



Internal sewer flooding

Purpose: This performance commitment incentivises the company to reduce the number of internal sewer flooding incidents.

Benefits: A reduction in internal sewer flooding helps to minimise disruption for customers.

Version control

Version	Date of issue	Performance commitment changes
0.1	22 December 2022	Published at final methodology, changes to definition from draft methodology identified in red text.
0.2	09 May 2023	Removal of red text. Section 1.4 change 'mains length' to sewer connections'.
1.0	11 July 2024	Minor textual amendments in Annex 1
2.0	19 December 2024	Measurement of sewer connections specified for Hafren Dyfrdwy.
2.1	31 March 2025	Updated link in footnote 2. Minor grammatical correction in section 1.2.

Performance commitment definition and parameters

1.1 Detailed definition of performance measure

The measure is calculated as the number of internal sewer flooding incidents normalised per 10,000 sewer connections.

This measure includes flooding due to overloaded sewers (hydraulic flooding) and due to other causes (Flooding Other Causes – FOC). It includes sewer flooding due to severe weather events.

For the purpose of this performance commitment, flooding event means any escape of water from a sewerage system, irrespective of size, as evidenced by standing water, running water or visible deposits of silt or sewage solids.

For the purpose of this performance commitment, a flooding incident means the total number of properties¹ flooded during each flooding event from a public sewer. For example, five properties which suffered two flooding events during a year, would count as ten incidents. Where a property floods both internally and externally during the same event it shall only be recorded as an internal flooding incident.

The company shall also report how many incidents have been included as a result of activities that were carried out to determine nearby properties affected.

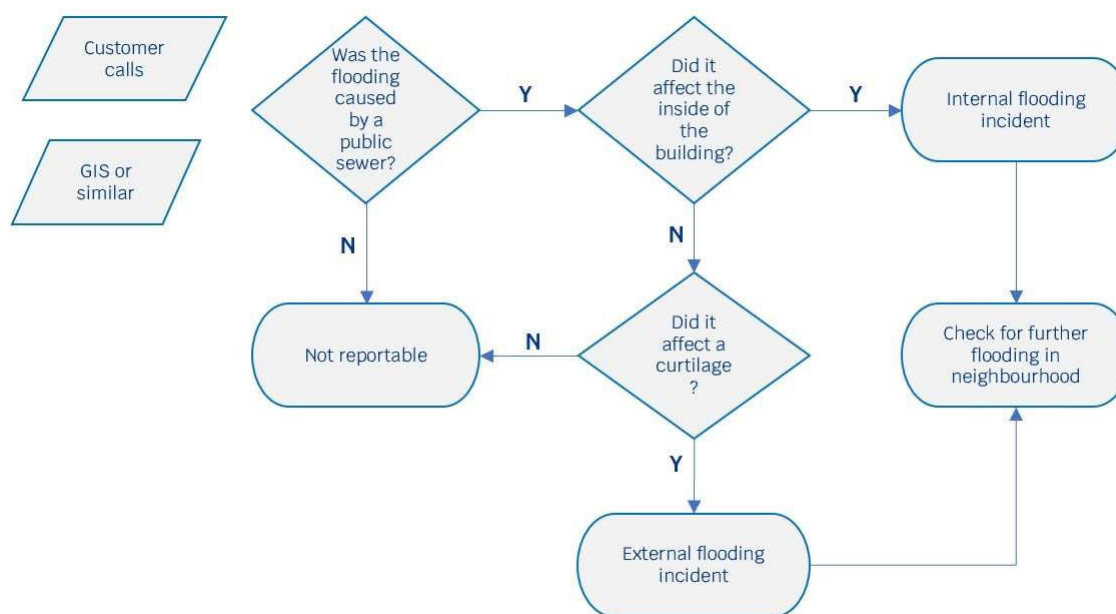
Assets causing flooding

All flooding events caused by an escape from public sewers (whether foul, combined or surface water), including pumping stations, sewage treatment works and other assets under the control of the sewerage undertaker shall be reported.

¹ For the purposes of this performance commitment "properties" includes both "household premises" (as defined by section 17C of the Water Industry Act 1991) and non-household premises (premises other than household premises).

Flooding events caused by sewers, lateral drains, and pumping stations transferred under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011 (2011 Regulations) shall be included.

