

Glossary

| Term | Definition |
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| Abiotic | Pertaining to physical and inorganic components of the environment; non-living. |
| Abutment | The part of a valley against which a dam is constructed. Right and left abutments are those on respective sides of an observer looking downstream. |
| Accretion | (a) The process of growth or enlargement by external accumulation. (b) Sediment accumulation, not necessarily with cementation (opposite to erosion). |
| Acidic | Quality of being acid; having a pH of less than 7 (see pH). |
| Adopted Middle Thread Distance (AMDT) | The distance from the mouth of the watercourse or the confluence of the watercourse with the main watercourse measured along the middle of the watercourse. |
| Adsorbed | The process of attaching to the outside of a surface. |
| Allocated water | Water that a person or entity has been granted an entitlement to extract. |
| Allochthonous material | Organic matter that is derived from outside of the aquatic ecosystem, such as leaves of terrestrial vegetation that fall into the stream. |
| Alluvial (alluvium) | Weathered material transported and deposited by the movement of water. |
| Alluvial forests | Forests growing in alluvial soils, mainly sand and silt, that a river has carried in suspension and then deposited. |
| Alluvial plain | A plain formed by the deposition of alluvial material over a long period of time. |
| Amphidromous | Organisms which migrate between saltwater and freshwater environments however not for breeding purposes. |
| Anabat | A bat detector that can record the signals of bats for computer analysis. It converts the ultrasonic echolocation signals of bats into audible electronic signals which can be recorded and processed, to assist in identification of the species. |
| Anadromous | Diadromous species that spend the majority of their life in saltwater and migrate to freshwater to breed. |
| Anastomosing | Water spreading across the river bed as numerous small channels. |
| Animal | Any member, alive or dead, of the animal kingdom (other than a human being). |
| Annual Exceedance Probability (AEP) | The probability of a specified magnitude of a natural event being exceeded in any year. |
| Annual Proportional Flow Deviation | Annual proportional flow deviation is the statistical measure of changes to flow season and volume in the simulation period calculated using the formula in Technical Report 5 of "Fitzroy Basin Water Allocation and Management Planning Technical Reports" (DNRW, 1999) |
| Anoxic | Without or depleted of oxygen. |
| Anthropogenic | Effects, processes, objects or materials which do not occur in natural environments but are as a result of, or derived from human activities. |
| Aquatic macrophyte | Submerged, emergent or floating aquatic vegetation that is visible to the naked eye. |
| Aquiclude | A boundary layer that prevents soil water infiltration. |
| Aquifer | A water-bearing stratum of permeable rock, sand, or gravel, able to transmit substantial quantities of water. |
| Arboreal | Living in or among trees. |
| Australian Height Datum (AHD) | The datum used for determining elevations in Australia which uses a national network of bench marks and tide gauges, and has set mean sea level as zero elevation. |
| Average Recurrence Interval (ARI) | The average interval (in years) between the occurrence of a flow, discharge or rainfall greater than or equal to a specified amount. |
| B horizon | The second or subsurface zone of soil made of clay and oxidized materials and organic matter obtained from the A horizon by leaching. |
| Barrier beaches | Elongate sandy ridges slightly above high tide level, and running parallel to the shoreline – extended by long shore transport (Brennan, 2004). |

| Term | Definition |
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| Benthic | Pertaining to the bottom of a body of water. |
| Biodiversity | Biodiversity is short for “biological diversity”. It describes the variety of life forms and their habitats that make up a region. Biodiversity includes the diversity of plant and animal species, the diversity of ecosystems formed by communities of these organisms, and the genetic diversity within and between species. |
| Biofilm | A thin layer of living cells, such as bacteria, protozoa and algae, which coat the surface of a living or non-living substrate. |
| Biogenic sediment | Sediment produced by the actions of living organisms. |
| Biotic | Pertaining to living organisms, and usually applied to the biological aspects of an organism’s environment. |
| Borrow pit | A small excavation providing earth to be used for construction material. |
| Bunding | An artificially created boundary, usually in the form of an embankment used to prevent sediment and substances from entering a water stream or storage facility. |
| CAMBA | CAMBA means the Agreement between the Government of Australia and the Government of the People’s Republic of China for the protection of Migratory Birds and their Environment signed in Canberra on 20 October 1986. |
