Module 11. Wetland protection area

11.1 Wetland protection area state code

11.1.1 Purpose

The purpose of the code is to ensure that development in wetland protection areas is planned, designed, constructed and operated to prevent the loss or degradation of wetland environmental values, or enhances the values of wetlands within these areas.

Editor's note: The purpose of the code will be achieved through the following overall outcomes in a wetland protection area:

(1) For development to which the code applies in a wetland protection area, the development—
  (a) is located outside of a wetland
  (b) enhances existing wetland environmental values or avoids adverse effects on wetland environmental values.

(2) Where significant adverse impacts on wetland environmental values cannot be avoided:
  (a) those impacts are mitigated
  (b) an environmental offset is provided for any significant residual impacts.

(3) For development listed in (4), the development—
  (a) achieves the outcomes in (1), where relevant, to the maximum extent practicable where this would not compromise the intrinsic characteristics of the development
  (b) provides an environmental offset for any significant residual impacts on wetland environmental values, except where the development arises from and is necessary to give effect to a development approval.

(4) Development that does not have to fully achieve the outcomes in (1), but is acceptable if it achieves the outcome in (3), is development that—
  (a) provides for an overriding need in the public interest, or
  (b) is a development commitment, or
  (c) is for one or more of the following types of community infrastructure:
    (i) aeronautical facilities of State significance as defined in the *State Planning Policy*, Department of State Development, Infrastructure and Planning 2014
    (ii) emergency services facilities
    (iii) wharves, public jetties, port facilities and navigational facilities
    (iv) domestic gas pipelines
    (v) storage and works depots and similar facilities, including administrative facilities associated with the provision or maintenance of the community infrastructure in (i) to (iv).

11.1.2 Criteria for assessment

Development mentioned in column 1 below must be assessed against the assessment criteria in the table mentioned in column 2.

Column 1	Column 2
Material change of use	Table 11.1.1
Operational work	Table 11.1.1
Reconfiguring a lot	Table 11.1.1

Table 11.1.1: All development

Performance outcomes	Acceptable outcomes
Acceptable circumstances for not fully achieving the performance outcomes	
PO1 Acceptable circumstances for not fully achieving all other performance outcomes is development that:	**AO1.1** The proposal achieves PO2 – PO13 to the maximum extent practicable, where this would not compromise the intrinsic characteristics of the development. AND

Performance outcomes	Acceptable outcomes
(1) provides for an overriding need in the public interest (2) is a development commitment (3) is for community infrastructure.	**AO1.2** Where impacts cannot be reasonably avoided or minimised, the proposal provides an environmental offset for any significant residual impact on a wetland, except where the development arises from, and is necessary to give effect to, a development approval.
Development location	
PO2 Development is not carried out in a wetland in a wetland protection area.	**AO2.1** Development is located outside: (1) the mapped boundary of a wetland in a wetland protection area, or (2) an alternative mapped boundary of the wetland in a wetland protection area: (a) submitted as part of the development application, and (b) supported by a site assessment and analysis of the wetland to delineate its extent, in accordance with the *Queensland wetland definition and delineation guideline* (as updated from time to time) available on the Department of Environment and Heritage Protection website, (c) if the chief executive is satisfied the alternative is a more accurate representation of the boundary. OR **AO2.2** Development is minimised in a wetland in a wetland protection area and, where impacts cannot be reasonably avoided or minimised, an environmental offset is provided for any significant residual impact, in accordance with PO13 (except where development arises from, and is necessary to give effect to a current development approval).
PO3 An adequate buffer to a wetland in a wetland protection area is provided and maintained.	**AO3.1** A buffer surrounding a wetland in a wetland protection area is provided and has a minimum width of: (1) 200 metres, where the wetland is located outside an urban area, or (2) 50 metres, where the wetland is located within an urban area. OR **AO3.2** An alternative buffer is provided, the width of which is supported by evaluation of the environmental values and functioning of, and threats to, the wetland in a wetland protection area. Editor's note: The *Queensland wetland buffer guideline*, Department of Environment and Heritage, 2011 should be referred to when planning detailed buffer design to position development, determine any alternative buffer widths, and establish operating measures that avoid adverse impacts on a wetland.
Hydrology	
PO4 The existing surface water hydrological regime of the wetland protection area (including the area of the wetland) is enhanced or maintained.	**AO4.1** Development must: (1) provide a net ecological benefit and improvement to the environmental values and functioning of a wetland in a wetland protection area (2) rehabilitate the existing hydrological regime, or restore the natural hydrological regime of the wetland in a wetland protection area to enhance the ecological functions and biodiversity values of the wetland. Editor's note: Refer to the *Wetland rehabilitation guidelines for the Great Barrier Reef catchment*, Wetland Care Australia, 2008. OR **AO4.2** Development does not change the existing surface water hydrological regime of a wetland in a wetland protection area, including through channelisation, redirection or interruption of flows. Editor's note: An assessment of the extent of change should take into account the natural

