAE	
023	Invest to Save Revenue	
810	Vehicle & Plant Maintenance	
811	Vehicle & Plant Accident Repair	
812	Garage Overheads	
813	Roads Service	
820	Telemetry	
890	TMG Function Activity	
050	Ops & Maint General (Water)	
055	Ops & Maint General (Sewerage)	Overhead Pot 2 - Sewerage
585	Health & Safety - WW	
590	Waste Water Function Activity	
735	Trade Effluent	
821	Radio & Monitoring Wastewater	
390	Networks Function Activity	Overhead Pot 3 - Networks Water & Sewerage

Table 23

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 23 REGULATORY ACCOUNTS
ANALYSIS OF TURNOVER AND OPERATING INCOME

DESCRIPTION	UNITS	DP	1	2	3	4	5	6	7	8	9	10	11	CG
			2007-08			2008-09			2009-10			SUBSIDY WATER INCLUDED	SUBSIDY SEWERAGE INCLUDED	
			WATER SERVICES	SEWERAGE SERVICES	APPOINTED BUSINESS	WATER SERVICES	SEWERAGE SERVICES	APPOINTED BUSINESS	WATER SERVICES	SEWERAGE SERVICES	APPOINTED BUSINESS			
A TURNOVER														
1 Unmeasured - household	£m	3	104.560	99.245	203.805	114.089	104.945	219.028	118.127	122.227	240.354	118.127	122.227	A2
2 Unmeasured - non- household	£m	3	0.000	0.000	0.000	1.699	1.637	3.336	3.431	3.436	6.867	2.200	2.200	A2
3 Unmeasured	£m	3	104.560	99.245	203.805	115.782	106.582	222.364	121.558	125.663	247.221	120.327	124.427	A2
4 Measured - household	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	A2
5 Measured - non- household	£m	3	40.623	37.164	77.787	39.768	36.965	76.733	42.101	25.466	67.567	7.472	3.412	A2
6 Measured	£m	3	40.623	37.164	77.787	39.768	36.965	76.733	42.101	25.466	67.567	7.472	3.412	A2
7 Trade effluent	£m	3	0.000	5.471	5.471	0.000	4.712	4.712	0.000	2.831	2.831	0.000	0.000	A2
7a Roads Drainage Revenue	£m	3	0.000	0.000	0.000	0.000	17.150	17.150	0.000	19.670	19.670	0.000	0.000	A2
8 Large user and special agreement	£m	3	5.863	0.000	5.863	5.352	0.000	5.352	5.594	3.413	9.007	0.000	0.000	A2
9 Revenue grants	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	A2
10 Non potable water large user and special agreements	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	A2
11 Rechargeable works	£m	3	0.307	0.000	0.307	0.192	0.192	0.384	0.330	0.330	0.660	0.000	0.000	A2
12 Bulk supplies/inter company payments	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	A2
13 Other appointed business (third party)	£m	3	0.557	0.266	0.823	0.000	0.000	0.000	0.379	0.234	0.613	0.000	0.000	A2
14 Third party services (excluding non-potable water)	£m	3	0.864	0.266	1.130	0.192	0.192	0.384	0.709	0.564	1.273	0.000	0.000	A2
15 Other sources (excluding large users, third parties and special agreements)	£m	3	0.000	0.000	0.000	0.407	0.293	0.700	0.000	0.000	0.000	0.000	0.000	A2
16 Total turnover	£m	3	151.910	142.146	294.056	161.501	165.894	327.395	169.962	177.607	347.569	127.799	127.839	A2
B OPERATING INCOME														
17 Current cost profit or loss on sale of fixed assets	£m	3	0.021	-0.077	-0.056	-0.072	0.022	-0.050	0.120	-0.115	0.005			A2
18 Exceptional items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			A2
19 Other operating income	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			A2
20 Total operating income	£m	3	0.021	-0.077	-0.056	-0.072	0.022	-0.050	0.120	-0.115	0.005			A2
C WORKING CAPITAL ADJUSTMENT														
21 Working capital adjustment	£m	3	1.327	0.000	1.327	-0.292	0.000	-0.292	4.313	0.000	4.313			A2
D REVENUE CORRECTION MECHANISM														
22 Net revenue movement out of the tariff basket	£m	3							0.000	0.000	0.000	0.000	0.000	A2

Table 23 – Analysis of turnover and operating income

Working Capital Adjustment

The commentary to Table 27 outlines the methodology for the Working Capital adjustment.

The adjustment shown in Table 23 has been entirely attributed to Water. There will be an element relating to Sewerage but the information is currently not available to calculate this split.

Monitoring Of Revenue

Measured and Unmeasured Water and Sewerage – non household

Revenue is monitored at each month end when figures are made available by Echo. Each revenue stream is compared to the budget set at the beginning of the year with PTD and YTD variances calculated and analysed. A forecasting process is also in place to take account of trends and variances that are emerging and the actual PTD and YTD are also compared to the recent forecast. The forecast process is ongoing during the year (normally quarterly) with the budget set and fixed at the start of the financial year.

The Finance and Customer Services (CS) teams meet on a monthly basis to discuss any emerging variances. This monitoring system has continued to improve during the year with the use of the Dynamic Consumption Report. This report allows underlying trends in consumption to be compared to the volumetrics underpinning the forecasted information and this can begin to provide logical explanations for under or over achievement in revenue targets. In particular key customer accounts are examined for consumption trends and economic activity as these customers can have a significant influence on results.

Comparison of 2008/09 and 2009/10

The revenue subsidy from DRD has been allocated to the classifications within Table 23 in line with the posting of these categories of subsidy in Oracle. The subsidy element is shown separately in the table below for 2009/10 and compared to the position in 2008/09.

Non- Household

	UNM W	UNM S	MW	MS
	£m	£m	£m	£m
Customer	1.231	1.236	34.629	23.629
Subsidy	-		9.672	5.612
Total 2009-10	1.231	1.236	44.301	29.241
Customer	1.699	1.638	33.016	14.217
Subsidy			6.752	22.748
Total 2008-09	1.699	1.638	39.768	36.965
Variance	(0.468)	(0.402)	4.533	(7.724)
	(27.5%)	(24.5%)	11.4%	(20.9%)

	TE	MW Large User	Other W	Other S
	£m	£m	£m	£m
Customer	4.669	5.594	0.709	0.564
Subsidy	-	-	-	19.670
Total 2009-10	4.669	5.594	0.709	20.234
Customer	4.712	5.352	0.599	0.460
Subsidy	-	-	-	17.175
Total 2008-09	4.712	5.352	0.599	17.635
Variance	(0.043)	0.242	0.110	2.599
	(0.9%)	4.5%	18.4%	14.7%

Measured Sewerage income has fallen by 20.9% partly driven by reduced sewerage charges for some high volume water customers who successfully challenged the standard % 'return to sewer' assumption underpinning their measured sewerage charges.

The income category 'Other Sewerage' has risen by approximately £2.6m (14.7%). The main income stream within this is Road drainage charges and these have risen from £17.175m in 2008-09 to £19.670m in 2009-10.

In Measured Water the subsidy is related to domestic allowance and is agreed with DRD based on customer numbers and consumption. As consumption has risen in 2009/10 this subsidy has increased.

Household

	UNM W	UNS S
	£m	£m
Customer	-	-
Subsidy	118.127	122.227
Total 2009-10	118.127	122.227
Total 2008-09	114.083	104.945
Variance	4.044 3.5%	17.282 16.5%

Variances in domestic subsidy revenue are in line with RPI and the funding agreement under SBP.

Reported Turnover and Billed Amounts

Each month Management Accounts carry out a number of adjustments to the information provided by Echo on the billed amounts. A schedule is produced that maps the Echo information to the final Oracle General Ledger balances on the five main revenue accounts in the Profit and Loss Account (see Appendix 4). The adjustments can be summarised as follows:

Account 4211 Measured Water and Account 4311 Measured Sewerage

- a. Accrued Income from the Echo Accrued Income Report is added to billed amounts for the month.
- b. Referred Income – this relates to bills produced by Echo and included in the billing information are not issued because they have exceeded the value range expected for the bill ('the bill ceiling) or the bill is under query (N stops) or the address is not certain. Although most of these bills will eventually be released at the month end an amount is debited from billed amounts in case the full value of the bill is not finally released.
- c. Other adjustments – an issue of under-billing arose related to test meters where customers should have been billed for consumption and had not been (approximately £0.679m MW and £0.273m MS). An issue of over-billing arose related to an error in relation to legacy data whereby customers had been assigned the incorrect pipe size with a consequent overstatement of the bill issued giving approximately £885k overstatement to MW income. Manual adjustments were made for both items at year end (see billed income reconciliation).
- d. Victoria Square- this relates to billing of £0.116m that was not included in the rapid billing run and was manually accrued.

Account 4251 Unmeasured Water and Account 4351 Unmeasured Sewerage

The billing information from Echo will show the annual bills issued to cover 12 months in advance for unmeasured customers. An adjustment is completed by NIW to spread this initial advance billing over the twelve months of the year. This is achieved by deferring the income relating to the months billed in advance by debiting

income and crediting a deferred income account on the balance sheet. At year end the amount of the deferral is zero as the billing year is in line with the financial year ended 31 March.

An adjustment was for £0.082m for non void vacant properties. This adjustment is for customers occupying properties that were not being billed - 'Void' (i.e. not billable), that were in fact revised as 'non-voids' by the metering contractor, Enterprise. At 31 March 2010 815 properties were left to bill at a revised average bill of £200, NIW provided for 50% of this on a prudent basis.

Account 4411 Trade Effluent (TE)

TE income from Echo is adjusted for the TE element of the Accrued Income Report. There is no adjustment for referred bills.

Echo Reporting Packs

The Echo billing and accrued income reports are sent to NIW at each month end on a disk. All information is in excel spreadsheet form with twenty three separate sheets. The listing of these sheets and the reconciliations and checks completed by Echo are shown in Appendix 1. The tasks carried out by NIW Finance, NIW Customer Services and Echo are included in Appendix 2.

Reconciliations of Echo data to General Ledger (GL) Balance Sheet Accounts

A monthly exercise is carried out by Financial Accounts to ensure the following information is reconciled to the relevant GL balances on Oracle:

- Aged debtors balances provided by Echo;
- Bad Debt Provisions calculated by Customer Services;
- Accrued Income Report provided by Echo;
- Unreconciled receipts information from Echo;

At year end the position on all relevant balance sheet nominal ledger accounts was:

1210 Measured and Unmeasured Water and Sewerage Debtors	£16.544 m**
1213 Trade Effluent Debtors	£ 0.671 m
1218 Unreconciled Receipts	£(0.147)m
1220 Metered Water Bad Debt Provision	£(5.465)m
1223 Trade Effluent Bad Debt Provision	£(0.104)m
1420 Metered Water Accrued Income*	£15.392 m
1423 Trade Effluent Accrued Income	£ 0.805 m

* includes metered sewerage accrued income.

** this has been adjusted in the statutory accounts to exclude credit balances of approximately £2.237m that are then shown in creditors.

Monthly Monitoring Actual versus Budget

The monthly revenue monitoring procedures have been outlined at the start of this commentary. The year end position of income against budget can be shown as follows:

	YTD Budget (£m)	YTD Actual (£m)	Variance (£m)	Variance (%)
Measured Water / Sewerage	73.699	63.853	(9.846)	(13.4)
Unmeasured Water / Sewerage	4.441	2.467	(1.974)	(44.4)
Trade Effluent	5.200	4.669	(0.531)	(10.2)
Subsidy	277.590	277.107	(0.483)	(0.1)
Other	3.379	4.196	0.817	24.2
Total	364.309	352.292	(12.017)	(3.3)

The monthly monitoring against budget is carried out against the above lines. It should be noted subsidy is monitored at a total subsidy level and not by the income streams it is associated with. Unappointed activities are included above in both other income (vehicle maintenance, septic tank emptying etc.) and subsidy (septic tank subsidy).

Meter Reading Routestar and Rapid Xtra

In 2008-09 a module was designed by Echo to allow a reconciliation to take place between the system that collects meter readings (Routestar) to the Rapid Xtra system for bill generation. The aim was to compare the number of monthly readings being taken against the number of bills generated with an explanation of why for legitimate reasons (e.g. test meters) each reading may not give rise to a bill. This reconciliation was carried out on a monthly basis during 2009/10 and the output was examined by Customer Services, Internal Audit and External Audit. The reconciliation is now able to provide a completeness check on the numbers of readings versus the number of bills raised and it is the intention that the system should now be extended to cover consumption data read versus billed.

Measured Accrual

Accrued income is calculated by the RapidXtra system for Measured Water, Measured Sewerage and Trade Effluent income streams. The output is summarised in an Accrued Income Report and used by NIW when preparing the month end accrual.

The basis of the accrual is the same for all three income streams. At month end the number of days that has elapsed since the last bill date is multiplied by an appropriate accrual rate per day. The accrual rate is based on the historical daily consumption by the customer multiplied by the appropriate standing charge and consumption charge dependent on the customer pipe size etc. New customers without a billing history will have an industry average usage applied until a billing history has been established.

In the present economic climate historical consumption may tend to overstate future usage. This is particularly relevant for the large user accounts and an assessment is

carried out each month to determine if a manual adjustment is required to the accrued income to take account of this potential overstatement.

Reconciliation of Billed Income to P&L Account

All sources of income from Echo including MW,MS,UMW,UMS,TE.

Measured & Unmeasured Water and Sewerage	
Op. Accrued income at 1 April 2009	(£11.630m)
Cl. Accrued income at 31 March 2010	£15.924m
Movement in test meter billing	(£0.952m)
Adjustment for pipe size	£0.885m
Movement in accrual provision	£0.141m
Victoria Square	£0.116m
Non void vacant properties	£0.082m
Referred Bills Movement	£0.004m
Other movement	(£0.003m)
	<u>£4.567m</u>
Billed Income	<u>£61.754m</u>
Total income in P&L	<u>£66.321m</u>

Accrued income at year end 25.8% of billed income in the year.

Trade Effluent	
Op. Accrued income at 1 April 2009	(£0.964m)
Cl. Accrued income at 31 March 2010	£0.811m
Movement in Accrual Provision	(£0.006m)
	<u>(£0.159m)</u>
Billed Income	<u>£4.828m</u>
Total income in P&L	<u>£4.669m</u>

Accrued income at year end 16.8% of billed income in the year.

Variations in Accrued Income during 2009/10

The accrued income balances at 31 March 2009 can be shown as follows:

	2009-10	2008-09	Variance
	£m	£m	%
MW and MS	15.392	11.630	32.3
TE	0.805	0.964	(16.5)
Total	16.197	12.594	28.6

The MW and MS customer (excluding subsidy) income has increased by 32.3 % during the year (see earlier table) and this has contributed to the significant increase in the associated accrued income at the year end. The figures above include a provision of 2% for accrued income up to 210 days and 100% for income accruing over 211 days.

Trade Effluent income has stayed fairly constant compared to last year and has decreased by 16.5%. The figures above include a provision of 2% for accrued income up to 210 days and 100% for income accruing over 211 days.

Accrued versus Billed income

This is currently not carried out although NIW are working with Echo to incorporate this as part of the monthly analysis. This will ensure variances between the accrual calculation and subsequent billing are understood and action can be agreed to enhance the accuracy of the accrued amounts.

Road Drainage Income

Liability for the costs of road drainage was transferred from sewerage service users to the Roads Service in 2008/2009 following an independent review.

NIW drew up a methodology for the calculation of the costs of road drainage which was agreed with the Regulator and accepted by the Department for Regional Development (DRD). Details of the methodology and calculation of road drainage are contained in Appendix 3.

2009/10 road drainage charges have been calculated based on the agreed projections for NIW costs of operation as set out in the NIW tariff model and as approved by DRD and NIAUR. The basis for the calculations has been examined and approved by the Regulator and accepted by DRD. A total of £19.670m was invoiced in 09/10 for road drainage.

	Combined	Storm Water	Total
Split of sewers for run off from roads and footpaths	50.35%	49.65%	100%
Total volume of Water (Cubic metres)	32,324,700	31,875,300	64,200,000
Mogden Formula element	R+V	R	
Cost of Element	0.41580	0.19543	
Cost of Run off	£13.441m	£6.229m	£19.670m

Subsidy

NI Water received £238.9m subsidy in relation to household customers and at 31 March 2010 an amount for £1.454m was outstanding from DRD. The total subsidy for household was £240.3m.

NI Water received £17.0m subsidy in relation to non-household customers and at 31 March 2010 an amount for £1.716m was due to DRD. The total subsidy for non-household was £15.3m.

At 31 March 2010 £0.262m was due to DRD from NIW, these figure were made up of £1.454m household subsidy due to NIW and £1.716m due to DRD for non-household subsidy.

Non tariff basket revenue

Water service

There is no net revenue movement out of the tariff basket for the water service.

Sewerage service

There is no net revenue movement out of the tariff basket for the sewerage service.