| Carboniferous | The period of geological time extending from about 360 to 290 million years ago. |
| Carboniferous period | The Carboniferous is a major division of the geologic timescale that extends from the end of the Devonian period, about 360 million years ago (mya), to the beginning of the Permian period, about 290 mya. |
| Catadromous species | Diadromous species that spend the majority of their life in freshwater and migrate to saltwater to breed. |
| Cease to flow | The period where water ceases to flow. |
| Coastal plain | Any plain with its margins on the shore of the sea. Generally a flat featureless area of low relief which is usually underlain by sediments. |
| Colluvium | Loose bodies of sediment transported by gravity which have been deposited or built up towards the base of a low grade slope. |
| Common | The wildlife is common or abundant and is likely to survive in the wild. |
| Commonwealth Marine Area | The Commonwealth Marine Area is any part of the sea, including the waters, seabed, and airspace, within Australia’s exclusive economic zone and/or over the continental shelf of Australia, that is not State or Northern Territory waters. |
| Community | An assemblage of interdependent populations of different species (plants and animals) interacting with one another, and living in a particular area. |
| Compensatory habitat | A vegetation offset to maintain the extent of remnant vegetation that will be loss as a result of the Project. |
| Conglomerate | Coarse sedimentary rock containing cemented rounded gravel or pebbles |
| Connectivity | Refers to the ease with which organisms move between particular landscape elements. |
| Controlled action | An action (including a project, development, undertaking, activity, or series of activities) that is likely to have a significant impact on a Matter of National Environmental Significance, as defined by the Commonwealth Minister for the Department of Environment and Water. If an action is controlled it is subject to a rigours assessment and approval process under the provisions of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth). |
| Coquina | A soft, whitish, coral like stone, formed of broken shells and corals, found in low, calcareous beach ridge sequences. Dated beach ridge sequences from the Burdekin area date from around 25000-30000 yBP (Hopley 1970). |
| Covenant | An agreement or contract between two parties (i.e. landholder and council). |
| Cracking clay | Clay soil from surface with large cracking patterns. Usually with gilgai surface features. |
| Critical storm duration | The critical storm duration is the duration of rainfall that will result in the highest peak flood levels at a particular location. |
| Crystobalitic | Form of silica. |
| Cusped | Points formed by the intersection of two arcs. |

| Term | Definition |
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| Dead storage | The volume in a water storage below the lowest operable level. |
| Dendritic | Having a form resembling a shrub or tree. |
| Denuded (denudation) | The removal of matter. Commonly used to describe the removal of vegetation, but also refers to the process of mass, or rapid, sediment removal. |
| Dermosols | Soils lacking strong texture contrast and having a structured B horizon. |
| Diadromous species | Organisms that move during their life cycle between freshwater and saltwater environments. |
| Dispersion | To distribute or suspend fine particles, such as clay, in or throughout a dispersion medium, such as water. |
| Duplex | Light surface texture of sand or clay loam abruptly overlying clay. |
| Easement | An access right held by a third party to enter upon and make use of land belonging to another for a specified purpose. |
| Ecology | The study of the interrelationships of organisms with and within their environment. |
| Ecosystem | A biophysical environment containing a community of organisms. |
| Edge effect | All changes at an ecosystem boundary and within adjacent ecosystems; the negative influence of a disturbed habitat edge on the interior conditions of a habitat, or on species that use the interior habitat. |
| Electrofishing | A fish sampling technique which uses electric fields and electric currents to capture fish by controlling fish movement and/or immobilising fish. |
| Embankment dam | Embankment dams are made mainly from natural materials. The two main types are earthfill dams and rockfill dams. Earthfill dams are made up mostly from compacted earth, while rockfill dams are made up mainly from dumped and compacted rockfill. The materials are usually excavated or quarried from nearby sites, preferably within the reservoir basin. |
| Embayment | Small bay between minor headlands. |
| Emerson test | A classification of soil aggregates based on their coherence in water. The conditions under which they slake, swell and disperse allow the different aggregates to be separated into eight classes. The test is particularly valuable in a soil conservation context as it grades soil aggregates according to their stability in water. |
