The Wessex area Drainage and wastewater management plan (DWMP) – Appendix H – Glossary and references

Wessex Water

May 2023



1. Introduction

The DWMP is technical and we have used many acronyms. So this document contains a glossary to help explain their meaning. It also contains references to other documents, used in the production of the DWMP.

Glossary of terms

Acronym	Full	Description
12/24	12/24-hour spill counting technique for overflows defined by the EA	The storm overflow spill frequency calculation uses this to say roughly how many days a year storm overflows discharge.
AMP7, AMP8 etc.	Asset Management Plan	5-year Asset Management Plan starting in AMP7 (PR19) started in 2015, AMP8 (PR24) starts in 2025 etc.
BaNES	Bath and North East Somerset	BaNES is a unitary council area
BACP	Bristol Avon Catchment Partnership	
BART	Bristol Avon Rivers Trust	
BCP	Bournemouth, Christchurch and Poole	BCP unitary council
BRAVA	Baseline Risk and Vulnerability Assessment	A stage in the DWMP framework that assesses of the risks for each sewer catchment to understand the current system performance and future vulnerabilities against various planning objectives
CaBA	catchment based approach	
CAF	Capacity assessment framework	A 21 st Century drainage/WaterUK that assesses the available and future capacity within a sewer system to cope with current and future pressures.
Capex	Capital expenditure	
СВА	Cost benefit analysis	
CBR	Cost benefit ratio	
CCTV	Closed-circuit television	CCTV equipment used for inspecting sewers etc.
CCWater	Consumer Council for Water	Statutory consumer body for the water industry. CCWater represent the interests of our customers.
CIPP	Cured in Place Pipelining	
CIWEM	Chartered Institution of Water and Environmental Management	

Consent	See 'Permit'		
Creep	Urban creep	Development at a small scale that increases impermeable areas, e.g. where over time gardens are paved over to make driveways.	
CSO	Combined Sewer Overflow	These are now called storm overflows	
DAP	Drainage Area Plan	DAPs were the name of previous planning frameworks before the DWMP	
DCLG	Department for Communities and Local Government	Now called the Ministry of Housing, Communities and Local Government (MHCLG).	
DEFRA	Department for Environment, Food & Rural Affairs	Government department covering the water and environment sectors	
DST	decision support tools		
DWF	Dry weather flow	DWF is the average daily flow to a wastewater treatment works during a period without rain. It can be expressed as an average flow or a daily volume. DWF normally excludes seasonal groundwater inundation.	
DWMP	Drainage and wastewater management plan	Long term planning framework setting out how water companies must extend, improve, and maintain a robust and resilient drainage and wastewater system. The Environment Act calls this the Drainage and sewerage management plan. DWMP are produced in partnership with other stakeholders.	
DWMP portal	Drainage and wastewater management plan portal	The Wessex Water geospatial viewing platform hosted on our website	
EA	Environment Agency	WaSC environmental regulator	
EDM	Event duration monitoring	This equipment monitors storm overflow spill durations to calculate the 12/24 spill counts	
ELMS	Environmental Land Management Scheme		
EO	Emergency Overflow	An overflow which is Permitted to operate when assets fail	
FCERM	Flood and Coastal Erosion Risk Management		
FE	Final Effluent	Treated discharges from WRC to the environment	
FFT	Flow to full treatment	Flow being treated by the WRC	
FIO	faecal indicator organisms	these are types of bacteria found in mammal intestines that are both common, easy to cultivate and survive well outside of their natural environment	
FRMP	Flood risk management plan	EA produce FRMP in partnership with other stakeholders	