APPENDIX 1 - THE TESTS CARRIED OUT BY THE ECHO ACCOUNTANT AND ASSISTANT ACCOUNTANT ON THE MONTHLY REPORTING PACK SENT TO NIW

<u>File Name</u>	<u>Output</u>	<u>Reconciliations & Checks</u>
CA_BSD_02 MMM Financial Summary Information_v1.0.xls	Day 3 Summary of Day 5 Files	Ensure all tabs relate to files for day 5 CD
CA_BSD_MMM Bank rec_V1.0.xls	Bank Reconciliation	Ensure reconciliation to FN012 Cash, FN012 credit card, FN012 refunds and Suspense
CA_BSD_Accrualdetail31052009_v1.0.xls	Details of accruals by customer	Analysis performed to examine changes in meters, consumption and summary given in Day 3 of income analysis
CA_BSD_AccrualexceptionsDC31052009_v1.0.xls	Details of meters not accrued	Ensure number of meters corresponds to Accrual Summary file
CA_BSD_AccrualsummaryDC31052009_v1.0.xls	Summary by Pipesize of accruals	Ensure that totals correspond to detailed file
CA_BSD_Aged Cash MMM 09_v1.0.XLS	Cash received aging	Reconciliation to FN012
CA_BSD_Aged Returned Payments MMM 09_v1.0.XLS	Returned Payments aging	Reconciliation to FN012
CA_BSD_FN012 Summary Split Extended MMM 09_v1.1.xls	Summary of FN012 by category with monthly summary and journals	Reconciliation to FN012, reconciliation of journal files to FN012
CA_BSD_FN012 Summary Split OLD - MMM 09_v1.0.xls	Summary of FN012 with VAT summary	Reconciliation to FN012

<u>File Name</u>	<u>Output</u>	<u>Reconciliations & Checks</u>
CA_BSD_FN012 Summary Total Aged Debt Rec MMM 09_v1.0.xls	Reconciliation of 0-30 days transactions and FN012	N/a - this is a reconciliation
CA_BSD_FN012 Summary Total MMM 09_v1.0.xls	Summary by month of billing and cash received	Reconciliation to FN012
CA_BSD_FN015 Aged Debt By Industry MMM 09_v1.0.xls	Aged debt	Reconciliation to FN012 and FN016,FN017,FN018
CA_BSD_FN016 Aged Debt By Payment Plan MMM 09_v1.0.xls	Aged debt	Reconciliation to FN012 and FN015,FN017,FN018
CA_BSD_FN017 Aged Debt By Recovery Stage MMM 09_v1.0.xls	Aged debt	Reconciliation to FN012 and FN015,FN016,FN018
CA_BSD_FN018 Aged Debt By Recovery Profile MMM 09_v1.0.xls	Aged debt	Reconciliation to FN012 and FN015,FN016,FN017
CA_BSD_Manual Adjustments MMM 09_v1.0.xls	Details of manual adjustment transactions	Reconciles to FN012
CA_BSD_N-Stop Aging - MMM 09_v1.0.xls	Summary of N-Stops by age	Reconciles to GL99 - Ordinary Customers
CA_BSD_Referred Bills Summary MMM 09_v1.0.xls	N-Stops and Bill Ceilings	Reconciles to GL99 and CTLPRT04

<u>File Name</u>	<u>Output</u>	<u>Reconciliations & Checks</u>
CA_BSD_Summary Suspense Report 090531 incl aged_v1.0.xls	Summary of FN013 (aged)	Reconciles to FN013 / Bank Rec
CA_BSD_TE FN012 Aged Debt Rec MMM 09_v1.0.xls	Reconciliation of TE FN012 to aged debt	N/a - this is a reconciliation
CA_BSD_TE_AI_20090531_V1.xls	Details of accruals by customer (TE)	Spot check on calculation sheets. Income test for TE accruals and invoices
CA_BSD_Transaction Report MMM 09_v1.0.xls	Full transactional detail of FN012 amounts	Reconciled to FN012
Vat Invoice Summary - MMM 09.xls	All VAT bill transactions for period	Reconciles to FN012 and summary split (old)

APPENDIX 2
TABLE 23**INCOME CHECKLIST**

	NIW Mgt A/cs	NIW Fin A/cs	Echo	NIW CS
Email received from Echo			●	
Income summary populated			●	
Journal Template Populated			●	
Income Summary Reconciled to GL	●			
Debtors per Echo reconciled to GL		●		
Bad Debts Provision prepared and sent to Financial Accounts				●
Accrued Income provision prepared and sent to Financial Accounts				●
Bad Debts Provision reviewed		●		
Accrued Income provision reviewed & reconciled to GL		●		
DSO, Debtors days and Debt KPI prepared and sent to Financial Accounts				●
Income Summary quality checked		●		
Debtors Reconciliation quality checked	●			
Attend monthly Income meeting	●	●		●
Post Accrued Income	●			
Post Cash Received	●			
Post income and debtors	●			
Post referred bills adjustment	●			
Reconcile FN012/GL to income	●			
Post bad debt write off	●			
Disc received from Echo			●	
Review of systems adjustments to confirm these are reasonable				●
Comparison of systems adjustments to prior months				●

APPENDIX 3**METHODOLOGY AND CALCULATION OF ROAD DRAINAGE CHARGES****Calculation and Methodology**

1 The calculation of Road Drainage charges was prepared on the following basis:

i The total urban road and footway surface area was obtained (Source Roads Service),

a. Urban road surface area = 39.3million m²

b. Urban footway surface area = 17.0million m²

c. Total Urban road & footway surface area = 56.3 million m²

ii The average annual rainfall in Northern Ireland over the last 10 years was obtained (Source: Met Office).

Average annual rainfall = 1.14m

iii The average volume of rain and therefore the run-off from roads and footpaths discharged into NIW sewers and storm drains was calculated as follows:

$56.3\text{million m}^2 \times 1.14\text{m} = 64.2\text{million m}^3$

iv NIW's network information management system (NIMS) indicated that for the largest 105 urban areas in N Ireland the length of combined sewers and the length of stormwater sewers was split as detailed in the following table. These figures were adjusted to allow for those storm water sewers which rather than discharging into a watercourse were connected into the combined system.

	Km	% of total
Combined sewers	4,378	50.35%
Storm water sewers	4,317	49.65%
Total	8,695	100.00%

- v The unit costs of R & V applied were obtained using the Trade Effluent Mogden Formula as per the table below:

Mogden Formula element	Cost Per cubic metre	Application
R (Reception)	0.19543	Run off into Storm water sewers
V (Volumetric)	0.22037	
R+V	0.41580	Run off into Combined sewers

- vi The cost determined for Road Drainage was computed as follows

	Combined	Storm Water	Total
Split of sewers for run off from roads and footpaths	50.35%	49.65%	100%
Total volume of Water (Cubic metres)	32,324,700	31,875,300	64,200,000
Mogden Formula element	R+V	R	
Cost of Element	0.41580	0.19543	
Cost of Run off	13,440,610	6,229,390	19,670,000

AIR 10 Table 23

Appendix 4

		31-Mar-10							
YTD income 1st Apr to end of Previous Month		from Crystal Alliance	Accrued Income	Accrued Income	Referred Income	Referred Income	Deferred Income	Deferred Income	
		Disc Dr/(Cr)	Reverse Previous Dr/(Cr)	For this month Dr/(Cr)	Reverse Previous Dr/(Cr)	For this month Dr/(Cr)	Reverse Previous	For this month	
4211	Measured Water	36,594,382.46	(3,369,125.42)	9,688,212.95	(9,490,802.13)	(75,242.25)	60,168.18		
4311	Measured Sewerage	21,802,659.89	(1,970,034.03)	6,406,646.10	(6,433,220.18)	(88,233.57)	50,632.92		
4251	Unmeasured Water	1,095,007.81	<u>40,009.47</u>			6,454.53	(12,502.96)	177,325	-
4351	Unmeasured Sewerage	1,049,935.09	<u>41,550.44</u>			6,454.53	(12,502.96)	178,527	-
4411	Trade Effluent	4,276,485.29	(237,785.90)	650,755.69	(810,788.38)				
64,818,470.54		(5,495,385.44)	16,745,614.74	-	16,734,810.70	150,566.76	85,795.18	355,852	-

Table 24

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 24 REGULATORY ACCOUNTS (CURRENT COST)
BALANCE SHEET AS AT 31 MARCH 2010 (TOTAL)**

DESCRIPTION		UNITS		DP		1	2	3
						2007-08	2008-09	2009-10
A FIXED ASSETS								
1	Tangible assets	£m	3			6,689.435	6,958.883	7389.297
2	Third party contributions	£m	3			-91.814	-114.399	-141.802
B OTHER OPERATING ASSETS AND LIABILITIES								
3	Working capital	£m	3			-77.318	-96.960	-91.609
4	Cash	£m	3			2.844	3.554	0.349
5	Short term deposits	£m	3			54.000	19.000	10.000
6	Overdrafts	£m	3			0.000	0.000	0.000
7	Infrastructure renewals prepayment/(accrual)	£m	3			-9.695	0.091	1.452
8	Net operating assets	£m	3			-30.169	-74.315	-79.808
C NON-OPERATING ASSETS AND LIABILITIES								
9	Borrowings	£m	3			0.000	0.000	0.000
10	Non-trade debtors	£m	3			1.490	1.486	1.491
11	Non-trade creditors due within one year	£m	3			-1.610	-4.385	-3.833
12	Investment - loan to group company	£m	3			0.000	0.000	0.000
13	Investment - other	£m	3			0.106	0.106	0.106
14	Corporation tax payable	£m	3			0.000	0.000	0.000
15	Ordinary share dividends payable	£m	3			-33.538	0.000	0.000
16	Preference share dividends payable	£m	3			0.000	0.000	0.000
D CREDITORS: AMOUNTS FALLING DUE AFTER MORE THAN ONE YEAR								
17	Borrowings	£m	3			-307.560	-457.560	-627.560
18	Other creditors	£m	3			-3.422	-110.808	-106.136
E PROVISION FOR LIABILITIES AND CHARGES								
19	Deferred tax provision	£m	3			-16.566	-30.653	-42.713
20	Post employment asset / (liabilities)	£m	3			5.619	5.942	2.286
21	Other provisions	£m	3			-15.131	-20.638	-32.884
F PREFERENCE SHARE CAPITAL								
22	Preference share capital	£m	3			0.000	0.000	0.000
23	Net assets employed	£m	3			6196.840	6153.659	6358.444
G CAPITAL AND RESERVES								
24	Called up share capital	£m	3			500.000	500.000	500.000
25	Share premium	£m	3			0.000	0.000	0.000
26	Profit and loss account	£m	3			-17.632	-39.058	-93.045
27	Current cost reserve at 31 March	£m	3			5542.782	5521.027	5779.799
28	Other reserves	£m	3			171.690	171.690	171.690
29	Total capital and reserves	£m	3			6196.840	6153.659	6358.444

Table 24 – CC Balance Sheet as at 31 March 2010

The retained current cost loss for the year is £38.346m. The P&L reserves in the balance sheet decrease by £53.988m. The difference of £15.642m represents the loss on the pension fund net of deferred tax £9.255m and a prior year loss of £6.387m as shown below:

Retained profit for the year	£(38.346m)
Pension scheme loss net of deferred tax	£ (9.255m)
Prior year adjustment *	£ (6.387m)
Movement in P&L Account	£(53.988m)

*A prior year adjustment to profit and loss account reserves of £6.387m has been recognised in the current year in relation to the valuation of land and buildings. The corresponding entry has been a decrease in the value of Fixed Assets by £6.387m. This has arisen through work undertaken as part of the Company's price control review which identified a number of sites where a decision had been taken in prior years to decommission them at a future date. As a result, adjustments were required to accelerate the depreciation on the sites, or impair the asset from the date of the decision to decommission to the decommissioning date, to reflect residual value at that date. (see also commentary to Table 25).

(The associated indexation on these assets has produced an additional prior year adjustment of £1,129m on the current cost reserve. This is outlined in the commentary to Table 27).

The effect of the corrections on the company's CC balance sheet at 31 March 2009 was as follows:

	As previously stated £'000	Effect £'000	As restated £'000
Fixed assets	6,958,885	-7,516	6,951,369
CC P&L Reserves at 1.4.08	-17,632	-5,769	-23,401
Total recognised gains and losses for the year ended 31.3.09	-21,425	-618	-22,043
CC P&L Reserves at 31.3.09	-39,057	-6,387	-45,444
CC Reserves at 31.3.09	5,521,029	-1,129	5,519,900

The CC Balance Sheet for the year ended 31 March 2010 within the Regulatory Accounts includes the impact of this adjustment to the 2008-09 comparator year.

However within Table 24 the comparator for 2008-09 has not been amended to reflect this.

- No minority interests exist.

The elements of PPP included in the table are as follows:

Line 1: Tangible Assets

	Alpha	Omega	Kinnegar	Total
	£m	£m	£m	£m
Gross	111.932 *	3.529	1.986	117.447
Acc. Deprec	(3.247)	-	-	(3.247)
NBV	108.685	3.529	1.986	114.200

		£m
*	Initial expenditure	111.708
	Additions to Capital Maintenance fund	<u>0.224</u>
		<u>111.932</u>

Line 3: Working Capital

	Alpha	Omega	Kinnegar	Total
	£m	£m	£m	£m
Accruals	3.007	3.707	1.857	8.571

Line 11: Non-trade creditors due within one year

	Alpha
	£m
Lease obligation due < 1 yr	2.313

Line 18: Other Creditors

	Alpha
	£m
Lease obligation due > 1 yr	105.805

Line 21 - Other provisions

	Omega
	£m
Provisions	9.519

Significant features and movements**Line 1: Tangible assets**

See commentary to Table 19.

Line 2: Third party contributions

Increased by approximately £27.4m shown as follows:

	£m
Infrastructure contributions (including £18.3m sewers adopted)	23.9
Non Infrastructure contributions	1.2
Amortisation of non- infrastructure contributions and government grants	(2.8)
Indexation	<u>5.1</u>
	<u>27.4</u>

Line 3: Working capital

See commentary to Table 26.

Line 4: Cash

See commentary to Table 19.

Line 5: Short term deposits

See commentary to Table 19.

Line 17: Borrowings

See commentary to Table 19.

Line 19: Deferred tax provision

See commentary to Table 19.

Line 20: Post employment asset / (liability)

See commentary to Table 19.

Line 21: Other provisions

See commentary to Table 19.

Table 25

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 25 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING)
ANALYSIS OF FIXED ASSETS BY ASSET TYPE (TOTAL)**

DESCRIPTION	UNITS	DP	1	2	3	4	5	6	7	8	9	
			WATER SERVICE				SEWERAGE SERVICE				TOTAL	
			INFRASTRUCTURE ASSETS	OPERATIONAL ASSETS	OTHER TANGIBLE ASSETS	SUBTOTAL	INFRASTRUCTURE ASSETS	OPERATIONAL ASSETS	OTHER TANGIBLE ASSETS	SUBTOTAL		
A GROSS REPLACEMENT COST												
1	Gross replacement cost at 1 April	£m	3	2648.726	794.811	23.910	3467.447	2547.006	1042.673	35.134	3624.813	7092.260
2	AMP adjustment	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	RPI adjustment	£m	3	118.885	33.324	0.948	153.157	106.660	39.569	1.233	147.462	300.619
4	Disposals	£m	3	0.000	-0.032	-0.503	-0.535	0.000	-0.291	-0.362	-0.653	-1.188
5	Additions	£m	3	41.348	29.299	3.762	74.409	64.933	97.960	2.799	165.692	240.101
6	Gross replacement cost at 31 March	£m	3	2808.959	857.402	28.117	3694.478	2718.599	1179.911	38.804	3937.314	7631.792
B DEPRECIATION												
7	Depreciation at 1 April	£m	3		55.807	6.452	62.259		72.256	6.376	78.632	140.891
8	AMP adjustment	£m	3		0.000	0.000	0.000		0.000	0.000	0.000	0.000
9	AMP adjustment - gross MEA revaluation	£m	3		0.000	0.000	0.000		0.000	0.000	0.000	0.000
10	AMP adjmt - amendment to remaining useful econ. lives	£m	3		0.000	0.000	0.000		0.000	0.000	0.000	0.000
11	RPI adjustment	£m	3		2.447	0.270	2.717		3.161	0.223	3.384	6.101
12	Disposals	£m	3		0.000	-0.367	-0.367		-0.044	-0.288	-0.332	-0.699
13	Charge for year	£m	3		43.181	2.930	46.111		46.112	3.979	50.091	96.202
14	Depreciation at 31 March	£m	3		101.435	9.285	110.720		121.485	10.290	131.775	242.495
15	Net book amount at 31 March	£m	3	2808.959	755.967	18.832	3583.758	2718.599	1058.426	28.514	3805.539	7389.297
16	Net book amount at 1 April	£m	3	2648.726	739.004	17.458	3405.188	2547.006	970.417	28.758	3546.181	6951.369

Table 25 – Analysis of Fixed Assets by Asset Type (Total)**Commentary and Methodology****Methodology**

The following asset categories have been analysed in the table as follows:

‘Infrastructure assets’ include infrastructure assets only.

‘Non-specialised operational assets’ include active market value land, buildings and civils.

‘Specialised operational assets’ include land, buildings, civils and fixed plant.

‘Other tangible assets’ include surplus land, buildings and civils, mobile plant and IT.

Gross Replacement Cost at 1 April and Depreciation at 1 April

The total opening balances for gross replacement cost and depreciation at 1 April 2009 have been brought forward from the total closing balances for gross replacement cost and depreciation at 31 March 2009. The analysis across asset categories is based on analysis within the fixed asset register.

Prior year adjustment

A prior year adjustment has been recognised in the current year in relation to the valuation of land and buildings. Through work undertaken as part of the Company’s price control review, a number of sites were identified where a decision had been taken in prior years to decommission them at a future date. As a result, adjustments were required to accelerate the depreciation on the sites, or impair the asset from the date of the decision to decommission to the decommissioning date, to reflect residual value at that date. Consequently, the following prior year adjustment has been recognised in table 25. The effect of the adjustments was a decrease in gross replacement cost of £3.528m and an increase in accumulated depreciation of £3.988m. The effect of the corrections on the opening balances of table 25 was as follows:

	Specialised	Non-Specialised			
	Operational Assets	Operational Assets	Infrastruc. Assets	Other Assets	Total
	£m	£m	£m	£m	£m
Gross replacement cost					
At 1 April 2009 (as originally stated)	1,820.191	17.796	5,195.732	62.069	7,095.788
Prior year adjustment	(0.229)	(0.274)	0.000	(3.025)	(3.528)

At 1 April 2009 (as restated)	1,819.962	17.522	5,195.732	59.044	7,092.260
Depreciation					
At 1 April 2009 (as originally stated)	(125.584)	(0.368)	0.000	(10.951)	(136.903)
Prior year adjustment	(1.631)	(0.480)	0.000	(1.877)	(3.988)
At 1 April 2009 (as restated)	(127.215)	(0.848)	0.000	(12.828)	(140.891)

AMP Adjustment

There was no AMP adjustment during the year. The next AMP adjustment is planned to report in PC13.

RPI Adjustment

In April 2009, all assets in the Fixed Asset Register (FAR) were indexed upwards using year end Retail Price Index (RPI) to be consistent with OFWAT. This was adjusted for assets disposed of in April 2009, if there were any, as they were not indexed.

Disposals

Disposals during the year mainly consisted of surplus land, civil structures and mobile plants (lorries and vans). All disposals have depreciation in the month of disposal.

Decommissioned Assets

A number of assets (NCRC - £18,309,911) were decommissioned in April 2009. Decommissioned assets are assets which are no longer in use but still have a net current replacement cost (NCRC) value at the time. In order to account for this, the assets are fully depreciated in year to bring the NCRC down to nil.

Additions

Additions consisted of capital expenditure incurred during the year plus adopted sewers and sewage pumping stations and PPP assets (see below). When the assets created by the capital expenditure are commissioned they are put onto the fixed asset register and depreciation commences the following month.

In accordance with the regulatory accounting guidelines, fixed asset additions are stated gross of capital contributions but net of IRE. This gives rise to the reconciliation with the capital works programme and statutory accounts below:

	£'000
Total expenditure in capital works programme	221,736
Add: total ops spend	36,464
Less: capital contributions	(5,555)
Add: PPP residual interest	2,164
Add: adopted assets – infrastructure	18,340
Add: adopted assets – non-infrastructure	260
Less: adopted assets capital contributions	(18,340)
Less: de-capitalised assets	(479)
Additions per statutory accounts	254,590
Add: capital contributions	23,896
Less: IRE	(38,396)
Other adjustments	8
Additions per regulatory accounts	240,098

PPP Assets Additions

During the year, there were on-balance sheet additions to PPP assets. Therefore, there was an element in the table relating to PPP assets totalling to £224k, relating to the Alpha capital maintenance fund.

There is also additional residual interest for PFI Kinnegar asset and Omega asset of £2,160,000 which is included in Table 25 under specialised operational civil. The total residual interest at 31 March 2010 is £5,553,000 (31 March 2009: £3,393,000).

Depreciation Charge for Year

Current cost depreciation charge during the year was calculated based on the opening GCRC at 1 April 2009. Additions and disposals during the year were taken into account in calculating the depreciation charge.

Commentary

All assets were analysed to each of their respective asset categories and service activities to identify the water and sewerage services. The management and general service activity assets, with a GCRC of £57,290,353 (08/09: £58,028,058) as at 31 March 2010, could not be readily identified as water and sewerage services and have been split as per IFM: Water 41% and Sewerage 59%.

Table 25 has also been adjusted to include only the appointed business and exclude the unappointed business relating to vehicle maintenance carried out for third parties. This has been adjusted through Water Services – Other Assets.

