

Drainage and Wastewater Management Plans (DWMPs)

Workshop on the North Kent DWMP

Wednesday 30 September 2020



from
**Southern
Water** 

Agenda

- Objectives of the workshop
- Presentation: Drainage & wastewater management in North Kent
- Presentation: Risk Based Catchment Screening
- Discussion Session 1: Exploring the Risk Based Catchment Screening results
- **BREAK**
- Presentation: Planning Objectives
- Discussion Session 2: What planning objectives are required for this river basin catchment?
- Next steps



Objectives of the Workshop

- To start working together to develop the DWMP
- To share and introduce the results from the **risk based catchment screening** (RBCS)
- To identify any other issues or concerns in the catchment
- To discuss the planning objectives for the DWMP
- To identify any other metrics or indicators of risk that need to be included in the **baseline risk and vulnerability assessment** (BRAVA).

Presentation 1

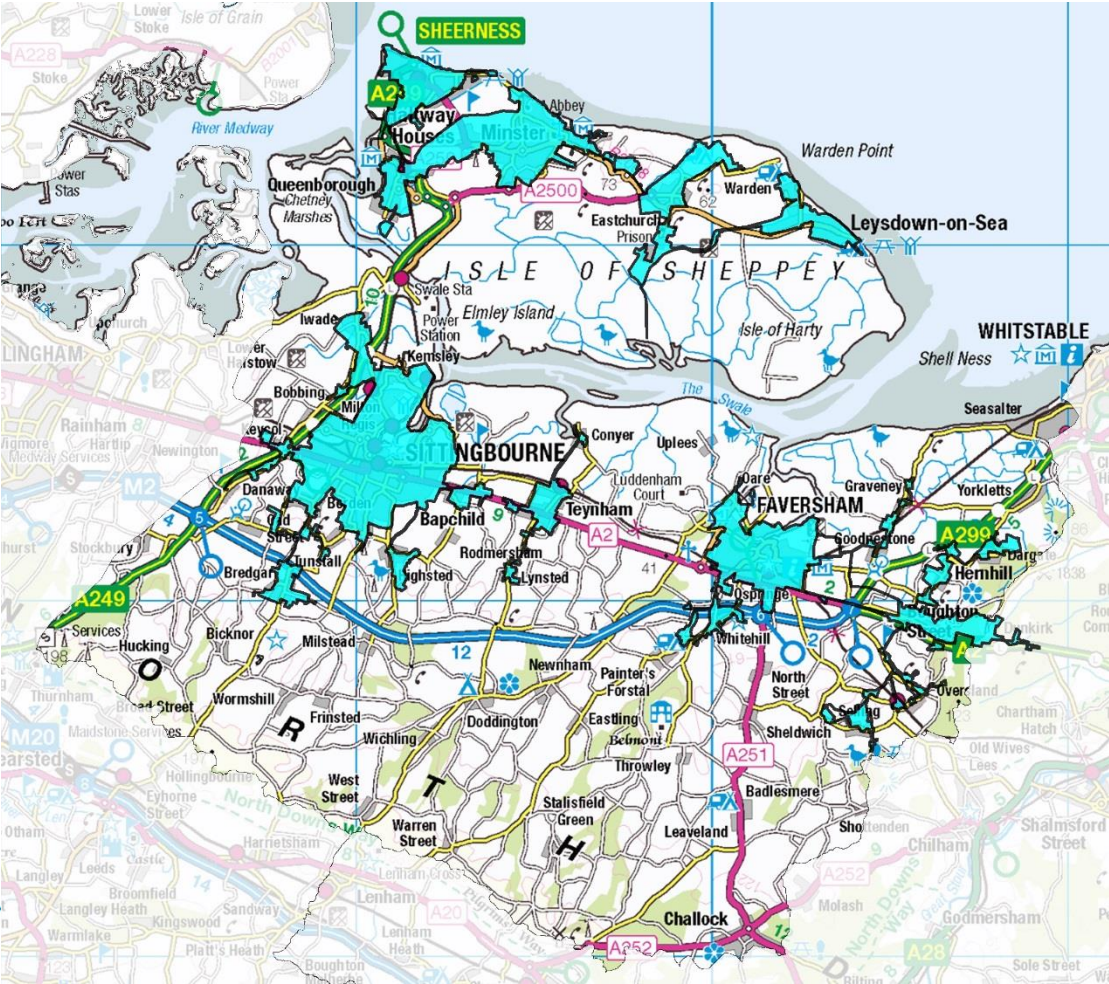
Drainage and Wastewater Management in
the North Kent catchment