Performance outcomes	Acceptable outcomes
	variability of the hydrological regime of the wetland. OR **AO4.3** The extent of any change to the existing surface water hydrological regime is minimised to ensure wetland values and functioning are protected. The change is minimised if: (1) there is no change to the reference duration high-flow and low-flow duration frequency curves, low-flow spells frequency curve and mean annual flow to and from the wetland (2) any relevant stream flows into the wetland comply with the relevant flow objectives of the applicable water resource plan for the area (3) for development resulting in an increase to the velocity or volume of stormwater flows into the wetland—the collection and re-use of stormwater occurs in accordance with (1) and (2).
PO5 The existing groundwater hydrological regime of the wetland protection area (including the area of the wetland) is enhanced or protected.	**AO5.1** The water table and hydrostatic pressure in the wetland protection area are returned to their natural state. OR **AO5.2** The water table and hydrostatic pressure in the wetland protection area is not lowered or raised outside the bounds of variability of existing pre-development conditions. AND **AO5.3** Development does not result in the ingress of saline water into freshwater aquifers.
Stormwater management	
PO6 During construction and operation of development in a wetland in a wetland protection area: (1) a wetland in a wetland protection area is not used for stormwater treatment (2) the buffer for and water quality values of a wetland in a wetland protection area are protected from stormwater impacts.	**AO6.1** Development does not result in any measurable change to the quantity or quality of stormwater entering a wetland in a wetland protection area during construction or operation. OR **AO6.2** Development in a wetland protection area manages stormwater quantity and quality in accordance with best practice environmental management for erosion and sediment control in the *State planning policy, Appendix 3, Table A: Construction phase—stormwater management quality design objectives*, Department of State Development, Infrastructure and Planning, 2014. AND **AO6.3** During the construction of development in a wetland protection area, erosion and sediment control practices, including approved proprietary products, are designed, installed, constructed, maintained and monitored in accordance with local conditions and recommendations by suitably qualified persons or professionals. During construction, development also incorporates erosion and sediment control measures to achieve best practice design objectives. Editor's note: It is recommended that an erosion and sediment control plan should be prepared by a Registered Professional Engineer of Queensland (RPEQ) or Certified Professional in Erosion and Sediment Control (CPESC) to demonstrate compliance with AO6.2 and AO6.3. AND **AO6.4** During construction of development in a wetland protection area, release of sediment-laden stormwater is avoided for the nominated design storm, and minimised if the design storm is exceeded, consistent with an erosion and sediment control plan for the development which includes the following best practice principles: (1) stormwater run-off during any construction works is diverted or by-passed around a wetland

