



Abbreviations and definitions



Narromine to Narrabri Environmental Impact Statement

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Abbreviations

Abbreviation	Definition
ABS	Australian Bureau of Statistics
AEP	annual exceedance probability
AHD	Australian height datum
AHIMS	Aboriginal Heritage Information Management System
ALCAM	Australian Level Crossing Assessment Model
ANZECC guidelines	<i>Australian Guidelines for Water Quality Monitoring and Reporting</i> (ANZECC/ARMCANZ, 2000b)
AS	Australian Standard
BC Act	<i>Biodiversity Conservation Act 2016</i> (NSW)
BoM	Bureau of Meteorology
CEMP	construction environmental management plan
Cth	Commonwealth
dB(A)	decibels (A-weighted)
EEC	endangered ecological community
EIS	environmental impact statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
EPL	environment protection licence
ESD	ecologically sustainable development
FM Act	<i>Fisheries Management Act 1994</i> (NSW)
ha	hectare
Heritage Act	<i>Heritage Act 1977</i> (NSW)
Infrastructure SEPP	State Environmental Planning Policy (Infrastructure) 2007
IS	infrastructure sustainability
ISCA	Infrastructure Sustainability Council Australia
km	kilometres
km ²	square kilometres
km/h	kilometres per hour
LEP	local environmental plan
LGA	local government area
LALC	Local Aboriginal Land Council
m	metres
m ³	cubic metres
MCA	multi-criteria assessment

Abbreviation	Definition
NCA	noise catchment area
NEPC	National Environmental Protection Council
NEPM	National Environmental Protection Measure
NPW Act	<i>National Parks and Wildlife Act 1974 (NSW)</i>
NSW EPA	NSW Environment Protection Authority
OEH	(former) Office of Environment and Heritage
PCT	plant community type
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of less than 10 micrometre (µm).
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of less than 2.5 micrometre (µm).
POEO Act	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
the Regulation	Environmental Planning and Assessment Regulation 2000 (NSW)
SEARs	Secretary's Environmental Assessment Requirements (for the EIS)
SEPP	State Environmental Planning Policy

Definitions

Term	Definition
Aboriginal object	Defined by the <i>National Parks and Wildlife Act 1974</i> (NSW) as: ‘any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains’.
Aboriginal site	A place where physical remains or modification of the natural environment indicate past and ‘traditional’ activities by Aboriginal people. Site types include artefact scatters, isolated artefacts, burials, shell middens, scarred trees, quarries and contact sites. Includes sites listed on the AHIMS. Also known as ‘Aboriginal objects’.
Absorptive capability	Absorptive capability relates to the ability of the landscape character zones to absorb the proposal within the existing landscape setting.
Active control (level crossings)	Where the movement of vehicular or pedestrian traffic across a railway crossing is controlled using devices such as flashing signals, warning sounds, gates and/or boom barriers (or a combination of these), with the device/s activated prior to, and during, the passage of a train through the crossing.
Annual exceedance probability (AEP)	The chance of a flood of a nominated size occurring in a particular year. The chance of the flood occurring is expressed as a percentage and, for large floods, is the reciprocal of the ARI. For example, the 1% AEP flood event is equivalent to the 100-year ARI flood event.
Aquifer	A groundwater bearing formation sufficiently permeable to transmit and yield groundwater or water bearing rock.
Ballast	Crushed rock, stone, etc. used to provide a foundation for a railway track. Ballast usually provides the bed on which railway sleepers are laid, transmits the load from train movements, and restrains the track from movement.
Biodiversity	The variety of plant and animal life in the world or in a particular habitat.
Biodiversity offsets	Measures that benefit biodiversity by compensating for the adverse impacts elsewhere of an action, such as clearing for development. Biodiversity offsets work by protecting and managing biodiversity values in one area in exchange for impacts on biodiversity values in another.
Biophysical environment	The physical environment (water, soil etc) as well as the biological activity within it (plants, animals, etc).
Bore	Constructed connection between the surface and a groundwater source that enables groundwater to be transferred to the surface either naturally or through artificial means.
Borrow pit	An area where material (such as sand, gravel or rock) has been dug for construction use at another location.
Bulk freight	Bulk freight generally involves large quantities of homogenous product, typically liquid or loose crushed solid material (such as cement, grains and ores), transported en masse, without packaging.
Catchment	The land area draining through the main stream, as well as tributary streams, to a particular site. It always relates to an area above a specific location.
Classified road	A road that meets the definition of a classified road and is listed as such under the <i>Roads Act 1993</i> (NSW) includes main roads, highways, freeways, etc.
Climate	The average weather experienced at a site or region over a period of many years, ranging from months to many thousands of years. The relevant measured quantities are most often surface variables such as temperature, rainfall and wind.