Table 26

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 26 REGULATORY ACCOUNTS
WORKING CAPITAL

				1	2	3
				2007-08	2008-09	2009-10
DESCRIPTION		UNITS	DP			
1	Stocks	£m	3	2.400	1.896	1.865
2	Trade debtors - measured household	£m	3	0.000	0.000	0.000
3	Trade debtors - unmeasured household	£m	3	0.000	0.000	0.000
4	Trade debtors - measured non household	£m	3	4.459	6.991	13.587
5	Trade debtors - unmeasured non household	£m	3	0.000	0.584	0.296
6	Other trade debtors	£m	3	2.021	0.710	2.907
7	Measured income accrual	£m	3	6.674	12.594	16.197
8	Prepayments and other debtors	£m	3	15.926	7.341	6.407
9	Trade creditors	£m	3	-26.515	-18.030	-14.989
10	Deferred income - customer advance receipts	£m	3	-1.717	-1.509	-1.677
11	Short term capital creditors	£m	3	-51.952	-64.335	-72.643
12	Accruals and other creditors	£m	3	-28.614	-43.201	-43.559
13	Total working capital	£m	3	-77.318	-96.959	-91.609

Table 26 – Working Capital**Lines 2 – 6: Trade Debtors**

Trade debtors are split into the five categories shown in lines 2-6 using the information from the General Ledger and the aged debtors analysis provided in the Echo pack.

The elements of PPP included in the table are as follows:

Line 12: Accruals and other creditors

Alpha	Omega	Kinnegar	Total
£m	£m	£m	£m
3.007	3.707	1.857	8.571

Significant movements from last year**Line 4: Trade debtors - measured non household**

This has increased from £7.0m to £13.6m (94.3%). This is mainly due to customers for Measured Sewerage now being billed fully for this service from 2009-2010.

Line 6: Other trade debtors

This has increased from £0.7m to £2.9m (314%) primarily due an increase in rechargeable debtors of £1.4m, driven partly by increased debtors from DRD and DARD, and an increase of £1m represented by a debtor arising in connection with the PPP Alpha contract.

Line 7: Measured income accrual

This has increased by £3.6m (29%) over the period accounted for as follows:

- A number of high value accounts with meter readings outstanding in March 2010 had significant amounts accrued rather than the normal practice of issuing an estimated bill.
- The increase in measured sewerage charges directly to customers as outlined above.

Line 9: Trade creditors

Trade creditors have fallen by £3.041m (24.2%) in the period. This is related to:

- A fall of approximately 4.4% in operating expenditure from £207.6m to £198.5m.
- A rise in short-term capital creditors that are wholly comprised of capital accruals indicating less invoice value contained within Trade Creditors.

Line 11: Short term capital creditors

Additions to assets in the course of construction have fallen by approximately 9% from 2009 to 2010. Capital accruals have risen by approximately 13% and this is partly linked to a fall in invoices within year end Trade Creditors described above.

Table 27

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 27 REGULATORY ACCOUNTS
MOVEMENT ON CURRENT COST RESERVE (TOTAL)

DESCRIPTION				1		2		3	
				UNITS	DP	2007-08	2008-09	2009-10	
1	Current cost reserve at 1 April	£m	3	5332.978	5542.782	5519.900			
2	AMP adjustment	£m	3	0.000	0.000	0.000			
A	RPI ADJUSTMENTS								
3	Fixed assets	£m	3	220.187	-23.438	294.518			
4	Working capital adjustment	£m	3	-1.327	0.292	-4.313			
5	Financing adjustment	£m	3	-6.543	1.044	-25.217			
6	Grants and third party contributions	£m	3	-2.513	0.347	-5.089			
7	Current cost reserve at 31 March	£m	3	5542.782	5521.027	5779.799			

Table 27 – Movement on current cost reserve**Line 1: Current cost reserve at 1 April**

The opening current cost reserve at 1 April 2009 differs in the table from the closing balance on current cost reserve at 31 March 2009. The reason for this is outlined later in this commentary under Prior Year Adjustment.

Working capital adjustment

The working capital adjustment includes opening stock at 1st April 2009 plus all the opening short – term debtors and creditors at 1st April 2009, with the following exclusions from the calculation:

• Stock		
Stock relating to unappointed activities		£0.005m
• Debtors		
EU grants receivable		£1.482m
Interest receivable		£0.004m
Debtors relating to unappointed activities		£0.352m
• Creditors		
EU grants payable		£1.482m
Cash bond interest payable		£0.015m
Creditors relating to unappointed activities		£0.276m

The following indices have been used and applied to the opening working capital balance at 1 April 2009:

RPI	2010	2009
Year end RPI	220.7	211.3
Change in 2009-10	4.44865%	

Working capital adjustment = opening working capital at 1 April 2009 x change in RPI 2009-2010

$$= \text{£96,959k} \times 4.44865\% = \text{£4,313k}$$

Financing adjustment

The financing adjustment can be shown as follows:

	£m
Opening net assets	6,153.662
Opening net fixed assets	<u>6,844.486</u>
	-690.824
 Add back: working capital	 96.959
Opening net finance	-593.865
 Add back:	
Ordinary share dividends payable	0.000
Deferred tax provision	30.653
 Less:	
Pension asset	-5.942
 Add back:	
Deferred tax liability on pension asset	2.310
 Revised opening net finance	 -566.844
 RPI	 4.44865%
 Financing Adjustment	 <u><u>25.217</u></u>

Prior Year Adjustment

As outlined in the commentaries to Table 24 and Table 25 a prior year adjustment to profit and loss account reserves of £6.387m has been recognised in the current year in relation to the valuation of land and buildings. The corresponding entry has been a decrease in the value of CC Fixed Assets by £6.387m. The associated indexation on these assets has produced an additional prior year adjustment of £1.129m on the current cost reserve. With a further decrease in the value of CC fixed assets of £1.129m.

The effect of the corrections on the company's CC balance sheet at 31 March 2009 was as follows:

	As previously stated £'000	Effect £'000	As restated £'000
Fixed assets	6,958,885	-7,516	6,951,369
CC P&L Reserves at 1.4.08	-17,632	-5,769	-23,401
Total recognised gains and losses for the year ended 31.3.09	-21,425	-618	-22,043
CC P&L Reserves at 31.3.09	-39,057	-6,387	-45,444
CC Reserves at 31.3.09	5,521,029	-1,129	5,519,900

The Regulatory Accounts for the year ended 31 March 2010 includes the impact of this adjustment to the 2008-09 comparator year.

However within Table 27 the comparator for 2008-09 has not been amended to reflect this.

Table 28

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 28 REGULATORY ACCOUNTS
CASH FLOW STATEMENT FOR YEAR ENDING 31 MARCH (TOTAL)**

DESCRIPTION	UNITS	DP	1	2	3
			2007-08	2008-09	2009-10
1 Net cashflow from operating activities	£m	3	142.202	133.052	137.968
A RETURN ON INVESTMENTS & SERVICING OF FINANCE					
2 Interest received	£m	3	2.228	1.840	0.247
3 Interest paid	£m	3	-9.613	-18.012	-26.905
4 Interest in finance lease rentals	£m	3	0.000	-4.193	-11.325
5 Non-equity dividends paid	£m	3	0.000	0.000	0.000
6 Net cashflow from returns on investments & servicing of finance	£m	3	-7.385	-20.365	-37.983
B TAXATION					
7 Taxation (paid)/received	£m	3	0.000	0.000	0.000
C CAPITAL EXPENDITURE AND FINANCIAL INVESTMENT					
8 Gross cost of purchase of fixed assets	£m	3	-214.427	-226.011	-213.359
9 Receipts of grants and contributions	£m	3	3.703	6.270	6.514
10 Infrastructure renewals expenditure	£m	3	-24.431	-44.058	-38.396
11 Disposal of fixed assets	£m	3	0.379	0.790	0.494
12 Movements on long term loans to group companies	£m	3	0.000	0.000	0.000
13 Net cashflow from investing activities	£m	3	-234.776	-263.009	-244.747
D ACQUISITIONS AND DISPOSALS					
14 Acquisitions and disposals	£m	3	0.000	0.000	0.000
E EQUITY DIVIDENDS					
15 Equity dividends paid	£m	3	0.000	-33.538	-34.537
F MANAGEMENT OF LIQUID RESOURCES					
16 Net cashflow from management of liquid resources	£m	3	-54.000	35.000	9.000
17 Net cashflow before financing	£m	3	-153.959	-148.860	-170.299
G FINANCING					
18 Capital in finance lease rentals	£m	3	0.000	-0.430	-2.906
19 New bank loans taken out	£m	3	157.560	150.000	170.000
20 Repayment of bank loans	£m	3	0.000	0.000	0.000
21 Proceeds from share issues	£m	3	0.000	0.000	0.000
22 Net cash inflow from financing	£m	3	157.560	149.570	167.094
23 Increase/(decrease) in cash in the year	£m	3	3.601	0.710	-3.205

Table 28 – Cashflow statement**Significant movements from last period****Line 1 - Net cashflow from operating activities**

This has increased by £4.916m (3.7%). The reconciliation of operating profit to net cashflow from operating activities is shown in Table 29.

Line 3 - Interest paid

Interest paid has increased by 49% from £18.012m to £26.905m. This is consistent with an additional loan drawdown of £170m in 2009-2010. The balance on loans can be summarised as follows:

At 1 April 2007	£150m
At 31 March 2008	£307.56m (average for year £228.78m)
At 31 March 2009	£457.56m (average for year £382.56m)
At 31 March 2010	£627.56m (average for year £542.56m)

Line 4 - Interest in finance lease rentals

The Alpha project during 2009-2010 gave rise to £11.325m (2008: £4.193m) interest payable on the associated finance lease.

Line 8 - Gross cost of purchase of fixed assets

These have decreased by £12.652m (5.6%). This is consistent with capital expenditure plans for 2009-10.

Line 10 - Infrastructure Renewals Expenditure

IRE for 2009-2010 compared to 2008-2009 can be shown as follows:

IRE	2009-2010	2008-2009	Increase/(Decrease) in period	Increase/(Decrease) in period
	£m	£m	£m	%
Water	26.903	37.458	(10.555)	(28.2)
Sewerage	11.493	6.600	4.893	74.1
Total	38.396	44.058	(5.662)	(12.9)

Water IRE has decreased over the period. In 2008-09 the total included the Alpha PPP IRE of approximately £4.9m whereas in 2009-10 there is no PPP Alpha element. There is however a further reduction of £5.7m which is in line with the capital expenditure plans for 2009-10 for IRE water.

Sewerage IRE has risen by £4.9m over the period. This represents the planned increased focus on base maintenance in 2009-10 that has occurred as the high level of expenditure on sewerage enhancement (Belfast Tunnel) has concluded.

Line 16 - Net cashflow from management of liquid resources

Management of liquid resources represents the movement in monies held on short-term deposit accounts.

Monies on deposit have decreased by £9m from the end of 2008-2009 to the end of 2009-2010 with a consequent release into cashflow.

Line 18 - Capital in finance lease rentals

An amount of £2.906m was made in payment against the Alpha PPP finance lease.

Line 19 - New bank loans taken out

In 2009-2010 £170m of additional loan notes were drawn down from DRD. These new loans were required to part finance the ongoing capital expenditure programme with the balance of capital expenditure financed by working capital.

PPP

The elements of PPP included in the cashflow are as follows:

Line 1 - Net cashflow from operating activities

This is summarised in Table 29 as follows:

1	Current cost operating profit	£m	22.963
2	Working capital adjustment	£m	(4.313)
3	Movement in working capital	£m	(13.702)
4	Depreciation	£m	96.202
5	Current cost profit on sale of fixed assets	£m	(0.005)
6	Infrastructure renewals charge	£m	37.035
7	Other non-cash profit and loss items	£m	(0.213)
8	Net cash flow from operating activities	£m	137.967

The commentary to Table 20 (Current Cost P&L Account) outlines the PPP element contained within operating costs that contributed to the current cost operating profit within Line 1 and depreciation Line 5.

The commentary for Table 26 (Working Capital) outlines the elements of PPP that are contained within working capital that feed into the movement in working capital above.

The PPP aspect to lines 4, 10 and 18 in Table 28 are outlined in 'significant movements from last period' in this commentary.

Included in Line 8: Gross cost of purchase of fixed assets in Table 28 is £0.224m in respect of capital maintenance additions for Alpha PPP paid for via the unitary payments. All other capital expenditure for Alpha is accounted for through the repayment of the finance lease.

Table 29

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 29 REGULATORY ACCOUNTS (CURRENT COST ACCOUNTING)
RECONCILIATION OF OPERATING PROFIT TO NET CASH FLOW FROM OPERATING ACTIVITIES (TOTAL)**

DESCRIPTION		UNITS	DP	1	2	3
				2007-08	2008-09	2009-10
1	Current cost operating profit	£m	3	17.077	11.626	22.963
2	Working capital adjustment	£m	3	-1.327	0.292	-4.313
3	Movement in working capital	£m	3	26.554	7.258	-13.701
4	Receipts from other income	£m	3	0.000	0.000	0.000
5	Depreciation	£m	3	58.834	76.184	96.202
6	Current cost profit on sale of fixed assets	£m	3	0.056	0.050	-0.005
7	Infrastructure renewals charge	£m	3	35.668	34.272	37.035
8	Other non-cash profit and loss items	£m	3	5.340	3.370	-0.213
9	Net cash flow from operating activities	£m	3	142.202	133.052	137.968

**Table 29 – Reconciliation of Operating Profit to Net Cash Flow from
Operating Activities**

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Table 29 commentary is not required

Table 32

**ANNUAL INFORMATION RETURN - TABLE 32 FINANCIAL MEASURES
ANALYSIS OF FIXED ASSET ADDITIONS AND ASSET MAINTENANCE BY ASSET TYPE (CURRENT COST ACCOUNTING) (NIW Only)**

DESCRIPTION	UNITS	DP	1	2	3	4	5	6	7
			INFRASTRUCTURE ASSETS	WATER SERVICE 0.96	SUBTOTAL	INFRASTRUCTURE ASSETS	SEWERAGE SERVICE NON-INFRASTRUCTURE ASSETS	SUBTOTAL	TOTAL
A NIW ADDITIONS -NEW ASSETS (ENHANCEMENT)									
1	Water resource facilities	£m	3	0.094	0.219	0.313			0.313
2	Water treatment works	£m	3		8.823	8.823			8.823
3	Water distribution mains	£m	3	41.577	1.272	42.850			42.850
4	Service reservoirs and water towers	£m	3		6.506	6.506			6.506
5	Pumping stations	£m	3		1.302	1.302			1.302
6	Water management and general	£m	3	1.091	1.460	2.551			2.551
7	Sewerage	£m	3				64.684	0.973	65.657
8	Sea outfalls and headworks	£m	3				0.188	0.412	0.600
9	Sewage treatment works	£m	3					52.703	52.703
10	Sludge treatment works	£m	3					0.745	0.745
11	Sludge disposal	£m	3				0.000	0.000	0.000
12	In-line pumping stations	£m	3					6.319	6.319
13	Terminal pumping stations	£m	3					5.669	5.669
14	Sewerage management and general	£m	3				0.061	1.659	1.721
15	Total infrastructure additions (Enhancement)	£m	3	42.763		42.763	64.933		107.696
16	Total non-infrastructure additions (Enhancement)	£m	3		19.583	19.583		68.480	88.063
17	Total additions (Enhancement)	£m	3	42.763	19.583	62.346	64.933	68.480	133.413
B NIW BASE SERVICE PROVISION									
18	Water resource facilities	£m	3	0.184	0.427	0.611			0.611
19	Water treatment works	£m	3		4.226	4.226			4.226
20	Water distribution mains	£m	3	24.237	1.247	25.483			25.483
21	Service reservoirs and water towers	£m	3		0.963	0.963			0.963
22	Pumping stations	£m	3		0.716	0.716			0.716
23	Water management and general	£m	3	2.483	4.727	7.210			7.210
24	Sewerage	£m	3				10.392	0.343	10.736
25	Sea outfalls and headworks	£m	3				0.001	0.003	0.004
26	Sewage treatment works	£m	3					16.821	16.821
27	Sludge treatment works	£m	3					0.320	0.320
28	Sludge disposal	£m	3				0.000	0.895	0.895
29	In-line pumping stations	£m	3					7.349	7.349
30	Terminal pumping stations	£m	3					0.964	0.964
31	Sewerage management and general	£m	3				1.100	3.420	4.520
32	Total infrastructure renewals (Base)	£m	3	26.904		26.904	11.494		38.397
33	Total non-infrastructure expenditure (Base)	£m	3		12.305	12.305		30.115	42.421
34	Total expenditure (Base service provision)	£m	3	26.904	12.305	39.209	11.494	30.115	80.818

Table 32 – Analysis of Fixed Asset Additions and Asset Maintenance by Asset Type (Current Cost Accounting)**PPP**

No PPP expenditure is reported on this table. There was no capital spend in 2009/10 relating to PPP that is not included within the unitary charge payments. In relation to Capital additions the only capital not included in this table is the PPP Alpha capital maintenance charge of £224k.

General

The main types of new assets constructed in the year were distribution mains, sewerage assets and waste water treatment works to ensure compliance with obligations to improve quality standards as agreed with the Drinking Water Inspectorate and the Northern Ireland Environment Agency. A large portion of this investment as in 2008/09 is the result of a legacy of under funding in the former Water Service.

The majority of asset maintenance expenditure related to water distribution mains (Water rehabilitation projects), sewerage assets (Drainage Area Plan projects) and wastewater treatment works in order to maintain the serviceability of the asset base for customers.

The Capital Investment Driver Allocation methodology has changed significantly since the SBP. The Methodology is explained in Chapter 34 which in summary is the process adopted in 07/08 and 08/09 with some further system advancements.

The allocation methodology for Management and General expenditure is reflective of that included within the 'Strategic Business Plan' (SBP) allocation at 41%:59% (Water/Sewerage). This is only applied when projects have not already been allocated within Management and General to either Water or Sewerage within individual projects and is typical of projects within Human Resources and Finance and Regulation which are common to both Water and Sewerage. No apportionment has taken place during the analysis and table population stage as this was completed by Project Managers at the initiation of the project, and reviewed at appropriate gateways for EP projects.

Expenditure for Zonal Study investigations has been allocated to Water M & G/ Base/Infrastructure Expenditure and Drainage Area studies have been allocated to Sewerage M & G/Base/Infrastructure/ for 09/10 reporting. Expenditure in these two areas has been separately identified within Asset Management Directorate expenditure in 09/10 and is not confused with the resultant delivery projects managed within Engineering Procurement Directorate.

Sewer adoptions paid by third parties of £18,341m are included in column 4, line 7 of Table 32 within Sewerage infrastructure enhancements. Sewerage Pumping Stations paid by third parties of £0.262m are included in Col 5, line 12 within Sewerage non infrastructure enhancements.

The calculation of gross asset valuation for adopted sewerage assets is based on the unit costs derived for the SBP which was indexed to 09/10 prices by RPI. The unit costs are applied by diameter banding and total lengths laid. The unit costs adopted in the SBP were developed from historic actual costs of projects completed by NI Water Service and reported in 06/07 prices.

