

Appendix 6: Glossary

AAMI is short for Australian Associated Motor Insurance Limited, an insurer which is part of the Suncorp Group Limited.

Allianz (otherwise known as Allianz Australia Insurance Limited) is an insurer which is a subsidiary of Allianz Australia Limited.

Annual Exceedance Probability (AEP) means the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. For example, if a peak flood discharge of 500m³/s has an AEP of 5%, it means that there is a 5% chance (1 in 20 chance) of a 500m³/s or larger event occurring in any one year (see ARI).

Anthill (as the term is used in this report) is used to describe a development that has been built in such a way that, during flood events, the area either becomes completely isolated or is difficult to reach by ordinary means.

Appliance is a term used by the fire service when referring to a vehicle used in its firefighting operations. Appliances include technical rescue vehicles, pumper tankers and fire command vehicles.

Area hydrology report is a report about the likely nature and causes of flooding on a regional or area basis (such as Brisbane or Emerald or the Somerset region) rather than property-by-property basis. Some hydrology reports covered particular postcode areas.

Assessable development is development for which development approval is needed before it can proceed. The types of development that are assessable are declared under section 232(1) of the *Sustainable Planning Act 2009*: a state planning regulatory provision, a planning scheme, a temporary local planning instrument, master plan or preliminary approval overriding the planning scheme.

Assessment criteria means those standards or controls contained in a planning instrument that a development application is assessed against.

Assessment manager (with respect to land planning) means the entity that administers and decides a development application under the *Sustainable Planning Act 2009*, but may not always assess all aspects of development for the application. For most development applications the entity is the council.

Australian Bureau of Meteorology (the Bureau) is Australia's national weather, climate and water agency.

Australian Height Datum (AHD) means a common national surface level datum approximately corresponding to mean sea level.

ASIC refers to the Australian Securities and Investments Commission, which is Australia's corporate, markets and financial services regulator, established under the *Australian Securities and Investments Commission Act 2001* (Cth).

Auxiliary firefighter is a paid part-time firefighter, located in regional communities across Queensland.

Average Recurrence Interval (ARI) means the long term average number of years between the occurrence of a flood as big as, or larger than, the selected event. For example, floods with a discharge as great as, or greater than, the 20 year ARI flood event will occur on average once every 20 years. ARI is another way of expressing the likelihood of occurrence of a flood event (see AEP).

Backflow flooding is flooding that occurs when the discharge point for a stormwater pipe that collects water from a low-lying area is located near a waterway and that discharge point becomes submerged by a tide, storm surge or floodwater, causing water to pass back through the pipe and out of inlets and manholes. Backflow flooding may occur even if the waterway does not breach its banks.

Backflow prevention device is a one-way or non-return valve installed at, or near, the point at which a stormwater pipe discharges into a waterway and designed to allow stormwater to discharge from a pipe into a waterway, but to close and seal to prevent water entering the pipe from the waterway. The purpose of the device is to ensure that, if the water levels rise in the waterway, water does not flow back through the stormwater network and flood low-lying areas (see backflow flooding, duckbill valves and flap gates).

Bowen basin is an area in central Queensland which has around 47 operating coal mines and extends over around 60 000 square kilometres between the town of Collinville in the north and Theodore in the south. The Bowen basin encompasses sections of the Fitzroy basin.

Building Code of Australia is a nationally uniform set of technical standards for the design and construction of buildings and other structures.

Building controls are standards that regulate the construction of buildings, as distinct from planning controls that regulate where buildings are constructed. These standards can be found in the Building Code of Australia and the Queensland Development Code, or in planning instruments.

Bund is a raised embankment or structure designed either to store or exclude water.

Calibrate (with respect to a hydrologic and hydraulic model) means to check values derived from the model against physical measurements. This is achieved by adjusting parameters (within an acceptable range and in a consistent manner) to best fit the physical measurements.

Catchment is the land area drained by a waterway and its tributaries.

CityCat is a network of catamaran ferries which form an inner city public transport system operated by the Brisbane City Council on the Brisbane River from Hamilton to the University of Queensland (St Lucia campus).

CityFerry is a network of ferries which form an inner city public transport system operated by the Brisbane City Council to connect the northern and southern banks of the Brisbane River.

Claims officer is an employee of an insurance company who processes insurance claims made by policy-holders.

