Outcomes Working Group – Customer outcomes from sewer collection

Peter Jordan, January 2021

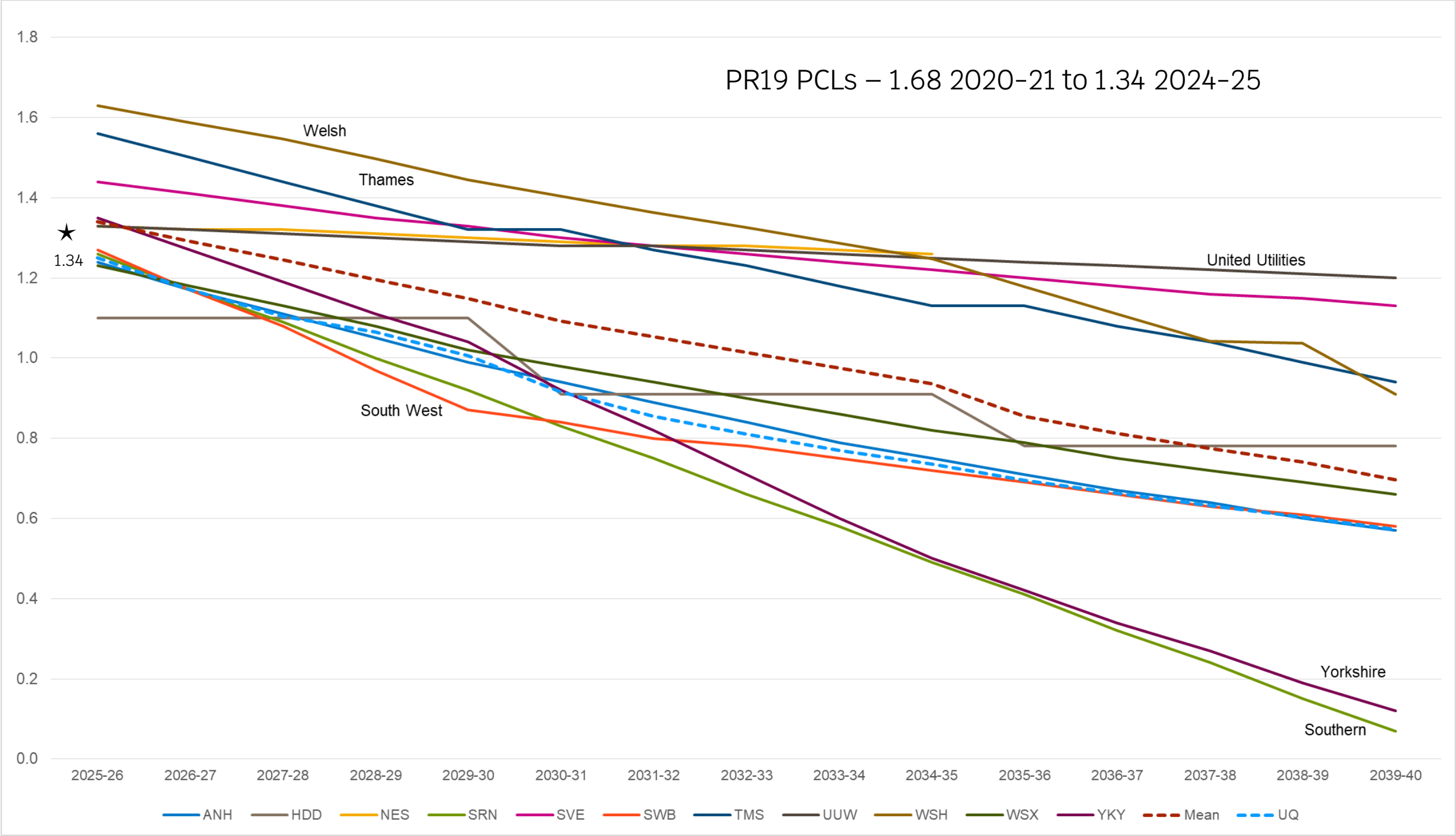
Ofwat

Agenda

Aim: agree if we should consider wider metrics than the existing internal sewer flooding PC and if so agree actions to how we should do this.