Frequently spilling overflow	Storm overflows that are deemed to be spilling too frequently. The threshold of frequent is being reviewed by Defra.
Flooding other causes	Flooding of properties or areas by sewage that is not the result of hydraulic overload (rainfall) but caused by other issues such as blockages (e.g. due to wet wipes, fat, oils and grease), tree roots or mechanical failures
Fats, oils and grease	FOG should not be put down sinks because when it cools it coagulates and clogs up sewers causing flooding and odour issues.
First time sewage	Section 101a of the industry act requires, and if viable, for sewerage companies to connect wastewater from private properties which are or could be causing pollution.
Geographic Information System	Geospatial viewing software. An example is our DWMP portal on our website.
generic options	
Hampshire Avon Catchment Partnership	
Hydraulic capacity	Hydraulic incapacity that could be a hydraulic flood risk
Hydraulic computer model of the sewerage network or WRC	Computers are used to replicate sewer network performance in DWF and typical or extreme rainfall scenarios. They are used to predicted what options would resolve storm overflow and flooding risks.
Habitats regulations Assessment	
Hydraulic overload	When a sewer is overwhelmed by incoming flows (rainfall/groundwater).
Internal Drainage Boards	
Level 1	Wessex area
Level 2	Catchment partnership area
Level 3	WRC catchment area
ModeFronteer	
Monitoring certification scheme	Equipment that is calibrated and certified annually
Lead local flood authorities	RMA Responsible for all local flood risk
Ministry of Housing, Communities and Local Government	Formerly called DCLG, has a role in to supporting local development and promoting economic growth
	WW job scheduling and recording system used across the sewerage network. Some functions have moved to WAM in recent years.
natural flood management	
	Flooding other causes Flooding other causes Fats, oils and grease First time sewage Geographic Information System generic options Hampshire Avon Catchment Partnership Hydraulic capacity Hydraulic capacity Hydraulic computer model of the sewerage network or WRC Habitats regulations Assessment Hydraulic overload Internal Drainage Boards Level 1 Level 2 Level 3 ModeFronteer Monitoring certification scheme Lead local flood authorities

NIC	National Infrastructure commission	The NIC assesses infrastructure needs, reported in the National Infrastructure Assessment, and recommends action to the government.
NIRS	National incident recording system	EA records of pollution incidents
NRV	Non-return valve	Valves that prevent backing up from surcharged sewers
ODA	Options Development and Appraisal	Stage in the DWMP framework to assess the options to the issues prioritised in previous stages.
OFWAT	The Water Services Regulation Authority	Body responsible for economic regulation of WaSC
OFWG	Operational Flood Working Group	Chaired by BaNES
Opex	Operational expenditure	
Optimatics	Optimatics	Optimatics DST
pe	Population equivalent	This includes domestic population and the flows from commercial properties and trade effluents (converted to population equivalent)
Permit	Environmental permit	Formerly referred to as consent, the EA document which sets out legal conditions associated with the operation of an asset, e.g. a pumping station, storm overflow, WRC etc
PFF	Pass forward flow	Flow rate that is pumped forward to treatment (for pumping stations)
PFR	Property flood resilience	
PIRP	Pollution incident reduction plan	
PO	Planning objective	A performance or activity measure used in the DWMP framework
PHCI	Poole Harbour Catchment Initiative	
PR24	Periodic review 2024	Business plan submission to Ofwat in 2024 for the next 5-year AMP cycle (e.g. PR24 relates to the eighth submission, hence AMP8 covers 2025 to 2030)
Problem Characterisation	Problem Characterisation	Stage in the DWMP framework to ask how big the problem is and how difficult would it to resolve, at a level 3. Determines the level of optioneering required (standard, extended or complex).
Qnn	Percentage quartile	The nn th percentile (may refer to river flow, or pollutant concentration)
RAPID		WW's customer incident reporting and management system