Claims responsibilities refers to the responsibilities of insurers in handling claims under the contract of insurance, *Insurance Contracts Act 1984* (Cth) and the General Insurance Code of Practice.

Coal seam gas water means water contaminated as a result of the process of coal seam gas extraction.

Code (with respect to land planning) is part of a planning instrument in which assessment criteria are found.

Code assessment involves a basic assessment by the council of the information contained in the application against the applicable assessment criteria set out in codes in a planning scheme. The application must also be assessed against other matters specified in the *Sustainable Planning Act 2009*, including any state planning instruments, such as a state planning policy.

Code of Practice: see General Insurance Code of Practice.

Command and control (with respect to the State Emergency Service 'SES') refers to the ability to direct SES members and to use SES resources.

CommInsure (otherwise known as Commonwealth Insurance Limited) is an insurer which is part of the Commonwealth Bank Group.

Community infrastructure is development that provides services vital to the wellbeing of the community (State Planning Policy 1/03).

Compliance assessment (with respect to land planning) is the term used for the process of assessment of development that must be authorised by a compliance permit under the *Sustainable Planning Act 2009*. It is typically undertaken by a council.

Coral bleaching is a decrease in the algal density of corals which causes them to appear bleached. It is caused by, amongst other things, pollution and increases in water temperatures.

Council is a local government as defined in the *Local Government Act 2009*. The terms council and local government are used interchangeably in this report.

Councillor is an elected official of a local government (council), including the mayor.

Council of Australian Governments (COAG) is Australia's peak intergovernmental forum which comprises the Prime Minister, Premiers and Chief Ministers.

Culvert is a short passageway under a road, railway or embankment designed to allow stormwater to flow from one side to the other without being dammed.

Customer dedicated assets means electricity infrastructure that is constructed inside customer premises: usually commercial and industrial substations.

Defined flood event (DFE) is the flood event adopted by a local government for the management of development in a particular locality.

Defined flood level (DFL) is the level of a flood that would occur during a defined flood event (DFE).

Deployment (with respect to the SES) means the movement of SES members from their local government area to another area within Queensland or to another state or territory (see SES).

DERM is the Queensland Department of Environment and Resource Management.

Detention basins are depressions in the ground constructed for the purpose of catching and holding stormwater.

Development (with respect to land planning) is carrying out building work, plumbing or drainage work, carrying out operational work, reconfiguring a lot and making a material change of use. Operational work under the *Sustainable Planning Act 2009* includes works such as placing fill on land, constructing barriers in waterways or undertaking road works. Reconfiguring a lot includes undertaking a subdivision. The making of a material change of use can involve starting a new use on land, for example by establishing a use on vacant land or by changing a commercial use to a residential use, or materially increasing the intensity or scale of an existing use.

Development applicant / Applicant means the person who or entity that lodges a development application with an assessment manager.

Development application means an application for development approval under the *Sustainable Planning Act 2009*.

Dewatering (with respect to mining) means the draining of or removal of water from a mine.

Disaster management consists of the actions of groups and individuals within the disaster management hierarchy (such as local disaster management groups and local disaster co-ordinators) to manage the adverse effects of a disaster event, including, for example, arrangements for mitigating, preventing, preparing for, responding to and recovering from a disaster.

Disaster operations means activities undertaken before, during or after an event happens to help reduce loss of human life, illness or injury to humans, property loss or damage, or damage to the environment, including for example, activities to mitigate the adverse effects of the event. Disaster operations are typically undertaken by specialist response agencies such as the Queensland Police Service, Queensland Fire and Rescue Service, Queensland Ambulance Service and the State Emergency Service.

Disaster response is the taking of measures to respond to a disaster before, during and immediately after its onset including issuing warnings, providing medical assistance, evacuating people and establishing emergency food and shelter.

Discharge is the rate of flow of water measured in terms of volume per unit of time, for example, cubic metres per second (m^3/s). Discharge is different from the speed or velocity of flow, which is a measure of how fast the water is moving.

Distributor-retailer (with respect to sewerage infrastructure) means the three council-owned bodies established under the *South East Queensland Water (Distribution and Retail Restructuring) Act 2009* to take over the management and operation of sewerage infrastructure and services from councils: UnityWater, Queensland Urban Utilities and Allconnex.

District disaster co-ordinator (district co-ordinator) is the person appointed under the *(Disaster Management Act 2003*) to co-ordinate disaster operations in a disaster district, who is also the chairperson of the district group.