Nick Davies

Wastewater Area Plan Lead



North Kent River Basin Catchment



- 5 sewer catchments
- 5 WTWs
- 104 pumping stations
- 581 km sewers
- 11% area
- 93% homes connected



Presentation 2

Drainage and Wastewater Management in
the North Kent catchment

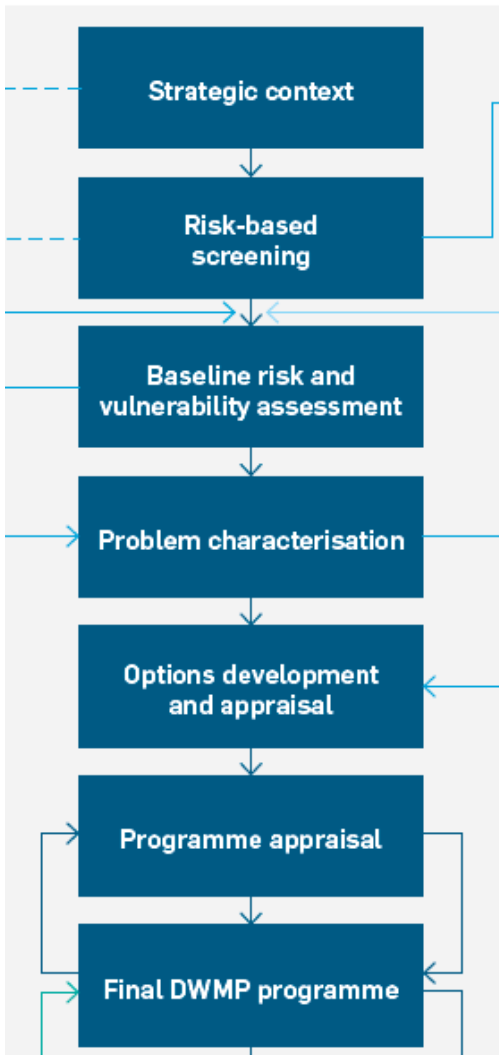
Stefan Cross

Technical Lead, Engineering team



Risk Based Catchment Screening (RBCS)

- Second step in the DWMP process
- Identifies where there is potential “system vulnerability” to future changes (i.e. risks that need to be investigated during the DWMP)
- Screening process for all sewer catchments
- 18 metrics: 17 specified by Water UK, and we’ve added one additional one on customer complaints



