



Glossary

Introduction

Like many industries, the water sector uses a variety of jargon – acronyms, words and phrases that act as shorthand when people who work within it talk to each other.

We know that people outside the industry in most cases won't be fully familiar with these terms, so we try not to use them when talking to customers and other stakeholders. Despite this, we're aware that we may occasionally, and unintentionally, include some of this jargon when talking about what we do.

That's why we've come up with this brief guide to some of the language and concepts commonly used within the water business.

Glossary

Acronym	Description
Amm	Ammonia (Amm) is one of the key parameters used to assess water pollution, as high concentrations are toxic to wildlife. Sewage Treatment Works (STW) [see below] discharges (treated sewage effluent) usually have a limit, expressed as 'ammoniacal nitrogen'.
AMP	The Asset Management Period (AMP) is the five year period during which prices are fixed as an outcome of the price review (PR) [see below]. The current period (2020-2025) is commonly known as AMP7 because it is the seventh cycle since the water industry was privatised in 1989.
BOD	Biochemical Oxygen Demand (BOD). A measure of the oxygen-depletion exerted by pollutants. Another parameter for assessing water quality and key limit applied to discharges of treated sewage effluent.
CaBA	<p>The Catchment Based Approach (CaBA) partnerships were brought in by Defra in 2011 to help achieve the Water Framework Directive initiatives. Catchment Partnerships are run by host organisations who organise meetings with a wide range of local organisations to promote collaborative working at a river catchment scale to realise environmental, social, and economic benefits.</p> <p>CaBA partnerships aim to drive cost-effective delivery on the ground; resulting in multiple benefits including improvements to water quality, enhanced biodiversity, reduced flood risk, resilience to climate change, and greater community engagement with their local water cycle and river system.</p>
CBA	Cost benefit assessment (CBA) is a widely applied valuation technique used to inform decisions on investment, that compares the cost with the monetised benefit.
CCG	The New Customer Challenge Group (CCG) is an independent body of selected customer representatives, regulators and stakeholders. CCG's role is to constructively challenge Thames Water on the quality of its engagement

	<p>with the customers and communities it serves, the extent to which customer priorities are reflected in what the company does, and the company's delivery against those priorities. You can find out more about Thames Water's CCG here:</p> <p>https://www.thameswater.co.uk/about-us/performance/our-customer-challenge-group</p>
Consumer Council for Water	<p>The Consumer Council for Water (CCW) is an independent body that represents customers' interests relating to price, service and value for money as well as conducting independent research and investigating customers' complaints relating to water quality.</p>
CSO	<p>From our sewerage network we have intermittent discharge provisions called combined sewer overflows (CSOs). These reflect that as well as 'foul' sewage, our network also often receives large volumes of excess water during periods of high rainfall. The sewers may become full and in order to prevent excess storm water / sewage backing up in the network and flooding people's homes, discharges are made to the environment via CSOs. The operation of CSOs is permitted by the Environment Agency, subject to conditions, although these do not include quality parameters and such discharges, whilst diluted, do not normally receive treatment beyond perhaps a physical screen.</p> <p>The term is often used interchangeably, (if incorrectly) to describe any untreated or partially treated discharge of storm sewage [see below].</p>
DEFRA	<p>The Department for Environment, Food and Rural Affairs (DEFRA) is the UK government department responsible for safeguarding our natural environment, supporting the food and farming industry and rural economy. DEFRA sets the overall water and sewerage policy framework in England including setting standards and drafting legislation.</p> <p>Defra is the Governmental body that oversees the role of the Environment Agency.</p>
DWF	<p>Dry Weather Flow (DWF) is the notional volume of sewage expected to be treated at a treatment works under dry weather conditions. It reflects the underlying baseload of sewage from the community served, and is used to set the quality conditions required for a discharge.</p>
DWI	<p>The Drinking water inspectorate (DWI) is the body which regulates the quality of our tap water.</p>
DWMP	<p>Drainage and Wastewater Management Plans (DWMP) are the new way for organisations to work together to improve drainage and environmental water quality. Fundamental to the DWMP process is the expectation that all organisations with interests and/or responsibilities relating to drainage, flooding and protection of the environment will work together throughout the preparation of the plan to ensure any interventions are sustainable.</p> <p>https://www.thameswater.co.uk/about-us/regulation/drainage-and-wastewater-management</p>