District disaster management group (district group) is a disaster management group established under the *Disaster Management Act 2003* to perform disaster management activities in a district.

Duckbill valves / Duckbill check valves are a type of backflow prevention device consisting of a valve made of a flexible moulded material which is fitted to the outlet of a stormwater pipe or other pipe to prevent backflow flooding (see backflow flooding, backflow prevention device and flap gates).

Easement is a right granted by the owner of land to another to make use of the land for a particular purpose.

Effluent is sewage in a liquid form that has been treated or partially treated.

Emergency Management Queensland is an agency within the Department of Community Safety that has overall responsibility for Queensland's disaster management arrangements (see disaster management).

Emergency Services Communications and Operational Response Tasking (ESCORT) is a computer aided despatch system used by the Queensland Police Service to despatch police officers in response to emergency calls.

Emergency Services Computer Aided Despatch (ESCAD) is a system used by the Department of Community Safety to despatch emergency services (fire and ambulance officers) in response to emergency calls.

Environmental authority means an authority issued under the *Environmental Protection Act 1994*.

Ephemeral watercourses/streams are those watercourses that are usually dry, but which flow during times of rainfall.

Essential services encompass electrical power, the provision of drinking water, sewerage, stormwater drainage, telecommunications and roads and rail.

Exempt development is development that does not require any development approval to proceed. (See section 235(1) of the *Sustainable Planning Act 2009*) It is defined in the *Sustainable Planning Act* as being development that is not assessable, self assessable or prohibited development or development requiring compliance assessment. (See section 231(2) of the *Sustainable Planning Act 2009*).

Fill is earthen or other material used to raise ground level.

Financial Ombudsman Service Limited is an independent dispute resolution service for financial service providers, including insurers, and their policy-holders. It has other functions which include monitoring insurers' compliance with the General Insurance Code of Practice and reporting systemic issues to ASIC. For more information see the Terms of Reference for the Financial Ombudsman Service.

Fitzroy basin means the catchment area encompassing the Fitzroy River, Don River, Dawson River, Comet River, Brown River, Nogoa River, Connors River, Isaac River and Mackenzie River, which is defined in Schedule 1 of the *Water Resource (Fitzroy Basin) Plan 2011* (made under the *Water Act 2000*).

Fitzroy model conditions are those conditions developed for inclusion in environmental authorities following severe flooding at the Ensham mine in 2008. The conditions arose from the Fitzroy River Water Quality Issues report and stipulate the quantity and quality of water that can be discharged from mines across the region.

Flap gates are a type of backflow prevention device consisting of a circular plate which is connected to the pipe outlet of a stormwater pipe or other pipe to prevent backflow flooding.

Flash flood is usually the result of intense local rain and characterised by rapid rises in water levels.

Flood event (with regard to Wivenhoe, Somerset or North Pine dams) means a situation where the flood engineer on duty expects the water level in Wivenhoe, Somerset or North Pine dams to exceed the full supply level.

Flood hazard area, for the purposes of Queensland Development Code, proposed new part 3.5: 'Construction of buildings in flood hazard areas', 21 November 2011, means an area, whether or not mapped, designated by a local government as a natural hazard management area (flood) under section 13 of the *Building Regulation 2006*.

Flood map is a map which depicts the extent of a particular flood or floods, for example the 1% AEP flood or a historical flood.

Flood overlay map is a map used in land planning to depict the land constrained by planning controls imposed by a council because of the flood risk associated with the land.

Floodplain is an area of land adjacent to a creek, river, estuary, lake, dam or artificial channel, which is subject to inundation by floodwater.

Floodplain advisory committee is a committee, usually at a local government level, which assists councils to develop and implement a plan for the management of a floodplain.

Flood risk is a term that usually embodies both likelihood of flooding and the consequences of flood. Sometimes, though, it relates only to likelihood. How it is used in this report depends on context. Where the Commission uses expressions such as ‘susceptible to flooding’, ‘vulnerable to flooding’ or ‘at risk of flooding’ it does not use them in any technical sense; they should be regarded as having their ordinary meaning.

Flood study is a scientific investigation into flooding in a particular area, usually the catchment of a river system. It may involve hydrologic and hydraulic investigations and a statistical analysis of the frequency with which floods have occurred in the past.

Flow velocity means the flow rate of water over an area and is measured in cubic metres per second (m^3/s) or cumecs.