Figure 1 Flow diagram showing simplified version of the process



Internal sewer flooding

For the purpose of this performance commitment, internal sewer flooding means a flooding event which enters a building or passes below a suspended floor. In this context, buildings are defined as those normally used for residential, public, community, commercial, business, or industrial purposes. The following list gives examples of what parts of buildings shall be included in the internal sewer flooding category. It is not designed to be exhaustive:

- the main parts of the building;
- conservatories;
- basements and cellars (even if unoccupied);
- areas below suspended floors;
- lift shafts;
- stairwell/lobby area of flats (to be counted as 1 flooded property);
- any shared car parking areas beneath the main building where access to the parking area is from within the building (to be counted as 1 flooded property);
- studios and workshops, which are an integral part of the main building;
- porches; and

- garages which are an integral part of the house with an adjoining door to the occupied building.

1.2 Additional detail on measurement units

Repeat incidents

Where a flooding event has occurred and flooding subsides, any subsequent flooding event shall be counted as a separate flooding incident. This shall be regardless of the time between events and if any investigation or follow on work has started or been completed.

Further clarification

Flooding events due to third party action shall be included in all cases. Any flooding event due to jetting shall be included unless the water is fully contained within a toilet bowl. Damp patches caused by seepage through walls or floors shall be excluded, but any area which has visible standing or running water or which has visible deposits of silt or sewage solids shall be included.

Properties in the vicinity

The company shall make all reasonable efforts to determine the number of properties affected by a flooding event. This shall include site visits to the affected property and all properties in the vicinity that may have been affected taking into account factors such as topography and the proximity of adjacent properties. The company shall actively seek evidence of flooding. It shall include the use of modelling where this is appropriate. Where the customer of a nearby property is not present, the company shall leave a calling card stating that it has enquired about a recent incident and encourage the customer to make contact with the company. A prescriptive methodology that is appropriate for all circumstances is not defined here. The company shall have clear guidance for operational staff and keep records of attempts that are made to contact the customers of properties in the vicinity.

The company is expected to be able to demonstrate that the processes that it has in place are applied consistently in relation to similar flooding events in similar locations, including where different personnel attend. Properties in the vicinity identified by the company, rather than by the customer, shall be flagged as such and the percentage found in this way reported. If there is clear site evidence that a nearby property has experienced a flooding event then that property shall be included in the relevant

flooding incident despite the absence of a customer report, or a denial by a customer that a flooding event occurred.

The company shall be able to break down the information around the percentage of affected properties found by their staff by the particular circumstances of discovery, such as incidents identified following site visit, identified in response to a calling card, and identified through modelling.

Sewer connections

Except for Hafren Dyfrdwy, sewer connections are equal to the average number of total properties connected in the reporting year within the undertaker's area. This includes void properties that are connected to the company's assets but do not receive a charge as there are no occupants.

For Hafren Dyfrdwy, sewer connections are equal to the average number of total properties connected in the 2023-24 reporting year within its area. This includes void properties that are connected to the company's assets but do not receive a charge as there are no occupants.

1.3 Specific exclusions

Any flooding events for which responsibility lies outside the company's statutory functions are considered to be outside the parameters of the performance commitment and shall not be included. As is flooding that originates from assets which are not part of the company's sewerage system. For example:

- flooding due to surface water run off which has not originated from public sewers;
- fluvial flooding;
- coastal flooding;
- ground water which has not originated from a public sewer;
- flooding from water mains etc.;
- flooding caused by any highway drainage failure: This includes any flooding incidents caused by the blockage, capacity, or failure of any road gully serving a highway drain connected to a public sewer (e.g., run off from highway gradients where road gullies are unable to intercept flows), including blockage to its grating, or the failure of any pipework above ground; and
- flooding incidents caused by private assets (including drains): For example, A flooding incident shall be excluded where the cause of the incident is the blockage,

capacity or failure of: i) a gully serving a single property; or ii) a shared gully, or blockage of a property gully grating, or the failure of any pipework above ground.

The Water UK Guide to Transfer of Private Sewers Regulations 2011,² shall be applied to assess if the flooding incident shall be attributed to the company or a private asset such as a drain.³

For the purpose of this performance commitment **shared gully** means a gully shared by two or more properties and connected to a public sewer.