RBC	River basin catchment	DWMP Level 2 area, which represent the watershed of a catchment.
RBCS	Risk Based Catchment Screening	An early stage in the DWMP framework top screen out catchments that don't have risk. Catchments with risk go to the BRAVA stage.
RCP	Representative Concentration Pathways	RCP represent climate changes predictions, as adopted by the Intergovernmental Panel on Climate Change (IPCC) and the latest UK Climate Projections (UKCP18).
RBMP	river basin management plans	
Rising mains	Rising mains	Pipes that convey pressurised flows from SPS.
RMA	Risk management authority	RMAs have specific responsibilities for flood and coastal erosion risk management. They are defined in the FWMA2010 and include a number of organisations such as the Environment Agency, lead local flood authorities, unitary (or district) councils, Internal Drainage Boards, Highways England and water and sewerage companies.
SMF	Service Measure Framework	
RNAG	reasons for the waterbodies not achieving good ecological status	
SiteID	Unique asset identification number	Wessex Water 5- or 6-digit identifier for sites, e.g. pumping stations, storm overflows, treatment works etc.
Storm overflow	Storm overflow	Storm overflows are permitted assets that act as relief mechanism to prevent flooding during heavy rainfall.
SODRP	Storm overflow discharge reduction plan	The government's Storm overflow discharge reduction plan[108]
Stormpac	Stormpac	Software for producing time series of rainfall data
SCI	Stour Catchment Initiative	
SMP	Shoreline management plan	
SOAF	Storm overflow assessment framework	Framework published in 2018 to address FSOs. This is likely to be superseded / updated by Defra's new policy.
SPS	Sewage pumping station	SPS lifts sewage from the low spot in a catchment through rising mains to another location.
SSO	Settled storm overflow	SSOs are usually storm tanks at a WRC but can be in the networks. The storage reduces the load of the discharge by setting the solids so cleaner water discharges.

STW	Sewage Treatment Works	STW are now known as Water Recycling Centres
SuDS	Sustainable urban Drainage Systems	SuDS are sustainable surface water management measures to keep rainfall close to where it lands, so it doesn't enter sewers. SuDS can mimic natural drainage through infiltration, attenuation, and passive treatment.
SWPS	Surface water pumping station	Pumps surface water flow, not sewage.
SWIMS	Sewage Waste Information Management Systems database	WW software that visualises the flow data at some WRC and SPSs
T&F	Task and finish	Task and finish group
Totex	Total expenditure	Includes capex and opex costs in a 5-year cycle
UDG	Urban Drainage Group	CIWEM UDG
UKWIR	UK water industry research	Water research
UPM	urban pollution management	Study uses water quality sampling data and computer modelling (e.g. UPM Rat, Sagis, SIMpol) to verify water quality impact of sewers
ViewPoint	Viewpoint is software package provided by Esri	A browser-based GIS used by WW for viewing sewer records and the portal
WAM	Work and asset management system	WW's service optimisation and asset lifecycle management system
WaSC	Water and Sewerage Companies	Water companies that provide both water supply and wastewater services to customers in their region.
WDRCS	West Dorset Rivers and Coastal Streams	
WIF	Waste Information Form	A summary of an incident managed with RAPID
WINEP	Water industry national environment programme	
WRFCC	Wessex Regional Flood and Coastal Committee	
WW	Wessex Water	The WaSC covering the Wessex area
WQM	Water quality modelling	
WRC	Water Recycling Centre	WRCs were formally known as sewage treatment works
WRMP	Water Resources Management Plan	Long term plan for the water resources side of the WaSC business.

References

These links were correct at the time of writing. Wessex Water take no responsibility in the third-party links and provide these as a source only.

1 CCWater, 2022, Customer experiences of sewer flooding

https://www.ofwat.gov.uk/publication/customer-experiences-of-sewer-flooding-a-joint-reportby-ccw-and-ofwat/

2 Defra, 2020, Accounting for the Effects of Climate Change: Supplementary Green Book Guidance

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_da ta/file/934339/Accounting_for_the_Effects_Of_Climate_Change_-_____Supplementary_Green_Book .._.pdf

3 Defra, 2022, Consultation on the Government's Storm Overflows Discharge Reduction Plan

https://consult.defra.gov.uk/water-industry/storm-overflows-discharge-reductionplan/supporting_documents/Final Consultation Document PDF.pdf