Freeboard is a height allowance buffer that provides for uncertainty in the distance between the expected height of the water surface and the floor above.

Gauge is a tool which takes measurements of, for example, rainfall or river height.

General Insurance Code of Practice is a voluntary industry code which sets minimum standards for insurers to meet when handling insurance claims and dealing with complaints from policy-holders. It also applies when policy-holders make initial enquiries about insurance policies, and when they are buying and renewing insurance policies.

Groundwater aquifer means the layer of earth that holds groundwater.

Gully (with respect to stormwater networks) means a gridded box inlet or entry point for stormwater to enter stormwater pipes.

Habitable rooms are general living areas and include bedrooms, living rooms, kitchens, family and rumpus rooms but do not include areas such as laundries, bathrooms or garages.

Hazard means a source of harm, or a situation with a potential to cause loss.

Hazardous material means a substance with the capacity, because of its chemical, physical or biological properties, to cause harm to persons, property or the environment.

Hydraulic studies/investigations (with respect to flood studies) means an analysis that estimates the behaviour of flood flow (that is, flow rate, velocity, depth and extent of inundation) as it passes through a floodplain (see flood study).

Hydrodynamic (hydraulic) model uses data about the flow in streams and the terrain of a particular area to estimate flood heights, velocities and flow over time. In order to do this the hydrodynamic model solves the equations for the conservation of mass and momentum/energy.

Hydrologic model (runoff routing model) uses rainfall data and estimates of the proportion of the rainfall which turns into runoff and the time which the runoff from each part of the catchment takes to flow into the stream to estimate flow in the stream over time.

Hydrologic study/investigation (with respect to flood studies) means a study aimed at determining rainfall and associated stream flows in a range of scenarios (see flood study).

Hydrology is the term given to the study of the rainfall and runoff process; in particular, the evaluation of peak flows, flow volumes and the derivation of hydrographs for a range of floods.

Hydrostatic pressure means the pressure exerted by a fluid at rest because of the weight of the fluid.

Inactive flow or backwater area means an area so designated by a council as an inactive flow or backwater area under section 13 of the *Building Regulation 2006*.

Inlet (with respect to stormwater networks) means an entry point for stormwater to enter stormwater pipes: usually an opening in a park or open area.

Insurance Australia Group Limited (IAG) is a group of insurers which includes CGU Insurance Limited and NRMA Insurance.

Insurance Council of Australia represents the interests of the Australian general insurance industry. It was established to act as the peak body for general insurance companies in Australia licensed under the *Insurance Act 1973*.

Insurance Council hydrology report refers to a hydrology report prepared by a panel of insurers commissioned by the Insurance Council of Australia.

Interoperability means the capacity for persons in different organisations or different parts of the same organisation to exchange information.

Impact assessment means the assessment of:

- (a) the environmental effects of proposed development; and
- (b) the ways of dealing with the effects under the Sustainable Planning Act 2009.

Kerbs and channels (or gutters) are the structures built on the sides of roads that allow the road surface to convey water flow.

La Niña refers to the extensive cooling of the central and eastern Pacific Ocean. In Australia (particularly eastern Australia), La Niña events are associated with increased probability of wetter conditions.

Levee is a raised embankment or earthworks.

Light detection and ranging (LiDAR) means technology that is used to measure geospatial information which may be used to inform the creation of terrain models and maps.

LN1 is the irrigation drainage system in Emerald which runs from the western edge of Emerald to the Nogoa River. The system is owned and operated by SunWater.

Local controller is the person appointed as the local controller of an SES unit (*Disaster Management Act 2003*).

Local disaster co-ordinator (local co-ordinator) is a person appointed to co-ordinate disaster operations for a local disaster management group under the *Disaster Management Act 2003*.

Local disaster management group (local group) is a local group established by a local government to perform disaster management activities in its area.

Local disaster management plan (local plan) is the disaster plan prepared by a local government for its area.

Local Government Association of Queensland is the peak body representing local government in its dealings with other governments, unions, business and the community.

Local laws are laws made and enforced by a council, rather than the state or federal government.

Loss assessor (as the term is used in this report) refers to a person who inspects damaged properties (and often interviews policy-holders) and provides reports to insurers. Some insurers used their own loss assessors (internal loss assessors), others used external loss assessors. Loss assessors are sometimes called loss adjusters.

