

Glossary of terms and abbreviations

Abstraction The removal of water from any source, either permanently or temporarily.

Abstraction licence

The authorisation granted by the Environment Agency to allow the removal of water from a source.

ACORN

A Classification Of Residential Neighbourhoods (ACORN) is a socio-demographic classification of neighbourhoods published by CACI Ltd. The system is based on the assumption that people who live in similar neighbourhoods are likely to have similar behavioural and consumption habits.

Allowable outage

The outage (calculated from legitimate unplanned and planned events) which affects the water available for use. An outage allowance may be made for such outages.

Annual average

The total demand in a year, divided by the number of days in the year.

Available headroom

The difference (in MI/d or percent) between water available for use (including imported water) and demand at any given point in time.

Average day demand in peak week

One seventh of total demand in the peak week in any 12 month accounting period (ADPW).

Average incremental social costs

The ratio of present social costs over present net value of additional water delivered or reduced demand

Baseline forecast

A demand forecast which reflects a company's current demand management policy but which should assume the swiftest possible achievement of the current agreed target for leakage during the forecast duration, as well as implementation of the company water efficiency plan, irrespective of any supply surplus.

Consumption monitor

A sample of properties whose consumption is monitored in order to provide information on the consumption and behaviour of properties served by a company.

Demand management

The implementation of policies or measures which serve to control or influence the consumption or waste of water (this definition can be applied at any point along the chain of supply).

Deployable output

The output of a commissioned source or group of *sources* or of bulk supply as constrained by: environment

- Licence, if applicable
- Pumping plant and/or well/aquifer properties
- raw water mains and/or aquifers
- transfer and/or output main
- treatment
- water quality

Distribution input

The amount of water entering the distribution system at the point of production

Distribution losses

Made up of losses on trunk mains, service reservoirs, distribution mains and communication pipes. Distribution losses are distribution input less water taken

Distribution system operation use (DSOU)

Water knowingly used by a company to meet its statutory obligations particularly those relating to water quality. Examples include mains flushing and air scouring

Drought order

An authorisation granted by the Secretary of State under drought conditions, which imposes restrictions upon the use of water and/or allows for abstraction/impoundment outside the schedule of existing licences on a temporary basis.

Drought permit

An authorisation granted by the Environment Agency under drought conditions, which allows for abstraction/impoundment outside the schedule of existing licences on a temporary basis.

Dry year annual average unrestricted daily demand

The level of demand, which is just equal to the maximum annual average, which can be met at any time during the year without the introduction of demand restrictions. This should be based on a continuation of current demand management policies. The dry year demand should be expressed as the total demand in the year divided by the number of days in the year.

Final planning demand forecast

A demand forecast, which reflects a company's preferred policy for managing demand and resources through the planning period, after taking account of all options through full economic analysis.

Final planning scenario

The scenario of water available for use and final planning demand forecast which constitute the company's best estimate for planning purposes, and which is consistent with information provided to Ofwat for the Periodic Review.

Forecast/plan horizon

The end date of demand forecast or water resources plan (for example, 2035).

Maximum Likelihood Estimation (MLE)

A statistical technique where a reconciliation item is distributed to the largest and least certain components of an estimate of the magnitude of a variable. The technique can be applied to the reconciliation of a water balance.

Meter optants

Properties in which a meter is voluntarily installed at the request of its occupants.

Meter programme Properties, which are to be metered according to current company metering policy.

Micro-component analysis

The process of deriving estimates of future consumption based on expected changes in the individual components of customer use.

Net Present Value

The difference between the discounted sum of all of the

benefits arising from a project and the discounted sum of all the costs arising from the project.

Non-households Properties receiving potable supplies that are not occupied as domestic premises, for example, factories, offices and commercial premises.

Normal year annual average daily demand

The total demand in a year with normal or average weather patterns, divided by the number of days in the year.

Outage

A temporary loss of deployable output. (Note that an outage is temporary in the sense that it is retrievable, and therefore deployable output can be recovered. The period of time for recovery is subject to audit and agreement. If an outage lasts longer than 3 months, analysis of the cause of the problem would be required in order to satisfy the regulating authority of the legitimacy of the outage).

Point of abstraction

The top of a borehole for borehole abstraction; the river intake for a river abstraction to direct supply or bankside storage; the draw-off tower for a direct supply reservoir.