Performance outcomes	Acceptable outcomes
	(2) all stormwater run-off saved for dewatering flow from site catchments achieves a maximum concentration of 50 milligrams per litre of total suspended solids (3) all drainage lines, diversion and collection drains and bank, chutes and outlets are able to safely carry peak flow in accordance with the *State planning policy, Appendix 3, Table A: Construction phase—stormwater management quality design objectives*, Department of State Development, Infrastructure and Planning, 2014. AND **AO6.5** During construction of development in a wetland protection area, erosion and sediment control practices, including approved proprietary products, are designed, installed, constructed, maintained and monitored in accordance with local conditions and recommendations by suitably qualified persons or professionals. AND **AO6.6** During operation of development in a wetland protection area, stormwater discharges are treated in accordance with best practice load reduction design objectives before stormwater flow enters the buffer for a wetland. Stormwater treatment should address pollutants including, but not limited to: (1) total suspended solids (2) total phosphorus (3) total nitrogen (4) gross pollutants >5 millimetres. AND **AO6.7** During operation of development in a wetland protection area, development incorporates stormwater flow control measures to achieve best practice design objectives.
Ecological values	
PO7 Development involving the clearing of vegetation protects the biodiversity, ecological values and processes, and hydrological functioning of a wetland in wetland protection area, including: (1) water quality values (2) aquatic habitat values (3) terrestrial habitat values (4) usage of the site by native wetland fauna species or communities.	**AO7.1** Vegetation clearing undertaken as a consequence of development does not occur: (1) in a wetland in a wetland protection area, or (2) in a buffer for a wetland in a wetland protection area. OR **AO7.2** Where development is in a wetland protection area, development is located and designed to minimise the extent of vegetation clearing, and development is undertaken outside of a wetland and any buffer for the wetland to minimise the extent of vegetation clearing required.
PO8 Development avoids land degradation in a wetland protection area, including: (1) mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, wind erosion or scalding (2) loss or modification or chemical, physical or biological properties or functions of soils.	**AO8.1** Development: (1) is located outside the wetland in a wetland protection area and buffer for the wetland (2) that involves clearing is undertaken in a way that avoids and minimises land degradation in accordance with a sediment and erosion control plan. AND **AO8.2** Mechanical clearing of vegetation within a wetland protection area: (1) is located outside of a wetland and any buffer for the wetland (2) is undertaken in a way that avoids and minimises land degradation in accordance with a sediment and erosion control plan.

Performance outcomes	Acceptable outcomes
	OR **AO8.3** The application is a development application where a local government is the assessment manager.
PO9 Development in a wetland protection area ensures that any existing ecological corridors are enhanced or protected, and have dimensions and characteristics that will: (1) effectively link habitats on or adjacent to the development (2) facilitate the effective movement of terrestrial and aquatic fauna accessing or using a wetland as habitat.	**AO9.1** Development in a wetland protection area does not occur within an existing ecological corridor. OR each of the following acceptable outcomes apply: **AO9.2** If an ecological corridor is required to facilitate fauna movement, access or use of a wetland in a wetland protection area, the ecological corridor: (1) has a minimum width of 100 metres, and is provided and maintained in accordance with the *Wetland rehabilitation guidelines for the Great Barrier Reef catchment*, Department of Environment and Heritage, 2008 or other relevant guidelines, or (2) is of sufficient width to facilitate fauna movement, access or use of a wetland in a wetland protection area, and is provided and maintained in accordance with the *Wetland rehabilitation guidelines for the Great Barrier Reef catchment*, Department of Environment and Heritage, 2008 or other relevant guidelines. AND **AO9.3** Unimpeded movement of fauna associated with or likely to use, a wetland in a wetland protection area as part of their normal life cycle is facilitated within and through the wetland protection area, particularly along identified ecological corridors, by: (1) ensuring that development (for example, roads, pedestrian access, in-stream structures) during both construction and operation does not create barriers to the movement of fauna along or within ecological corridors (2) providing wildlife movement infrastructure where necessary, and directing fauna to locations where wildlife movement infrastructure has been provided to enable fauna to safely negotiate a development area (3) separating fauna from potential hazards (for example, through fencing) (4) setting development back from a waterway within a strategic environmental area by at least 200 metres.
PO10 Development does not result in the introduction of non-native pest plants or animals that pose a risk to the ecological values and processes of a wetland in a wetland protection area.	**AO10.1** Existing non-native pest plants or animals are removed, or their threat is controlled by adopting pest management practices that provide for the long-term integrity of a wetland in a wetland protection area. OR all of the following acceptable outcomes apply: **AO10.2** Development does not result in the introduction of any non-native fauna or pest species in a wetland in a wetland protection area. AND **AO10.3** Exclusion fencing or other pest dispersal control measures are provided in appropriate locations to manage the threat of pest species to a wetland in a wetland protection area. AND **AO10.4** Exclusion fencing does not result in a barrier or hazard to the movement of wetland fauna in a wetland protection area.
PO11 During construction and operation of development in a wetland protection area, wetland fauna are protected from impacts associated with noise, light or visual disturbance.	**AO11.1** Development in a wetland protection area does not result in any measurable impact on wetland fauna from noise, light or visual disturbance during construction or operation. OR **AO11.2** Development in a wetland protection area mitigates noise, light and visual disturbance in accordance with expert advice, to ensure it does not have an adverse effect on the wetland fauna of a wetland in a wetland protection area.