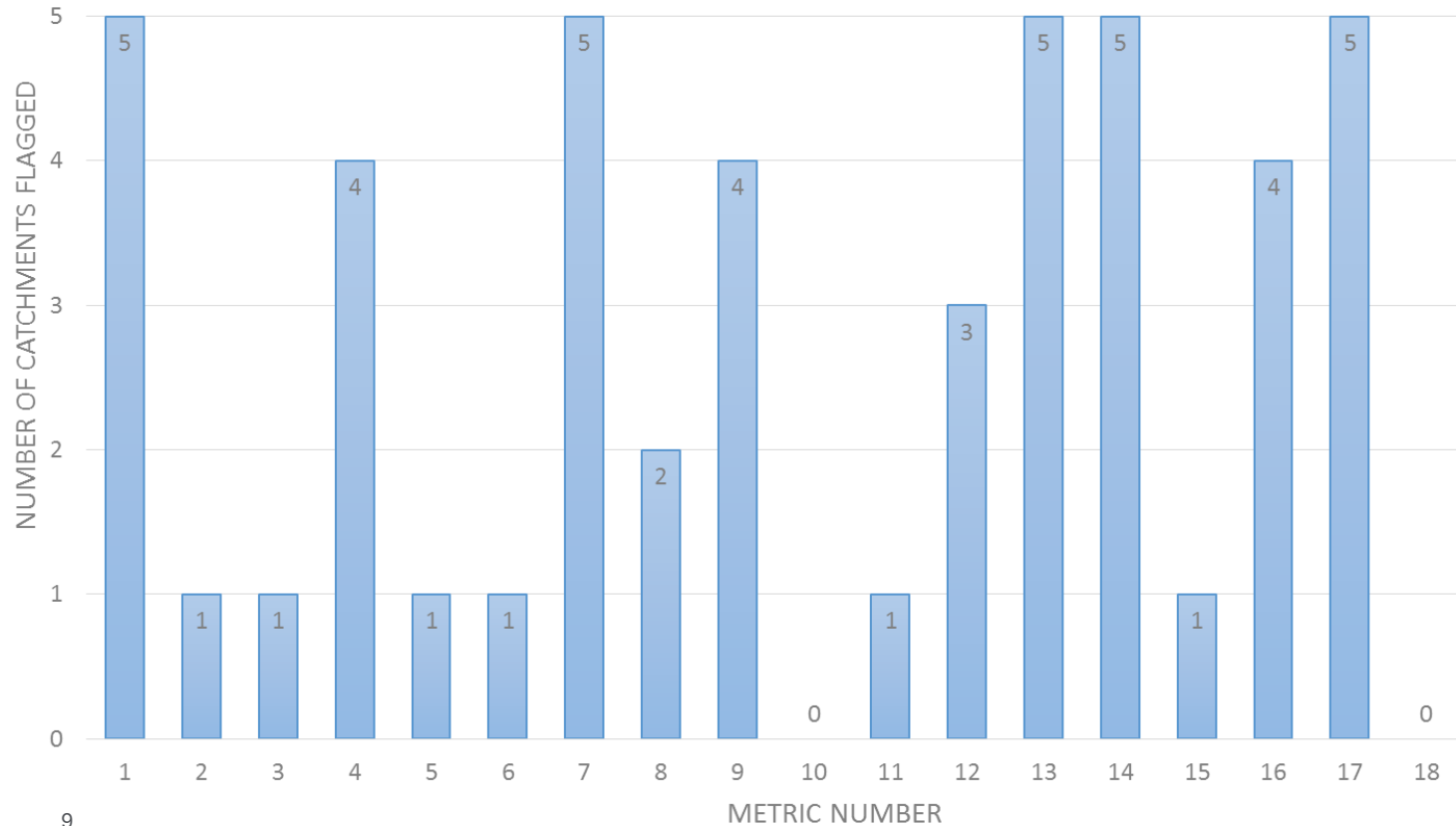
Risk Based Catchment Screening - Results