Of the total capital expenditure of £276.577m (net of grants and contributions on infrastructure maintenance expenditure and inclusive of sewerage adoptions), £80.818m (29%) related to base service position. There has been gradually been an increase each year during the SBP period in the % of Base Maintenance as a % of the total Capital expenditure programme.

In all the Capex Financial tables Backlog Base as defined in the SBP has been allocated consistently as per the SBP. This amounts to £6.096m for water service and £7.912m for sewerage service and is allocated to 'Enhanced Service Levels' for financial reporting purposes.

Infrastructure Renewals expenditure has been reported net of any grants and contributions in this table. Grants and contributions (Infrastructure Charges) have been apportioned 59% IRE and 41% MNI for both Water and Sewerage for 09/10 reporting. The apportionment has been derived from the SBP predictions.

Reconciliation between Table 32, 35 and 36

Table 32 - Line 17 + Line 34 in col 7	<u>£276.577m</u>
Table 35 – line 28 col 4	£101.554m
Table 36 – line 25 col 4	£156.420m
Assets adopted at nil cost	<u>£ 18.602m</u>
Reconciliation total	<u>£276.577m</u>

Reporter recommendations (AIR09)

(Page 1 para 7 of Reporter's Report)

The Reporter commented that SBP apportionments were still being adopted outside the CWP and these might not always be valid. In order to reduce the reliance on SBP apportionments these have been removed from all documentation and project managers have now to access each project on its own merits. There are still a number of projects within the M & G categories, some of which commenced in earlier years, that have the default 41%/59% split with spend reported in 09/10. There is no additional data to provide a change to these allocations.

(Page 4 para 2 & 3 of Reporter's report)

The Reporter had made comment that data breakdown was not the most transparent and ideally a single system would simplify audit work. The Model input tab on the Engineering procurement model has been updated for 09/10 reporting to improve the transparency of the data set for interrogation on any individual investment driver. In addition, NIW is developing a new reporting tool referred to as Capital Programme Monitoring and Reporting (CPMR) which will mean that all reporting will be from a single

source. The development phase is underway and it is anticipated that this will be in use in AIR11.

Table 33

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 33 FINANCIAL MEASURES (CURRENT COST ACCOUNTING)
DEPRECIATION CHARGE BY ASSET TYPE (NIW Only)**

DESCRIPTION	UNITS	DP	1	1a	2	3	4	5	6	CG	
			WATER SERVICE								
			2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10		
A DEPRECIATION CHARGE FOR THE YEAR											
1	CCD on enhancement assets	£m	3	N/C	9.924	9.776	12.217	11.719	12.545	16.333	C4
2	CCD on MNI assets	£m	3	N/C	19.823	19.529	19.931	19.002	21.398	26.531	C4
3	Total depreciation charge for the year	£m	3	N/C	29.747	29.305	32.148	30.721	33.943	42.864	C4
B INFRASTRUCTURE RENEWALS CHARGES, EXPENDITURE AND PROVISION											
4	Infrastructure renewals expenditure	£m	3	N/C	25.186	19.778	20.724	32.534	23.195	26.903	B2
5	Infrastructure renewals charges	£m	3	N/C	27.277	27.277	28.747	22.500	29.938	27.171	C5
6	Infrastructure renewals prepayment/ (accrual)	£m	3	N/C	-2.091	-7.499	-10.114	2.535	-16.857	2.267	C5

DESCRIPTION	UNITS	DP	7	7a	8	9	10	11	12	CG	
			SEWERAGE SERVICE								
			2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10		
A DEPRECIATION CHARGE FOR THE YEAR											
1	CCD on enhancement assets	£m	3	N/C	20.706	24.017	24.239	33.230	25.426	34.562	C4
2	CCD on MNI assets	£m	3	N/C	6.921	8.027	8.080	11.077	11.424	15.529	C4
3	Total depreciation charge for the year	£m	3	N/C	27.627	32.044	32.319	44.307	36.850	50.091	C4
B INFRASTRUCTURE RENEWALS CHARGES,											
4	Infrastructure renewals expenditure	£m	3	N/C	12.968	6.195	12.308	6.600	9.743	11.493	B2
5	Infrastructure renewals charges	£m	3	N/C	8.391	8.391	9.275	8.367	10.869	9.864	C5
6	Infrastructure renewals prepayment/ (accrual)	£m	3	N/C	4.577	-2.196	7.610	-3.963	6.484	-2.334	C5

DESCRIPTION	UNITS	DP	13	13a	14	15	16	17	18	
			Total							
			2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10	
A DEPRECIATION CHARGE FOR THE YEAR										
1	CCD on enhancement assets	£m	3	0.000	30.630	33.793	36.456	44.949	37.971	50.895
2	CCD on MNI assets	£m	3	0.000	26.744	27.556	28.011	30.079	32.822	42.060
3	Total depreciation charge for the year	£m	3	0.000	57.374	61.349	64.467	75.028	70.793	92.955
B INFRASTRUCTURE RENEWALS CHARGES,										
4	Infrastructure renewals expenditure	£m	3	0.000	38.154	25.973	33.032	39.134	32.938	38.396
5	Infrastructure renewals charges	£m	3	0.000	35.668	35.668	38.022	30.867	40.807	37.035
6	Infrastructure renewals prepayment/ (accrual)	£m	3	0.000	2.486	-9.695	-2.504	-1.428	-10.373	-0.067

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 33 FINANCIAL MEASURES (CURRENT COST ACCOUNTING)
DEPRECIATION CHARGE BY ASSET TYPE (PPP Only)

DESCRIPTION		UNITS	DP	1	1a	2	3	4	5	6	CG
				WATER SERVICE							
				2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10	
A DEPRECIATION CHARGE FOR THE YEAR											
1	CCD on enhancement assets	£m	3	0.000	0.000	0.000	1.156	1.156	3.247	3.247	C4
2	CCD on MNI assets	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	C4
3	Total depreciation charge for the year	£m	3	0.000	0.000	0.000	1.156	1.156	3.247	3.247	C4
B INFRASTRUCTURE RENEWALS CHARGES, EXPENDITURE AND PROVISION											
4	Infrastructure renewals expenditure	£m	3	0.000	0.000	0.000	0.000	4.924	0.000	0.000	B2
5	Infrastructure renewals charges	£m	3	0.000	0.000	0.000	0.000	3.405	0.000	0.000	C5
6	Infrastructure renewals prepayment/ (accrual)	£m	3	0.000	0.000	0.000	0.000	1.519	0.000	1.519	C5

DESCRIPTION		UNITS	DP	7	7a	8	9	10	11	12	CG
				SEWERAGE SERVICE							
				2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10	
A DEPRECIATION CHARGE FOR THE YEAR											
1	CCD on enhancement assets	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	C4
2	CCD on MNI assets	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	C4
3	Total depreciation charge for the year	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	C4
B INFRASTRUCTURE RENEWALS CHARGES,											
4	Infrastructure renewals expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	B2
5	Infrastructure renewals charges	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	C5
6	Infrastructure renewals prepayment/ (accrual)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	C5

DESCRIPTION		UNITS	DP	13	13a	14	15	16	17	18
				TOTAL						
				2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10
A DEPRECIATION CHARGE FOR THE YEAR										
1	CCD on enhancement assets	£m	3	0.000	0.000	0.000	1.156	1.156	3.247	3.247
2	CCD on MNI assets	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	Total depreciation charge for the year	£m	3	0.000	0.000	0.000	1.156	1.156	3.247	3.247
B INFRASTRUCTURE RENEWALS CHARGES,										
4	Infrastructure renewals expenditure	£m	3	0.000	0.000	0.000	0.000	4.924	0.000	0.000
5	Infrastructure renewals charges	£m	3	0.000	0.000	0.000	0.000	3.405	0.000	0.000
6	Infrastructure renewals prepayment/ (accrual)	£m	3	0.000	0.000	0.000	0.000	1.519	0.000	1.519

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 33 FINANCIAL MEASURES (CURRENT COST ACCOUNTING)

DEPRECIATION CHARGE BY ASSET TYPE (Total)

DESCRIPTION	UNITS	DP	1	1a	2	3	4	5	6	CG	
			WATER SERVICE								
			2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10		
A DEPRECIATION CHARGE FOR THE YEAR											
1	CCD on enhancement assets	£m	3	0.000	9.924	9.776	13.373	12.875	15.792	19.580	C4
2	CCD on MNI assets	£m	3	0.000	19.823	19.529	19.931	19.002	21.398	26.531	C4
3	Total depreciation charge for the year	£m	3	0.000	29.747	29.305	33.304	31.877	37.190	46.111	C4
B INFRASTRUCTURE RENEWALS CHARGES,											
4	Infrastructure renewals expenditure	£m	3	0.000	25.186	19.778	20.724	37.458	23.195	26.903	B2
5	Infrastructure renewals charges	£m	3	0.000	27.277	27.277	28.747	25.905	29.938	27.171	C5
6	Infrastructure renewals prepayment/ (accrual)	£m	3	0.000	-2.091	-7.499	-10.114	4.054	-16.857	3.786	C5

DESCRIPTION	UNITS	DP	7	7a	8	9	10	11	12	CG	
			SEWERAGE SERVICE								
			2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10		
A DEPRECIATION CHARGE FOR THE YEAR											
1	CCD on enhancement assets	£m	3	0.000	20.706	24.017	24.239	33.230	25.426	34.562	C4
2	CCD on MNI assets	£m	3	0.000	6.921	8.027	8.080	11.077	11.424	15.529	C4
3	Total depreciation charge for the year	£m	3	0.000	27.627	32.044	32.319	44.307	36.850	50.091	C4
B INFRASTRUCTURE RENEWALS											
4	Infrastructure renewals expenditure	£m	3	0.000	12.968	6.195	12.308	6.600	9.743	11.493	B2
5	Infrastructure renewals charges	£m	3	0.000	8.391	8.391	9.275	8.367	10.869	9.864	C5
6	Infrastructure renewals prepayment/ (accrual)	£m	3	0.000	4.577	-2.196	7.610	-3.963	6.484	-2.334	C5

DESCRIPTION	UNITS	DP	13	13a	14	15	16	17	18	CG	
			Total								
			2006-07	Per SBP 2007-08	2007-08	Per SBP 2008-09	Actual 08-09	Per SBP 2009-10	Actual 09-10		
A DEPRECIATION CHARGE FOR THE YEAR											
1	CCD on enhancement assets	£m	3	0.000	30.630	33.793	37.612	46.105	41.218	54.142	C4
2	CCD on MNI assets	£m	3	0.000	26.744	27.556	28.011	30.079	32.822	42.060	C4
3	Total depreciation charge for the year	£m	3	0.000	57.374	61.349	65.623	76.184	74.040	96.202	C4
B INFRASTRUCTURE RENEWALS											
4	Infrastructure renewals expenditure	£m	3	0.000	38.154	25.973	33.032	44.058	32.938	38.396	B2
5	Infrastructure renewals charges	£m	3	0.000	35.668	35.668	38.022	34.272	40.807	37.035	C5
6	Infrastructure renewals prepayment/ (accrual)	£m	3	0.000	2.486	-9.695	-2.504	0.091	-10.373	1.452	C5

Table 33 – Depreciation Charge by Asset Type & Infrastructure Renewals Charge

Commentary and Methodology

Methodology

Current Cost Depreciation (CCD) Charge

The depreciation charge for the year has been populated using the same methodology used to populate Table 25. Current cost depreciation was calculated using the Fixed Asset Register (Real Asset Management). The Fixed Asset Register holds two sets of books (HCA and CCA books) which calculate depreciation using different gross book value (GBV) and gross current replacement cost (GCRC) figures. The CCA books have been used for both Table 25 and Table 33

The final depreciation report from the CCA book was then analysed to each of their respective asset categories and service activities to identify the water and sewerage services. The management and general service activity could not be readily identified as water and sewerage services and have used the following percentages split as per IFM: Water 41% and Sewerage 59%.

Historical data to provide the split between Base Service Provision (BSP) and Enhancement (E) is not available for assets in existence at 01/04/07. During the SBP period all capital projects have had CIDA applied. This has however not been uploaded to the Fixed Asset Register (FAR) during the SBP period and cannot be used for the population of this table. NIW plan to update the FAR during 2010/11 to capture this split for all assets commissioned during the PC10 period. Given that the table structure does not lend itself for population, (as per the meeting between NIW and UR in March 2010), of the assets commissioned prior to 01/04/07 the Table 34 split from AIR 10 has been used as follows:

- Water, Enhancement (62%), Base Service Provision (38%)
- Sewerage, Enhancement (69%), Base Service Provision (31%)
- The exception to this is the PPP Alpha asset that is deemed to be 100% enhancement: the CCD for Alpha has been allocated to the PPP table on this basis.

With respect to Confidence Grades this is reported as DX for CCD. This is the case as no historical data is available to provide a robust analysis.

Assets to be decommissioned or written off result in accelerated depreciation in the year. Assets with a NCRC of £18,309,911 were decommissioned in April 2009 – the corresponding accelerated depreciation is included in Table 33.

There are three main PPP Projects – Alpha, Omega and Kinnegar. When these projects were established each was examined to determine whether the

risks and rewards were transferred to the provider or remained with NIW. Findings are as follows:

Alpha Project - for Alpha it was determined that the risks and rewards remained with NIW and therefore the assets were owned by the company and should be capitalised and depreciated. An associated finance lease should also be established with an initial liability equivalent to the value of the assets capitalised.

Omega and Kinnegar Projects – it was determined that in both cases the risks and rewards were transferred to the operator and thus the assets would not be capitalised and all charges would be debited to the P&L as incurred. However an element of these charges would be credited from P&L to Balance Sheet to establish a residual interest asset since ultimately the assets would come back into NIW ownership and would have a residual value at this time. These residual assets would not be depreciated during the life of the contracts.

During the year, there were on-balance sheet additions to the Alpha PPP assets. Therefore, there was an element of depreciation, £3.247m, (2009: £1.156m) in the table relating to PPP assets. This is separately identified in the second table for PPP only.

The asset lives used in calculating depreciation are consistent with those that have been used to populate Table 34. The asset lives used to calculate depreciation in the Fixed Asset Register are the same in both the HCA and CCA books.

Table 33 has also been adjusted to include only the appointed business and exclude the unappointed business relating to vehicle maintenance carried out for third parties. The depreciation charge (£118k) relating to this has been adjusted through Water Services – CCD on MNI assets. This is the only adjustment made in populating Table 33.

There were some limitations to the CCD process namely it was based on the last asset management plan (AMP) survey of existing assets as at 1 September 2001. NI Water plans to address this limitation by preparing the next AMP which is planned to report in 2013.

There were no MEA revaluations during the year and therefore no impact on CCD charge in the year.

During the year, decommissioned assets with a net current replacement cost (NCRC) of £18,309,911 were included within the current year depreciation charge.

	Water (09/10)	Sewerage (09/10)	Total (09/10)
CC Depreciation in year	£33,823,140.54	£ 44,071,083.58	£ 77,894,224.12
Accelerated Depreciation	£12,288,392.88	£6,021,518.52	£18,309,911.40
Total (2009/2010)	£ 46,111,533.42	£50,092,602.10	£ 96,204,135.52

	Water (08/09)	Sewerage (08/09)	Total (08/09)
CC Depreciation in year	£ 29,483,049.54	£ 34,462,641.41	£ 63,945,690.95
Accelerated Depreciation	£ 2,394,263.73	£ 9,844,383.26	£ 12,238,646.99
Total (2008/2009)	£ 31,877,313.27	£ 44,307,024.67	£ 76,184,337.94

The depreciation charge for 09/10 (£96,204k) is £20,019k greater than 08/09 (£76,184k). The majority of the increase is explained by the trend in recent years of higher spending on the capital programme. This resulted in the depreciation charge increasing by £14,835k from 07/08 to 08/09. The increased spending on the capital programme continued in 08/09 resulting in the higher 09/10 depreciation charge. Part of the overall increase is explained by a £6,071k increase in accelerated depreciation relating to decommissioned assets. This was the result of an extensive fixed asset register cleansing exercise carried out during the year. Also, 09/10 included a full year's depreciation (£3,247k) of the Alpha PPP asset which was £2,091k higher than the previous year.

Infrastructure Renewals Accounting

The IRC calculation for 09/10 is based on a ten year average of Infrastructure Renewals Expenditure (IRE). The ten year annual figures comprise a four year 'look back' to 04/05, the current year 2009-2010 and a 'look forward' for the five years to 13/14.

The look back relies upon data captured in 01/02 as actual expenditure. This information is captured from a 'June Return' completed by Water Service. A return was completed for 01/02 which was subject to audit but not a full reporter review. A QBEG allocation was completed for the largest projects in the capital programme which constituted 80% of the total value of the programmes. It is recognised that this approach is not as robust as would be liked, and likely to deliver a lower value of IRE as Maintenance (IRE) projects are largely completed within smaller capital projects. However, given the lack of historical information on IRE no better solution exists to provide a reasonable calculation of IRC.

The look forward to 13/14 was calculated directly from the SBP base spreadsheets. The three base spreadsheets contributing to the E & P Capital programme were examined and where base expenditure was allocated via QBEG this was defined as either IRE or MNI at a project level. The IRE, MNI figures were carried forward to a separate spreadsheet where the analysis was completed. A review was completed of Drainage Area Plans (DAPs) following the initial assessment to correct for Sewerage Pumping stations as they are designated as non infrastructure (MNI). Initially DAPs were noted as infrastructure so the correction removed anticipated costs for Sewerage Pumping stations from IRE to MNI. Separate analysis was completed of all remaining capital and is summarised as follows:

- a. Wastewater Treatment – assumed as 100% MNI as these are above ground assets.
- b. Water Supply – assumed as 100% MNI as these are above ground assets.
- c. Networks – an analysis was completed of expenditure in the first 6 months of 06/07 and a QBEG allocation was completed on each project. The IRE output from this is 38% of networks expenditure (14% water and 24% sewerage) and 18% MNI. The balance of 44% is allocated to Capital Enhancement.
- d. Leakage – assumed as 100% IRE.
- e. The remaining areas of capital investment have been allocated 100% to MNI based on a split of 41% water and 59% sewerage. This split was derived from the SBP allocation within the Base Spreadsheets for the SBP. Typical examples include investment in Asset Management and Head Office areas which are clearly not infrastructure.

The final output from the above is an average over the first 5 years. This is actual predictions of investment based on historical unit costs as applied in the SBP re-costing exercise and verified by the interim reporter. NB the Base spreadsheets used for the SBP had the 06/07 programme included. Whilst not part of the final SBP the 06/07 data was used for the IRC calculation process.

The blank years between 02/03 and 06/07 were populated using extrapolation from the 01/02 analysis. The extrapolation provided for an increasing IRE in Water and a decreasing IRE in Sewerage. Since no historical data was available no alternative mechanism was available. As a consequence the IRC calculation has a degree of uncertainty attached to it but by completing comparisons with England and Wales IRE programmes it was deemed to be reasonable. Table 1 below shows the summary output as agreed with the interim reporter. This demonstrates that the IRE figure for NIW is at the higher end of the England and Wales numbers when compared on a like for like basis. It should be noted that Backlog Base was not included in the NIW determination of IRC. In summary the IRC was last calculated as part of the SBP process in 2007.

Table 1: Comparison with E&W IRE figures.