4 Defra, 2016, Enabling resilience in the water sector

https://www.gov.uk/government/publications/water-sector-improving-long-term-resilience

5 Defra, Flood Innovation Resilience Fund for the Bristol Frome

https://www.bristol.gov.uk/newsroom/new-funding-announced-for-innovative-flood-resilienceproject

6 Defra, 2022, Guiding principles for drainage and wastewater management plans

https://www.gov.uk/government/publications/drainage-and-wastewater-management-plansguiding-principles-for-the-water-industry

7 Defra, 2018, Surface Water Management. An Action Plan

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_da ta/file/725664/surface-water-management-action-plan-july-2018.pdf

8 Defra, 2022, The governments strategic priorities for Ofwat

https://www.gov.uk/government/publications/strategic-policy-statement-to-ofwatincorporating-social-and-environmental-guidance/february-2022-the-governments-strategicpriorities-for-ofwat

9 Environment Agency, Catchment Data Explorer

https://environment.data.gov.uk/catchment-planning/

10 Environment Agency, 2020, Environmental Performance Assessment (EPA methodology (version 8) for 2021 to 2025

https://www.ofwat.gov.uk/wp-content/uploads/2021/01/EPA-methodology-version-8-October-2020.pdf

11 Environment Agency, 2020, National Flood and Coastal Erosion Risk Management Strategy for England

https://www.gov.uk/government/publications/national-flood-and-coastal-erosion-riskmanagement-strategy-for-england-action-plan

12 Environment Agency, 2020, new FCERM strategy for England w https://www.gov.uk/government/publications/national-flood-and-coastal-erosion-riskmanagement-strategy-for-england--2

13 Environment Agency, 2022, Peak rainfall climate change allowance by management catchment

https://www.gov.uk/government/publications/peak-rainfall-climate-change-allowances-bymanagement-catchment

 14
 Environment Agency,
 River Basin Management Plans

 https://environment.data.gov.uk/catchment-planning/v/c3-draft-plan/RiverBasinDistrict/8

15 Environment Agency, 2021, Roadmap for the National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_da ta/file/1080740/FCERM-Strategy-Roadmap-to-2026-FINAL.pdf

16Environment Agency, 2019,Shoreline management plans (SMPs)https://www.gov.uk/government/publications/shoreline-management-plans-smps

17 Environment Agency, 2021, Water industry strategic environment requirements https://www.gov.uk/government/publications/developing-the-environmental-resilience-andflood-risk-actions-for-the-price-review-2024

18 Environment Agency, 2022, Water quality in rivers, Fourth Report of Session 2021–
22

https://committees.parliament.uk/publications/8460/documents/88412/default/

19 Environment Agency, 2022, WINEP roadmap

https://www.gov.uk/government/publications/water-industry-national-environmentprogramme-winep-roadmap

20 Government, 2018, 25 Year Environment Plan for England https://www.gov.uk/government/publications/25-year-environment-plan

21 Government, 2021, Environment Act 2021 https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

22 Government, 2010, Flood and Water Management Act 2010 https://www.legislation.gov.uk/ukpga/2010/29/contents

23 Government, 2016, National Flood Resilience Review https://www.gov.uk/government/publications/national-flood-resilience-review

24 Government, 2022, Storm overflow evidence project (SOEP) addendum

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_da ta/file/1064767/storm-overflows-evidence-project-march-2022-addendum.pdf

25 Government, 2021, Storm overflow evidence project (SOEP) report https://www.gov.uk/government/publications/storm-overflows-evidence-project

26 Government, 2021, Storm Overflows Taskforce

https://www.gov.uk/government/groups/storm-overflows-taskforce

27 Met Office, The Met Office UKCP User Interface https://ukclimateprojections-ui.metoffice.gov.uk/ui/home

28 NIC, 2021, National Infrastructure Commission's Assessment https://www.nic.org.uk/our-work/national-infrastructure-assessment/