Performance outcomes	Acceptable outcomes
	Visual disturbance may be mitigated by excluding activities in certain areas (for example, line of sight buffers, exclusion fencing), and using visual screens, or similar, during sensitive periods, such as when breeding or roosting.
PO12 During construction and operation of the development in a wetland protection area, ongoing management, maintenance and monitoring is undertaken to ensure adverse effects on hydrology, water quality and ecological processes of a wetland are avoided or minimised.	**AO12.1** Construction and operations related to the development in a wetland protection area are carried out in accordance with an operational management plan where appropriate.
Offsets	
PO13 Development involving a wetland in a wetland protection area avoids significant adverse impacts on matters of state environmental significance; and riparian areas or wildlife corridors in a strategic environmental area, or where this is not reasonably possible, significant adverse impacts are mitigated and an environmental offset is provided for any significant residual impacts on matters of state environmental significance that are prescribed environmental matters.	**AO13.1** Matters of state environmental significance likely to be affected by development involving a wetland in a wetland protection area are identified and evaluated. AND **AO13.2** Any significant adverse impacts on matters of state environmental significance and riparian areas or wildlife corridors in a strategic environmental area are avoided. OR **AO13.3** Where significant adverse impacts on matters of state environmental significance and on strategic environmental area values cannot be reasonably avoided: (1) significant adverse impacts are mitigated (2) where impacts cannot be reasonably minimised, an environmental offset is provided for any significant residual impacts on matters of state environmental significance that are prescribed environmental matters (3) development minimises clearing of native vegetation in a strategic environmental area beyond the extent of operational work, and natural regeneration of cleared or work areas is facilitated. Editor's note: Applications for development should identify anticipated losses, and outline what actions are proposed to be undertaken to offset the loss in accordance with Section 3.3 (Wetlands and watercourses) of the *Significant Residual Impact Guideline* and the relevant *Queensland Environmental Offsets Policy*.

11.2 Reference documents

Wetland Care Australia 2008 *Wetland rehabilitation guidelines for the Great Barrier Reef catchment*

Department of Environment and Heritage Protection 2014 *Queensland Environmental Offsets Policy*

Department of Environment and Resource Management 2011 *Queensland wetland buffer guideline*

Department of Environment and Resource Management 2011 *Queensland wetland definition and delineation guideline*

Department of Infrastructure, Local Government and Planning 2014 *State Planning Policy*

11.3 Glossary of terms

Agricultural activities means:

(1) cultivating soil

(2) planting, irrigating, gathering or harvesting a crop, including a food or fibre crop

(3) disturbing the soil to establish non-indigenous grasses, legumes or forage cultivars, or

(4) using the land for horticulture or viticulture.

The term does not include:

(1) producing agricultural products for the domestic needs of the occupants of the land if the maximum area of the land on which the products are produced is—

  (a) for fewer than 10 occupants of the land—0.25 hectares

  (b) for 10 or more, but fewer than 50 occupants of the land—2 hectares

  (c) for 50 or more, but fewer than 100 occupants of the land—4 hectares

  (d) for 100 or more occupants of the land—6 hectares, or

(2) producing agricultural products in a market garden, if the maximum area of land on which the products are produced is not more than 4 hectares, or

(3) baling or cutting pasture, or

(4) broadcasting seed to establish an improved pasture, or

(5) planting, gathering or harvesting a crop of pasture or grain species in a preservation area, if the pasture or grain species is—

  (a) only for animal feed

(6) forestry activities, or

(7) activities carried out for land rehabilitation or remediation.

Examples—

  (a) deep ripping, shallow ponding

  (b) blade ploughing in an area that, under the *Vegetation Management Act 1999*, is a category X area or category C area on a property map of assessable vegetation.

Animal husbandry activities means:

(1) breeding, keeping, raising or caring for animals, for commercial purposes, that—

  (a) rely on prepared, packaged or manufactured feed or irrigated or ponded pastures

  (b) are kept in a pen, yard, enclosure, pond, cage, shed, stables or other confined area or structure, or

(2) establishing a feedlot, piggery or dairy.

