# Drainage and Wastewater Management Plans (DWMPs)

Workshop on the Arun and Western Streams DWMP

Thursday 24 September 2020





#### Agenda

- Objectives of the workshop
- Presentation: Drainage & wastewater management in this river basin
- 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).



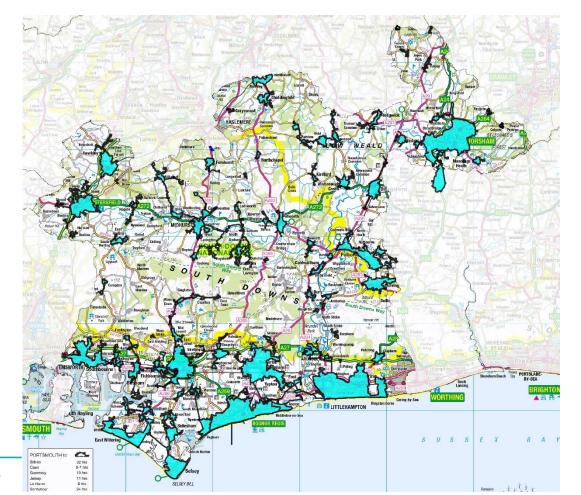
## Presentation 1

Drainage and Wastewater Management in the Arun and Western Streams catchment

Bryan Bleeker
Wastewater Area Plan Lead



#### Arun and Western Streams River Basin Catchment



- 59 sewer catchments
- 56 WTWs
- 527 pumping stations
- 4019 km sewers
- 12% area
- 93% homes connected

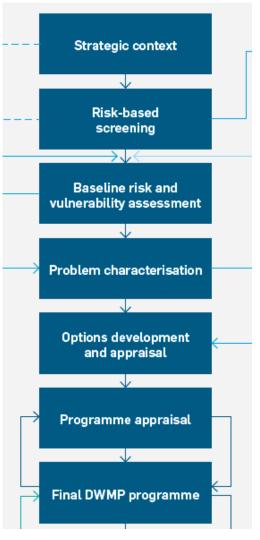


## Presentation 2

Drainage and Wastewater Management in the Arun and Western Streams 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 WwTW 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?
FORW	FORD					•									The second second		•	·		YES
HONE	HORSHAM NEW																			YES
CHIC	CHICHESTER																			YES
SIDL	SIDLESHAM																			YES
LIDS	LIDSEY																			YES
THOR	THORNHAM																			YES
PETE	PETERSFIELD																			YES
SOAM	SOUTH AMBERSHAM																			YES
PULB	PULBOROUGH																			YES
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LISS	LISS																			YES
TANG	TANGMERE																			YES
BOSH	BOSHAM																			YES
LOXW	LOXWOOD																			YES
CHID PETW	CHIDDINGFOLD PETWORTH																			YES YES
LAVA	LAVANT																			YES
RUDG	CHEPHURST COPSE RUDGWICK																			YES
FERN	FERNHURST																			YES
WAAM	WARNHAM																			YES
SLIN	SLINFOLD																			YES
WISB	WISBOROUGH GREEN																			YES
MANN	MANNINGS HEATH																			YES
ROGA	ROGATE																			YES
HATG	SOUTH HARTING																			YES
COLW	COLDWALTHAM																			YES
FITT	FITTLEWORTH																			YES

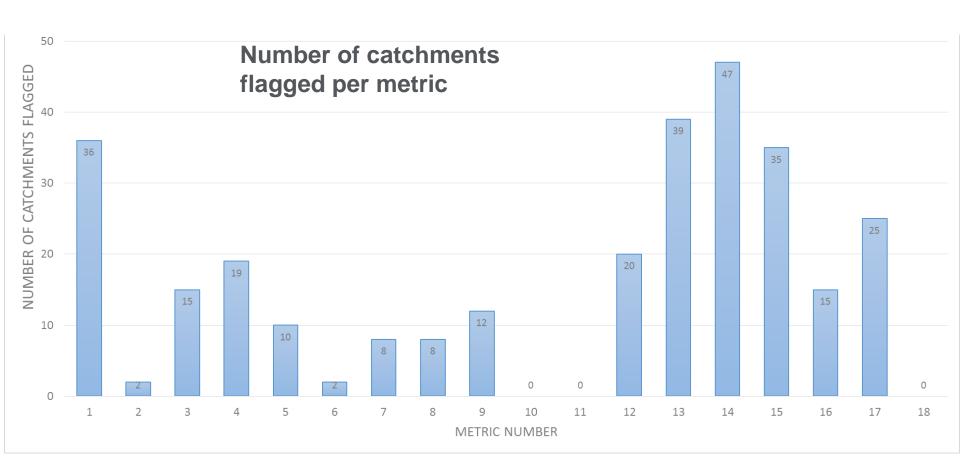


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TWCP	COLGATE PRIVATE																			NO
ELST	ELSTED																			NO
HARD	HARDHAM																			YES
WSHC	HILLSIDE COTTAGES WEST STOKE																			NO
	59																			53



#### Risk Based Catchment Screening



## 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?



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## Presentation 3

Planning Objectives for the DWMP

Stefan Cross
Technical Lead, Engineering team

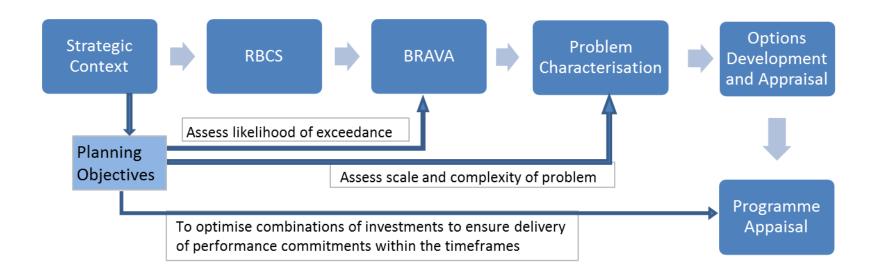


#### Objectives for this session

- 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?

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## 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:

- 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

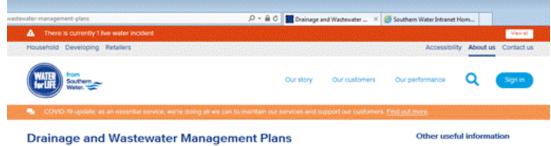


## **Timetable**

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



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.

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#### 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. What are DWMPs?

Developing our DWMPs

Why develop DWMPs?

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



Find out more ~ What are DWMPs

# Thank you for participating today

Contact us: <a href="mailto:DWMP@southernwater.co.uk">DWMP@southernwater.co.uk</a>



