

## OUTPUT MONITORING GROUP

### OUTPUT MONITORING REPORT: Quarter 4 2017-18

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#### 1. Introduction

This document summarises what has been achieved for customers against Scottish Water's Delivery Plan for the 2015-21 period and confirms the position up to the end of March 2018 (Quarter 4 2017/18). It has been prepared for the Output Monitoring Group (OMG) which was set up by Ministers to monitor and report on the delivery of their [Objectives](#).

The OMG comprises the main stakeholders in Scotland's water industry: Scottish Government, Scottish Water, Citizens Advice Scotland, Scottish Public Services Ombudsman and the regulators (the Water Industry Commission for Scotland, the Scottish Environment Protection Agency and the Drinking Water Quality Regulator). It is chaired by Scottish Government and operates under a Terms of Reference agreed by Ministers.

#### 2. What We Monitor

Each quarter the OMG assesses Scottish Water's progress with the delivery of outputs using a metric, Overall Measure of Delivery (OMD), to measure Scottish Water's progress against targets agreed in its Delivery Plan.

Delivery progress is also monitored against the outputs agreed for individual programmes in Scottish Water's Delivery Plan, as shown in the following Appendices:

- Appendix A: Providing continuous high quality drinking water (includes drinking water quality, reliability and security of supply).
- Appendix B: Protecting and enhancing the environment (includes flood risk management).
- Appendix C: Supporting economic development (includes climate change and improving the long term cost of service).
- Appendix D: those outputs and customer service measures that are reported annually at the end of each financial year.

Each Appendix highlights where a programme area or service measure is ahead or behind target; and, if behind, the reason and remedial actions being taken by Scottish Water. The year-end status for each programme area has been measured against Scottish Water's Delivery Plan update approved by the Scottish Government in March 2018.

The Output Monitoring Group also monitors Scottish Water's progress in completing those projects due but not delivered by 31 March 2015 so that the benefits to customers can be delivered as quickly as possible.

### 3. Key points

The key points to report on Scottish Water's output delivery in the period up to the end of March 2018 (Quarter 4 2017/18) are:

- The overall measure of delivery (OMD) position was 148 points in Quarter 4, against a target of 128 points. This is an increase of 16 points from the Quarter 3 2017/18 position of 132 points. At the half way point of the regulatory period, 72% of outputs have achieved start on site.
- Providing continuous high quality drinking water: of the 10 output programmes in this category, 10 were on or ahead of the year-end target at March 2018.
- Protecting and enhancing the environment: of the 10 output programmes in this category, 9 were ahead of the year-end target at March 2018. The one area that was behind plan was the improvement to abstractions required by the Water Framework Directive. This was to allow Scottish Water to more effectively manage the resilience of the supply of drinking water to customers from the Amlaird system until work on the Ayrshire Resilience Scheme is progressed.
- Supporting economic development: of the 6 programmes in this category, 2 were ahead of target at March 2018; and the remaining 4 are demand driven.
- Projects due to have been completed by March 2015: by the end of Quarter 4 Scottish Water had completed 34 of the 37 projects that were outstanding at March 2015.
- Annual Measures: Scottish Water continues to deliver a level of customer service well above the minimum commitment in its Delivery Plan. Of particular note are reduced leakage levels despite a very harsh winter, zero failing waste water treatment works and our lowest ever level of environmental pollution incidents.

### 4. Overall Measure of Delivery (OMD)

The [Overall Measure of Delivery](#) provides a high level measurement of Scottish Water's progress against its Delivery Plan; it assesses the progress of the investment outputs monitored by OMG across each of the five key delivery milestones, combining this information to give an overall score. Progress with delivering late projects from previous investment periods and demand led schemes (such as new capacity to support economic development) are not included in the OMD.

At the beginning of the programme the OMD score starts at zero and at 31 March 2021 should reach 250 points confirming that all milestones and outputs due to be delivered by that date have been delivered. At the end of March 2018 Scottish Water's OMD position was 148 points, against a Quarter 4 2017/18 OMD target of 128 points. This is an increase of 16 points from the Quarter 3 2017/18 position of 132 points as illustrated in Figure 1.