Service Area	England & Wales Benchmarks AMP4 (Post-efficiency) (£m)			Base Expenditure	NIW (Post-efficiency) (£m)			
	Min	Ave	Max		3yr Ave	5yr Ave	9yr Ave	
Water IRE	8.8	14	17.6	Water IRE	25.0	22.6	26.3	adjusted to post-efficiency figures from above data adjusted to post-efficiency figures from above data adjusted to post-efficiency figures from above data
				Backlog Base	4.0	5.9	6.7	
				Water IRE + BB	29.0	28.5	33.0	
Wastewater IRE	4.8	6.7	10.7	Wastewater IRE	9.2	9.1	10.8	adjusted to post-efficiency figures from above data adjusted to post-efficiency figures from above data adjusted to post-efficiency figures from above data
				Backlog Base	4.8	6.6	5.3	
				Wastewater IRE + BB	14.0	15.7	16.1	

The difference between the IRE and IRC is treated as an accrual or prepayment.

Based on the information available management has not finalised its view of IRC due to the uncertainty around the base data, to ensure it reflects the medium to long term view of the maintenance needs of its infrastructure assets. IRC is towards the maximum when compared to England & Wales but this is necessary to counteract the historical under investment.

2009-2010 IRC

The IRC for 2009-10 based on the above methodology and incorporated in the final Strategic Business Plan can be summarised as follows:

Water - £29.930m
Sewerage - £10.855m
Total - £40.785m

This would have been the figure used in the 2009-2010 financial statements but a reduction of approximately 9.2% (£3.75m) to the total IRC figure for 2009-2010 was agreed with the Regulator. This reduction was pro-rated against the original SBP charge to give the following water and sewerage IRC:

Water - £27.171m
Sewerage - £ 9.864m
Total - £37.035m

The Interim Reporter (Halcrow) had previously provided NIW with a statement that the projected levels of IRE underpinning the SBP would be sufficient to ensure that there is a low risk of a decline in the aggregate serviceability of infrastructure assets. In light of the reduction in IRC of 9.2% Halcrow were requested to review this opinion. Although the original IRE figures were not amended to achieve a calculated IRC at the lower agreed level Halcrow took account of the reduction and issued a second statement reiterating their original view.

The PC10 submission was not used to inform the IRC for this year (2009-10). This is because it is the last year of a distinct business plan period and, therefore, it was considered appropriate to use the IRC contained in the SBP for 2009-10. If the PC10 figures for IRE were used for the calculation of IRC in 2009-10 it would have led to an increase in IRC of approximately £210k.

The IRE for 2009-2010 can be shown as follows:

Water	- £26.903m
Sewerage	- £11.493m
Total	- £38.396m

The prepayment /accrual at 31 March 2010 can be shown as follows:

	W TOTAL £m	S TOTAL £m	Total TOTAL £m
IRE	26.903	11.493	38.396
IRC	27.171	9.864	37.035
In year prepayment / (accrual)	-0.268	1.629	1.361
c/f prepayment / (accrual)	4.054	-3.963	0.091
Cumulative prepayment / (accrual)	3.786	-2.334	1.452

At the end of the year to 31 March 2009 an overall small prepayment of £0.091m was evident with IRE and IRC in total virtually matching for the first two years of the SBP period. This year Water IRE has been below the IRC charge giving a small accrual of £0.268m. Sewerage has shown IRE larger than IRC by £1.629m and this has produced an overall prepayment of £1.452m for the year.

PPP

Alpha PPP has not given rise to any IRE for this year and therefore no IRC has been allocated to the PPP services.

The SBP columns could not be populated for PPP elements as the Financial Model supporting the SBP did not allocate IRE and IRC separately to the Alpha Project.

There is no difference between the IRC in the Statutory accounts and the IRC in the regulatory accounts.

Table 34

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 34 FINANCIAL MEASURES (CURRENT COST ACCOUNTING)
ANALYSIS OF NON-INFRASTRUCTURE FIXED ASSET ADDITIONS BY LIFE CATEGORIES (NI WATER ONLY)**

DESCRIPTION	UNITS	DP	1	2	3	4	CG	5	6	7	8	CG	
			WATER SERVICE					SEWERAGE SERVICE					
			2006-07	2007-08	2008-09	Report Year 2009-10		2006-07	2007-08	2008-09	Report Year 2009-10		
ACCOUNTING FIXED ASSET ADDITIONS													
NON-INFRASTRUCTURE ASSET ADDITIONS (ENHANCEMENT) BY ASSET LIFE													
A													
1	Very Short	£m	3	N/C	0.000	0.000	0.043	B3	N/C	0.000	0.000	0.033	B3
2	Short	£m	3	N/C	4.797	1.634	2.464	B2	N/C	6.206	7.319	5.465	B2
3	Medium	£m	3	N/C	2.146	4.310	7.203	B2	N/C	27.800	32.232	27.181	B2
4	Medium long	£m	3	N/C	0.000	0.000	0.000	n/a	N/C	0.000	0.000	0.000	n/a
5	Long	£m	3	N/C	2.210	6.229	9.831	B2	N/C	32.290	41.759	35.558	B2
6	Land	£m	3	N/C	0.678	0.025	0.053	B3	N/C	3.406	0.495	0.244	B3
7	Land Disposals	£m	3	N/C	-0.199	-0.531	-0.061	B2	N/C	-0.003	-0.001	-0.014	B2
8	Total	£m	3	N/C	9.632	11.668	19.534	B2	N/C	69.700	81.804	68.467	B2
NON-INFRASTRUCTURE ASSET ADDITIONS (BASE SERVICE) BY ASSET LIFE													
B													
9	Very Short	£m	3	N/C	0.000	0.000	0.809	B3	N/C	0.000	0.000	0.000	n/a
10	Short	£m	3	N/C	11.578	5.291	3.568	B2	N/C	5.859	5.117	5.603	B2
11	Medium	£m	3	N/C	1.851	6.404	5.465	B2	N/C	6.460	12.370	13.966	B2
12	Medium long	£m	3	N/C	0.000	0.000	0.000	n/a	N/C	0.000	0.000	0.000	n/a
13	Long	£m	3	N/C	5.928	7.728	2.451	B2	N/C	10.978	10.351	10.546	B2
14	Total	£m	3	N/C	19.356	19.423	12.293	B2	N/C	23.297	27.838	30.114	B2
NON-INFRASTRUCTURE ADDITIONS AVERAGE LIFE (YEARS)													
C													
15	Very Short	years	0	N/C	0	0	4	B3	N/C	0	0	4	B3
16	Short	years	0	N/C	10	10	10	B2	N/C	10	10	10	B2
17	Medium	years	0	N/C	20	20	20	B2	N/C	20	20	20	B2
18	Medium long	years	0	N/C	0	0	0	n/a	N/C	0	0	0	n/a
19	Long	years	0	N/C	60	60	60	B2	N/C	60	60	60	B2

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 34 FINANCIAL MEASURES (CURRENT COST ACCOUNTING)
ANALYSIS OF NON-INFRASTRUCTURE FIXED ASSET ADDITIONS BY LIFE CATEGORIES - PPP

DESCRIPTION	UNITS	DP	1	2	3	4	CG	5	6	7	8	CG	
			WATER SERVICE					SEWERAGE SERVICE					
			2006-07	2007-08	2008-09	Report Year 2009-10		2006-07	2007-08	2008-09	Report Year 2009-10		
A ACCOUNTING FIXED ASSET ADDITIONS													
NON-INFRASTRUCTURE ASSET ADDITIONS (ENHANCEMENT) BY ASSET LIFE													
1	Very Short	£m	3	N/C	N/C	0.000	0.000	n/a	N/C	N/C	0.000	0.000	n/a
2	Short	£m	3	N/C	N/C	0.000	0.000	n/a	N/C	N/C	0.000	0.000	n/a
3	Medium	£m	3	N/C	N/C	48.389	0.000	n/a	N/C	N/C	0.000	0.000	n/a
4	Medium long	£m	3	N/C	N/C	0.000	0.000	n/a	N/C	N/C	0.000	0.000	n/a
5	Long	£m	3	N/C	N/C	41.361	0.000	n/a	N/C	N/C	0.000	0.000	n/a
6	Land	£m	3	N/C	N/C	0.000	0.000	n/a	N/C	N/C	0.000	0.000	n/a
7	Land Disposals	£m	3	N/C	N/C	0.000	0.000	n/a	N/C	N/C	0.000	0.000	n/a
8	Total	£m	3	N/C	N/C	89.750	0.000	n/a			0.000	0.000	n/a
B NON-INFRASTRUCTURE ASSET ADDITIONS (BASE SERVICE) BY ASSET LIFE													
9	Very Short	£m	3	N/C	N/C	0.000	0.000	n/a	N/C	N/C	0.000	0.000	n/a
10	Short	£m	3	N/C	N/C	0.000	0.000	n/a	N/C	N/C	0.000	0.000	n/a
11	Medium	£m	3	N/C	N/C	0.137	0.099	B3	N/C	N/C	0.000	0.000	n/a
12	Medium long	£m	3	N/C	N/C	0.000	0.000	n/a	N/C	N/C	0.000	0.000	n/a
13	Long	£m	3	N/C	N/C	0.117	0.125	B3	N/C	N/C	0.000	0.000	n/a
14	Total	£m	3	N/C	N/C	0.254	0.224	B3			0.000	0.000	n/a
C NON-INFRASTRUCTURE ADDITIONS AVERAGE LIFE (YEARS)													
15	Very Short	years	0	N/C	0	0	0	n/a	N/C	0	0	n/a	n/a
16	Short	years	0	N/C	10	10	10	n/a	N/C	10	10	n/a	n/a
17	Medium	years	0	N/C	20	20	20	B3	N/C	20	20	n/a	n/a
18	Medium long	years	0	N/C	0	0	0	n/a	N/C	0	0	n/a	n/a
19	Long	years	0	N/C	60	60	60	B3	N/C	60	60	n/a	n/a

Table 34 – Financial Measures (Current Cost Accounting) - Analysis of Non-Infrastructure Fixed Asset Additions by Life Categories**Commentary and methodology**

All the capital expenditure tables have been populated using project data extracted from the company's core project control system (CAPTRAX), as well as ORACLE (Financial management system).

Internal training and mentoring has been ongoing with key staff mainly with Engineering Procurement, Operations, Asset Management, PPP and Finance and Regulation directorates. A specific Master Class was developed and presented to Engineering Procurement, Operations and Asset Management staff in December 2009 and January 2010 to help staff understanding of CIDA definitions and allocations as well as awareness of the use of CIDA data for various business and regulatory needs including common framework and benchmarking. Feedback from these sessions has been very positive.

Methodology NIW Table

Capital expenditure is analysed in 2 separate streams as follows:

- a) Capital Works Programme delivered by Engineering Procurement Directorate
- b) Operating Capital and Management & General (M & G).

The methodology is explained in detail under these 2 areas as follows.

Capital Works Programme

Capital investment driver allocation (CIDA) processes have been further developed from 2008/09 to reflect weaknesses identified during AIR09 audit and internal experience gained in our second year as NI Water. As noted in AIR09 the CIDA methodology is significantly different from the Capital Proportional allocation (QBEG) process adopted in the Strategic Business Plan (SBP).

During 2009/10 the CIDA data capture and analysis process has developed significantly and this is explained as follows:

- a) CIDA calculator spreadsheet – This spreadsheet was developed in 2007/08 to capture engineering data from the complex projects where proportional allocation is required and convert this to CIDA outputs for Regulatory reporting in accordance with the processes as outlined in the CIDA Manual, dated June 2007(updated Nov 09) and the Regulatory Accounting Guideline 2.03. Calculations to complete the analysis are built within the spreadsheet and an output in CAPTRAX format is provided. During the 2009/10 year the following has been completed
 - The CIDA calculator is no longer viewed as a tool to be adopted on its own for apportionment of complex projects. By spending quality time with project managers and demonstrating worked examples at the master class it is now deemed more practical that project managers break each project into defined elements

and apply CIDA to this element. The CIDA calculator has performed a basis to ensure consistency for the first 2 years of NIW but it is accepted that a spreadsheet cannot be built that will define every individual project scenario that is possible within a water and sewerage company.

- CIDA Q apportionment against all WWTW projects was reviewed, and corrected as necessary, to ensure that the Q allocation was against the correct drivers. This followed some discrepancies that were identified during Reporter's audit in AIR09. This only affects the output on Table 38.
- CIDA allocation on all Water Rehabilitation projects has been reviewed during 09/10 to further improve the allocation following the weakness identified by the Reporter in AIR09 in that DG2 was not generally demonstrated in the allocations. In other words the Enhanced Service Level (ESL) allocation on Watermain Rehab projects was generally missing. This was due to the methodology adopted previously in that each scheme within the project had a primary driver applied but these primary drivers had not included ESL. This has been updated to allow secondary drivers to be used in some schemes to ensure ESL is captured. (Note: No ESL allocation was completed on Watermain rehab projects in the SBP).

In addition we have taken the opportunity to improve our allocation by ensuring Meters and PRV's are allocated as non-infra. This was not the case in previous years.

- The CIDA master classes were used as a platform to introduce clarity around the definition for Sewerage and the split between infra (to include Civils and all long life assets) and non-infra (to include all short life assets, e.g. screens) as this is unique and not similar to the other allocations.
 - The CIDA manual has had an update in November 2009 to reflect the above matters and other minor adjustments to ensure better understanding within the business.
- b) An additional level of approval is now required on all EP projects. All approvals now must go via Asset Management Strategic Investment team and within this team the CIDA allocation is checked. The Senior Regulatory Analyst who has been mentoring all Staff on CIDA matters has spent considerable time during 09/10 helping the 'Strategic Investment team' gain a good understanding of principles to be applied. Proof of this progress was demonstrated at the CIDA master classes when a set of complex CIDA examples were demonstrated by this team.
- c) CAPTRAX – CAPTRAX is reconciled on a monthly basis with ORACLE so the final reports can be run directly from CAPTRAX. Three CIDA reports are generated from CAPTRAX as follows:
- CIDA non lands. – This reports the accrual in 2009/10 against each project, excluding land acquisition, with a full CIDA output.

- CIDA lands – this reports the accrual in 2009/10 against land acquisition and the associated CIDA output.
- Projects with no CIDA – In 2007/08 555 projects had no CIDA applied. The expenditures on these projects were very small, and on projects largely completed as part of the former company Water Service. Typical projects contributing to this were watermain projects completed in 05/06 and 06/07 and indeed in earlier years, where wayleave compensation had only been agreed in 07/08. In 2008/09 the number of projects with no CIDA had been reduced to 149 with a related expenditure of £278k. This related to 0.1% of the CWP in 2008/09.

For 2009/10 this file is no longer required as all Capital projects now have CIDA applied. In addition we can report that the projects that did not have CIDA applied in 2007/08 and 2008/09 now have had these completed during the reporting year to assist the company in our Capital Allowances claim for tax purposes.

- d) CWP AIR reporting Model – The model developed in Excel for AIR09 reporting has been adopted for AIR 10 reporting. The model takes the outputs from the above reports from CAPTRAX and completes the tables 32, 34, 35, 36, 37 and 38 with the CWP element of Capital expenditure. Some refinement has been completed within the model to improve the transparency of the project drivers.

Operating Capital and M & G

This area captures all Capital expenditure which is not managed via the CWP. For all Capital projects not on the CWP (herein referred to Operating Capital expenditure) the CIDA information has been captured on the Project Setup form at Project approval and recorded on a Database (AICC) in Finance and Regulation Directorate. A single merged output from ORACLE and the AICC Database is input into a similar model as described above that is used to analyse the output for population of the AIR tables. All expenditure in this category had a full CIDA allocation in 09/10.

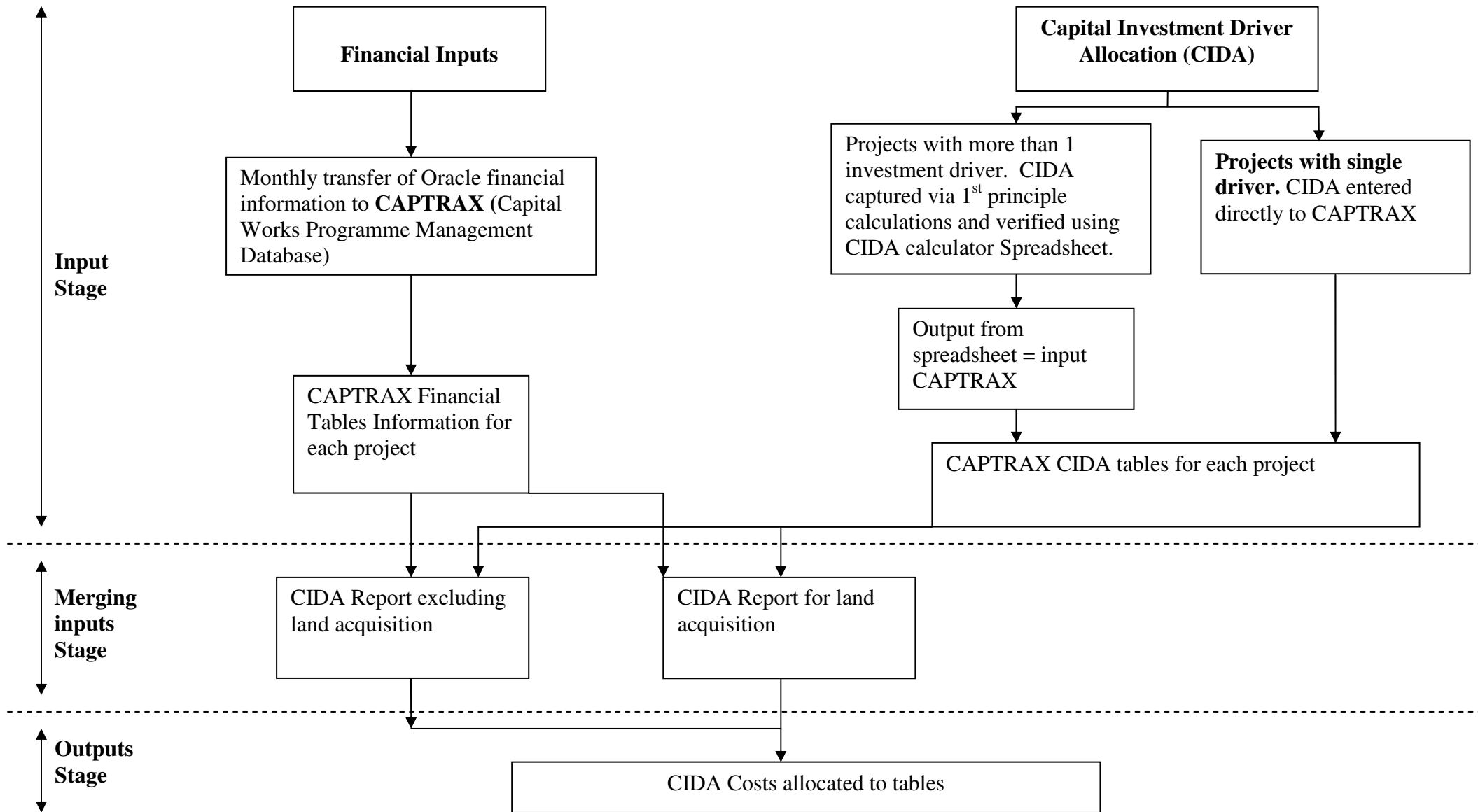
This information has been analysed separately from the CWP and merged on the final output tables.