When	What	Contributer	Why
10-10.05	Introduction		
10.05-10.20	Long term outcomes (Q1-3)		To inform the debate on performance commitments
10.20-11.00	Potential new PCs (Q6-9)	Matt Greenwood Jonathan Culf	To identify if there is new metrics we should consider.
11.00 – 11.20	PR19 PC definitions (Q4)	Jonathan Culf	Highlight any existing issues
11.20-11.40 (if time)	Leading indicators (eg Sewer Flooding in a storm)		Closely related, but will also be covered in April.
11.40 – 12.00	Actions and feedback		Ensure we have a plan to take work forward

Long term outcomes (Questions 1-3)


PR19 PCLs – 1.68 2020-21 to 1.34 2024-25
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
★
1.34
Welsh
Thames
United Utilities
South West
Yorkshire
Southern
2025-26
2026-27
2027-28
2028-29
2029-30
2030-31
2031-32
2032-33
2033-34
2034-35
2035-36
2036-37
2037-38
2038-39
2039-40
ANH
HDD
NES
SRN
SVE
SWB
TMS
UUW
WSH
WSX
YKY
Mean
UQ

PR19 Drainage PCs

	Incidents			
	Internal	External	Public	High impact
Anglian				
Dŵr Cymru				Worst serv
Northumbrian				Repeat int
Hafren Dyfrdwy				
Severn Trent				
South West				
Southern				
Thames				
United Utilities				
Wessex Water				
Yorkshire				

Asset focussed	
Blockages	Collapses

	Risk		
	Flooding in a storm	Risk	
Anglian			
Dŵr Cymru		Nr high risk	
Northumbrian		Properties*	
Hafren Dyfrdwy			
Severn Trent			
South West			
Southern			
Thames			
United Utilities		int sol'ns	ext sol'ns
Wessex Water		Score	
Yorkshire			

Partnership/SuDS	
Collab-oration	Surface water
	Cubic meters
Properties	Value
	Cubic meters
	Hectares
	Natural capital
Working with others	Hectares

Key
Standard definition
Based on standard def
Bespoke used at PR14
Bespoke new for PR19
Broader than drainage

PR19 Drainage PCs

Main focus for today

	Incidents				Asset focussed	
	Internal	External	Public	High impact	Blockages	Collapses
Anglian						
Dŵr Cymru				Worst serv		
Northumbrian				Repeat int		
Hafren Dyfrdwy						
Severn Trent						
South West						
Southern						
Thames						
United Utilities						
Wessex Water						
Yorkshire						

May working group – Link to Asset Health Maturity Assessment

Key
Standard definition
Based on standard def
Bespoke used at PR14
Bespoke new for PR19
Broader than drainage

Intend to cover, but will also cover in April

	Risk		
	Flooding in a storm	Risk	
Anglian			
Dŵr Cymru		Nr high risk	
Northumbrian		Properties*	
Hafren Dyfrdwy			
Severn Trent			
South West			
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Partnership/SuDS	
Collab-oration	Surface water
	Cubic meters
Properties	Value
	Cubic meters
	Hectares
	Natural capital
Working with others	Hectares