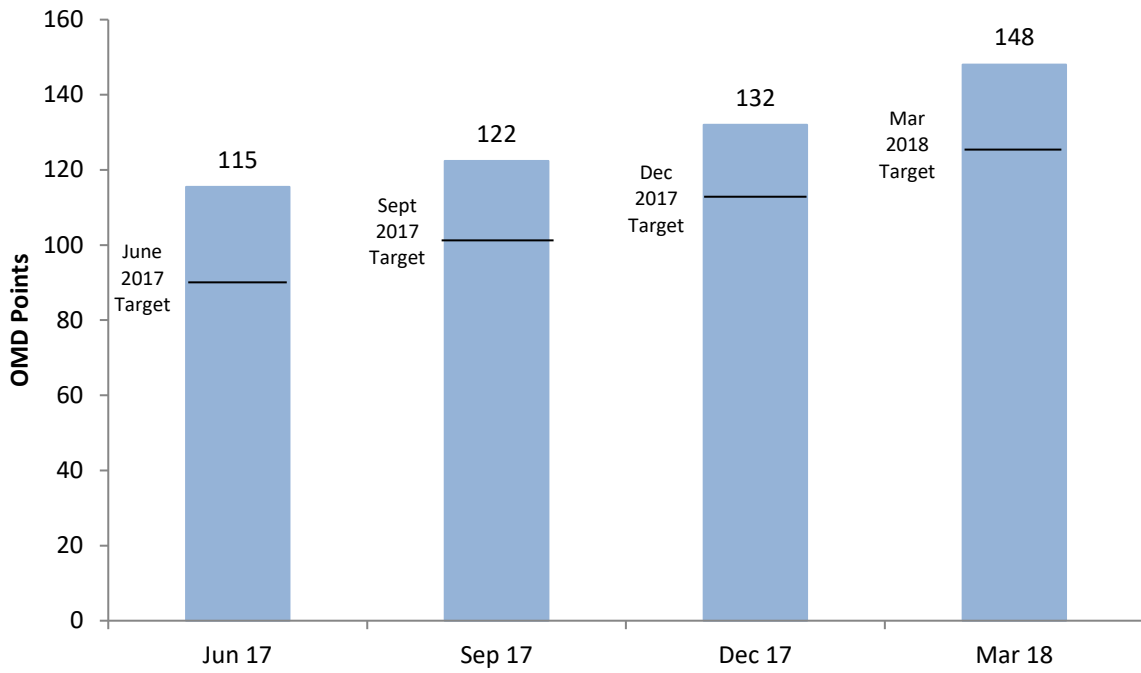


Figure 1 – Overall Measure of Delivery to Quarter 4 2017-18

**5. Progress against milestones**

To demonstrate the progress being made through each of the 5 programme milestones monitored by OMG, Figure 2 below shows the cumulative % budget and number of outputs through each milestone for the reported programmes.