Table population

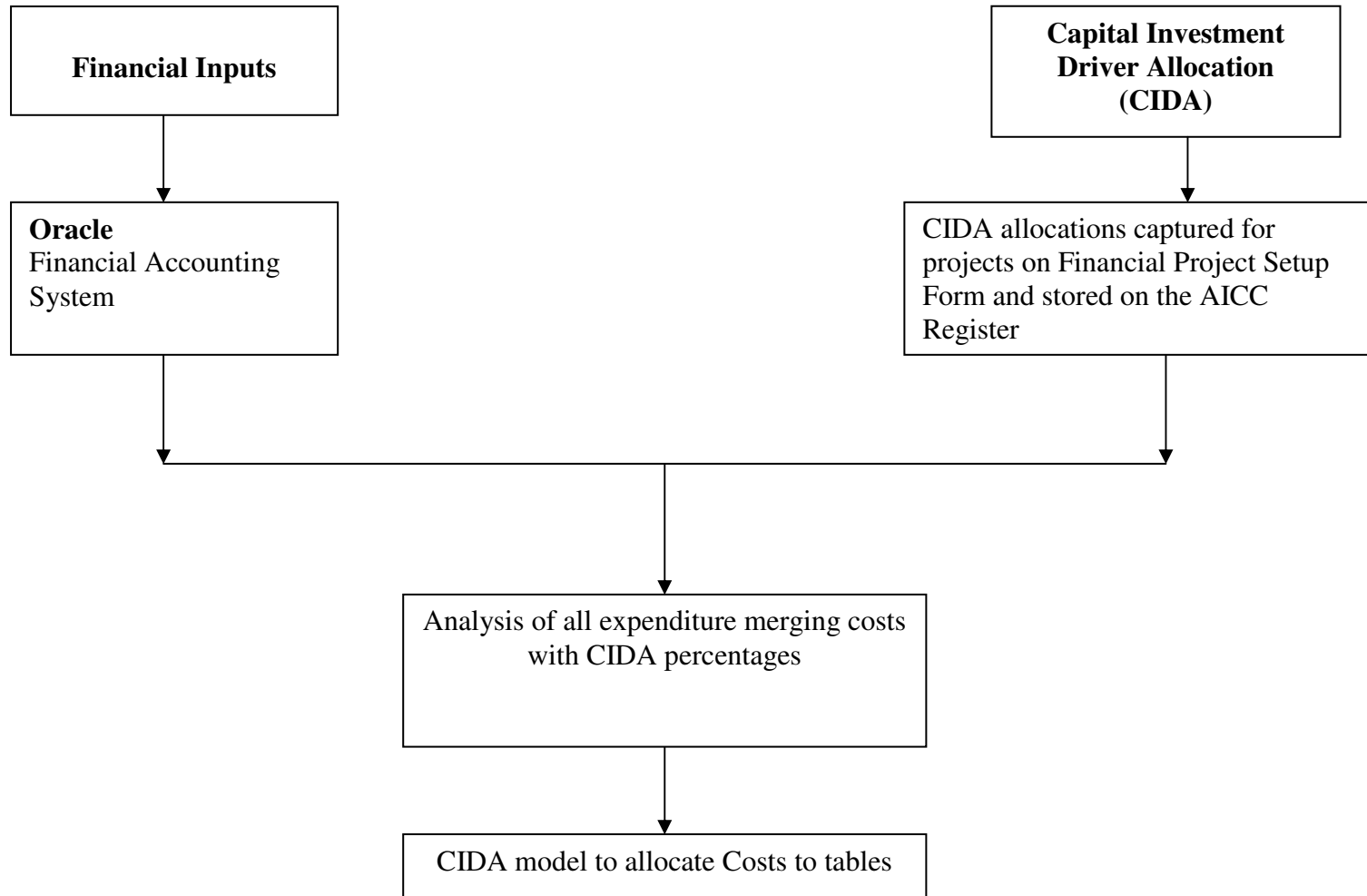
Data used in the population of the table is based on data extracted from the company's core systems and no assumptions are made in the allocation of project expenditure to the lines in the tables for all the expenditure with CIDA directly attributed. For the small rounding figure of £43k of CWP expenditure (due to CAPTRAX rounding finance to the nearest £k, this is apportioned in each table in equal portions to the allocated expenditure.

Process diagrams below show the process for completing the tables.

Process for completion of Capex Financial tables for all CWP Expenditure



Process for Completion of Capex financial tables for Operating Capital and M & G Expenditure



Asset Lives

During 09/10 financial year the life designated for Digitisation has been changed from short to medium to align with the NIW financial categories. Additional categories of spend have been captured in 09/10 and are reported as follows:

- a) Vans – reported as very short
- b) Computers
- c) Land Management. This relates to catchments area management of land Reservoir sites and has been reported as Medium life.

The above paragraph completes the reporter recommendation from AIR09 to include commentary on Asset life allocations as referenced on Page 2 par 6 of the reporters report on AIR09.

The last comprehensive review of asset lives was completed as part of NIAMP2 in 2001. NIW are currently developing systems that a full review of asset lives can be completed in the future.

Methodology PPP table

Figures for PPP Alpha Capital maintenance have been taken directly from Table 42 and apportioned between Fixed Plant and Civils as per the PPP Contractors Financial model. This is the same process as adopted in AIR09.

PPP - Omega

No PPP OMEGA capital has been reported in the AIR10 financial tables for the following reasons:

- The Capital Cost split between Civils and M & E has been extracted from the Contractors Financial Model. This does not define between infra and non infra elements and unlike ALPHA no valid assumptions can be made to define individual projects as some of the projects contain both infra and non infra elements.
- QBEG information has been captured on each project within OMEGA in a similar basis as was captured for the SBP submission which includes backlog base. In order to maintain consistency within all the tables we have not populated any of the OMEGA capital expenditure within the tables.

PPP - Kinnegar

No PPP Kinnegar residual interest finance has been populated as NIW have no information on either the QBEG or the Asset Life categories for this project.

NIW Table

The allocation methodology for Management and General expenditure is reflective of that included within the 'Strategic Business Plan' (SBP) allocation at 41%:59% (Water/Sewerage). This is only applied when projects have not already been allocated within Management and General to either Water or Sewerage within individual projects. This was adopted by project managers when completing the CIDA data and no assumptions were required during the

analysis.

The asset lives adopted for Regulatory reporting are consistent with those in the Fixed Asset Register (FAR). The links for reporting purposes is outlined in the Capital investment Driver allocation manual.

The last comprehensive review of asset lives was completed as part of NAIMP2 in 2001. NIW are currently developing systems so that a review of asset lives can be completed in the future, which is anticipated to take place for PC13.

Expenditure is charged to individual projects and these are assigned individual asset lives for regulatory reporting.

This table is consistent with the analysis in Table 32. All expenditure reported in Table 34 is in outturn prices, gross of grants and contributions.

PPP Table

The expenditure of £0.224m on this table relates to the Capital Maintenance element of PPP Alpha expenditure for 09/10. The £0.224m is reported in Section B of the table and is split using the Asset lives split assumed in the contractors financial model. There is no PPP Capital on Sewerage.

Table 35

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 35 FINANCIAL MEASURES
WATER SERVICE - EXPENDITURE BY PURPOSE (NIW ONLY)**

DESCRIPTION	UNITS	DP	1		2		3		4	
			SBP 2006-07	CG	REPORTING YEAR 2007-08	CG	REPORTING YEAR 2008-09	CG	REPORTING YEAR 2009-10	CG
A BASE SERVICE PROVISION										
1	Base operating expenditure	£m	3	N/C	95.308	B4	98.446		71.455	B4
2	Infrastructure renewals expenditure (net)	£m	3	N/C	19.778	B3	32.534	B3	26.904	B3
3	MNI (gross of grants and contributions)	£m	3	15.030	19.356	B3	19.423	B3	12.305	B3
4	MNI - grants and contributions	£m	3	N/C	0.000		0.000		0.000	n/a
5	MNI - net of grants and contributions	£m	3	15.030	19.356	B3	19.423	B3	12.305	B3
6	Infrastructure renewals expenditure (gross)	£m	3	35.730	19.778		32.534	B3	26.896	B3
B QUALITY ENHANCEMENTS										
7	Capex: Total quality enhancement programme	£m	3	23.790	15.714	B3	19.076	B3	19.704	B3
8	Opex: Total quality enhancement programme	£m	3	N/C	0.050	B4	0.053	B4	0.307	B4
C ENHANCED SERVICE LEVELS										
9	Capital expenditure - customer service	£m	3	4.370	5.930	B3	2.949	B3	13.452	B3
10	Additional operating expenditure - customer service	£m	3	N/C	0.000	B4	0.000	B4	0.000	B4
D MAINTAINING AND IMPROVING SUPPLY/DEMAND BALANCE										
11	Capital expenditure supply/demand balance	£m	3	16.530	18.069	B3	10.963	B3	12.194	B3
12	Capex - new development	£m	3	N/C	17.758	B3	4.824	B3	11.485	B3
13	Capex - growth	£m	3	N/C	0.311	B3	6.139	B3	0.709	B3
14	Capex - free meter "selective and optants"	£m	3	N/C	0.000	B3	0.000	B3	0.000	B3
15	Additional operating expenditure supply/demand balance	£m	3	N/C	0.000	B4	0.000	B4	0.000	B4
16	Capital expenditure - security of supply	£m	3	N/C	1.541	B3	24.095	B3	16.996	B3
17	Additional operating expenditure - security of supply	£m	3	N/C	0.000	B4	0.000	B4	0.000	B4
E NEW OUTPUTS/OBLIGATIONS SINCE THE SBP										
18	New outputs/obligations - capex	£m	3	N/C	0.000	B3	0.000	B3	0.000	B3
19	New outputs/obligations - opex	£m	3	N/C	0.000	B4	0.000	B4	0.000	B4
F GRANTS, CAPITAL CONTRIBUTIONS AND INFRASTRUCTURE CHARGES RECEIPTS FOR NEW CONNECTIONS										
20	Infrastructure charge receipts - new connections	£m	3	N/C	1.486		1.584		1.230	A2
21	Enhancement requisitions, grants and contributions	£m	3	N/C	2.504		2.763		2.995	A2
G ADOPTED ASSETS, NIL COST ASSETS										
22	Assets adopted or acquired at nil cost	£m	3	N/C	0.000		0.000	n/a	0.000	n/a
23	Adopted assets in return for a payment	£m	3	N/C	0.000		0.000	n/a	0.000	n/a
H EXPENDITURE TOTALS										
24	Total operating expenditure (total)	£m	3	N/C	95.358		98.499		71.762	n/a
25	Infrastructure renewals expenditure (net) (NIW only)	£m	3	N/C	19.778	B3	32.534	B3	26.904	B3
26	Total asset additions (NIW only)	£m	3	N/C	60.611	B3	76.506	B3	74.651	B3
27	Total enhancement capital contributions (NIW only)	£m	3	N/C	3.990	B3	4.347	B3	4.225	B3
28	Total capital expenditure (excl. adopted and nil cost assets) (NIW only)	£m	3	N/C	80.389	B3	109.040	B3	101.554	B3
I Capital element of PPP unitary charge payment										
29	Base maintenance (infrastructure and non-infrastructure)	£m	3						0.224	n/a
30	Quality enhancement expenditure	£m	3						0.000	n/a
31	Enhanced service level expenditure	£m	3						0.000	n/a
32	Supply demand balance expenditure	£m	3						0.000	n/a
33	New outputs/obligations since the SBP	£m	3						0.000	n/a
34	Total capital element of PPP unitary charge payment	£m	3						0.224	n/a

Table 35 - Water service – Expenditure by purpose**Capital expenditure (Capex)**

In 2009/10 NIW invested £101.554m, excluding PPP, capital expenditure in water service activities and outputs. Investment has been allocated to purpose categories in line with the CIDA manual and the methodology as outlined in Chapter 34. Detailed explanations of the expenditure and achievements are set out by purpose category below.

Capex: base service provision – infrastructure renewals (NIW)

In 2009/10 NIW invested £26.904m (net) in water service infrastructure renewals. This is an increase on the 07/08 figure of £19.778m which we noted as being understated in AIR08 and a reduction on the 08/09 figure of £32.534m. By delivering this investment the company has:

- Renewed 172km of mains (including mains renewed for ENHANCEMENT)
- Replaced 6418 communication pipes (not including lead replacement).

In 2009/10 there is a difference in the IRE (net) and IRE (gross) of £0.008m which relates to income received for watermain diversions.

Capex: base service provision-maintenance non-infrastructure (NIW)

In 2009/10 NIW invested £12.3m (gross) in the maintenance of water non-infrastructure assets. In doing so the company has:

- Invested at many sites/assets under our refurbishment programme. The Service reservoir rehab programme is the main highlight in this area for 09/10. Twenty reservoirs and water towers have been refurbished in 09/10. Much of this spend has been allocated to Backlog Base and so is not shown in Section B of the Table.
- Invested in Management and General activities (water), to maintain non-operational assets including improvements to IT systems. In line with the SBP costs have been allocated in the proportions 41% water: 59% sewerage where not directly allocated to either Water or Sewerage by the Project Managers within CIDA.
- Invested £4.2m in Water Treatment works upgrades. The main sites included in this investment are Lough Bradan WTW, Carnmoney WTW and Killyhelvin WTW.

Serviceability

In 2009, water quality compliance of drinking water leaving our Water Treatment Works out turned at 99.92%, against the target of 99.90%. Following the introduction of PPP Alpha upgraded works along with asset improvements in 2009, we reduced the number of Trihalomethane regulatory exceedances, at the customer tap, from 141 in 2008 to 30 in 2009. This is a direct result of improved treatment at our treatment works. This figure will be

further improved in 2010, following the commissioning of Seagahan Water Treatment Works in late 2009.

Expenditure to reduce leakage

Operational expenditure in the Leakage function in 2009/10 was £3.81m

The following table shows the breakdown of expenditure in the Leakage function in 2009/10.

Table 1 – Leakage expenditure

Expenditure category (£m outturn prices)	2009/10 £m
Total Capex	6.79
Total Opex	3.81
Total Expenditure	10.6

This expenditure includes £0.02m Business Improvement Operating expenditure and £0.18m Business Improvement Capital expenditure.

Capex within the Leakage function includes the following 3 contracts: Leakage Detection Contract, Leakage Repair Contract and Leakage Management Services Contract and capitalised salaries for internal staff associated with leakage infrastructure improvements. Other capex is in relation to meters, PRVs etc as well as leakage infrastructure work associated with pressure management, DMA optimisation, and meter replacement/installation

Opex expenditure is mainly contributed to from staff costs and Roads Service fees for Road opening permits (moleseye).

Capex: quality enhancements (NIW)

In 2009/10 NIW invested £19.7m in water service quality programmes. In doing so the company has:

- Renewed mains as part of the water rehabilitation programme. The quality programme is a significant element of the Rehab programme.
- Upsized mains as part of the water rehabilitation programme. Some of this work is also driven by the quality programme.
- Completed work at the following WTW sites as part of the quality improvement programme agreed with DWI as part of the SBP
 1. Seagahan WTW
- A more detailed review of the quality programme accompanies Table 37.

Capex: new obligations

NIW have not completed any new obligations that were not listed in the SBP CWP in 2009/10.

Capex: supply-demand balance (NIW)

In 2009/10 NIW invested £16.996m providing security of supply projects and £0.7m on growth projects as part of the supply-demand balance. This expenditure results partially from proportional expenditure to this service area from delivery of the Quality enhancement programme as well as security of supply projects resulting from the Water Resource Strategy.

In 2009/10 NIW also invested £11.485m in water services supply/demand programme relating to new development (provision on new supplies/connections). In doing so it has:

- Connected 4819 new properties; (4457, household and 272 non-household).

Operating Expenditure (opex)**Line 1 - Opex: Base Service Provision**

The Opex in Base Service provision is taken as the Total Base Opex from Table 21 minus the Opex from Capex calculated for Enhancements.

Lines 2 – 6 - Base Service Provision: IRE and MNI**IRE**

In 09/10 £7k was received for the diversion of watermains. This is included on line 6.

MNI

There are no contributions or grants for non infrastructure base projects in 2009/10.

Thus MNI gross and MNI net are the same - lines 3 and 5 and line 4 – MNI grants and contributions is zero.

OPEX from CAPEX

OPEX from CAPEX has been calculated directly from the accounting general ledger for those sites identified as becoming operational during 2007/08, 2008/09 and 2009/10. A direct comparison has been completed on a site by site basis of expenditure on the relevant sites pre and post CAPEX investment. After adjusting for inflationary rises the difference is recorded as OPEX from CAPEX. For sites which have been adopted the entire OPEX has been treated as OPEX from CAPEX.

Apportionment within the Table has been completed in accordance with CIDA apportionments to ENHANCEMENT. A separate database has been developed to analyse these smaller number of projects using the CIDA ENHANCEMENT outputs (rebalanced to 100%) from the original Capital project to apportion the OPEX from CAPEX.

No PPP Opex from Capex is reported on this table as NIW does not have any data to support such an analysis.

Lines 20 – 21 - Grants, capital contributions and infrastructure charge receipts for new connections

Line 20 - Infrastructure charge receipts – new connections of £1.230m in Line 20 represents the total gross receipts for 2009-2010 prior to the company applying the accounting policy for these. In the statutory accounts part of the infrastructure receipt is deemed to apply to non-infrastructure enhancement of assets (2009-2010 (42.46%) and this element is not treated as a capital contribution toward infrastructure but is credited in the balance sheet to a deferred income account and is amortised over the average useful life of non-infrastructure assets (30 years).

Line 21 - Enhancement requisitions, grants and contributions comprise:

2009-2010	£m
Water connections	2.306
Requisitions	0.689
Total line 21	2.995

- Total asset additions – Check to Table 25 line 5 col 4. For AIR 10 the reported numbers in these two tables are as follows:
Table 25 – £74.409m
Table 35 - £74.651m

The difference in the above 2 figures is explained as follows:

- PPP Alpha capital maintenance of £224k is not included in Table 35
- £-479k included in Table 25 relates to Decapitalised projects in 09/10 and the reversal of £250k of PPP Alpha Capital maintenance from 08/09. The balance is a small rounding error.

Confidence Grades –CIDA allocation has made further progress in 09/10 and whilst it is accepted there may minor shortcomings these are very few in number. With the allocation procedures, CIDA Masterclass training, CATPRAX development for storage and reporting as well as the reporting model all fully operational the Confidence grade has been maintained as B3 but being deemed close to 5% accuracy.

For OPEX as a result of CAPEX B4 has been assigned to all categories.

Confidence grades have not been assigned to the following:

- total opex as this is extracted from T21 where no confidence grades are applied
- Block I as this information is extracted from T42 where no confidence grades are applied.

Backlog Base

Backlog Base expenditure of £6.096m in Water Service is included in line 9 of the table.

Reporter Recommendations (AIR 09)

The reporter identified that few Zonal Study projects had a DG2 allocation in AIR09 with a result that the ESL allocation was understated. NIW have reviewed all Zonal Studies /Rehabilitation projects CIDA allocations in 09/10 including those projects delivered in 07/08 and 08/09.