29 Ofwat, 2021, Assessing base costs at PR24

https://www.ofwat.gov.uk/wp-content/uploads/2021/12/Assessing-base-costs-at_PR24.pdf

30 Ofwat, 2021, Draft long-term delivery strategies data tables <u>https://www.ofwat.gov.uk/publication/pr24-long-term-scenario-data-table/</u>

31 Ofwat, Letter: A joint approach for how water companies should consider flood and coastal resilience in the context of their statutory roles and duties <u>https://www.ofwat.gov.uk/publication/a-joint-approach-for-how-water-companies-shouldconsider-flood-and-coastal-resilience-in-the-context-of-their-statutory-roles-and-duties/</u>

32 Ofwat, 2021, Ofwat's expectations for strategic planning frameworks at PR24 https://www.ofwat.gov.uk/publication/ofwats-expectations-for-strategic-planning-frameworksat-pr24/

33 Ofwat, 2022, Ofwat's Final Public Value Principles https://www.ofwat.gov.uk/wp-content/uploads/2022/03/Ofwats-Final-Public-Value-Principles.pdf

34 Ofwat, 2022, Operational resilience discussion paper https://www.ofwat.gov.uk/wp-content/uploads/2022/04/Ofwat-Operational-resiliencediscussion-paper-April-2022-1.pdf

35 Ofwat, 2021, PR24 and beyond: Creating tomorrow, together. <u>https://www.ofwat.gov.uk/wp-content/uploads/2021/05/PR24-and-Beyond-Creating-tomorrow-together.pdf</u>

36 Ofwat, 2022, PR24 and beyond: Final guidance on long-term delivery strategies <u>https://www.ofwat.gov.uk/publication/pr24-and-beyond-final-guidance-on-long-term-delivery-</u> <u>strategies/</u>

37 Ofwat, 2021, PR24 and beyond: Long-term delivery strategies and common reference scenarios

https://www.ofwat.gov.uk/wp-content/uploads/2021/11/PR24-and-beyond-Long-termdelivery-strategies-and-common-reference-scenarios.pdf

38 Ofwat, 2021, PR24 and beyond: Performance commitments for future price reviews <u>https://www.ofwat.gov.uk/wp-content/uploads/2021/11/PR24-and-beyond_Performance-</u> commitments-for-future-price-reviews.pdf

39 Ofwat, Time to act together

https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ofwat.gov.uk%2 Fwp-content%2Fuploads%2F2019%2F10%2FTime-to-act-together-Ofwats-strategy-1.pdf&data=05%7C01%7CErin.Priddey%40environment-

agency.gov.uk%7Cf33d9c55d50742898c0008da47a6c45f%7C770a245002274c6290c74e3 8537f1102%7C0%7C0%7C637901078932077447%7CUnknown%7CTWFpbGZsb3d8eyJWI joiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTil6lk1haWwiLCJXVCI6Mn0%3D%7C3000%7C% 7C%7C&sdata=kNrfRiGOtxd6JlqYXdz4LlkhnSwZKII27j1emz%2FIVPQ%3D&reserved=0

40 Ofwat , 2022, Customer engagement policy

https://www.ofwat.gov.uk/wp-content/uploads/2022/02/PR24-customer-engagementpolicy.pdf

41 Ofwat , 2011, Future impacts on sewer systems in England and Wales (Mott Macdonald)

https://www.ofwat.gov.uk/wp-content/uploads/2015/11/rpt_com201106mottmacsewer.pdf

42 Ofwat, Reporting guidance – Risk of sewer flooding in a storm https://www.ofwat.gov.uk/publication/reporting-guidance-risk-of-sewer-flooding-in-a-storm/

43 ONS, Household projections for England - Office for National Statistics https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationp rojections/bulletins/householdprojectionsforengland/2018based

44ONS,National population projections - Office for National Statisticshttps://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2018based