| Endangered | A species is endangered if: <ul style="list-style-type: none"> ■ there have not been thorough searches conducted for the wildlife and the wildlife has not been seen in the wild over a period that is appropriate for the life cycle or form of the wildlife; or ■ the habitat or distribution of the wildlife has been reduced to an extent that the wildlife may be in danger of extinction; or ■ the population size of the wildlife has declined, or is likely to decline, to an extent that the wildlife may be in danger of extinction; or ■ the survival of the wildlife in the wild is unlikely if a threatening process continues. |
| Endangered Regional Ecosystem | A regional ecosystem is listed as endangered under the <i>Vegetation Management Act 1999</i> (Qld) if remnant vegetation is less than 10 per cent of its pre-clearing extent across the bioregion; or 10-30% of its pre-clearing extent remains and the remnant vegetation is less than 10,000 hectares. |
| Endemic | Restricted to a certain region or part of region. |
| Environment | The total of all the external conditions that act upon an organism. |
| Environmental flow | The flow of water that is required to maintain aquatic and riparian ecosystems in streams and rivers. |
| Environmental Flow Objective (EFO) | Performance indicators set out in the <i>Water Resource (Mary Basin) Plan 2006</i> for the measurement of the environmental performance of the Mary Basin. |
| Environmental quality | Human (individual or social) concepts of desirable ecological situations. |
| Ephemeral | Transitory, short-lived. |
| Epilimnion | Upper waters of a thermally-stratified water body. The upper layer is characterised by warmer and lighter water. |

| Term | Definition |
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| Erosion | <p>The process by which rocks are loosened, worn away and removed from parts of the Earth's surface.</p> <p>Seven processes of erosion discussed separately; in practice they overlap and it is often difficult to isolate the net effects of any one process.</p> <p>Rainsplash erosion: the detachment and removal of soil and debris by raindrop impact.</p> <p>Overland flow OR surface runoff: water flowing over the surface before being concentrated into definite streams.</p> <p>Sheet erosion, sheet wash, or slope wash: the combined effect of overland flow and rainsplash.</p> <p>Gully erosion: the rapid development of gullies, usually in first- or second-order tributaries of streams, BUT also in situations unrelated to an integrated drainage system (eg highly dispersive soils)</p> <p>Mass Movement: downhill movement of debris <i>en masse</i> rather than as individual particles. It can occur slowly (creep), or rapidly (rockfalls, slumps, landslides).</p> <p>Surface rock creep: the movement of stones down sloping surfaces.</p> <p>Fluvial erosion: the detachment and removal by streams of material in solution, suspension, or as bed load. Includes removal of debris supplied to the streams by slope wash, mass movement, and gullies.</p> |
| Essential habitat | Vegetation in which a species of wildlife is known to occur that is listed as endangered, vulnerable, near threatened or rare under the <i>Nature Conservation Act 1992</i> (Qld). |
| Estuarine | The mouth region of a river that is affected by tides. |
| Euphotic zone | Surface layer of a body of water which receives enough sunlight for photosynthesis. |
| Eutrophication | Process during which water bodies become enriched with dissolved nutrients resulting in excessive growth of organisms, such as algae, and the subsequent depletion of oxygen. |
| Evaporation | The process that changes a liquid or a solid into a gas. In the tropical hydrological cycle, this involves the conversion to water vapour and the return to the atmosphere of the precipitation (rainfall) that has reached the earth's surface. |
| Evapotranspiration | The combined effect of evaporation and transpiration. |
| Exotic species | Introduced species not native or endemic to the area in question. |
| Ex-situ | Ex-situ means off site, i.e. protecting a species of plant or animal by removing part of the population from a threatened habitat and placing it in a new location. |
| Failure Impact Assessment (FIA) | An assessment carried out by a registered professional engineer who evaluates the number of people whose safety would be at risk if there was a dam failure. The assessment, if accepted by the chief executive of the Queensland Department of Natural Resources and Water, will result in the dam being given a failure impact rating according to the number of people at risk. |
| Fauna | The collective animals of a given region (see definition for 'animals'). |
| Feral | An introduced or domestic animal living in the wild. |
| Ferrosols | Soils lacking strong texture contrast and having high free iron in B horizon |