Major flooding is a term used by the Bureau of Meteorology to depict extensive flooding of rural areas and/or urban areas. Properties and towns are likely to be isolated and major traffic routes likely to be closed. Evacuation of people from flood affected areas may be required.

Mandatory provisions are those provisions that must be included in new planning schemes prepared under the *Sustainable Planning Act 2009*.

Material change of use can involve starting a new use on land, for example by establishing a use on vacant land or by changing a commercial use to a residential use, or materially increasing the intensity or scale of an existing use.

Mine-affected water means any water that is contaminated as a result of the process of mining.

Minimum floor levels set the height to which habitable and non-habitable rooms should be built. They are usually based on a defined flood level plus a freeboard (see habitable rooms, DFL and freeboard).

Minor flooding is a term used by the Bureau of Meteorology to depict flooding that occurs in low-lying areas next to watercourses where inundation may require the removal of stock and equipment. Minor roads may be closed and low-level bridges submerged.

Model local laws are template local laws prepared by the Queensland Government for use by councils.

Moderate flooding is a term used by the Bureau of Meteorology to depict when the evacuation of some houses may be required and main traffic routes may be covered. The area of inundation is substantial in rural areas, requiring the removal of stock (www.bom.gov.au).

m³/s (cumec) means a rate of flow measured by cubic metre per second.

Natural Disaster Insurance Review was established by the Commonwealth Government in March 2011 to independently review issues relating to insurance for flood and other natural disasters. It provided a report to the Federal Government which was released to the public in November 2011.

Natural Disaster Resilience Program is a grants program that is administered as a partnership between the Australian and state/territory governments. Its aim is to enhance Australia's disaster resilience through mitigation works and activities. Local governments and disaster groups and agencies are able to seek funding for particular projects.

New Farm Riverwalk was a floating walkway that extended approximately 3.5 kilometres parallel to the Brisbane River from New Farm to the Story Bridge.

Non-habitable rooms are rooms such as garages, bathrooms and laundries.

NRMA or NRMA Insurance is an insurer which is part of the Insurance Australia Group Limited.

Ombudsman refers to the Ombudsman for General Insurance who is part of the Financial Ombudsman Service. It also refers to the Financial Ombudsman Service (defined separately).

Operational work under the *Sustainable Planning Act 2009* includes works such as placing fill on land, constructing barriers in waterways or undertaking road works.

O'Sullivan Review was an independent review of Queensland's disaster management legislation, policies, guidelines and plans, as well as management and accountability in the State Emergency Service (SES). Many of the review's recommendations took effect in November 2010 through amendments to the *Disaster Management Act 2003*.

Overflow relief gully grate means a small grate located on residential premises designed to ensure that if there is any backflow into the private sewerage system, the discharge will occur through the overflow relief gully grate outside the house rather than through the bathroom or kitchen fixtures.

Overflow relief structure means an outlet which discharges sewage into a waterway in emergency situations or during extreme weather events when the sewerage network is inundated.

Overland flow path is a depression in the ground where water accumulates and then flows. It is a component of the stormwater system.

Overlay means an extra layer of assessment in planning schemes. The provisions of an overlay code are usually triggered by overlay maps that depict extra information superimposed on a zoning map.

Overtopping means the flow of water over the top of a dam or embankment.

Permit is a document that authorises a development to take place.

Planning scheme is a local planning instrument for regulating development in Queensland. Planning schemes regulate what development must be assessed before it can be undertaken, the type of assessment required and the criteria used in an assessment in each council region. They also contain codes with which self-assessable development must comply.

Policyholder is a person who holds an insurance policy and by it contracts with an insurer for coverage against specified events.

Preliminary approval overriding a planning scheme is a type of permit for development that overrides the planning scheme and sets criteria against which future development applications must be assessed. (See section 242 of the *Sustainable Planning Act 2009*).

Prescribed tidal work is tidal work described in section 14 of the *Coastal Protection and Management Regulation 2003* which is completely or partly within a local government tidal area.

Private insurer refers to an insurance company. Where the term ‘insurer’ is used in this report, it denotes a private insurer, not a state government-owned or controlled insurer.

Probable maximum flood is an estimate of the largest possible flood that could occur at a particular location, under the most severe meteorological and hydrological conditions.

Property buy-back means the purchase of a residential dwelling by a local or state government so that it can be removed from the floodplain.