The term does not include—

(1) grazing, or

(2) raising livestock for the domestic needs of the occupants of the land, or

(3) keeping livestock, for example, horses, necessary for working the land, or

(4) giving livestock supplementary feed, including, for example, by using roller drums, blocks, licks or protein meals—

  (a) to maintain the livestock's survival, or

  (b) to improve the livestock's fertility, or

  (c) for an activity associated with an animal husbandry activities (for example, weaning), or

  (d) if the livestock is predominantly reliant on native or improved pasture for feed—to prepare the livestock for sale, or

(5) aquaculture, or

(6) environmentally relevant activities.

Buffer means the transition zone between a wetland and any surrounding land use that supports the values and processes of the wetland and protects it from external threats.

Clear see the *Vegetation Management Act 1999*.

Editor's note: To clear or clearing vegetation–

(1) means remove, cut down, ringbark, push over, poison or destroy in any way, including by burning, flooding or draining but
(2) does not include destroying standing vegetation by stock, or lopping a tree.

Community infrastructure means one or more of the following types of community infrastructure:

(1) aeronautical facilities of State significance

(2) emergency services facilities

(3) wharves, public jetties, port facilities and navigational facilities

(4) domestic gas pipelines

(5) storage and works depots and similar facilities, including administrative facilities associated with the provision or maintenance of the community infrastructure in (1) to (4).

Development approval see the *Sustainable Planning Act 2009*.

Editor's note: Development approval means—

(1) a decision notice or a negotiated decision notice that—

  (a) approves, wholly or partially, development applied for in a development application (whether or not the approval has conditions attached to it)

  (b) is in the form of a preliminary approval, a development permit, or an approval combining both a preliminary approval and a development permit in the one approval, or

(2) a deemed approval, including any conditions applying to it.

Development commitment means any of the following:

(1) development that arises from, and is necessary to give effect to, a development approval

(2) development that is located within a state development area under the *State Development and Public Works Organisation Act 1971* and is consistent with the development scheme prepared for the state development area

(3) development for which the Coordinator-General has evaluated an environmental impact statement under the *State Development and Public Works Organisation Act 1971* if the report recommends the development be approved

(4) development that is consistent with a designation of land for community infrastructure under the *Sustainable Planning Act 2009*.

Ecological corridor means an area of land (typically vegetated), or water, including areas above and below ground, that is capable of providing fauna habitat in its own right, or has the potential to do so, while allowing fauna to move to and between other habitats.

Environmental offset see the *Environmental Offsets Act 2014.*

Editor's note: Environmental offset means works or activities undertaken to counterbalance the impacts of a development on the natural environment.

Environmental values, for wetlands, are those values declared under the *Environmental Protection Regulation 2008*, section 81A to be the environmental values for wetlands.

Hydrological regime means the surface and groundwater flows of water into and out of a wetland, and its associated natural wetting and drying cycle, over an appropriate temporal scale. It includes:

(1) peak flows

(2) volume of flows

(3) duration of flows

(4) frequency of flows

(5) seasonality of flows

(6) water depth (seasonal average)

(7) wetting and drying cycle.

Map of referable wetlands see Environmental Protection Regulation 2008, schedule 12.

Editor's note: Map of referable wetlands means the 'Map of referable wetlands', a document approved by the chief executive [Environment] on 4 November 2011 and published by the department [Environment and Heritage Protection], as amended from time to time by the chief executive under section 144D [Environmental Protection Regulation 2008].

Matters of state environmental significance see the *State Planning Policy*, Department of State Development, Infrastructure and Planning, 2014.

Editor's note: Matters of state environmental significance means the following natural values and areas:

(1) protected areas (including all classes of protected area except coordinated conservation areas) under the *Nature Conservation Act 1992*

(2) marine parks and land within a 'marine conservation park', 'conservation park', 'scientific research', 'preservation' and 'buffer' zone under the *Marine Parks Act 2004*

(3) areas within declared fish habitat areas that are management A areas and management B areas under the Fisheries Regulation 2008

(4) threatened wildlife under the *Nature Conservation Act 1992* and special least concern animal under the Nature Conservation (Wildlife) Regulation 2008

(5) regulated vegetation under the *Vegetation Management Act 2009* that is:

  (a) Category B areas on the regulated vegetation management map, that are 'endangered' or 'of concern', regional ecosystems

  (b) Category C areas on the regulated vegetation management map that are 'endangered' or 'of concern' regional ecosystems