Table 35a

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN - TABLE 35A FINANCIAL MEASURES WATER SERVICE - EXPENDITURE BY PURPOSE

RPI Inflator (Operating Expenditure) base year to report year prices
COPI Inflator (Capital Expenditure) base year to report year prices

0.96

DESCRIPTION	UNITS	DP	1	2	3	4	5	
			SBP PROJECTIONS FOR 2009/10	SBP PROJECTIONS UPLIFTED FOR RPI AND COPI	ACTUAL 2009/10 OUTTURN	DIFFERENCE FROM REVISED SBP FIGURES	% DIFFERENCE FROM REVISED SBP FIGURES	DP
A BASE SERVICE PROVISION								
1	Base operating expenditure	£m	3					
2	Infrastructure renewals expenditure (net)	£m	3	23.633	22.579	26.904	4.324	19.15
3	MNI (gross of grants and contributions)	£m	3	20.479	19.566	12.305	-7.261	-37.11
4	MNI - grants and contributions	£m	3	0.000	0.000	0.000	0.000	0.00
5	MNI (net of grants and contributions)	£m	3	20.479	19.566	12.305	-7.261	-37.11
B QUALITY ENHANCEMENTS								
6	Capex - total quality enhancement programme	£m	3	17.092	16.330	19.704	3.374	20.66
7	Opex - total quality enhancement programme	£m	3					
C ENHANCED SERVICE LEVELS								
8	Capital expenditure - customer service	£m	3	2.445	2.336	13.452	11.116	475.92
9	Additional operating expenditure - customer service	£m	3					
D MAINTAINING AND IMPROVING SUPPLY/DEMAND BALANCE								
10	Capital expenditure supply/demand balance	£m	3	16.955	16.199	12.194	-4.005	-24.72
11	Total enhancement capital contributions	£m	3	5.524	5.278	4.225	-1.053	-19.95
12	Capex net of enhancement capital contributions	£m	3	11.431	10.921	7.969	-2.952	-27.03
13	Additional operating expenditure supply/demand balance	£m	3					
14	Capital expenditure - security of supply	£m	3	0.000	0.000	16.996	16.996	
15	Additional operating expenditure - security of supply	£m	3					
E EXPENDITURE TOTALS								
16	Total gross capex - gross of grants (ire net) and excluding new outputs	£m	3	80.604	77.010	101.554	24.545	31.87
17	Total opex excluding new outputs	£m	3					
18	Total gross capex - gross of grants (ire net) and including new outputs	£m	3	80.604	77.010	101.554	-77.010	-100.00
19	Total opex including new outputs	£m	3					

Table 35a – Water Service – Expenditure comparisons by purpose

The Strategic Business Plan was not structured using the PR process and as a result the data used and the systems adopted for the SBP analysis are not easily utilised to populate this table accurately. Tables 35a and 36a SBP totals have been reconciled to £252,738m shown on page 17 of the full SBP document by excluding Capital Contributions and PPP Alpha Capital maintenance.

It is difficult to report on the variations as noted on this table as the reporting methodology of the QBEG in the SBP and the CIDA allocation in 09/10 reporting year are derived differently. The variations are best examined on a project by project basis using the CIM template. However, the following commentary will give an explanation of some of the main differences.

Comparison issues

- 1) The only central source of SBP (col 1) data is the Financial Model used in the SBP. The Model only works with Enhancement and Base Service Provision. It does not distinguish between Quality Enhancement, Enhanced Service Level and Supply demand balance. Some assumptions have had to be adopted to develop this granularity for the population of the tables.
- 2) Backlog Base has been reported as ESL in this table as is the case for all the CAPITAL tables as this was adopted for the SBP period. Whilst this in itself should not present a comparison issue in the table care need to be adopted when comparing with other companies.
- 3) Capitalised Salaries were applied to the SBP as per the CWP split. However, for Enhancement salaries these were only applied to infrastructure projects within the SBP. This is a weakness in the SBP as Enhancement Salaries apply to both Infra and non-infra projects. For consistency the information has been maintained as per the SBP assumption in this table.
- 4) Within the M & G (using the SBP definition and not OFWAT definition) predicted spend was allocated to Base Service Provision and Enhancement. The portion of Enhancement was split between Water infra, Water non-infra, Sewerage infra and Sewerage non-infra. In reality, the spend relates to Watermains in new developments and should have been entirely allocated to Water infra. This was a SBP financial error.
- 5) Within the SBP a combination of RPI and COPI was adopted to Capital Elements. By using actual COPI on this table we do not have a true comparison.
- 6) £202k SBP amount of PPP Alpha Capital Maintenance has been removed from col 1.
- 7) When QBEG was applied to the SBP this was completed at sub programme level. Within these sub programmes the QBEG allocation could be challenged as it does not now reflect our understanding as has been refined during the 3 years of the SBP. One example of this is Zonal Studies/watermain rehab programme where in the SBP there was no allocation for ESL (DG2). In col 3 this now includes for DG2 allocation against ESL.

- 8) A number of post SBP determination financial adjustments took place at the request of DRD. These mainly moved finance from Infrastructure to non Infrastructure. There was no Engineering and Regulatory reasoning behind these changes but fully financially motivated. These adjustments have not been reflected in Col 1.

General Matters

The COPI factor of 0.96 has been derived by estimating no increase in the COPI index in the last Quarter of 09/10 and is the factor from the base year of 06/07 to 09/10. This figure is less than 1 due to deflation in the COPI index in the last 2 years. This alone has the effect of reducing the SBP capital from that assumed in 'Water Service' SBP submission of £12.2m in 09/10.

Figures reported in Columns 1 and 2 of this table are post efficiency.

PPP

No PPP is included in this table.

Line 6 - Capex - Total Quality Enhancement Programme

The quality enhancement (Q) programme spent more than the SBP projection in 09/10. This can partly be attributed to the increase in Water Distribution rehab. programme being larger.

Line 16 - Total Gross Capex - Gross of Grants (IRE Net) and Excluding New Outputs

The total SBP Water predicted expenditure as per the table is £77m in 09/10 prices. The actual expenditure was £101.5m.

Reporter Recommendations from AIR09

- a) Actual COPI has been adopted in this table rather than assumed SBP COPI.
- b) Reconciliation issues from the SBP col have been presented to NIAUR on the 28/04/10.
- c) Line 17 and 19 is not populated in AIR 10 as per the guidance.

Table 36

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 36 FINANCIAL MEASURES
SEWERAGE SERVICE - EXPENDITURE BY PURPOSE**

DESCRIPTION	UNITS	DP	1		2		3		4	
			BASE YEAR SBP		REPORTING YEAR		REPORTING YEAR		REPORTING YEAR	
			2006-07	CG	2007-08	CG	2008-09	CG	2009-10	CG
A BASE SERVICE PROVISION										
1	Base operating expenditure	£m	3	N/C	87.703	B4	107.531	B4	95.090	B4
2	Infrastructure renewals expenditure (net)	£m	3	N/C	6.195	B3	6.600	B2	11.494	B3
3	MNI (gross of grants and contributions)	£m	3	25.980	23.297	B3	27.838	B2	30.102	B3
4	MNI - grants and contributions	£m	3	N/C	0.000		0.000	B2	0.000	n/a
5	MNI - net of grants and contributions	£m	3	25.980	23.297	B3	27.838	B2	30.102	B3
6	Infrastructure renewals expenditure (gross)	£m	3	9.640	6.195	B3	6.600	B2	11.494	B3
B QUALITY ENHANCEMENTS										
7	Capex - total quality enhancement programme	£m	3	43.930	49.426	B3	79.419	B2	62.880	B3
8	Opex - total quality enhancement programme	£m	3	N/C	0.096	B4	1.028	B4	1.413	B4
C ENHANCED SERVICE LEVELS										
9	Capital expenditure - customer service	£m	3	17.210	49.691	B3	28.209	B2	20.002	B3
10	Additional operating expenditure - customer service	£m	3	N/C	0.000	B4	0.044	B4	0.338	B4
D IMPROVING SUPPLY/DEMAND BALANCE										
11	Capital expenditure supply/demand balance	£m	3	50.470	45.287	B3	44.230	B2	31.723	B3
12	Capex - new development	£m	3	N/C	19.875	B3	38.339	B3	28.642	B3
13	Capex - growth - sewage	£m	3				5.834	B3	2.777	B3
14	Capex - growth - sewage treatment	£m	3				0.057	B3	0.304	B3
15	Additional operating expenditure supply/demand balance	£m	3	N/C	0.596	B4	0.489	B4	0.968	B4
E NEW OUTPUTS/OBLIGATIONS SINCE THE SBP										
16	New outputs/obligations - capex	£m	3	N/C	0.000	B3	0.000	B3	0.220	B3
17	New outputs/obligations - opex	£m	3	N/C	0.000	B4	0.000	B2	0.000	B4
F GRANTS, CAPITAL CONTRIBUTIONS AND INFRASTRUCTURE CHARGES RECEIPTS FOR NEW CONNECTIONS										
18	Infrastructure charge receipts - new connections	£m	3	N/C	1.132		1.164	A2	1.029	A2
19	Enhancement requisitions, grants and contributions	£m	3	N/C	0.124		0.759	A2	1.253	A2
G ADOPTED ASSETS, NIL COST ASSETS										
20	Assets adopted or acquired at nil cost	£m	3	N/C	19.859	B3	19.284	B3	18.602	B3
H EXPENDITURE TOTALS										
21	Total operating expenditure	£m	3	N/C	88.395		109.092	B2	97.808	n/a
22	Infrastructure renewals expenditure (net)	£m	3	N/C	6.195	B3	6.600	B2	11.494	B3
23	Total asset additions	£m	3	N/C	187.560	B3	198.980	B2	163.529	B3
24	Total enhancement capital contributions	£m	3	N/C	1.256	B3	1.923	B2	2.282	B3
25	Total capital expenditure (excluding adopted and nil cost assets)	£m	3	N/C	173.896	B3	186.296	B2	156.420	B3
I Capital element of PPP unitary charge payment										
26	Base maintenance (infrastructure and non-infrastructure)	£m	3						0.000	n/a
27	Quality enhancement expenditure	£m	3						0.000	n/a
28	Enhanced service level expenditure	£m	3						0.000	n/a
29	Supply demand balance expenditure	£m	3						0.000	n/a
30	New outputs/obligations since the SBP	£m	3						0.000	n/a
31	Total capital element of PPP unitary charge payment	£m	3						0.000	n/a

Table 36 - Sewerage Service – Expenditure by purpose**Capital expenditure (Capex)**

In 2009/10 NIW invested £156.4m (excluding adopted and nil cost assets) of capital expenditure in sewerage service activities and outputs. Investment has been allocated to purpose categories in line with the methodology as outlined in Chapter 34. Detailed explanations of the expenditure and achievements are set out by purpose category below.

Capex: base service provision – infrastructure renewals

In 2009/10 NIW invested 11.49m (net) in sewerage service infrastructure renewals. With the large Belfast Sewer project now nearing completion the balance of expenditure on Sewerage is increasing within Base Maintenance. This reflects the longer term company view as expenditure on sewerage infra base maintenance has been low in 07/08 and 08/09. In spending the 09/10 investment the company has:

- Replaced sewers primarily within Drainage Area Plan projects.
- Addressed blockages, collapses etc which lead to flooding incidents.
- Diverted network assets where necessary.

NIW have been targeting Capital Maintenance activity during 2009/10 on both Critical and non-critical sewers in line with findings from the Drainage Area Studies.

Capex: base service provision – maintenance non- infrastructure

In 2009/10 NIW invested £30.102 million (net) in the maintenance of non-infrastructure assets. This is an increase on the 08/09 figure of £27m.

In doing so the company has:

- Completed projects at wastewater treatment works. Refer to commentary in Chapter 38. These are quality driven projects but some contain a Base Service Provision apportionment within CIDA.
- Invested approximately £3.4 million in Management and General Activities to maintain non-operational assets.

Capex: quality enhancements

In 2009/10 NIW invested £63.0 million in sewerage service quality programmes. In doing so the company has:

- Completed 19 of wastewater treatment works as agreed in the SBP targets for 09/10 financial year, 5 wastewater treatment works that had 08/09 SBP completion dates and 1 with an 07/08 completion date.

Line 16 - Capex: New Obligations

Derrytrasna WWTW was not included within the SBP project listing. On 30/03/07 March 2007 a new Water Order Consent (WOC) was issued for this works, which the works was unable to meet. In response to a statement under caution (SUC) dated 7/04/09 NIW responded by completing some short term measures and accelerating a Capital project. NIW has advanced this project

without any additional funding. £220k is reported in 09/10 against this project. The £220k is added to this line and removed from lines 3, 7 & 12 of the table.

Line 1 - Opex: Base Service Provision

The Opex in Base Service provision is taken as the Total Base Opex from Table 21 minus the Opex from Capex calculated for Enhancements.

Lines 2-6 - Base Service Provision: IRE and MNI

IRE

There are no grants for IRE in 2009/10.

IRE related contributions would be those contributions from third parties towards work carried out on base sewerage projects. This is shown as zero for 2009/10 as this income is currently not shown in the accounts as a capital contribution.

Thus IRE gross and IRE net are the same -lines 2 and 6.

MNI

There are no contributions or grants for non infrastructure base projects in 2009/10.

Thus MNI gross and MNI net are the same - lines 3 and 5 and line 4 – MNI grants and contributions is zero.

OPEX from CAPEX

OPEX from CAPEX has been calculated directly from the accounting general ledger for those sites identified as becoming operational during 2007/08, 2008/09 and 2009/10. A direct comparison has been completed on a site by site basis of expenditure on the relevant sites pre and post CAPEX investment. After adjusting for inflationary rises the difference is recorded as Opex from Capex.

Small WWTW's, do not have individual representation on the General ledger. Benchmarking against similar existing sites identified power costs as the main expenditure at each of these sites. It was possible to get the power costs for these sites. Pumping Stations cannot be identified individually in the General Ledger and where possible the same methodology as the small WWTW's has been used. However there remain some pumping stations for which it has not been possible to separately identify power costs.

It should be noted that in some cases the entire OPEX is treated as OPEX from CAPEX as the assets are entirely new. Examples include assets adopted and WWTW's where no form of treatment was provided before. As the OPEX has been taken straight from the general ledger these costs will only relate to the portion of the year that the site is operational and therefore no apportionment is required.

Apportionment within the Table has been completed in accordance with CIDA apportionments to ENHANCEMENT. A separate database has been

developed to analyse these smaller number of projects using the CIDA ENHANCEMENT outputs (rebalanced to 100%) from the original Capital project to apportion the OPEX from CAPEX.

Grants, capital contributions and infrastructure charge receipts for new connections (lines

Line 18 - Infrastructure charge receipts – new connections of £1.029m in Line 18 represents the total gross receipts for 2009-2010 prior to the company applying the accounting policy for these. In the statutory accounts part of the infrastructure receipt is deemed to apply to non-infrastructure enhancement of assets (2009-2010 42.46%) and this element is not treated as a capital contribution toward infrastructure but is credited in the balance sheet to a deferred income account and is amortised over the average useful life of non-infrastructure assets (30 years).

Line 19 - Enhancement requisitions, grants and contributions

These comprise:

2009-2010	£m
Sewers for adoption – inspection fees	0.519
Requisitions	0.226
Sewerage connections	0.507
Total line 21	1.253

Confidence Grades – CIDA allocation has made further progress in 09/10 and whilst it is accepted there may minor shortcomings these are very few in number. With the allocation procedures, CIDA Masterclass training, CAPTRAX development for storage and reporting as well as the reporting model all fully operational the Confidence grade has been maintained as B3 but being deemed close to 5% accuracy.

For OPEX as a result of CAPEX B4 has been assigned to all categories.

Confidence grades have not been assigned to the following:

- c) Total opex as this is extracted from T21 where no confidence grades are applied.
- d) Block I as this information is extracted from T42 where no confidence grades are applied.

Total asset additions – Check to Table 25 line 5 col 8. For AIR 10 the reported numbers in these two tables are as follows:
Table 25 – £165.692m
Table 36 - £163.529m

The difference of £2.164m relates to the Residual interest on Kinnegar PPP project which is not included on Table 36.

Health and Safety

Health and Safety Expenditure has been allocated to Base Service Provision.

Backlog Base

Backlog Base expenditure of £7.912m is included in line 9 of this table.

Reporter's Recommendations

(Page 7 para 8). In line with the Reporter's recommendation it was agreed at the NIW/NIEA Regulation Sub-Group meeting that NIEA would produce Project Sign Off Procedures and Proformas.

Table 36a

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 36A FINANCIAL MEASURES
SEWERAGE SERVICE - EXPENDITURE BY PURPOSE**

RPI Inflator (Operating Expenditure) base year to report year prices
COPI Inflator (Capital Expenditure) base year to report year prices

	0.96

DESCRIPTION	UNITS	DP	1	2	3	4	5
			SBP PROJECTIONS FOR 2009-10	SBP PROJECTIONS UNPLIFTED FOR COPI AND RPI FOR 2009-10	ACTUAL 2009-10 OUTTURN	DIFFERENCE FROM REVISED SBP FIGURES	% DIFFERENCE FROM REVISED SBP FIGURES
						DP	2
A BASE SERVICE PROVISION							
1 Base operating expenditure	£m	3					
2 Infrastructure renewals expenditure (net)	£m	3	12.622	12.117	11.494	-0.623	-5.14
3 MNI (gross of grants and contributions)	£m	3	29.253	28.083	30.115	2.032	7.24
4 MNI - grants and contributions	£m	3	0.000	0.000	0.000	0.000	0.00
5 MNI (net of grants and contributions)	£m	3	29.253	28.083	30.102	2.019	7.19
B QUALITY ENHANCEMENTS							
6 Capex: Total quality enhancement programme	£m	3	53.769	51.618	63.032	11.414	22.11
7 Opex: Total quality enhancement programme	£m	3					
C ENHANCED SERVICE LEVELS							
8 Capital expenditure	£m	3	14.763	14.173	20.002	5.829	41.13
9 Additional operating expenditure - customer service	£m	3					
D MAINTAINING SUPPLY/DEMAND BALANCE							
10 Capital expenditure supply/demand balance	£m	3	47.043	45.161	31.778	-13.383	-29.63
11 Total enhancement capital contributions	£m	3	4.207	4.039	2.282	-1.757	-43.50
12 Capex net of enhancement capital contributions	£m	3	42.835	41.122	29.496	-11.626	-28.27
13 Additional operating expenditure supply/demand balance	£m	3					
E EXPENDITURE TOTALS							
14 Total gross capex - gross of grants (ire net) and excluding new outputs	£m	3	157.450	151.152	156.420	5.268	3.49
15 Total opex (excluding new outputs)	£m	3					
16 Total gross capex - gross of grants (ire net) and including new outputs	£m	3	157.450	151.152	156.420	5.268	3.49
17 Total opex including new outputs	£m	3					

Table 36a – Financial Measures - Sewerage Service – Expenditure by Purpose

The Strategic Business Plan was not structured using the PR process and as a result the data used and the systems adopted for the SBP analysis are not easily utilised to populate this table accurately. Tables 35a and 36a SBP totals have been reconciled to £252,738m shown on page 17 of the full SBP document by excluding Capital Contributions and PPP Alpha Capital maintenance.

It is difficult to report on the variations as noted on this table as the reporting methodology of the QBEG in the SBP and the CIDA allocation in 09/10 reporting year are derived differently. The variations are best examined on a project by project basis using the CIM template. However, the following commentary will give an explanation of some of the main differences.