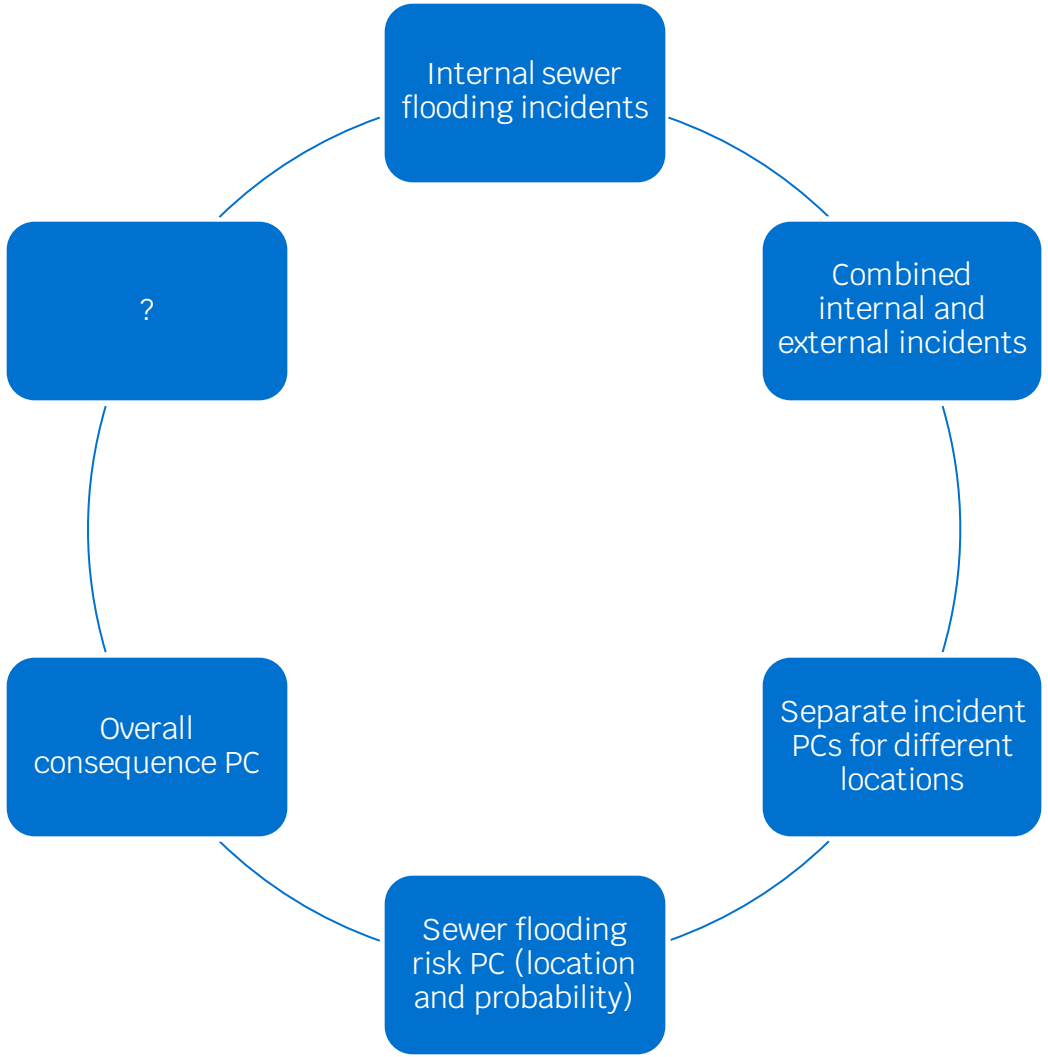
March working group – Environment

Potential new PCs (Questions 6 to 9)

Potential options for development of sewer flooding PC(s)

What should we consider for 2025-30?

Should we start now for beyond 2030?



Sewer flooding – inputs, outputs, outcomes and incentives

Wessex Water
YTL GROUP

What really matters (the outcome)

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Sewer flooding is the issue people care about – especially if it impacts them

Things we can (mostly) influence (the inputs)

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'OTHER CAUSES'

Sewer misuse or insufficient maintenance such as:

- Blockages from inappropriate sewer use, insufficient cleansing of silt, root infestation
- Equipment failures

OVERLOADED SEWERS

Insufficient capacity or increase in flows:

- Lack of investment to counter known new development
- Urban creep
- Severe rainfall

…sometimes a combination of the two

Typical flooding incident stats for Wessex Water

92% 'other causes' 8% inadequate capacity

…in a wet year, the ratio is 82:18

The ‘other causes’ inputs (causing 92% of the outcome)

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c90% of all sewage flooding and backing up incidents are due to **blockages**

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c30,000/year*

c80% of all **blockages** are a result of **sewer misuse**

c70% of all **sewer misuse blockages** are due to **wipes**

* Includes an estimate for private drain blockages cleared by contractors

The ‘overloaded sewers’ inputs (causing 8% of the outcome)

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Factors that increase risk

- Urban creep
- New development
- Climate change
  - Leading to more frequent high intensity storms and
  - Higher groundwater levels

Solutions that reduce risk

- Surface water separation
- Local attenuation
- Infiltration sealing
- Increasing capacity
- Redirection of flows

Risk of sewer flooding (the output)