| Fishway flow | Flows that are released through a structure designed to allow fish passage up or down stream where a hydraulic structure such as a dam blocks the natural channel. Specific flows are necessary to attract particular species to use the fishway. |
| Flood plain | That portion of a river valley that is covered during periods of high flood water. |
| Flora | The collective plants growing in a geographic area (see definition for 'plants'). |
| Flora | See definition for 'plants' |
| Flow duration curve | A cumulative plot showing the percent of time that given flow volumes are equalled or exceeded. |
| Flow regime | The variation in flow characteristics, such as volume, for a particular stream over time. |
| Fluvial | The river system. |
| Fragmentation | A process of landscape alteration in which natural areas are subdivided into smaller patches. |
| Full Supply Level (FLS) | The maximum normal operating water surface level of a reservoir. |

| Term | Definition |
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| Geomorphological Time Periods | <p>Proterozoic (2500-545 million years ago) During the Proterozoic two mountainous blocks, the Mt Isa Inlier and the Georgetown massif (current area of the Einasleigh Uplands) were formed. Formation was a result of faulting, folding, thrusting of deposited marine and terrestrial sediments, extrusive volcanics and igneous intrusions. Widespread metamorphism was associated with igneous intrusions and the deforming tectonic activities (Brennan, 2004).</p> <p>Palaeozoic (545-251 million years ago) Extensive erosion and planation was the major process occurring during this period. Weathered sediments were stripped from the two Proterozoic blocks and deposited within the Tasman geosyncline between these two divisions. North-west of the Proterozoic Mt Isa Inlier, a shallow sea transgressed from the south depositing carbonate-dominated marine sediments. These comprise the Barkly Tableland of the upper Nicholson and Settlement Catchments today. In the Einasleigh Uplands some extrusive volcanics accompanied erosion processes and resulted in the formation of the Newcastle and Croydon Ranges in the Norman and Gilbert Catchments. In the west, erosion continued to form an extensive plain that grew eastwards, and by the early Mesozoic, the whole of the Gulf region was reduced to a flat plain (Brennan, 2004).</p> <p>Mesozoic (251-65 million years ago) The Proterozoic to Mesozoic cycle of erosion was terminated by earth movements that warped the flat plains. The result was the transgression (higher sea levels) of the sea into the Carpentaria and Eromanga Basins and the widespread deposition of Mesozoic sediments, namely sandstone, siltstone, mudstone, limestone, shale and conglomerate overlying the erosion surface of old, deformed Proterozoic rocks. By the end of the Mesozoic, the only extruding Palaeozoic rocks remained in the east (Einasleigh Uplands) (Brennan, 2004).</p> <p>Early-Mid Tertiary (65-34 million years ago) During this period the Mesozoic plain was uplifted and warped resulting in widespread erosion of the Mesozoic sediments. By the Mid-Tertiary most of the area was again reduced to a low relief plain that underwent laterisation (Brennan, 2004).</p> <p>Late Tertiary – Quaternary (34 million years ago to present) Uplifting and warping increased slopes and initiated another period of erosion and planation. Streams adjusted to a new base level (increased sea levels) and the erosional surfaces extended inland forming the dissected river valleys seen today. At the upland margins of the Gulf Plains, the late Cretaceous rocks (end of the Mesozoic period) were removed, and within the steeper ranges rocks formed at end of the Palaeozoic period were eroded away. Accompanying widespread erosion was extensive deposition and the formation of new alluvial fans in the lower reaches of the Gulf Catchments (Brennan, 2004). Along the coastline, down-warping lowered the laterised older Tertiary plain to wave action level (hence increased sea levels). This formed low cliffs and a marine terrace. Due to a low offshore gradient and wave action, and high loads of terrestrial sedimentation, constructional landforms were formed (eg, barrier beaches and islands). A later drop in sea level and subsequent emergence of land led to the abandonment of barrier beaches that occur as parallel ridges around the Gulf of Carpentaria today, and the formation of a new lower, marine terrace (Brennan, 2004). Some volcanic eruptions in the eastern block (Einasleigh Uplands) also occurred during this period, resulting in infilling of older valleys, particularly in the upper Flinders and Gilbert Catchments (Brennan, 2004).</p> |
| Geomorphology (geomorphological) | The form or shape of the landscape and the processes that modify and change it. |
| Gilgai | Melon hole, mound depression surface. |