Comparison issues

- 9) The only central source of SBP (col 1) data is the Financial Model used in the SBP. The Model only works with Enhancement and Base Service Provision. It does not distinguish between Quality Enhancement, Enhanced Service Level and Supply demand balance. Some assumptions have had to be adopted to develop this granularity for the population of the tables.
- 10) Backlog Base has been reported as ESL in this table as is the case for all the CAPITAL tables as this was adopted for the SBP period. Whilst this in itself should not present a comparison issue in the table care need to be adopted when comparing with other companies.
- 11) Capitalised Salaries were applied to the SBP as per the CWP split. However, for Enhancement salaries these were only applied to infrastructure projects within the SBP. This is a weakness in the SBP as Enhancement Salaries apply to both Infra and non infra projects. For consistency the information has been maintained as per the SBP assumption in this table.
- 12) Within the M & G (using the SBP definition and not OFWAT definition as this applies to spend in Operations directorate as well as M & G) predicted spend was allocated to Base Service Provision and Enhancement. The portion of Enhancement spend was split between Water infra, Water non infra, Sewerage infra and Sewerage non infra. In reality the spend relates to Watermains in new developments and should have been entirely allocated to Water infra. This was a SBP financial error.
- 13) Within the SBP a combination of RPI and COPI was adopted to Capital Elements. By using actual COPI on this table we do not have a true comparison.
- 14) When QBEG was applied to the SBP this was completed at sub programme level. Within these sub programmes the QBEG allocation could be challenged as it does not now reflect our understanding as has been refined during the 3 years of the SBP. One example of this is DAP Studies/Sewer rehab programme where in the SBP there was no allocation for ESL (DG5). In col 3 this now includes for DG5 allocation against ESL.

15) A number of post SBP determination financial adjustments took place at the request of DRD. These mainly moved finance from Infrastructure to non Infrastructure. There was no Engineering and Regulatory reasoning behind these changes but fully financially motivated. These adjustments have not been reflected in Col 1.

General Matters

The COPI factor of 0.96 has been derived by estimating no increase in the COPI index in the last Quarter of 09/10 and is the factor from the base year of 06/07 to 09/10. This figure is less than 1 due to deflation in the COPI index in the last 2 years. This alone has the effect of reducing the SBP capital from that assumed in 'Sewerage Service' SBP submission of £22.9m in 09/10.

Figures reported in Columns 1 and 2 of this table are post efficiency.

In respect of OPEX only total opex has been populated.

PPP

No PPP is included in this table.

Line 14 - Total Gross Capex - Gross of Grants (IRE Net) and Excluding New Outputs

The total SBP Water predicted expenditure as per the table is £151.15m in 09/10 prices. The actual expenditure was £156.42m.

Reporter Recommendations from AIR09

- d) Actual COPI has been adopted in this table rather than assumed SBP COPI.
- e) Reconciliation issues from the SBP col have been presented to NIAUR on the 28/04/10.
- f) Line 17 is not populated in AIR 10 as per the guidance.

Table 37

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 37 FINANCIAL MEASURES
WATER COMPLIANCE - EXPENDITURE REPORT (NIW only)**

DESCRIPTION	UNITS	DP	1		2		3		4	
			BASE YEAR SBP		REPORTING YEAR		REPORTING YEAR		REPORTING YEAR	
			2006-07	CG	2007-08	CG	2008-09	CG	2009-10	CG
A OBLIGATIONS PRIOR TO THE SBP										
1	Capex: Completion of programme of work funded prior to the SBP	£m	3	N/C		0.000		0.000	B4	n/a
2	Opex: Completion of programme of work funded prior to the SBP	£m	3	N/C		0.050	B4	0.053	B4	0.034
B WATER TREATMENT										
3	Capex: Nitrates	£m	3	N/C		0.000	B3	0.000	B2	0.001
4	Capex: Pesticides	£m	3	N/C		0.000	B3	0.004	B2	0.121
5	Capex: Cryptosporidium	£m	3	N/C		0.686	B3	0.084	B2	0.589
6	Capex: Lead - water conditioning	£m	3	N/C		0.000	B3	0.000	B2	0.001
7	Capex : Other parameters	£m	3	N/C		2.886	B3	4.273	B2	7.217
8	Opex: Water treatment	£m	3	N/C		0.000	B4	0.000	B4	0.272
C WATER DISTRIBUTION										
9	Capex: Total Article 31 distribution expenditure	£m	3	N/C		0.000	B3	0.004	B3	0.000
10	Capex: Distribution expenditure allocated to quality	£m	3	N/C		11.675	B3	10.525	B3	10.588
11	Capex: Lead communication pipes	£m	3	N/C		0.168	B3	0.131	B3	0.393
12	Opex: Quality distribution	£m	3	N/C		0.000	B4	0.000	B4	0.000
D SECURITY RELATED MEASURES										
13	Capex: Security-related	£m	3	N/C		0.208	B3	3.973	B2	0.645
14	Opex: Security-related	£m	3	N/C		0.000	B4	0.000	B4	0.000
E ENVIRONMENTAL PROGRAMME										
15	Capex: Investigations	£m	3	N/C		0.000	B3	0.000	B3	0.149
16	Capex: Options appraisals/implementations	£m	3	N/C		0.090	B3	0.086	B3	0.000
17	Opex: Environmental obligations	£m	3	N/C		0.000	B4	0.000	B3	0.000
F CAPEX & OPEX TOTALS										
18	Capex: Total quality enhancement programme (water)	£m	3	N/C		15.714	B3	19.076	B2	19.704
19	Opex: Total quality enhancement programme (water)	£m	3	N/C		0.050	B4	0.053	B4	0.307

Table 37 – Financial Measures - Water Compliance – Expenditure Report**PPP**

No PPP information is reported in this table in accordance with the guidance.

NIW Capex

The reporting of expenditure in Table 37 is consistent with the methodology outlined in Chapter 34. In summary proportional allocation is completed at project level and not at programme level as per the SBP.

The table below shows progress that NIW is making to deliver the DWI requirements as outlined in the SBP.

Table 2

Planned Project completions (Agreed with DWI or SBP)

	DWI ref no		2009/10
Seaghan WTW	W2514		Nov 09

Programme Delivery Schedule Actual/latest best estimate

	DWI ref no		2009/10
Seaghan WTW	W2514		Dec 09

Seaghan WTW was completed in Dec 09 which is within one month of the SBP planned completion date.

Lines 1 & 2 - Obligations Prior to the SBP

No pre SBP obligations are reported in 09/10 in line 1. The amount of £34k reported in line 2 relates to Carron Hill WTW which was commissioned in 07/08.

Water Compliance**Lines 3 – 7 - Water Treatment**

The water compliance programme allowed in the SBP price limits addresses the need to improve the water quality supplied from Seaghan WTW, which was supported by DWI. For the works completed the total design flow is 13.6Ml/d. The main drivers for this project were as follows: 91% quality Enhancement, 9% Base Service Provision (allocated to Backlog Base).

Lines 9 – 11 - Water Distribution**Lines 9 – 10 - Mains Rehabilitation**

In the twelve months to the 31st March 2010 NIW has rehabilitated a large length of ferrous mains as part of the Quality programme.

In 2009/10 NIW has laid a total of 379km of mains (new and replacement) as part of the mains rehab programme. A large portion of this is attributable to Quality Enhancement. The portion attributed to quality varies with each project as recorded within the Capital Investment Driver allocations.

Quality expenditure on water main rehabilitation is proportionally allocated on a project basis.

**Line 10 – Capex: Distribution Expenditure Allocated to Quality
Large Diameter Trunk Mains**

Castor Bay to Dungannon Strategic Trunk Main main contract commenced on site during 09/10 and £9.3m was accrued against this project. This project does not have a quality allocation.

Line 11 - Capex: Lead communication pipes

The £0.393million reported on this line related to lead communication pipe replacement. NIW does not have any obligation within the SBP from DWI to replace specific lead communication pipes. The finance reported here is a result of lead communication pipes replaced in conjunction with the watermain rehabilitation programme and individual homes replacing individual service pipe where NIW have replaced the company owned communication pipe at this connection.

Line 13 - Capex: Security-related

£0.645million was spent in 2009/10 to deliver work related to the Security and Emergency Measures. This expenditure was mainly delivered via the following 2 projects

- 1) Service Reservoir Enhanced Security.
- 2) Security improvements at Keypoint installations

Line 15 - Capex: Investigations

The majority of the £0.149m reported on this line was spent in 2009/010 for the Strule intake for Derg WTW.

Reporter recommendations (AIR09)

The reporter requested that NIW improve the transparency of the CIDA spreadsheet for E & P expenditure so that individual drivers can be filtered with the project ID still showing. This has been implemented for AIR10.

Table 38

NORTHERN IRELAND WATER LIMITED- ANNUAL INFORMATION RETURN 2010

**ANNUAL INFORMATION RETURN - TABLE 38 FINANCIAL MEASURES
SEWERAGE COMPLIANCE - EXPENDITURE REPORT (NIW only)**

DESCRIPTION	UNITS	DP	1		2		3		4		
			BASE YEAR SBP 2006-07	CG	REPORTING YEAR 2007-08	CG	REPORTING YEAR 2008-09	CG	REPORTING YEAR 2009-10	CG	
A OBLIGATIONS PRIOR TO THE SBP											
1	Capex: Completion of programme of work funded prior to the SBP - continuous discharge	£m	3	N/C		0.000		0.000	B3	0.000	n/a
2	Capex: Completion of programme of work funded prior to the SBP - intermittent discharge	£m	3	N/C		0.000		0.000	B3	0.000	n/a
3	Capex: Completion of programme of work funded prior to the SBP – sewage sludge management	£m	3	N/C		0.000		0.000	B3	0.000	n/a
4	Opex: Completion of programme of work funded prior to the SBP	£m	3	N/C		0.000		0.000	B4	0.000	n/a
B INTERMITTENT DISCHARGES											
5	Capex: Unsatisfactory intermittent discharges	£m	3	N/C		40.614	B3	40.378	B2	23.205	B3
6	Opex: Unsatisfactory intermittent discharges	£m	3	N/C		0.000	B4	0.081	B4	0.027	B4
C EU DIRECTIVES											
7	Capex: Continuous discharges - UWWTD	£m	3	N/C		0.515	B3	5.626	B2	7.994	B3
8	Opex: Continuous discharges - UWWTD	£m	3	N/C		0.000	B4	0.115	B4	0.469	B4
9	Capex: Continuous and intermittent discharges – Bathing Waters Directive	£m	3	N/C		0.087	B3	1.781	B2	1.677	B3
10	Opex: Continuous and intermittent discharges – Bathing Waters Directive	£m	3	N/C		0.000	B4	0.067	B4	0.061	B4
11	Capex: Continuous and intermittent discharges – Freshwater Fish Directive	£m	3	N/C		1.865	B3	6.852	B2	5.999	B3
12	Opex: Continuous and intermittent discharges – Freshwater Fish Directive	£m	3	N/C		0.000	B4	0.030	B4	0.109	B4
13	Capex: Continuous and intermittent discharges – Habitats Directive	£m	3	N/C		0.005	B3	0.025	B2	0.055	B3
14	Opex: Continuous and intermittent discharges – Habitats Directive	£m	3	N/C		0.000	B4	0.000	B4	0.000	B4
15	Capex: Continuous and intermittent discharges – Other EU Directives	£m	3	N/C		5.480	B3	23.365	B2	23.528	B3
16	Opex: Continuous and intermittent discharges – Other EU Directives	£m	3	N/C		0.095	B4	0.735	B4	0.747	B4
D OTHER ENVIRONMENTAL PROGRAMMES											
17	Capex: First Time Sewerage	£m	3	N/C		0.860	B3	1.392	B2	0.574	B3
18	Opex: First Time Sewerage	£m	3	N/C		0.000	B4	0.000	B4	0.000	B4
19	Capex: CReW Act	£m	3								
20	Opex: CReW Act	£m	3								
21	Capex: Chemicals – endocrine disruptor schemes	£m	3	N/C		0.000	B3	0.000	B2	0.000	B3
22	Opex: Chemicals – endocrine disruptor schemes	£m	3	N/C		0.000	B3	0.000	B4	0.000	B3
23	Capex: Other cost drivers	£m	3	N/C		0.000	B3	0.000	B2	0.000	B3
24	Opex: Other cost drivers	£m	3	N/C		0.000	B3	0.000	B4	0.000	B3
E INVESTIGATIONS											
25	Capex: Investigations	£m	3	N/C		0.000	B3	0.000	B2	0.000	B3
26	Opex: Investigations	£m	3	N/C		0.000	B3	0.000	B4	0.000	B3
F SEWAGE SLUDGE MANAGEMENT											
27	Capex: Enhanced sewage sludge management	£m	3	N/C		0.000	B3	0.000	B2	0.000	B3
28	Opex: Enhanced sewage sludge management	£m	3	N/C		0.000	B3	0.000	B4	0.000	B3
G CAPEX & OPEX TOTALS											
29	Capex: Total quality enhancement programme – sewerage service	£m	3	N/C		49.426	B3	79.419	B2	63.032	B3
30	Opex: Total quality enhancement programme – sewerage service	£m	3	N/C		0.096	B4	1.028	B4	1.413	B4

Table 38 – Financial Measures - Sewerage Compliance – Expenditure Report

PPP Capex

No PPP Capex information is reported in this table in accordance with the guidance issued in March 2010.

NI Capex

The allocation of expenditure in Table 38 is based upon the same methodology adopted for the other CAPEX tables. The detail for quality enhancement apportionment is as follows. NB. In NIW most Wastewater Treatment projects have multiple drivers with many projects having five or more environmental drivers. The Reporter's report from AIR09 stated that a number of QBEG discrepancies were found in the allocation of Quality drivers on WWTW projects. CIDA quality allocations on WWTW projects have been reviewed during the reporting year to align with the EHS (NIEA) Quality drivers listing (ref Table 1).

Table 2 SBP compared with 09/10 delivery

Project Title	SBP Completion Date	Current Completion Date
Ballybogey WWTW	Aug-09	Nov-09
Ballyhalbert WWTW	Jun-09	May-09
Ballyhaskin WWTW (Ballywhiskin WWTW))	May-09	Feb-09
Ballywalter WWTW	Aug-09	Apr-09
Benburb WWTW	Apr-09	Dec-09
Benone WWTW and Benone Area Sewerage	Mar-10	Oct-12
Castlewellan/Annsborough WWTW	Apr-09	Nov-09
Cloughy WWTW	May-09	May-09
Darragh Cross WWTW (in parallel with Saintfield)	Mar-10	Jul-10
Donnybrewer WWTW	Sept-09	Mar-10
Draperstown WWTW	Feb-10	Feb-10
Dromara WWTW	Jul-09	Feb-10
Edenderry WWTW	Oct-09	Feb-10
Enniskillen WWTW	Mar-10	Jun-09
Hamiltonsbawn WWTW	Apr-09	Sep-09
Limavady WWTW	May-09	Jun-09
Lisbarnet WWTW	Sept-09	Feb-10
Lower Ballinderry WWTW	Sept-09	Aug-09
Lurganare WWTW	Feb-10	May-10
Portaferry WWTW	Feb-10	Apr-09
Portavogie WWTW	Aug-09	Jul-11
Raholp WWTW	Jun-09	08/09 year completion
Saintfield WWTW	Mar-10	Feb-10
Seahill WWTW	Feb-10	Sep-09
Warrenpoint WWTW	Aug-09	08/09 year completion
Killea WWTW	Sept-09	Project not required

NIW completed 5 of the wastewater treatment works as agreed in the SBP targets for 08/09, 1 from 07/08, and 19 Wastewater treatment works as agreed in the SBP targets for 2009/10. Details of these are explained below.

First Time Sewerage – The SBP had no First Time Sewerage projects listed as being required by EHS to be delivered to meet the quality programme outputs. NIW has invested capex in 09/10 on projects which are in accordance with the RAG2.03 definition of first time sewerage. This expenditure has been reported on line 17 of the Table.

SBP projects planned for 07/08

The WWTW at Clough was due for completion as per SBP targets in 07/08. We can report that this project was completed in 09/10.

SBP projects planned for 08/09

In AIR09 we reported 6 works which were being delivered later than planned in the SBP. We can report that Annahilt WWTW(including Poundburn PA), Gilford WWTW, Park WWTW, Cranagh WWTW and Magheralin WWTW are now completed and Mullaghboy will be completed in 11/12.

Additional SBP outputs

NIW also report the following additional outputs as completed in 2009/10 as were not recorded as targets in the SBP.

- a) Castlecaulfield – This WWTW was carried forward from before the SBP and completed in 2009/10.
- b) Crossmaglen, Milltown (Antrim), Moygashel(Dungannon) and Ravarnet all had SBP funding but no SBP completion target defined. These are all reported as completed in 2009/10.

Methodology

The general methodology for apportionment of these costs is outlined in Chapter 34. Where the scheme (or components of the scheme) have multiple Quality drivers, the costs have been split and assigned to the appropriate drivers.

The Quality portion of each scheme (or component) can be split across a maximum of 6 drivers from the following list:

- Unsatisfactory Intermittent Discharge;
- U1 - UWWTD Failures for BOD/COD 1998/2000;
- U2 - UWWTD Failures for BOD/COD 2005;
- U3 - Nutrient removal in existing sensitive areas;
- U4 - Nutrient removal in new sensitive areas;
- U5 - Appropriate treatment of WwTW with PE 250 - 2,000 inland and 10,000 coastal;
- U6 - Appropriate treatment at WwTW <250 PE Category 1;
- U7 - Appropriate treatment at WwTW <250 PE Category 2a;
- HS1 - Hotspot failing UWWTD;
- HS2 - Hotspot failing RDS or public complaints;
- BWD - Causing failure to comply with BWD mandatory standards;
- SF - Failure to meet Shellfish Water Directive requirements;
- FF1 - Failure to meet Freshwater Fish Directive requirements;
- FF2 - Predicted failure to meet Freshwater Fish Directive requirements;
- WQO / WFD - Failure to meet GQA or WFD standards;
- DS - Expenditure required to remove dangerous substances;
- HD - Responsible for breach of the Habitats Directive;
- FTS - First Time Sewerage.

The proportion assigned to each contributing driver is derived from the WwTW scores provided by EHS (now NIEA). Where the WwTW does not appear on the list, or where no scores are provided, the supervising Engineer responsible for the scheme has applied his/her engineering judgement and

project knowledge to identify the relevant driver(s) and to assign appropriate score(s). For example, if WwTW "A" has been assigned scores of 3 for FF2 and 2 for U6, then 60% (i.e. 3/5) of its Quality cost has been allocated to the FF2 driver and 40% (i.e. 2/5) has been assigned to the U6 driver."

Pre SBP obligations

- NIW have not reported any pre SBP obligations in this table for 09/10. Note: There are a number of projects that commenced pre SBP with spend in 09/10 but these had also funding designated and outputs associated in the SBP period. For this reason they have not been defined as per SBP obligations.

Reporter recommendations (AIR09)

The Reporter's requested that NIW improve the transparency of the CIDA spreadsheet for E & P expenditure so that individual drivers can be filtered with the project ID still showing. This has been implemented for AIR10.

A number of CIDA discrepancies were found in AIR between the Quality allocations provided by NIEA at the outset of the SBP and those being applied by NIW staff in the CIDA allocation. All Quality CIDA allocations on WWTW projects have been reviewed during 2009/10.