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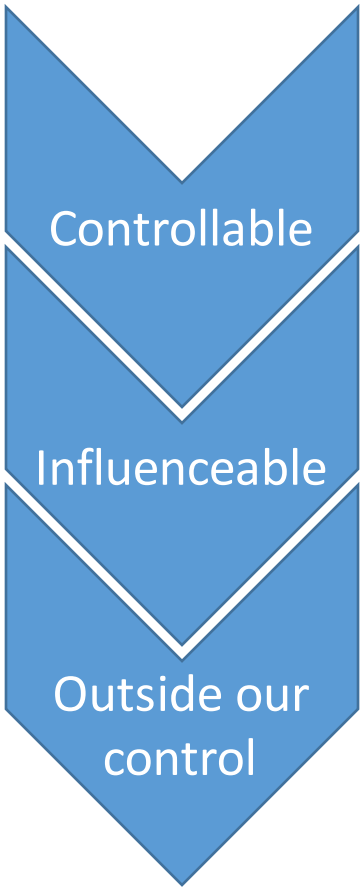

Risk of flooding due to hydraulic inadequacy

Sewer Flooding Risk: Number of Properties / areas				Impact: Very Low				Very High		
				Fields (Surface water) Minor Garden (s/w) Roads (Surface water)	Major Garden (Surface) Fields (Combined)	Road (Combined) Minor Garden (Combined)	Major Garden (Combined)	Internal	Nr of Properties /areas above the line of acceptable risk	Total Risk Score
				2	3	5	6	10		50651
Probability	Very High	5	2:10yr	26	30	188	140	31	415	11158
		4	1:10yr	47	32	335	190	65	668	14232
		3	1:20yr	8	11	16	47	363	444	11971
		2	1:30yr	26	16	227	69	532	870	11470
	Very Low	1	1:50yr	7	12	195	52	182	182	1820

Aim: To continue to maintain stable risk, by countering the natural rise resulting from urban creep and climate change

Where to go for PR24

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Outcome
Sewer flooding

Performance commitment
Something like "sewer flooding impact"

Measurement / target
Something like "impact *x* number of (internal and external) sewer flooding incidents" with long-term target

Incentive
RCV incentive to put liability onto current and future investors, with ongoing return hit and reduction in sale value

PR19 PC definitions (Question 4)

Outcomes working group
– Wastewater collection

21 January 2021

Outcomes – Wastewater collection

To seek improvements to the definitions of existing metrics, in order to avoid ambiguity and a difference in interpretation where this has an impact on materiality.

United Utilities recognises the transparency and trust gained by companies reporting consistently and publicly on performance to customers. However, to serve customers interests, safeguard the accuracy of reporting and allow true inter-company comparison of performance and incentive application, continued improvements to the definitions must be sought where existing ambiguity risks a material impact on reported company performance.

Our primary example would be with the existing internal flooding definition. Some potential areas for improvement include:

- The 'reasonable efforts' companies need to apply to identify neighbouring properties that have been flooded. In 2020, c.29% of our flooding incidents were as a result of our onsite flooding extent assessment. This means they were not directly reported to us by a customer, but instead discovered as a consequence of our pro-active investigation work.
- The classification of a 'damp patch'. In 2020, c.8% of our incidents were classified as a damp patch. Those damp patches caused by seepage through walls or floors are excluded from this total, but any area which has visible standing or running water or which has visible deposits of silt or sewage solids are included.
- Further guidance on 'inundation'. In 2020, c.27% of our incidents were subject to some form of inundation impact, such as ground water not originating from a public sewer or connected culverts that are deemed to contain groundwater.

These improvements cannot be dismissed as trivial. For example, a c.8% variation that could potentially be generated through damp patch classification alignment, would make a significant impact to the reported incidents and incentive application.

The WaterUK SIN group is also actively looking at the existing AMP7 definitions, and is working to gain consensus on the promotion of various changes ahead of AMP8.

Leading indicators (eg Sewer Flooding in a storm)

Actions

- What action have we decided?

-How do we take this forward?

-Who is taking the lead?

-Invitation for interest on March Working Group on Water (Interruptions and pressure)

-Feedback on the meeting (how long do people need material in advance?