

SECTION 11: GLOSSARY

(with thanks to the EA LEAP)

Above Ordnance Datum (AOD): land levels are measured relative to the average sea level at Newlyn in Cornwall. This average level is referred to as 'Ordnance Datum'. Contours on Ordnance Survey maps of the UK show heights in metres above Ordnance Datum.

Abstraction: the process of taking water from any source, either temporarily or permanently.

Alluvial: referring to materials eroded, transported and deposited by the action of river flow.

Ammonia: a chemical found in water, often as a result of discharge of sewage effluent. High levels of ammonia affect fisheries and abstractions for drinking water supply.

Asset Management Plan (AMP): a programme of water companies' environmental improvement schemes (known as AMP schemes), linked to Ofwat's five-yearly Final Determination of Water Company Prices. This is enforced by the EA under the National Environmental Programme, which states what improvements each company must make. For instance, improvements to sewage treatment works will usually be stated as the new discharge permit limits.

Aquifer: a layer of porous rock able to hold or transmit water.

Backwater: a ponded side channel connected to the main river that holds still or slow-flowing water. These can act as nursery sites for fish and as refuges for wildlife from high flow conditions or pollution incidents.

Baseflow: the flow in a river derived from groundwater sources.

Biodiversity: the variety of life on earth.

Biomass: a quantitative measure of animal and / or plant matter.

By-pass channel: a channel built to divert water from a main channel. These may be used to enable fish passage upstream or down stream in areas where the main channel is effectively barricaded by a weir or other structure such as a culvert or trash screen.

Catchment: the area of land around a water body (such as a river or lake) that provides its water supply. A catchment boundary is known as its watershed.

Coarse fish: a common term for cyprinid fish (eg roach, bream, carp and chub) and other commonly associated species of angling importance such as pike, perch and eels. The term is not usually used in reference to minor species such as bullhead, stone loach, minnow and stickleback.

Combined Sewer Overflow (CSO): an overflow structure that permits a discharge from the sewerage system during wet weather.

Confluence: the point at which two rivers meet.

Culvert: a watercourse that has been piped or covered to carry water underground, usually under a road, canal, embankment etc.

Cyprinid fish: fish of the Family Cyprinidae (eg roach, bream, carp and chub). Commonly also known as **coarse fish**.

Diffuse pollution: pollution without a single point source (eg urban runoff, pesticides, acid rain).

Dissolved oxygen (DO): the amount of oxygen dissolved in water. Oxygen is vital for life so this measurement is an important, but highly variable, indicator of the 'health' of a water body. DO is used to classify waters.

Ecosystem: a biological community of interacting organisms and the physical environment that they inhabit and rely on.

Ecosystem Approach: the management of natural resources at the landscape scale that balances both their use and conservation fairly.

Ecosystem Services: the benefits people obtain from ecosystems.

Eutrophication: the enrichment of water by nutrients, such as compounds of nitrogen and phosphorus. It causes accelerated growth of algae and other, higher, plants and can have negative consequences for ecosystem 'health' if allowed to reach too high a level.

Fauna: animals.

Flash flood: sudden high flows shortly after rainfall.

Floodplain: the parts of river valleys or coastal plains which are inundated during floods. It includes areas protected by flood defences.

Fry: a baby fish that has hatched and absorbed its egg yolk and is only a few centimetres long

Groundwater: water that is contained in the spaces in pervious rocks and also within the soil.

Hydrogeology: the branch of geology concerned with water within the earth's crust.

Hydrograph: a graph showing water height (known as stage) or discharge (rate of flow) plotted against time.

Hydrology: the study of water and its dynamics of flow.

Impoundment: a structure that impedes the flow of water (eg a weir) which often causes water to back up into a pool.

Local Nature Reserve (LNR): a nature reserve established and usually managed by a Local Authority. The remit of Local Authorities to designate such sites falls under the National Parks and Access to the Countryside Act 1949.

Meander: a winding curve or bend in a river.

Morphology: the science of the form and structure of features, such as a river channel.

Naturally functioning: processes such as nutrient cycling and flow regulation that would normally be associated with a particular ecosystem.

Outfall: a point where a pipe discharges, for example into a river.

pH: a measure of the concentration of hydrogen ions in solution. Water with pH less than 7 is acid, 7 itself is neutral and more than 7 is alkaline or base.

Parr: a young trout or salmon less than 1 year old and distinguished by a series of dark “finger print” markings along its body.

Potable water: water suitable for human consumption.

Reach: a stretch of river.

Riffle: a shallow, stony or gravelly part of a riverbed where the water surface is broken in low flows.

Riffle-pool: a natural sequence of broken water flow and deeper areas characteristic of rivers with gravel beds.

Riparian zone: the land adjoining a river or stream.

River terrace: a lateral bench between a river channel and its valley sides.

Runoff: commonly used term to mean rainwater flowing across land (also known as overland flow). In urban areas, where impervious surfaces may be abundant, the amount of runoff is likely to be higher than in rural areas where rainwater can enter the ground where it falls more easily.

Salmonid fish: fish of the Family Salmonidae (eg trout and salmon).

Self-sustaining: populations or ecosystems that are able to maintain themselves without external assistance.

Surface water: a general term to describe all visible water features such as rivers and ponds.

Sustainable development: development that meets present needs without compromising the ability of future generations to meet their own requirements.

Sustainable Urban Drainage Systems (SUDS): a collective term used to describe the management of runoff at or near the point where rainfall meets the ground and before it enters either the piped drainage systems of urban areas or watercourses. The aim is to attenuate surface water flow quantity and speed and in so doing reduce flood risk and potential pollution impacts by using natural processes to filter out contaminants. Examples of SUDS include reedbeds, rain gardens, swales and balancing ponds.

Tributary: a stream or river which feeds into a larger one.

Watercourse: a stream, river or canal along which water flows.

Water table: the level below which the soil / rock is permanently saturated with water.

Weir: a low dam across a river.

Winterbourne: a seasonal stream, typically in the headwaters of a chalk or limestone river system, which flows only after prolonged rainfall has recharged the underlying aquifer

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