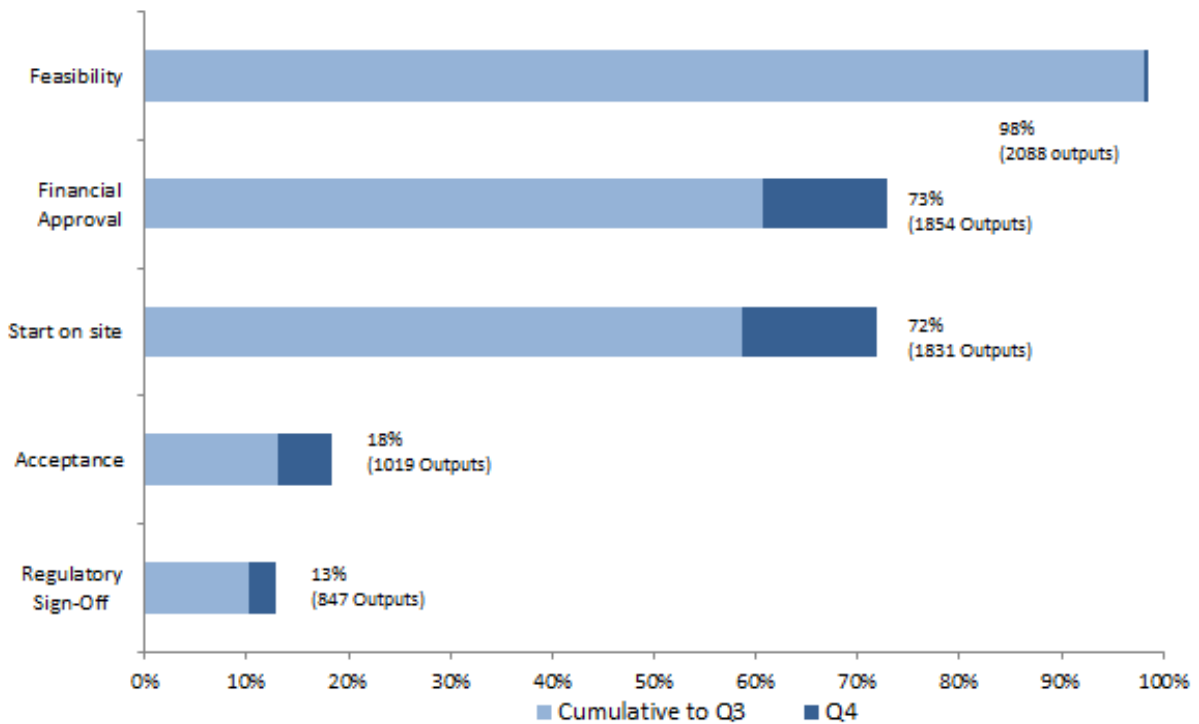


Figure 2 – Reported output programmes – cumulative % budget through each milestone

## 6. Projects due but not delivered by 31 March 2015

Scottish Water started the 2015-21 period with 37 projects from the previous programme which were due but not completed by March 2015. Scottish Water has achieved regulatory sign-off for 34 of these projects at the end of March 2018, with the Loch Maree Strategic Scheme achieving regulatory sign off in Quarter 4. Scottish Water remains focussed on delivering the projects due to have been completed by March 2015.

	Q4 2017/18	2018/19	2019/20	2020/21
Planned completion	31-33	33-36	36	37
Latest forecast completion range	34	35-36	37	37

## 7. Conclusion

The OMG notes the good progress made to March 2018 with the delivery of outputs required by Ministers, as measured through the Overall Measure of Delivery and programme milestones. It notes that there are a small number of projects for which challenges to delivery remain; particularly in the drinking water quality programme. On the environment programme, progress with improvements to meet the requirements of the Water Framework Directive is behind Scottish Water's Delivery Plan. This is to allow Scottish Water to more effectively manage the resilience of the supply of drinking water to customers from the Amlaird system until work on the Ayrshire Resilience Scheme is progressed.

The OMG notes that while exceptional weather in March caused incidents across Scotland, Scottish Water managed these challenges well and achieved its best ever performance on a number of critical measures. This is reflected in the highest ever score achieved on the Overall Performance Assessment (OPA).

Ministers recognises that while good progress has been made to get projects started and on to site, there are significant milestones to be achieved over the remaining 3 years of the current regulatory period. Ministers continue to stress to Scottish Water the importance of maintaining and achieving the investment milestones as agreed in Scottish Water's Delivery Plan.

## RAG Status

The following colour coding is applied to the forecast in the output delivery tables (Appendices A to C), using the definitions outlined below:

<b>Red</b>	Progress was behind target at 31 March 2018
<b>Green</b>	Progress was on or ahead of target at 31 March 2018

## Appendix A: Providing continuous high quality drinking water

Scottish Water is undertaking work associated with the 10 programme areas in the table below.