		Catchment Characterisation	Intermittent Discharge	Discharge to Sensitive Waters (part A)	Discharge to Sensitive Waters (part B)	Storm Overflow Assessment Framework (SOAF)	Capacity Assessment Framework (CAF)	Internal Flooding (inside properties)	External Flooding (within curtilage)	Risk of Pollution Incidents (Cat 1 -3)	Risk of WwTW Quality non-Compliance	Risk of WTW Dry Weather Flow non-Compliance	Storm Overflows	Other Risk Management Authority Systems	Planned Residential Development	Environmental Programme (WINEP)	Sewer Collapses	Sewer Blockages	Customer Complaints		
		Tier 2	Tier 1	Tier 1	Tier 2	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 2		
Sewer Catchment Ref	Sewer Catchment Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Proceed to BRAVA?	
SITT	SITTINGBOURNE	Blue	Yellow	Yellow	Yellow	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Blue	Blue	Yellow	Blue	Blue	Yellow	Yellow	YES
QUEE	QUEENBOROUGH	Blue	Yellow	Yellow	Blue	Yellow	Yellow	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Blue	Blue	Yellow	Blue	Blue	Yellow	Yellow	YES
FAVE	FAVERSHAM	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow	YES
ECHU	EASTCHURCH	Blue	Yellow	Yellow	Blue	Yellow	Yellow	Blue	Blue	Blue	Yellow	Yellow	Yellow	Blue	Blue	Yellow	Blue	Blue	Yellow	Yellow	YES
TEYN	TEYNHAM	Blue	Yellow	Yellow	Blue	Yellow	Yellow	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Blue	Blue	Yellow	Blue	Blue	Yellow	Yellow	YES
5																				5	



Risk Based Catchment Screening

Number of catchments flagged per metric



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The Southern Water logo consists of three blue wavy lines representing water, positioned to the right of the text 'Southern Water'.

Discussion Session 1

Discussing the results of the RBCS

Session 1: Risk Based Catchment Screening (RBCS)

Questions:

1. Based on the results, what are your main concerns in this river basin catchment?
2. What other issues or concerns do you have in this river basin catchment?
3. Are all the sewer catchments (where you have the most concerns) flagged to progress to BRAVA?
4. For any other concerns identified, what data could be used to assess the scale of the issue now and in the future?



Presentation 3

Planning Objectives for the DWMP

Stefan Cross

Technical Lead, Engineering team

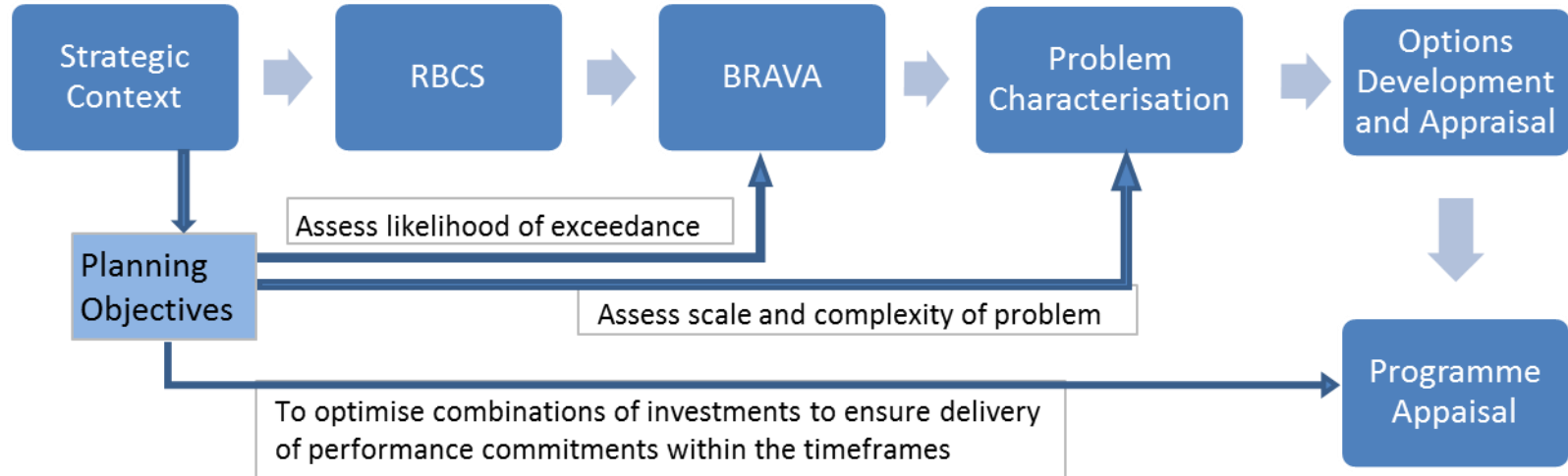


Objectives for this session

- To understand why we need planning objectives and how they will be used
- To know what planning objectives have been specified by Water UK for all companies to report
- To facilitate discussion on any additional planning objectives that may be needed for this river basin catchment