Term	Definition
Climate scenario	A plausible and often simplified representation of the future climate, based on an internally consistent set of climatological relationships that has been constructed for explicit use in investigating the potential consequences of anthropogenic climate change, often serving as input to impact models.
Construction compound	An area used as the base for construction activities, usually for the storage of plant, equipment and materials and/or construction site offices and worker facilities.
Construction environmental management plan	A site-specific plan developed for the construction phase of a project, to ensure that all contractors and sub-contractors comply with the environmental conditions of approval for the project and that the environmental risks are properly managed.
Construction segments/ portions	The biodiversity assessment groups the impacts of the proposal into 11 construction 'segments' or portions and determines associated biodiversity credits and offsets for each. This is to allow flexibility for each segment's biodiversity credits to be retired at different times rather than for the entire proposal at the same time.
Crossing loop	A section of track off to the side of the main track/s that allows a train to move to the side so that another train can pass.
Crown land	Land that is owned by the NSW Government.
Culvert	A structure that allows water to flow under a road, railway, track, or similar obstruction.
Cumulative impacts	Impacts that, when considered together, have different and/or more substantial impacts than a single impact assessed on its own.
Drainage	Natural or artificial means for the interception and removal of surface or subsurface water.
Emission	A substance discharged into the air.
Erosion	A natural process where wind or water detaches a soil particle and provides energy to move the particle.
Fauna	Animal life
Flora	Plant life
Flood	Relatively high stream flow that overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam; and/or local overland flooding associated with major drainage before entering a watercourse; and/or coastal inundation resulting from super-elevated sea levels and/or waves overtopping coastline defences, excluding tsunamis.
Floodplain	An area of land that is inundated by floods up to and including the probable maximum flood event (i.e. flood-prone land).
Formation	The earthworks/material on which the ballast, sleepers and tracks are laid.
Freight	Goods transported by truck, train, ship, or aircraft.
Freight task	The amount of freight transport, usually measured in tonnes or tonne-kilometres.
Groundwater	Water that is held in rocks and soil beneath the Earth's surface.
Heritage listed	An item, building or place included on statutory heritage lists maintained by local, State and/or the Australian Government.
Hydrology	The study of rainfall and surface water runoff processes.
Impact	Influence or effect exerted by a project or other activity on the natural, built and community environment.
Infrastructure sustainability	Infrastructure that is designed, constructed and operated to optimise environmental, social and economic outcomes over the long term.