EA	<p>The Environment Agency (EA) is a non-departmental public body which is the principal adviser to the government and main body set up to protect and improve the environment in England and Wales. The EA seeks to maintain and improve the quality of raw water in England and Wales and is responsible for issuing water companies with abstraction licenses and environmental permits. They also work in collaboration with other organisations to reduce flood risk, promote sustainable development and secure environmental and social benefits.</p> <p>The role of the Environment Agency is overseen by Defra.</p>
EDM	<p>Event Duration Monitors (EDMs) measure time and duration for which discharges of storm sewage [see below] are made to the environment from network or treatment assets. They do not measure the volume of any discharge.</p>
FFT	<p>Flow to Full Treatment (FFT) is the maximum rate of flow that can be treated by a Sewage Treatment Works (STW) [see below] following wet weather. It is also sometimes referred to as the 'storm exceedance flow' – the flow that a works should treat before storm discharges are made from the works.</p>
Infiltration	<p>Infiltration is the unplanned ingress of water into sewers (and drains) usually from the surrounding subsoil. It is a recognised component of sewage, as sewers are not expected to be watertight, but the extent varies with location and weather, and is different to 'planned' ingress such as from roofs and roads.</p>
INNS	<p>Species which have been introduced into areas outside their natural range through human actions and are posing a threat to native wildlife, are known as invasive non-native species (INNS).</p>
MCERTS	<p>MCERTS is the Environment Agency's Monitoring Certification Scheme for monitoring equipment used by environmental permit holders, such as Thames Water, and can cover emissions to air, land or water. Specifically, MCERTS accreditation is required for effluent flow monitoring to ensure that the reported values are of suitable quality.</p>
NE	<p>Natural England (NE) is a non-departmental public body in the UK, sponsored by Department for Environment, Food and Rural Affairs (Defra). They're responsible for ensuring England's natural environment, including its land, freshwater and marine environments are protected and improved.</p>
Ofwat	<p>The Office of Water Services (Ofwat, or more correctly the Water Services Regulation Authority) is the economic regulator of the water and sewerage industry in England and Wales [see PR below].</p>
P	<p>Phosphorous is an essential element for life but if available in excess in waters can lead to eutrophication. It is an important parameter to assess water quality and features as a limit on many larger STWs [see below].</p>
PR	<p>The price review (Periodic Review of Prices, PR) is a process led by the water industry's economic regulator Ofwat, that leads to a final determination</p>

	that sets out the price limits and the service levels and quality obligations we need to deliver for the following AMP period. It is usually set in 5-year blocks and is linked to the outputs set out in the WINEP [see below]; in February 2020 we accepted the final determination for AMP7 (2020-25) following the PR19 process. The next price review will be called PR24 and will determine our final determination for 2025-2030.
RBMP	River basin management plans (RBMPs) set out how organisations, stakeholders and communities will work together to improve the water environment to meet the requirements of the Water Framework Directive. Thames Water operate in the Thames river basin district. For water and sewerage companies, the measures in the RBMP should reflect those in the WINEP
SBI	Sites of Biodiversity Interest (SBIs) are those which have been identified, by Thames Water, as of significant interest to biodiversity. During AMP7 we have a performance commitment with Ofwat to improve the biodiversity on our SBIs by 5%.
Sewage Effluent	The generic description for discharges of sewage from sewerage assets, which may be untreated, partially treated or fully treated, before being made to the environment.
Sludge (biosolids)	Sewage sludge is the other principal product of the wastewater treatment process, being the residual solids after treatment. Sludge is collected from smaller sites and will be further treated at sludge treatment centres where, in general, it is 'digested' to produce biogas for fuel and biosolids. The biosolids are then returned to farmland as a soil improver/conditioner.
SPS	Sewage Pumping Station. Generally, these simply pump sewage away to another sewer or direct to the treatment works. Some, but not all, have provision for a storm sewage overflow to avoid flooding either following wet weather or in emergency situations.
SPS	Sewage Pumping Station (SPS)
SS	Suspended Solids are the other main parameter that are controlled (limited) in discharges of sewage effluent. Of less value in assessing river quality due to variability following rainfall.
SSSI	A Site of Special Scientific Interest (SSSI) is a formal conservation designation. Usually, it describes an area that's of particular interest to science due to the rare species of fauna or flora it contains - or even important geological or physiological features that may lie in its boundaries. There are several SSSIs within our operational boundaries.
Storm Overflow	A generic term to cover all or any type of discharge of storm sewage, so including CSO discharges, pumping station overflows, and those from storm tanks on works.
Storm Sewage	'Storm Sewage' is the phrase which is used to describe the higher flows of diluted sewage in wet weather or abnormal weather i.e. snow melt.