QBE is an insurer whose full name is QBE Insurance (Australia) Limited.

Queensland Development Code contains mandatory and non-mandatory Queensland building standards that are used by building certifiers to assess building applications.

Queensland Planning Provisions are the standard planning provisions made under the *Sustainable Planning Act 2009* that provide a consistent format and structure for council planning schemes across Queensland.

Queensland Reconstruction Authority (QRA) is a Queensland Government authority responsible for rebuilding Queensland communities affected by the 2010/2011 floods and cyclones.

Q100 is a probability-based design flood event, aimed to reflect typical combinations of flood producing and flood modifying factors which act together to produce a flood event at a specific location of interest that has a 1 in 100 chance of being equalled or exceeded in any one year (1% annual exceedance probability – AEP); it is described as having an average recurrence interval (ARI) of 100 years. It is a theoretical flood model used to inform planning and policy (see AEP and ARI).

Radio communications black spots are areas which are not covered by a radio communications network and within which radio communications are consistently difficult or impossible.

Referable dam is a dam which has been assessed as posing a risk to the safety of two or more people should it fail.

Referral agencies are bodies that have an interest in certain aspects of development and are provided with a development application for assessment of matters within the agency’s jurisdiction. They include Queensland Government agencies, government owned corporations and certain private sector corporations

Regional plan is a state planning instrument which is intended to articulate desired land use and development outcomes for a particular region and the ways in which those outcomes can be achieved.

Requirement is a document issued by the Commissioner under section 5(1) of the *Commissions of Inquiry Act 1950* requiring a person or entity to produce information to the Commission (such as documents or statements) at a specified time, or to attend an interview and answer questions asked by an authorised person.

RFA Online is a task management tool developed by Emergency Management Queensland and is used to co-ordinate requests for assistance received by the SES.

River architecture (as the term is used in this report) means structures built along the Brisbane River, such as the New Farm Riverwalk, CityCat terminals, CityFerry terminals and private pontoons.

Satellite planning systems means those planning systems which operate separately to the *Sustainable Planning Act 2009*, and are created and regulated by separate legislation.

Seqwater means the Queensland Bulk Water Supply Authority, trading as Seqwater.

SES is the State Emergency Service.

SES member is a person, usually a volunteer, appointed to the SES and available through the SES to assist with various activities including disaster response and relief.

SES unit is an SES unit established for a local government region.

Sewage is human waste product, sometimes referred to as ‘wastewater’.

Sewage reflux valve means a device that can be installed in household sewerage systems to prevent the backflow of sewage into private sewer systems and then into bathroom or kitchen fixtures.

Sewerage infrastructure or sewerage system is the infrastructure through which sewage flows, for example pipes, pump stations and treatment facilities. In the material before the Commission it is sometimes referred to as ‘wastewater infrastructure’.

Shared network infrastructure means the assets used to distribute electricity throughout Queensland, other than customer dedicated assets (see customer dedicated assets).

Site-specific hydrology report is a report by a hydrologist for a specific property.

State planning policy is a state level planning instrument that advances the purpose of the *Sustainable Planning Act 2009* by declaring the Queensland Government’s policy about a matter of state interest.

Stormwater is the rain water that has not yet entered a river system or soaked into the ground.

Stream / river gauging station (gauge) measures the height of the water in a river at a particular location. It may be manual or automated (Office of the Chief Scientist, 2011, Understanding floods: questions and answers).

Suncorp Group Limited (usually called the Suncorp Group in this report) is an Australian public company that provides financial services including insurance. A number of insurers are part of the Suncorp Group, including Suncorp Metway Insurance Limited, AAMI, Vero Insurance, GIO, Apia and Shannons.

Suncorp Metway Insurance Limited (usually called Suncorp in this report) is an insurer which is part of the Suncorp Group.

Tailings dams are constructed to hold wastewaters containing tailings (the waste by-products of extracting metals from mined ores), which are created during the mining process.

Telemeter gauge is a gauge that sends river level or rainfall data at periodic intervals to a computer. Data is sent via telephone communication landline, mobile or satellite.

Turbidity is the degree of clarity of water. Its measure is the number of small particles of solid matter suspended in a water sample.

UHF means ultra high (radio) frequency.

VHF means very high (radio) frequency.

Water storage facilities (with respect to mining) means, but is not confined to, dams, pits, tanks and tailings dams.