45 Partnerships, A Better Biss Approach (ABBA) (2021 - 5-year funded project) https://www.wiltshirewildlife.org/abba

46 Partnerships, Avon CMP

https://documents.hants.gov.uk/flood-water-management/14-HCC-CMP-Avon.pdf

47 Partnerships, Avon Water CMP

https://documents.hants.gov.uk/flood-water-management/15-HCC-CMP-AvonWater.pdf

48 Partnerships, BART are in the early stages of assessing the headwaters of the Little Avon catchment

https://bristolavonriverstrust.org/assessing-the-status-of-the-little-avon-headwaters/

49 Partnerships, Bath River Line

https://bathriverline.co.uk/index.php

50 Partnerships, Bristol Avon Flood Strategy

https://democracy.bristol.gov.uk/documents/s57930/Appendix A Strategic Outline Case.pdf

51 Partnerships, Bristol Avon partnership

https://www.wessexwater.co.uk/bristolavon

52 Partnerships, Brit Valley and Marshwood Vale

https://www.dorsetaonb.org.uk/wp-content/uploads/2020/12/Strategic-Landscape-Plan-Brit-Valley-and-Marshwood-Vale-Dec-2020-1.pdf

53 Partnerships, Brue Catchment

https://www.fwagsw.org.uk/Handlers/Download.ashx?IDMF=88ac1ffb-a0b1-4db1-922ac504894bee38

54 Partnerships, Cerne and Sydling Valleys

https://www.dorsetaonb.org.uk/wp-content/uploads/2021/03/Strategic-Landscape-Plan-Cerne-and-Sydling-Valleys-Dec-2020-1.pdf

55 Partnerships, 2020, Climate change risk assessments (ccra3) Future flood risk <u>https://www.ukclimaterisk.org/</u>

56 Partnerships, Dorset partnership

https://www.wessexwater.co.uk/dorset

57 Partnerships, Dorset Stour Catchment Initiative

https://www.wessexwater.co.uk/environment/catchment-partnerships/stour-catchmentpartnership

58 Partnerships, Frome River Strategy

https://friendsoftheriverfrome.co.uk/wp-content/uploads/2020/07/Frome-River-Strategy-2020-Flnal-web.pdf

59 Partnerships, Hampshire Avon partnership

https://www.wessexwater.co.uk/environment/catchment-partnerships/hamphire-avoncatchment-partnership

60 Partnerships, Poole Harbour Catchment Initiative

https://www.wessexwater.co.uk/environment/catchment-partnerships/poole-harbourcatchment-partnership

61 Partnerships, River Chew Reconnected https://theriverstrust.org/about-us/news/green-recovery-challenge-fund-rivers-are-winners

62 Partnerships, River Frome Reconnected https://www.southglos.gov.uk/environment/frome-reconnected-project/

63 Partners, Somerset Catchment Market for the Parrett and Tone catchments,

https://entrade.co.uk/news/somerset-catchment-market

64 Partners, Somerset Catchment Partnership https://www.fwagsw.org.uk/scp-somerset-project

65 Partners, Somerset partnership

https://www.wessexwater.co.uk/environment/catchment-partnerships/somerset-catchment-partnership

66 Partners, South Purbeck https://wessexwater.sharepoint.com/sites/SC0005/F001/DWMP%20documents/20200624_P lanningObjectives_Treatment.pptx

67 Partners, Tone Catchment https://www.fwagsw.org.uk/Handlers/Download.ashx?IDMF=94feef46-e8d0-4b25-9516-7c0264bedf97

68 Partners, WDRCS assessment of the issues within the area https://www.dorsetaonb.org.uk/wp-content/uploads/2019/04/FINAL-WDRCS-short-report-V2.pdf