If there is a strong suspicion of potentially fraudulent reports of an internal sewer flooding event made with the intention to gain payments from the guaranteed standards scheme (GSS) or receive increased service, and there is no evidence of internal sewer flooding, the company shall exclude the incident unless the customer provides substantiation that the flooding event occurred. Any proposal for such categorisation must be supported by significant evidence, tested by the company's assurance process, and be fully transparent to customers and regulators.

1.4 Reporting and assurance

The company shall maintain verifiable records for all reported flooding incidents irrespective of whether they are included. The aim of the records is to provide an auditable method for identifying specific incidents and shall be subject to each company's assurance process which is applied to all measures reported annually.

The company shall maintain a methodology statement, which shall be used as a decision support tool for this performance commitment. It shall record any changes in approach compared to previous years and will be reviewed as part of the company's assurance process.

This measure will be reported as both the absolute number of internal sewer flooding incidents and a normalised value of internal flooding incidents per 10,000 sewer connections. Any changes to the number of sewer connections that will have a material impact on the performance of this measure shall be highlighted in the report commentary.

² [Guide to Transfer of Private Sewers Regulations 2011](#), Water UK, published 30/09/2011.

³It shall be noted that this is not to be taken as an opinion on the legal status of these aspects of drainage apparatus.

Where the number of sewer connections differs by more than 1% from the sewer connections expected in its business plan, the company shall provide evidence of any adjustments made as part of the annual performance report (APR).

The company shall ensure that its outcome delivery incentive payments only relate to real performance changes and not definitional, methodological or data changes in performance commitments.

Compliance Checklist

The company shall complete the checklist below and report to Ofwat if any element is not green. Where an element is not green, we may intervene to protect customers and ensure that the company does not benefit from insufficient data quality. See Annex 1 for assessment rules for each element.

Table 1 Internal sewer flooding compliance checklist

	Component	Component R/A/G	Reason for any non-compliant component	Confidence grade
1	Assets causing flooding			
2	Repeat incidents			
3	Neighbouring properties			
4	Records			

Table 2 Definition parameters

Parameters	
Measurement unit and decimal places	Number of incidents per 10,000 sewer connections reported to two decimal places.
Measurement timing	Reporting year
Incentive form	Revenue
Incentive type	Outperformance and underperformance payments
Timing of underperformance and outperformance payments	In-period
Price control allocation	100% wastewater network plus

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Frequency of reporting	Annual
Any other relevant information	N/A
Links to relevant external documents	N/A

Annex 1 Compliance Checklist

This annex sets out the criteria on which to report checklists where specified in the performance commitment definition.

Compliance for elements is reported against:

R	Not compliant and having a material impact on reporting
A	Not compliant and having no material impact on reporting
G	Fully compliant

An overall RAG should be assigned for each component based on the following rules:

R	There are one or more red elements in the component, or the combined effect of amber elements is considered to produce a material impact.
A	Half or more of the elements in the component are amber and the combined effect of the amber elements is considered not to produce a material impact
G	More than half of the elements in the component are green

For each component on the checklist, and for the overall performance measure, the company will report a confidence grade. Confidence grades provide a reasoned basis for the company to qualify the reliability and accuracy of the data.

The company shall employ a quality assured approach in the methodology used to assign confidence grades, particularly if sampling techniques are in place. The confidence grade combines elements of reliability and accuracy, for example:

A2 – Data based on sound records etc. (A, highly reliable) and estimated to be within +/- 5% (accuracy band 2) Reliability and accuracy bands are shown in the tables below.

Reliability Band	Description
A	Sound textual records, procedures, investigations or analysis properly documented and recognised as the best method of assessment.
B	As A, but with minor shortcomings. Examples include old assessment, some missing documentation, some reliance on unconfirmed reports, some use of extrapolation.

C	Extrapolation from limited sample for which Grade A or B data is available.
D	Unconfirmed verbal reports, cursory inspections or analysis.

Accuracy band	Accuracy to or within +/-	But outside +/-
1	1%	–
2	5%	1%
3	10%	5%
4	25%	10%
5	50%	25%
6	100%	50%
X	Accuracy outside +/- 100 %, small numbers or otherwise incompatible (see table below)	

Certain reliability and accuracy band combinations are considered to be incompatible, and these are blocked out in the table below.

Compatible confidence grades				
Accuracy band	Reliability band			
	A	B	C	D
1	A1			
2	A2	B2	C2	
3	A3	B3	C3	D3
4	A4	B4	C4	D4
5			C5	D5
6				D6
X	AX	BX	CX	DX