Term	Definition
Inland Rail Program (Inland Rail)	The Inland Rail program comprises the design and construction of a new Inland Rail connection between Melbourne and Brisbane, via Wagga, Parkes, Moree, and Toowoomba. The route for Inland Rail is about 1,700 km in length. Inland Rail will involve a combination of upgrades of existing rail track and the provision of new track.
$L_{A90}(\text{period})$	The sound pressure level exceeded for 90 per cent of the measurement period.
$L_{Aeq}(\text{time})$	The equivalent continuous sound level for a defined time period.
L_{Amax}	The maximum sound level recorded during the measurement period.
Landscape	All aspects of a tract of land, including landform, vegetation, buildings, villages, towns, cities and infrastructure.
Landscape character	The combined quality of built, natural and cultural aspects that make up an area and provide its unique sense of place.
Landscape character zone	An area of landscape with similar properties or strongly defined spatial qualities, distinct from areas immediately adjacent.
Level crossing	A place where rail lines and a road cross at the same elevation.
Level crossing protection	The level of control provided at level crossings, which is determined on a case-by-case basis and depends on the particular characteristics of a crossing. It generally falls into two categories: passive protection (uses warning signage only) or active protection (uses signage and flashing lights with boom gates).
Level of service	Defined by Austroads as a measure for ranking operating road and intersection conditions, based on factors such as speed, travel time, freedom to manoeuvre, interruptions, comfort and convenience.
Local road	Road used primarily to access properties located along the road.
Made road	A road that has been graded but may or may not be sealed.
Multi-purpose compound	Large construction compounds proposed for use during construction that would provide a variety of construction-related support services, including storage, assembly, concrete batching and workforce facilities.
Non-bulk freight	Non-bulk freight is generally characterised as any containerised, packaged or other unitised freight, such as: pallets; motor vehicles and trailers; laden transported vehicles and live animals. It is generally placed or lifted onto or into transport vehicles or holds. It often involves heterogeneous goods being moved between dispersed locations. Non-bulk freight varies in density, perishability and fragility.
PM_{10}	Particulate matter 10 micrometres or less in diameter. Particles in this size range make up a large proportion of dust that can be drawn deep into the lungs. This is a classification of particles by size rather than chemical properties.
Possession	A period of time during which a rail line is blocked to trains to permit work to be carried out on or near the line.
Proposal	The construction and operation of the Narromine to Narrabri section of Inland Rail.
Proposal site	The area that would be directly affected by construction works (also known as the construction footprint). It includes the location of proposal infrastructure, the area that would be directly disturbed by the movement of construction plant and machinery, and the location of the storage areas/compounds sites, etc., that would be used to construct that infrastructure.
Rail alignment	The exact positioning of the track, accurately defined both horizontally and vertically, along which the rail vehicles operate.
Rail corridor	The corridor within which the rail tracks and associated infrastructure are located.

Term	Definition
Rating background level	The underlying level of noise present in an area once transient and short-term noise events are filtered out.
Reference design	An initial functional layout of a project. Used to facilitate understanding of a project, establish feasibility, provide basis for estimating, and determine further investigations needed for detailed design.
Risk	Chance of something happening that will potentially have an undesirable effect. It is measured in terms of consequence and likelihood.
Road reserve	A legally defined area of land within which facilities such as roads, footpaths and associated features may be constructed for public travel.
Scour	The erosion of material by the action of flowing water.
Species credit	The class of biodiversity credits created or required for the impact on threatened species that cannot be reliably predicted to use an area of land based on habitat surrogates. Species that require species credits are listed in the threatened species profile database.
Spoil	Excess soil, rock or dirt excavated from the site.
Sensitive receivers	Land uses that are sensitive to potential noise, air and visual impacts, such as residential dwellings, schools and hospitals.
State significant infrastructure	Major transport and services infrastructure considered to have State significance as a result of size, economic value or potential impacts.
Stock crossing	A defined location providing the ability for stock (cattle and sheep) to safely cross the rail corridor, via a level crossing or an underpass (culvert or bridge).
Study area	The study area is defined as the wider area including and surrounding the proposal site, with the potential to be directly or indirectly affected by the proposal (e.g. by noise and vibration, visual or traffic impacts). The actual size and extent of the study area varies according to the nature and requirements of each impact assessment technical report.
Surface water	Water flowing or held in streams, rivers and other wetlands in the landscape.
Temporary workforce accommodation facility	A facility used to accommodate the construction workforce for the proposal and provide a range of facilities for the workforce, including accommodation and catering.
Track	The structure consisting of the rails, fasteners, sleepers and ballast, which sits on the formation.
Track formation	See the definition of formation.
Travelling stock reserves	Travelling stock reserves are parcels of Crown land reserved under the <i>Crown Land Management Act 2016</i> (NSW) for use by travelling stock.
Visual amenity	The value of a particular area or view in terms of what is seen.
Viewpoint	The specific location of a view, typically used for assessment purposes.
Waste	Includes any matter (whether liquid, solid, gaseous or radioactive) that is discharged, emitted or deposited in the environment in such volume, constituency, or manner as to cause an alteration to the environment.
Water table	The surface of saturation in an unconfined aquifer, or the level at which pressure of the water is equal to atmospheric pressure.