Objective	Quarterly monitored programme areas	Q3 2017/18 Actual	2017/18 Year end Target	2017/18 Year end Actual	Total number of outputs in the programme
Drinking water quality and reliability	Number of water treatment works improved	1	4	4	27
	Number of zones made compliant with iron & manganese standards	3	0	4	78
	Number of improvements to reliability of supply (catchments and treatment)	6	4	8	47
	Number of improvements to reliability of supply (networks and storage)	13	9	13	82
	Distribution mains cleaned (km)	67	93	184	5,932
	Number of water quality etc studies to inform future periods	138	124	220	345
	2010-15 outputs planned to complete in the 2015-21 period	7	6	8	22
Drinking water security of supply	Water supply resilience strategy and improvements made	8	6	8	18
	Number of zones with improved security of supply (SOSI)	1	1	1	10
	Number of security measures and improvements to the infrastructure of critical reservoirs	176	118	271	689
<b>Total</b>		<b>353</b>	<b>272</b>	<b>537</b>	<b>1,318<sup>a</sup></b>

<sup>a</sup> Excludes 5,932km of mains cleaning as this programme area is measured on a per km basis rather than on the number of outputs or improvements made.

## Appendix B: Protecting and enhancing the environment

Scottish Water is undertaking work associated with the 10 programme areas in the table below.

Objective	Quarterly monitored programme areas	Q3 2017/18 Actual	2017/18 Year end Target	2017/18 Year end Actual	Total number of outputs in the programme
Protecting and enhancing the environment	Number of WWTWs improved to meet UWWTD	8	8	15	25
	Number of waste water networks improved to meet UWWTD	19	17	22	59
	Number of improvements required to meet UWWTD - Glasgow completion	43	42	51	85
	Number of improvements required to meet the Water Framework Directive	1	10	1 (note 1)	21
	Studies to inform requirements under the revised Bathing Waters Directive	6	1	8	11
	Number of environmental studies to inform future periods	16	1	33	127
	Number of improvements required by the Compliance Assessment Scheme; odour reduction and sludge management	22	13	27	42
	2010-15 outputs planned to complete in the 2015-21 period	10	9	12	15
Flood risk management	Reservoirs Act - Number of improvements to dams	14	16	18	55
	Flood Risk Management Act - models and integrated catchment studies	51	24	65	218
<b>Total</b>		<b>190</b>	<b>141</b>	<b>252</b>	<b>658</b>

**Note 1:** The improvements required to meet the Water Framework Directive were 9 outputs below target to allow Scottish Water to more effectively manage the resilience of the supply of drinking water to customers through abstraction of raw water from the Amlaird system while work on the Ayrshire Resilience Scheme is progressed.

## Appendix C: Supporting economic development

Scottish Water continues to support the Scottish economy by meeting the demand for water and waste water connections to new households and businesses and where necessary has initiated projects to increase strategic capacity. Connections have been made to 65,710 new households and businesses since April 2015, 9,210 more than the original Delivery Plan forecast. Scottish Water has also installed 9,968 first time wholesale meters and replaced 32,038 wholesale meters as shown in the table below.

Objective	Quarterly monitored programme areas	Q3 2017/18 Actual	2017/18 Year end Target	2017/18 Year end Actual	Total number of outputs in the programme
Supporting economic development	Number of new households and businesses connected	59,269 <sup>b</sup>	Demand driven	65,710	56,500 <sup>c</sup>
	Delivery of new waste water capacity (people)	2,143	Demand driven	5,325	58,000
	Number of first time non domestic meters installed	9,295	Demand driven	9,968	18,000
	Number of wholesale meters	26,876	Demand driven	32,038	75,500
Climate change	Number of climate change vulnerability assessments	55	55	57	122
Long term cost of service	Improvements in renewable power and energy efficiency (GWh)	11.2	7.9	12.4	17.5

<sup>b</sup> Quarter 3 reported 74,794. This reflected the number of water and waste water connections made rather than the number of households and businesses connected.

<sup>c</sup> Forecast of 56,500 new connections is the original Delivery Plan forecast for 2015-18.

## Appendix D: Performance against minimum service levels to customers for 2015-21

Scottish Water delivered a level of customer service well above the minimum commitment in its original Delivery Plan. While exceptional weather in March caused incidents across Scotland, Scottish Water managed these challenges well and achieved its best ever performance as measured by the Overall Performance Assessment (OPA).

