



Drainage and Wastewater Management Plan

Guide to the structure and content of our DWMP

May 2023
Version 2

Introduction

This Guide is intended to explain the structure and content of our Drainage and Wastewater Management Plan (DWMP) on the website.

The structure of our DWMP

The DWMP national guidance '[Framework for the production of Drainage and Wastewater Management Plans](#)' (Water UK, 2021) provides all water companies with a common structure and framework for developing their DWMPs. The guidance sets out the suggested steps, processes and management structures to develop an effective plan for the current and future management of our drainage and wastewater systems. Our DWMP is structured at three levels, outlined in more detail below.

Level 1 Regional Planning

Our [Level 1 DWMP](#) sets out our approach for how we will manage our drainage and wastewater services into the future, as well as our needs-led long term investment plans that will secure the outcomes and resilience expected by our customers and the environment. d by our customers and the environment.

Level 2 River Basin Catchment Planning

We have 11 River Basin Catchments (RBCs) within our region. The sub-sections for each RBC on our website forms the Level 2 DWMP – see [River Basin Catchment Information](#) further below in this Guide.

Our RBCs are fully aligned with the River Basin District catchments defined in the river basin management planning legislation, and which are also used for Flood Risk Management Planning. RBCs form ideal existing planning districts for collaborative partnerships and the co-creation of solutions to meet the future challenges to drainage and wastewater management.

Level 3 – Wastewater System Planning

We have 381 separate wastewater systems in our region. Each system covers a specific local geographical area within each of the river basin catchments. Ultimately, we will have an individual Level 3 DWMP for all our wastewater systems. In this, our first DWMP, we focused efforts on developing Level 3 DWMPs for 61 of our highest risk wastewater systems. We provide wastewater services to 78% of our customers in these 61 systems.

Level 3 DWMPs investigate specific current or future local operational problems or issues to identify local solutions that align with the broader policies for the regional Level 1 plan and the strategic issues considered in the Level 2 planning.

The table below sets out the number of wastewater systems with a level 3 DWMP in each RBC (see [River Basin Catchment Information](#) further below in this Guide for more details).

RBC	Number of systems
Adur and Ouse	4
Arun and Western Streams	10
Cuckmere and Pevensey Levels	4
East Hampshire	2
Isle of Wight	1
Medway	9
New Forest	5
North Kent	3
Rother	2
Stour	9
Test and Itchen	12

Where to find content on our website

[Website landing page](#)

There are three core areas on the main website landing page:

1. The main central area has an introduction and welcome to our DWMP. It contains a map and some key facts about our wastewater systems across our region.
2. At the top right-hand side of the website landing page there are links to information and materials that explain technical aspects of the DWMP – see [Right hand links](#) below for more details.
3. Further down the website landing page there are 12 subsections:
 - The top, [left hand box](#) is where you can find our Regional Drainage and Wastewater Management Plan and a short, plain English summary.
 - The remaining 11 boxes, one for each River Basin Catchment (RBC) in our operating area, hold all the information about the wastewater systems within the river basin. This includes what the challenges are, our proposed solutions and what our investment plans are to address the challenges. See [River Basin Catchment Information, below](#).

Right hand links

There are 11 links on the top right hand side of the website landing page which contain all our supporting information. These links explain how we have developed the DWMP, how we have interpreted the national guidance and describe the methods we've used to develop technical aspects. These are:

1. [Strategic context](#): this sets out the national guidance for water companies in producing their DWMPs, how we have met the expectations and the processes and steps we've followed.
2. [Planning Objectives](#): how and why we developed our Planning Objectives.
3. [Who we're working with](#): the partner organisations we are working with and how this has influenced our plan.

This page lists the dates and purpose of the workshops in each river basin catchment, the regional webinars and the meetings on specific wastewater systems or to gain expert input to the development of the methodologies. It also contains our [Register of Stakeholder Comments](#) which sets out what you have told us since we began developing the DWMP at both a strategic level and about the individual RBCs, and how we have taken this into account.

4. [Risk Based Catchment Screening](#): the criteria for the initial screening of wastewater systems.
5. [Baseline Risk and Vulnerability Assessment](#): the development of our risk assessments.

The methodologies used to develop the Baseline Risk and Vulnerability Assessments for all 14 Planning Objectives are listed and linked to below.

National Planning Objective Methodologies

- [Internal sewer flooding risk](#)
- [Pollution risk](#)
- [Sewer collapse risk](#)
- [Sewer flooding in a 1 in 50-year storm event](#)
- [Storm overflow performance](#)
- [Risk of WTW compliance \(Quality\)](#)

Bespoke Planning Objective Methodologies

- [Annualised flood risk \(hydraulic overload\)](#)
- [WTW Dry Weather Flow \(DWF\) compliance](#)

Partner proposed Planning Objective Methodologies

- [Achieve Good Ecological Status / Potential](#)
- [Improve surface water management](#)
- [Secure Nutrient Neutrality](#)
- [Reduce groundwater pollution](#)
- [Improve Bathing Water quality](#)
- [Protect Shellfish Waters](#)

6. [Regional BRAVA risk maps](#): Our regional BRAVA risk maps

Individual regional risk maps for each of the 14 Planning Objectives are listed and linked to below.