69 Partners, West Dorset Rivers and Coastal Streams Tbc

70 Partners, Working together to improve the water environment http://www.catchmentbasedapproach.org/

71 UK Climate risk, 2021, The Third UK Climate Change Risk Assessment Technical Report (CCRA3)

https://www.ukclimaterisk.org/

72 UKCP, UKCP18 Marine report

https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp 18-marine-report-updated.pdf

73 WaterUK, 21st Century Drainage Programme

https://www.water.org.uk/policy/improving-resilience/21st-century-drainage

74 WaterUK, 2019, A framework for the production of Drainage and Wastewater Management Plans

https://www.water.org.uk/wp-content/uploads/2018/12/Water-UK-DWMP-Framework-Report-Main-Document.pdf

75 WaterUK, Planning objectives (common)

https://www.water.org.uk/wp-content/uploads/2020/07/BRAVA-planning-objectives-for-thefirst-cycle-of-DWMPs.pdf

76 WaterUK, 2018, Wipes in sewer blockage study Tbc

77 WaterUK, Working together to improve drainage and environmental water quality – an overview of DWMP

https://www.water.org.uk/wp-

content/uploads/2021/10/Working Together an overview of Drainage and Wastewater <u>Management Plans.pdf</u>

78 Wessex Water, 2022, Bristol water recycling centre scheme – visualisation https://www.youtube.com/watch?v=isnLt2eVupg

79 Wessex Water, 2018, Call to ban 'flushable' wet wipes https://www.youtube.com/watch?v= uyKfdhD8WA

80 Wessex Water, 2021, Climate change adaptation report - tackling the climate emergency

https://www.wessexwater.co.uk/-/media/files/wessexwater/environment/carbon-andclimate/wessex-water-climate-change-adaptation-report.pdf

81 Wessex Water, 2022, Cromhall Wetland Investigation https://www.wessexwater.co.uk/-/media/files/wessexwater/environment/cromahll-wetlandinvestigation-report-executive-summary-2022.pdf

82 Wessex Water, 2022, DWMP portal https://arcg.is/1K8GaH

83 Wessex Water, 2022, DWMP website

https://www.wessexwater.co.uk/environment/drainage-and-wastewater-management-plan

84 Wessex Water, 2022, Help paying your bill https://www.wessexwater.co.uk/your-account/help-paying

85 Wessex Water, 2018, How ground water causes sewer flooding https://www.youtube.com/watch?v=7b4uaY4H1Tk

86 Wessex Water, 2021, How to avoid blockages in your home https://www.youtube.com/watch?v=ymHjYt_AIRM

87 Wessex Water, North Bristol relief sewer – a tunnelling breakthrough https://www.youtube.com/watch?v=6vgn2tz1drU

88 Wessex Water, Operation streamclean https://www.wessexwater.co.uk/-/media/files/wessexwater/your-home/help-andadvice/plumbing/operation-streamclean.pdf

89 Wessex Water, Our promise to household customers

https://www.wessexwater.co.uk/-/media/files/wessexwater/your-home/commitments-andpromises/ourpromisehouseholdcustomers.pdf

90 Wessex Water, 2021, Outcome Based Environmental Regulation https://www.wessexwater.co.uk/corporate/strategy-and-reports/performance/ober-report

91 Wessex Water, 2022, Pollution Incident Reduction Plan (PIRP) https://www.wessexwater.co.uk/environment/protecting-and-enhancing-theenvironment/pollution-incident-reduction-plan

92 Wessex Water, 2022, routemap to net zero carbon

https://www.wessexwater.co.uk/-/media/files/wessexwater/environment/carbon-andclimate/net-zero-report.pdf

93 Wessex Water, Storm overflow https://www.wessexwater.co.uk/services/sewerage/storm-overflows

94 Wessex Water, 2022, Storm Overflows Improvement Plan 2022-2025

https://www.wessexwater.co.uk/-/media/files/wessexwater/environment/storm-overflowsimprovement-plan-2022-25.pdf

95 Wessex Water, Strategic Direction Statement

https://www.wessexwater.co.uk/corporate/strategy-and-reports/our-strategic-direction