| Global warming | The warming of the earth's atmosphere generally attributed to the burning of fossil fuels. Also referred to as "The Greenhouse Effect" - the capacity of the atmosphere to transmit short-wave energy (visible and ultra violet light) to the earth's surface, and to absorb and retain heat radiating from the surface. |
| Groundwater | Water found underground in porous rock or soil strata. |
| Habitat | The biophysical medium or media occupied (continuously, periodically or occasionally) by an organism or group of organisms. |

| Term | Definition |
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| Harp trap | A trap used to capture microchiropteran bats, consisting of metal poles connected by fishing wire. |
| Herpetofauna | Includes reptiles and amphibians. |
| Highest Astronomical Tide (HAT) | The highest tide level which can be predicted to occur under any combination of astronomical conditions. |
| Historical No Failure Yield (HNFY) | This is the maximum volume of water that can be supplied from the dam for every year of the simulation period. |
| Holocene | Refers to a geological period of time between the present and 10,000 years before present. |
| Holomixis | Complete mixing of the lake or water body, for example during winter when the epilimnion starts to cool. |
| Horizontal Layer Method | The layering process involved in Roller Compacted Concrete inevitably leads to the presence of a large number of horizontal joints between the strata, since in order to maintain the necessary compaction density by roller, the layers are typically only 0.3m thick (see "Roller Compacted Concrete"). |
| Hydraulic | Mechanical properties of liquids. |
| Hydraulic conductivity | A coefficient of proportionality describing the rate at which water can move through a permeable medium. |
| Hydraulic connectivity | Describes the connection of different aquifers within the same vicinity. |
| Hydraulic gradient | The change in total head with a change in distance in a given direction. |
| Hydrodynamics | The movements of water and other liquids. |
| Hypolimnion | Bottom layer of a thermally-stratified water body. This bottom layer is characterised by cold water which is usually low or lacking in oxygen. |
| Hyporheic | Hyporheic zone is where there is mixing of shallow groundwater and surface water in a region beneath and lateral to a stream bed. |
| Igneous rock | Rock produced under conditions involving intense heat, as rocks of volcanic origin or rocks crystallised from molten magma. |
| Intertidal | The area between high and low tide. |
| Inundation area | The area that will be flooded with water above the existing water level, from raising of the dam. |
| JAMBA | JAMBA means the Agreement between the Government of Japan and the Government of Australia for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment signed in Tokyo on 6 February 1974. |
| Kandosols | Soils lacking strong texture contrast and having a massive B horizon. |
| Kurosols | Soils with strong texture contrast and having pH <5.5 in B horizon. |
| Lacustrine habitat | Lake environment, pertaining to standing water bodies. |
| Laterisation | General term for a process that converts rock or soil to laterite. Laterite is a highly weathered sub-soil or material rich in secondary oxides of iron, aluminium, and is generally devoid of primary silicates such as quartz and kaolinite (Brennan, 2004). |
| Lentic habitat | Standing or still water habitats such as lakes and ponds. |
| Lime | Calcium carbonate nodules. |
| Limnological process | Referring to the chemical, physical and biological properties of bodies of freshwater. |
| Listed species | A plant or animal included in a schedule of vulnerable, rare or endangered biota, such as the schedules in the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) or the <i>Nature Conservation (Wildlife) Regulation 2004</i> (Qld). |
| Littoral vegetation | Vegetation that occurs within the littoral zone. |
| Littoral zone | Region of shallow water near the shore of a body of water where light reaches the bottom. |
| Lotic habitat | Flowing water habitats such as rivers and streams. |
| Macroinvertebrate | Organisms without a backbone which are large enough to be seen with the naked eye. |
| Mass movement | The downslope movement of earth caused by gravity. Includes but is not limited to landslides, rock falls, debris avalanches, and creep. It does not however, include surface |

| Term | Definition |
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| | erosion by running water. |
| Matter of National Environmental Significance | <p>The matters of national environmental significance include:</p> <ul style="list-style-type: none"> ■ listed threatened species and communities ■ listed migratory species ■ Ramsar wetlands of international importance ■ the Commonwealth marine environment ■ World heritage properties ■ National heritage places ■ nuclear actions <p>as defined by the Commonwealth Minister for the Department of Environment and Water (see 'controlled action').</p> |
| Megachiropteran bats | Megachiropteran bats are larger than the microbats and feed on fruit, nectar and pollen, i.e. flying foxes. |