Planning Objectives



Planning Objectives

- Water UK require all water companies to report on the following 6 planning objectives:
 1. Risk of sewer flooding in a 1 in 50-year storm
 2. Storm overflow performance
 3. Risk of WTW compliance failure
 4. Internal sewer flooding risk
 5. Pollution risk
 6. Sewer collapse risk

- What is missing? Are any additional planning objectives needed for this river basin catchment?



Planning Objectives – methodology for BRAVA

- Water UK sets out how each of the 6 planning objective needs to measure and report on risk in 2020, and for 2050 (where required)
- Describes how risks will be assessed in BRAVA stage
- Additional planning objectives – need to consider how to measure the risks now, and for future planning horizons
 - What data is available? Coverage, ownership, format, accessibility?
 - Can we assess the likelihood of occurrence in the future, and consequence?
 - Can the outcomes be influenced by us, or other risk management organisations?
- Next step to develop BRAVA methodology for each planning objective



Discussion Session 2

Identifying planning objectives

Session 2: Planning Objectives

Questions:

Based on the RBCS results:

1. Are all your areas of concern / issues covered by the 6 national planning objectives?
2. If not, then what gaps need to be filled with additional planning objectives?
3. What additional indicators, metrics or data could we use to measure the current and future risks for any additional planning objectives?



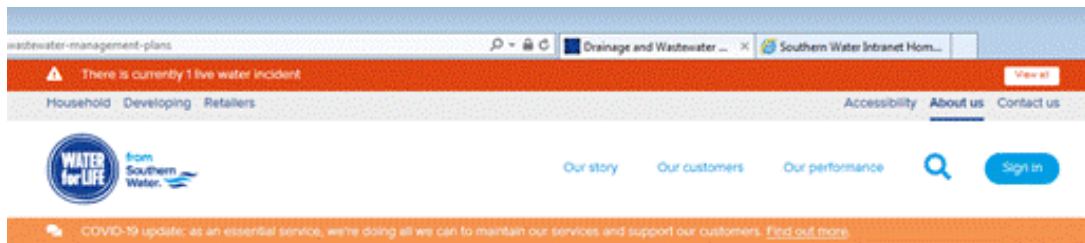
Next Steps



Timetable

Dates	Activity
To Nov 2020:	Working with partner organisations to develop the strategic context, planning objectives and baseline risk and vulnerability assessment (BRAVA)
Dec 2020	Submission of BRAVA to Water UK
Jan – Sep 2021	Working with partners on options development and appraisal
Autumn 2021	Start early consultation with customers on the catchment based DWMPs (Level 2)
Summer 2022:	Public consultation on the regional DWMP
January 2023	Publish final DWMPs

Further information



Drainage and Wastewater Management Plans

We're adopting a new approach to plan for the future of drainage, wastewater and environmental water quality. As part of this, we're currently developing 11 Drainage and Wastewater Management Plans (DWMPs) across our entire region.



What are DWMPs?

DWMPs are long-term plans – spanning 25 years or more – that will provide an opportunity to improve water quality and drainage systems and will reduce flooding and pollution for the benefit of our customers, communities, businesses, the environment and wildlife.

[Find out more – What are DWMPs?](#)

Other useful information

[What are DWMPs?](#)

[Developing our DWMPs](#)

[Why develop DWMPs?](#)

<https://www.southernwater.co.uk/dwmp/>



Thank you for participating today

Contact us: DWMP@southernwater.co.uk