Point of consumption

The point where the supply pipe rises above ground level within the property, usually the inside stopcock or an internal meter.

Point of delivery The point at which water is transferred from mains or pipes, which are vested in the water supplier into, pipes which are the responsibility of the customer. In practice this is usually the outside stopcock, boundary box or external meter.

Point of production

The point where treated water enters the distribution system.

Potable water produced

Raw water treatment less treatment works operational use and treatment work losses

Potable water exported

Potable water exports from within a defined geographical area to an area outside the defined geographical area

Potable water imported

Potable water imports from outside a defined geographical area to the defined geographical area.

Raw water abstracted

Raw water abstracted at the point where abstraction charges are levied. It is made up of raw water retained and raw water exported

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Raw water collected

Raw water retained plus raw water imported

Raw water Exported

Raw water exported from a specific geographical area

Raw water imported

Raw water imported from outside of a specified Imported geographical area

Raw water losses The net loss of water to the resource system, comprised of mains/aqueduct (pressure system) losses, open channel/very low pressure system losses, and losses from break-pressure tanks and small reservoirs.

Raw water operational use

Regular washing-out of mains due to sediment build-up and poor quality of source water.

Reconciliation item

The difference between the estimates of the magnitude of a variable and the sum of the estimates of the individual components of that variable.

Resource zone The largest possible zone in which all resources, including external transfers, can be shared and hence the zone in which all customers experience the same risk of supply failure from a resource shortfall.

Risk A measure of the probability and magnitude of an event and the consequences of its occurrence.

Source A named input to a resource zone. A multiple well/spring source is a named place where water is abstracted from more than one operational well/spring.

Supply-demand balance

The difference between water available for use (including imported water) and demand at any given point in time (c.f. available headroom).

Supply pipelosses

The sum of underground supply pipe losses and above ground supply pipe losses.

Sustainability reduction

Reductions in deployable output required by the Environment Agency to meet statutory and/or environmental requirements.

Target headroom

The threshold of minimum acceptable headroom, which would trigger the need for water management options to increase water available for use or decrease demand.

Total leakage

The sum of distribution losses and underground supply pipe losses.

Total water management

All water management activities from source to end use (i.e. resource management, production management, distribution management and customer-side management).

Treatment work losses

The sum of structural water loss and both continuous and intermittent over-flows

Treatment work operational use

Treatment process water i.e. net loss, which excludes water returned to source water

Underground supply pipe losses

Losses between the point of delivery and the point of consumption

Unrestricted demand

The demand for water when there are no restrictions in place (this definition can be applied at any point along the chain of supply).

Void property A property connected to the distribution network but not charged because it has no occupants.

WRP tables Water resources plan tables used for presenting key quantitative data associated with a water resources plan.

Water available for use

The value calculated by deducting allowable outages and planning allowances from deployable output in a resource zone.

Water delivered

Water delivered to the point of delivery

Water delivered billed

Water delivered less water taken unbilled. It can be split into unmeasured household, measured household, unmeasured non-household and measured non-households water delivered

Water taken

Distribution input minus distribution losses

List of abbreviations

ADPW	Average day demand peak week
AISC	Average incremental social cost
CAMS	Catchment abstraction management strategies
CAPEX	Capital expenditure
CLG	Communities and Local Government department
Defra	Department for Environment, Food and Rural Affairs
DETR	Department of Environment, Transport and the Regions; (now Defra)
DoE	Department of the Environment; (now Defra)
DO	Deployable output
GCM	Global circulation models
MI/d	Megalitres per day Megalitres = one million litres (1000 cubic metres)
MLE	Maximum Likelihood Estimation
ODPM	Office of the Deputy Prime Minister (now replaced by CLG department).
Ofwat	The Water Services Regulation Authority
ONS	Office for National Statistics
OPEX	Operating expenditure
PCC	Per capita consumption - consumption per head of population
SOA	Super Output Areas
UKCIP	UK Climate Impacts Programme
UKWIR	United Kingdom Water Industry Research Limited
WAFU	Water available for use
WAG	Welsh Assembly Government
WCA	Water Companies Association
WRP	Water resources plan
WSA	Water Services Association
Water UK	Water UK (formerly known as the Water Services Association)