| Metalimnion | Middle layer of a thermally-stratified body of water. The metalimnion is the transition layer between the epilimnion and hypolimnion and is also referred to as the thermocline. |
| Metamorphic sediment / rock | Rock or sediment that has exhibited a change in structure or composition. |
| Metamorphism | Transformation of a pre-existing rock into a new rock by the action of heat (thermal metamorphism associated with igneous intrusions) or by severe compressional earth movements (regional metamorphism associated with folding, faulting etc). Changes occur to the texture, composition, physical or chemical structure of the original rock (Brennan, 2004). |
| Metamorphosed sedimentary rocks | Changed in form or nature, a metamorphic rock is created by heat and pressure such that the minerals, fabric, colour are changed, but not the composition. |
| Metasediment | Sediments or sedimentary rock which has been subjected to metamorphism. |
| Microchiropteran bats | Microchiropteran bats are relatively small mammals. These species are specially adapted for flight with wing membranes up to 25cm. They use both eye sight and echolocation for finding their way around at night and locating prey, being mostly insects. |
| Microhabitat | Within this habitat area there is a low availability of ground microhabitat including leaf litter, logs and branches. |
| Migratory species | A migratory species listed and protected under the provisions of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth). |
| National heritage place | <p>Under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth), a World Heritage property is either:</p> <ul style="list-style-type: none"> ■ an Australian property on the World Heritage List kept under the World Heritage Convention; or ■ a property declared to be a World Heritage property by the Commonwealth Environment Minister. |
| Native species | A species that is indigenous to Australia or an external Territory, or periodically or occasionally visits. |
| Natural environment | The complex of atmospheric, geological, and biological characteristics found in an area in the absence of artefacts or influences of a well-developed technological human culture. |
| 'Not of Concern' regional ecosystem | A regional ecosystem is listed as 'Not of Concern' under the <i>Vegetation Management Act 1999</i> (Qld) if remnant vegetation is over 30 per cent of its pre-clearing extent across the bioregion, and the remnant area is greater than 10,000 hectares. |

| Term | Definition |
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| Nuclear action | <p>A nuclear action is:</p> <ul style="list-style-type: none"> ■ establishing or significantly modifying a nuclear installation; ■ transporting spent nuclear fuel or radioactive waste products arising from reprocessing; ■ establishing or significantly modifying a facility for storing radioactive waste products arising from reprocessing; ■ mining or milling uranium ores, excluding operations for recovering mineral sands or rare earths; ■ establishing or significantly modifying a large-scale disposal facility for radioactive waste. A decision about whether a disposal facility is large scale will depend on factors including: <ul style="list-style-type: none"> – the activity of the radioisotopes to be disposed of, – the half-life of the material, – the form of the radioisotopes, and – the quantity of isotopes handled; ■ de-commissioning or rehabilitating any facility or area in which an activity described above has been undertaken; or ■ any other type of action set out in the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) Regulations. |
| 'Of Concern' regional ecosystem | A regional ecosystem is listed as of concern under the <i>Vegetation Management Act 1999</i> (Qld) if remnant vegetation is 10-30 per cent of its pre-clearing extent across the bioregion; or more than 30 per cent of its pre-clearing extent remains and the remnant extent is less than 10,000 hectares. |
| Old growth forests | Forests that are both little disturbed and ecologically mature. |
| Opportunistic | When the conditions are ideal. |
| Overtopping | The process whereby the water level rises above the height of the dam wall. |
| Pelagic zone | The water column associated with the surface or middle depths of a water body, away from the bottom. |
| Permeability | The capacity of a material (rock) to transmit fluids (groundwater). |
| Permeable rock | Rock through which water can pass, either via: <ul style="list-style-type: none"> (a) a network of pores between the grains; or (b) interconnected joints, bedding planes and fissures (more correctly termed 'pervious rock'). |
| Permian | The period of geological time extending from about 285 to 250 million years ago. |
| PET richness | Refers to the sum total of all taxa from the orders Plecoptera (the stoneflies), Ephemeroptera (mayflies), and Trichoptera (caddisflies). |