Service measure	Minimum for 2015-2021	2017/18 Actual	Year end position
<b>Water service</b>			
Drinking Water Quality compliance at customer taps	99.88%	99.905%	<b>G</b>
Number of properties affected by unplanned water supply interruptions:			
• >12 hours	< 1,000	552	<b>G</b>
• >6 hours	13,000	6,393	<b>G</b>
Drinking water discolouration contacts	10,000	4,744	<b>G</b>
Drinking water taste contacts	5,000	2,503	<b>G</b>
Properties below reference level for pressure	100	45	<b>G</b>
Security of supply index	91	94	<b>G</b>
Leakage (MI/day)	575	492	<b>G</b>
<b>Waste water service</b>			
Annual number of incidents of internal sewer flooding due to blockages and failures (all sewers)	650	307	<b>G</b>
Number of properties at risk of internal flooding	370	373	<b>(Note 1)</b>
Annual number of incidents of internal sewer flooding due to overloading (all sewers)	95	38	<b>G</b>
Annual number of incidents of external flooding due to blockages and failures (all sewers)	13,000	7,498	<b>G</b>
Number of properties at risk of external flooding	< 5,000	3,701	<b>G</b>
Annual number of incidents of external flooding due to overloading (all sewers)	400	120	<b>G</b>
Number of failing waste water treatment works	5	0	<b>G</b>
Number of pollution incidents	330	191	<b>G</b>
% sludge disposed of satisfactorily	100%	100%	<b>G</b>
<b>Customer service</b>			
OPA	380	406	<b>G</b>
Household Customer Experience Measure	>82.6	86.3	<b>G</b>
Non-household Customer Experience Measure	n/a	77.5	<b>G</b>
Wholesale service key performance indicator	95%	97.6%	<b>G</b>
<b>Other</b>			
Carbon footprint (kg/household)	125	88	<b>G</b>

**Note 1:** At 31 March 2018 the number of properties on the internal sewer flooding register was 373. As a result of the number and complexity of additions this period, and particularly the 69 additions at Oak Mall - Greenock, the expected the number of properties on the 'at risk of internal sewer flooding' register will remain above the expected service level minimum of 370 until at least 2019. Scottish Water has increased the planned investment to 2021 to seek to bring the number of properties at risk of internal flooding below 300 by March 2021. The end position will be dependent on the rate of new properties emerging and the specific costs of individual solutions to reduce the risk of flooding for emerging properties.



## Glossary of Terms

Assets	Physical plant and equipment used to produce and transfer water, to collect and treat waste water such as water treatment works and water mains, sewers and sewage works etc.
Climate Change Adaption and Mitigation	'Adaptation' is the action taken by Scottish Water to increase the resilience of its assets to climate change variability and extremes whereas 'mitigation' is the steps to permanently eliminate or reduce its carbon emissions associated with its activities.
Delivery Plan	Scottish Water's annual statement of investment outputs and financial targets.
DMA	District meter areas (DMA) help to identify any localised leakage by the installation of online flow monitors.
Plan / Prepare / Deliver	Scottish Water's overarching process to planning and delivering investment to achieve the outcome required.
IR18	Rolling Investment Review 2018 to consider priorities and outputs for the 2018-21 period and beyond.
Leakage	The water lost from Scottish Water's network of water pipes and its assets (service reservoirs etc.) between putting water into supply and it arriving at customer taps.
Ministerial Objectives	A statement of requirements (deliverables) set out by Scottish Ministers.
Outputs	Tangible deliverables, such as an improved waste water treatment facility, which benefit customers, the environment or both.
Output Monitoring Group (OMG)	Representatives of Scotland's water industry who are accountable for the monitoring the progress of output delivery.
Overall Measure of Delivery (OMD)	The metric used to assess Scottish Water's delivery of its investment-related outputs.
Overall Performance Assessment (OPA) Score	A comparative overview of company performance which is calculated each year. It covers measures of water supply, sewerage service, customer service and environmental performance.
UID	Unsatisfactory Intermittent Discharges. An overflow on the sewer network that requires to be improved so as to meet environmental standards for the water body into which it discharges or which it affects.
UWWTD	The Urban Waste Water Treatment Directive is a European Union directive concerning the "collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors".
WWTW	A waste water treatment works (WWTW) treats waste water before returning it to the environment.