National Planning Objective Risk Maps

- [Internal sewer flooding risk](#)
- [Pollution risk](#)
- [Sewer collapse risk](#)
- [Sewer flooding in a 1 in 50-year storm event](#)
- [Storm overflow performance](#)
- [Risk of WTW compliance \(Quality\)](#)

Bespoke Planning Objective Risk Maps

- [Annualised flood risk \(hydraulic overload\)](#)
- [WTW Dry Weather Flow \(DWF\) compliance](#)

Partner proposed Planning Objective Risk Maps

- [Achieve Good Ecological Status / Potential](#)
- [Improve surface water management](#)
- [Secure Nutrient Neutrality](#)
- [Reduce groundwater pollution](#)
- [Improve Bathing Water quality](#)
- [Protect Shellfish Waters](#)

7. [Technical Summaries](#): there are nine technical summaries setting out how we have approached particular processes. These are listed below.

- [Our approach to uncertainty](#)
- [How we factored in climate change](#)
- [How we considered growth and urban creep](#)
- [How we selected the wastewater systems for full development in the first cycle](#)
- [Our approach to the Problem Characterisation](#)
- [Our approach to the Options Development and Appraisal](#)
- [Managing storm overflows](#)
- [How we completed the Programme Appraisal](#)
- [Bill impacts](#)

8. [Strategic Environment Assessment](#): Our Environmental Report and appendices: This section also contains the SEA scoping report and appendices that were used to develop our draft Environmental Report.

9. [Our 'Have your say' page](#): This page has the details and reports of our two public consultations (June – September 2022 and September – October 2021) and our Statement of Response.

10. [Guide to the DWMP](#): This page includes this website guide and the 'Regulatory Alignment' pdf which shows how and where we have met regulatory expectations in the production of the DWMP.

11. [DWMP Glossary](#): A glossary explaining our terminology and acronyms.

River Basin Catchment Information

This is where you can find most of the materials and information about our work in developing the DWMP. Each River Basin Catchment (RBC) has exactly the same structure but the information within each RBC section is relevant to that specific RBC. Details of the investment needs identified for each of the 61 Level 3 wastewater systems (the focus for the first cycle of the DWMP) are found within the relevant RBC section.

The links to each RBC are provided below.

- [Adur and Ouse](#)
- [Arun and Western Streams](#)
- [Cuckmere and Pevensey Levels](#)
- [East Hampshire](#)
- [Isle of Wight](#)
- [Medway](#)
- [New Forest](#)
- [North Kent](#)
- [Rother](#)
- [Stour](#)
- [Test and Itchen](#)

The structure and content of each RBC sub-section

There are 8 sections within each RBC subsection. The structure and content of these are as follows:

1. Overview

We set out an overview for each RBC with key features of the area including its waterbodies, environmentally designated and important wildlife areas, the major urban settlements and land uses, the extent of our wastewater infrastructure in each RBC, and how these are performing.

2. Working with others

This sets out the full range of partner organisations we have worked with in the RBC and the dates and purpose of the meetings held. A full table of meetings and dates for the systems we completed in the RBC is available.

3. Risk Based Catchment Screening

Risk Based Catchment Screening (RBCS) is a high level, initial screening of the wastewater systems within the RBC to identify where there is a current risk or vulnerability to future changes, such as new residential development or changes in climate. It means that wastewater systems with no identified risks can be removed from the DWMP process and enables our effort to be focused the systems where there are identified risks.

4. Baseline Risk and Vulnerability Assessment

The Baseline Risk and Vulnerability Assessment (BRAVA) is an important step for the DWMP. It examines the performance of the wastewater systems for each of the 14 Planning Objectives and identifies the current and future risks that need to be addressed. The output of the BRAVA shows current risks and issues in each sewer catchment and how the risks may change in future, and when they may change.

5. Problem Characterisation

The Problem Characterisation (PC) uses the results from the BRAVA to explore the causes of risks and the primary drivers that are causing the risks. This page has links to individual maps of the wastewater systems and a narrative explaining the causes of the risks.

6. Options Development and Appraisal

The Options Development and Appraisal (ODA) identifies the options that will address the risks. It begins with a long list of generic options and narrows these down through a series of steps, taking into account issues such as location, technology and the environmental impact into account until only the possible options remain. Costs are assigned and assessed to identify which provides the best overall value in terms of the benefits to customers, communities and the environment. This then becomes the preferred option. This page has links to the list of generic options, illustrates how we developed the feasible options, sets out the investment needs identified for each wastewater system studied in the BRAVA and PC stages, and has maps showing where the proposed solutions would be implemented.

7. Programme Appraisal

Undertaken at an RBC level, the Programme Appraisal brings all the investment needs identified during the ODA stage together into a single investment programme for each river basin catchment and extrapolates them to quantify the scale of the overall investment needs for the entire RBC. It provides a summary of the priorities for investment across the RBC needed to meet our Planning Objectives and address the risks identified for the short, medium and long-term.

It is important to note that the options and investment needs are not committed funding but an identification of the needs for funding. We will include these options in our future business plans as part of the Ofwat periodic review of Water Company funding to secure the investment needed to implement these options.

8. Consultation

This section set out the main findings from our 2021 stakeholder consultations for each river basin. There is also a link back to our 'Have your say' public consultation page:

<https://www.southernwater.co.uk/dwmp/have-your-say>