| pH | "power hydrogen". Negative logarithm of hydrogen-ion concentration; a numerical expression of acidity or alkalinity. |
| Piezometer | A small diameter water bore used to measure the hydraulic head of groundwater in aquifers. |
| Planation | Processes of erosion results in the formation of fundamentally, flat, even or level surfaces (Brennan, 2004). |
| Plant | A member, alive or dead, of the plant kingdom or of the fungus kingdom, and includes a part of a plant and plant reproductive material. |
| Pleistocene | The first part of the Quaternary period of geological time lasting from about 2 million years to 10,000 years ago. |
| Population | Occurrence of a species or ecological community in a particular area. |
| Porosity | Is a measure of void spaces in various rock types. |
| Potadromous species | Organisms which complete their entire life cycle in fresh water. |
| Precambrian | The period of geological time extending from about 285 to 250 mya. |
| Precipitation | A collective term for the moisture, either liquid or solid, that falls on the earth from the atmosphere. In North Queensland this is usually in the form of rain. |

| Term | Definition |
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| Probable Maximum Flood (PMF) | The flood resulting from the worst flood-producing catchment conditions that can be realistically expected in the prevailing meteorological conditions. |
| Prograde (progradation) | The accumulation of sediments and the subsequent migration of a bank or coastline outwards from the land. |
| Propagation | The reproduction of plants. |
| Ramsar wetland | Under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth), a Ramsar wetland is either: <ul style="list-style-type: none"> ■ an Australian wetland on the List of Wetlands of International Importance kept under the Ramsar Convention; or ■ a wetland declared to be a Ramsar wetland by the Commonwealth Environment Minister. |
| Rare | An animal is rare / near threatened if: <ul style="list-style-type: none"> ■ the population size or distribution of the wildlife is small and may become smaller; or ■ the population size of the wildlife has declined, or is likely to decline, at a rate higher than the usual rate for population changes for the wildlife; or ■ the survival of the wildlife in the wild is affected to an extent that the wildlife is in danger of becoming vulnerable. |
| Recharge | The process involving the infiltration of water from the surface to groundwater. |
| Recovery plan | A recovery plan is a document stating the research and management actions necessary to stop the decline, support the recovery and enhance the chance of long-term survival in the wild, of a stated species or community of protected wildlife. |
| Regional ecosystems (RE) | Regional ecosystems were defined by Sattler and Williams (1999) as vegetation communities in a bioregion that are consistently associated with a particular combination of geology, landform and soil. |
| Regrowth | A young, usually even-aged forest stand that has regenerated after disturbance. |
| Rehabilitation | Making the land useful again after a disturbance. It involves the recovery of ecosystem functions and processes in a degraded habitat. |
| Remnant vegetation | Small remaining areas of naturally occurring vegetation in a landscape that has been altered by human activity such as agriculture. These remnants were once part of a continuously vegetated landscape. |
| Rill erosion | The removal of soil by numerous small channels only several inches deep. Rills occur mainly on recently cultivated soils or recent cuts and fills. |
| Riparian | Pertaining to, or situated on the bank of, a body of water, especially a watercourse such as a river. |
| Riverine | Pertaining to rivers. |
| Roller Compacted Concrete (RCC) | A zero slump concrete requiring no steel reinforcement and is compacted by vibratory rollers. In RCC dams, progressive layers of a relatively dry mix of concrete are laid, each being compacted down in turn by rollers, allowing dams to be built much faster and significantly cheaper than by traditional methods of construction. |
| Rudosols | Soils with negligible pedological organisation. |
| Salinity | The concentration of any salt. |
| Sediment | Any usually finely divided organic and / or mineral matter deposited by air or water in non-turbulent areas. |
| Sedimentation pond | An artificial retention basin designed to trap suspended sediments carried in overland water flow before discharge into a water storage facility. |
| Sheet erosion | Erosion of thin layers of earth-surface material, more or less evenly, from extended areas of gently sloping land by broad continuous sheets of running water, without the formation of rills, gullies, or other channelised flow. |
| Slaking | The partial breakdown of soil aggregates in water due to the swelling of clay and the expulsion of air from pore spaces. |

| Term | Definition |
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| Sloped Layer Method | This method involves building up multiple layers of concrete, in 0.3m thicknesses, laid successively to build up one single super-layer, sloped at an incline of between 1:10 and 1:20. |