Storm Tank/ Storm land treatment area	Storage/settlement tank(s) which are used when the flow arriving at a sewage treatment works exceeds its treatment capacity (FFT). In the first instance, the storm sewage is held in the tank and later returned to the flow for full treatment; with persistent high flows, the storm tank(s) act as a settlement stage for the subsequent discharge of storm sewage. Not all STWs have storm tanks; some smaller village works treat all incoming flows, whilst a few have a land treatment area to provide comparable treatment.
STW	Sewage Treatment Works (STW)
Surface/ Storm Water	Surface water (Storm water) the runoff from roads and urban areas that is not mixed with foul sewage and is discharged without any treatment. Where possible this should be excluded from foul or combined sewers.
SWC	<p>Our Smarter Water Catchments initiative tests a more holistic approach to catchment management through a variety of very different but equally ambitious projects.</p> <p>The Smarter Water Catchments (SWC) programme for 2020 – 2025 includes three partnership projects (focusing on the Rivers Evenlode, Chess and Crane) and working with key stakeholders to join up existing and new activities, addressing a range of issues and providing multiple benefits. It will build detailed evidence of the costs and benefits of this new approach, helping us and others assess the potential to adopt catchment management on a larger scale more widely in our region.</p> <p>This is an Ofwat regulated performance commitment.</p>
SWOP	Our Surface Water Outfall Programme (SWOP) aims to identify outfalls to watercourses that are suffering from wastewater pollution. These outfalls are diagnosed with widespread sources, which are most likely third-party misconnections. Misconnections occur when domestic appliances are connected to surface water drains rather than foul waste pipes. Once identified they are highlighted to the relevant customer and where appropriate escalated to the local authority to ensure they are resolved.
Turbidity	A measure of the 'cloudiness' of water which may (or may not) relate well to the quantity of suspended solids and is not a parameter used to regulate STWs.
UWWTD	The Urban Waste Water Treatment Directive, implemented in the UK by regulations (UWWT Regulations, 1994). Establishes the minimum quality of treated effluent for discharge, according to size of STW and status of receiving water, and sets out expectations for the sewerage network.
WFD	Water Framework Directive. The overarching 'water quality' directive that sets quality standards for the UK rivers, as augmented by UK standards. It has a target of 'good status' for all waters by 2027.
WINEP	The Water Industry National Environment Programme (WINEP) represents a set of actions that the Environment Agency have obligated all 20 water

	<p>companies operating in England, to complete between 2020 and 2025, in order to contribute towards meeting their environmental obligations.</p> <p>The national WINEP programme will help to tackle some of the biggest challenges facing the water environment, from the spread of invasive species and low flows to the effects of chemical and nutrient pollution. The details of the schemes included in the WINEP are available online, for anyone to view and download, see here: https://data.gov.uk/dataset/a1b25bcb-9d42-4227-9b3a-34782763f0c0/water-industry-national-environment-programme.</p> <p>Our WINEP investment can be broadly divided into eight main categories:</p> <ol style="list-style-type: none"> 1. Sewage treatment works (STW) upgrades – Investment to enhance wastewater treatment to improve or protect the quality of the receiving waterbody. 2. Monitoring and investigation schemes – Investment to understand better how our operational activities may impact on the environment and how these could be improved to reduce this impact. 3. Conservation schemes – Investment to meet specific conservation measures to reduce our impact on protected sites or biodiversity. 4. Investigations into emerging risks – Investment to understand emerging risks facing the water industry such as microplastics and antimicrobial resistance or to understand if abstractions are having a negative impact on ecology. 5. Catchment management activities – Investment to manage pesticides, nitrates and herbicides in surface and ground waters through catchment activities. 6. Alleviating low flows – Investment to investigate or undertake work to alleviate the impacts that our abstractions have on low flows. 7. Reducing environmental impact of river structures – Investment to improve fish passage in waterbodies through work on our assets where they have been proven to be a blocker. 8. Addressing invasive non-native species (INNS) – Investment to investigate and implement measures to reduce the risk of INNS associated with our activities.
WPS	Water Pumping Station (WPS)
WRMP	<p>Every five years Thames Water prepares a Water Resources Management Plan (WRMP) which sets out how we will provide a secure and sustainable water supply for our customers, whilst protecting the environment. Our plan is available to read and download: https://www.thameswater.co.uk/about-us/regulation/water-resources.</p>
WRSE	<p>Water Resources South East (WRSE) is made up of an alliance of the six water companies that cover the South East region of England. The aim of WRSE is to secure the water supply for future generations through a collaborative, regional approach to managing water resources. https://www.wrse.org.uk/</p>
WRZ	To tailor our Water Resource Management Plan (WRMP) to our vast supply area we have divided our supply area into six different water resource zones

	<p>(WRZs). The Thames Water drinking water supply area is split into six different Water Resource Zones (WRZs):</p> <ul style="list-style-type: none"> • Swindon and Oxfordshire (SWOX) • Slough, Wycombe and Aylesbury (SWA) • Kennet Valley • Guildford • Henley • London
WTW	Water Treatment Works (WTWs)