96 Wessex Water, surface water policy for minor development https://www.wessexwater.co.uk/services/building-and-developing/planning-liaison

97 Wessex Water, Surface water reduction incentive

https://www.wessexwater.co.uk/help-and-advice/your-wastewater/surface-water-drainage

98 Wessex Water, 2022, The journey of your poo: how sewage is treated https://www.youtube.com/watch?v=BWJFmpek8mQ

99 Wessex Water, 2021, Understanding your sewer network and pipework https://www.youtube.com/watch?v=geNIFqxhQEs

100 Wessex Water, 2022, Warleigh Weir investigations <u>https://www.wessexwater.co.uk/warleigh-weir</u>

101 Wessex Water, **2020**, Wessex chalk streams project https://www.youtube.com/watch?v=SnFkueSn084

102 Wessex Water, 2021, What to do if you have a blockage? https://www.youtube.com/watch?v=h0yD9XgRf_o

 103
 Wessex Water, 2020, Wild swimming - what you need to know

 https://www.youtube.com/watch?v=T3nk2DugArA

 104
 WRFCC , WRFCC strategy

 https://www.gov.uk/government/groups/wessex-regional-flood-and-coastal-committee

105WW CCG,Wessex Water Customer Challenge Grouphttps://wessexwaterccq.co.uk/about-the-group

106 Partners, Catchment based approach http://www.catchmentbasedapproach.org/

107 EA, 2018, Storm overflow assessment framework (SOAF) https://www.water.org.uk/wp-content/uploads/2018/12/SOAF.pdf

108 Defra, 2022, Storm overflow discharge reduction plan (SODRP)

https://www.gov.uk/government/publications/storm-overflows-discharge-reduction-plan

109 Ofwat, 2022, PR24 and beyond final guidance on long term delivery strategies <u>https://www.ofwat.gov.uk/publication/pr24-and-beyond-final-guidance-on-long-term-delivery-strategies/</u>

110 BBC, 2022, Global warming set to break key 1.5C limit for first time https://www.bbc.co.uk/news/science-environment-65602293

111Wessex Water, 2022,Biodiversity action planhttps://corporate.wessexwater.co.uk/our-future/our-plans/biodiversity-action-plan

112Bristol City Council,Local Flood Risk Management StrategyBristol Local Flood Risk Management Strategy

113 Water UK, 2017, Valuing the benefits of storm discharge improvements for use in cost-benefit analysis, Report ref. NL5946

114 Ofwat, 2019, Outcomes definitions - PR19 https://www.ofwat.gov.uk/outcomes-definitions-pr19/

Other reference sources include:

UKWIR 2014 Economics of infiltration reduction	in
	in
UKWIR 2018 FOG control and FOG collection	in
UKWIR 2016 How best to align the funding processes with the various bodies	
resolving flooding	
UKWIR 2020 Implementing ecosystem services and natural and social capita	
accounting approaches - phase 1	
UKWIR 2017 Long term Investment in Infrastructure	
UKWIR 2019 Modelling solid transport and deposition in urban sewerage syst	ems
UKWIR 2022 Options for a Sustainable Approach to Asset Maintenance and	
Replacement	
UKWIR 2016 Practicalities - planned preventative maintenance - managing se	wer
blockages	
UKWIR 2015 Realising the wider benefits of sustainable drainage	

UKWIR	2017	Resilience – performance measures, costs and stakeholder
	comm	unication
UKWIR	2020	Source Apportionment GIS Model (SAGIS)
UKWIR	2019	Surface water drainage
UKWIR	2021	Understanding asset risk
UKWIR	2013	Use of active system control when designing sewerage schemes
UKWIR	2018	Wastewater treatment works Flow to full treatment
UKWIR	2020	When is surface water removal the most cost effective solution
UKWIR	TBC	Framework for Expenditure Decision Making
WRC	2020	Reducing sewer blockages: Delivering a step change