| Sodic | Refers to the dominance of sodium on the exchange complex of the soil. High levels of sodium can cause moisture infiltration problems and the accompanying, generally high soil pH, can cause nutrient disorders. |
| Soil aggregation | The lumping together of soil particles into a coherent mass. |
| Soil profile | The physical and chemical features of the soil imagined or seen in vertical section from the surface to the point at which the characteristics of the parent rock are not modified by surface weathering or soil processes. |
| Species | A group of biological entities that (a) interbreed to produce fertile offspring; or (b) possess common characteristics derived from a common gene pool. |
| Species richness | A botanical term indicating a measure of the number of species of plants or animals occurring in a given area. |
| Spotter/catcher | An ecologist who is accredited by the Queensland Parks and Wildlife Service (QPWS) to capture and relocate fauna (mainly mammals) from trees prior to vegetation clearance. |
| Strata | Plural of stratum, strata refers to the process whereby material, whether natural or artificial, forms parallel layers upon one another. |
| Stress | The result or consequent state of a physical or chemical, or social, stimulus on an organism or system. |
| Sub-species | A geographically separate population of a species, being a population that is characterised by morphological or biological differences from other populations of that species. |
| Systematic | In a methodical and organised way. |
| Taxa | Taxonomic group of any rank (for example as species, genus, family, class, order). |
| Tenosols | Soils with weak pedological organisation. |
| Terrain | A tract of land and its physical features with emphasis on bedrock geology. |
| Terrestrial | Pertaining to land, the continents, and/or dry ground. Contrasts to aquatic. |
| Tertiary | The period of geological time extending from about 65 to 2 mya. |
| Thermocline | The zone of rapid vertical temperature change in a thermally-stratified body of water. |
| Threatened | A collective term for native plants and animals which are presumed extinct, endangered and vulnerable. |
| Threatened species and ecological communities | Threatened species or ecological communities listed and protected under the provisions of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth). |
| Topography | Description or representation of natural or artificial features of the landscape; the description of any surface, but usually the earth's. |
| Translocation | The transfer of plants and animals from one part of their range to another. |
| Transpiration | The loss of water from plants, normally as vapour. |
| Ubiquitous | Having or seeming to have the ability to be everywhere at once. |
| Unallocated water | Water to which an entitlement to extract has not been granted. |
| Understorey | A general term for the plants of a community occurring at levels lower than the top stratum. |
| Vertosols | Soils with high clay content (>35%), cracks & slickensides. |
| Vulnerable | A species is vulnerable if: <ul style="list-style-type: none"> ■ its population is decreasing because of threatening processes, or ■ its population has been seriously depleted and its protection is not secured; or ■ its population, while abundant, is at risk because of threatening processes; or ■ its population is low or localised or depends on limited habitat that is at risk because of threatening processes. |
| Water Allocation Security Objective (WASO) | Means an objective that may be expressed as a performance indicator and is stated in a water resource plan for the protection of the probability of being able to obtain water in accordance with a water allocation. |

| Term | Definition |
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| Weathering | Changes in the coherence, texture and composition of rocks and minerals by either physical (mechanical) or chemical processes as a result of exposure at the Earth's surface. |
| Weed | A plant that is considered undesirable because it threatens the persistence of native plants. |
| Wetlands | Low-lying areas regularly inundated or permanently covered by shallow water. Usually important areas for birds and other wildlife. |
| Wildlife | An animal, plant or specimen derived from an animal or plant. |
| Wildlife corridor | A strip of habitat that facilitates fauna movement between otherwise isolated patches of habitat. |
| World Heritage property | Under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth), a World Heritage property is either: <ul style="list-style-type: none"> ▪ an Australian property on the World Heritage List kept under the World Heritage Convention; or ▪ a property declared to be a World Heritage property by the Commonwealth Environment Minister. |
| Zeolitic | Group of structures containing large internal cavities. |