  (c) Category R areas on the regulated vegetation management map

  (d) areas of essential habitat on the essential habitat map for wildlife prescribed as 'endangered wildlife' or 'vulnerable wildlife' under the *Nature Conservation Act 1992*

  (e) regional ecosystems that intersect with watercourses identified on the vegetation management watercourse map

  (f) regional ecosystems that intersect with wetlands identified on the vegetation management wetlands map

(6) wetlands in a wetland protection area or wetlands of high ecological significance shown on the Map of referable wetlands under the Environmental Protection Regulation 2008

(7) wetlands and watercourses in high ecological value waters as defined in the Environmental Protection (Water) Policy 2009, schedule 2

(8) legally secured offset areas.

Mechanical clearing means clearing vegetation using machinery, which disturbs the soil surface or uproots woody vegetation.

Overriding need the factors for determining overriding need in the public interest are:

(1) There is an overriding need if the overall social, economic and environmental benefits of the development outweigh—

  (a) any detrimental effect upon the natural values of the land and adjacent areas

  (b) any conflicts it has with the outcome of *State Planning Policy*, Department of State Development, Infrastructure and Planning, 2014

  (c) the development cannot be located elsewhere so as to avoid conflicting with the *State Planning Policy*, Department of State Development, Infrastructure and Planning, 2014.

(2) The following do not establish an overriding need in the public interest:

  (a) uses with relatively few location-based requirements

  (b) interests in or options over land

  (c) availability or ownership of land.

Prescribed environmental matter see *Environmental Offsets Regulation 2014*.

Editor's note: A prescribed environmental matter is any species, ecosystem or other similar matter protected under Queensland legislation for which an environmental offset may be provided. Each of the prescribed environmental matters are listed under the Environmental Offsets Regulation 2014. Not all environmental matters that may be impacted by development are associated with an offset requirement. Offsets are only required for a limited set of environmental values — categorised as prescribed environmental matters. These prescribed matters may be of national, State or local significance.

Significant residual impact see the *Environmental Offsets Act 2014*.

Editor's note: Generally, a significant residual impact is an adverse impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that–

(1) remains, or will or is likely to remain, (whether temporarily or permanently) despite on-site mitigation measures for the prescribed activity; and

(2) is, or will or is likely to be, significant.

Strategic environmental area see the *Regional Planning Interests Act 2014*.

Editor's note: a strategic environmental area is an area that –

(1) contains 1 or more environmental attributes for the area

(2) is either—
  (a) shown on a map in a regional plan as a strategic environmental area, or
  (b) prescribed under regulation.

Urban area see the *Sustainable Planning Act 2009*.

Editor's note: Urban area means–

(1) an area identified in a gazette notice by the chief executive under the *Vegetation Management Act 1999* as an urban area, or
(2) if no gazette notice has been published—an area identified as an area intended specifically for urban purposes, including future urban purposes (but not rural residential or future rural residential purposes) on a map in a planning scheme that:

  (a) identifies the areas using cadastral boundaries and Schedule 26 Sustainable Planning Regulation 2009

  (b) is used exclusively or primarily to assess development applications.

Vegetation includes grass and non-woody herbage.

Visual disturbance means the disturbance of fauna by visual intrusions that could lead to a loss or diminishment of key life cycle functions (for example, nest abandonment, modified feeding patterns), or changes to usage patterns of a wetland by mobile fauna (such as birds). This term include disturbance by people, pets or vehicles.

Water means all or any of the following:

(1) water in a wetland, watercourse, lake or spring

(2) underground water

(3) overland flow water

(4) water that has been collected in a dam.

Wetland means an area shown as a wetland on the Map of referable wetlands as defined within the Environmental Protection Regulation 2008.

Wetland fauna means species that have adapted to living in wetlands and are dependant on them for:

(1) all of their life cycle, or

(2) a major part of their life, or

(3) critical stages of their life cycle, such as breeding and larval development.

Wetland protection area means an area shown as a wetland protection area on the Map of referable wetlands as defined within the Environmental Protection Regulation 2008.

Wildlife movement infrastructure includes fauna underpasses under roads and sewage infrastructure, and fauna overpasses over roads.

11.4 Abbreviations

CPESC – Certified Professional in Erosion and Sediment Control

RPEQ – Registered Professional Engineer Queensland