# **Queensland Environmental Offsets Policy**

Version 1.9 (Superseded)

August 2020



Prepared by: Conservation Policy and Planning, Department of Environment and Science

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August 2020

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#### **Definitions**

Words in italics, other than titles of legislation and scientific names, are terms that are defined in the glossary.

## Introduction

Areas of high environmental value (for example habitat for vulnerable species) sometimes coincide with sites of particular value to industry, such as the presence of natural resources or proximity to infrastructure. *Environmental offsets* (offsets) may be used to counterbalance *significant residual impacts* from particular activities on particular matters of national, state or local environmental significance.

Under a number of existing Queensland laws, offsets may be required for certain activities where there is an unavoidable impact on significant environmental values. To counterbalance this loss, offsets, which include improvement and protection of alternative sites and/or actions that improve environmental viability, can provide a *conservation outcome* that is equivalent to the environmental value being lost at the impact site.

The mitigation hierarchy 'avoid - mitigate - offset' applies to prescribed activities that impact prescribed environmental matters. This means that in designing or planning the prescribed activity, impacts on prescribed environmental matters should, in the first instance, be avoided wherever possible. For impacts that cannot be avoided, the extent of those impacts should be carefully managed and mitigated to the greatest possible extent. These measures can reduce and, in some cases, remove the need for offsets. However, if there is still a significant impact to a prescribed environmental matter then an offset may be required. In cases where the impacted prescribed environmental matter cannot be offset, the prescribed activity might not be approved.

If an administering agency decides to impose an offset condition on an authority, the offset must be delivered in accordance with the Queensland *environmental offsets* framework established under the *Environmental Offsets Act* 2014, *Environmental Offsets Regulation 2014* and this policy.

This policy clarifies how offsets across Queensland's terrestrial and aquatic ecosystems should be delivered. The policy does not limit the functions or powers under the *State Development Public Works Organisation Act 1971* (State Development Act) of the Coordinator-General.

This policy provides a single, streamlined framework for *environmental offsets* in Queensland, and replaces the following repealed offset policies:

- Queensland Government Environmental Offsets Policy (2008);
- Marine Fish Habitat Offsets Policy (version FHMOP005.2);
- Policy for Vegetation Management Offsets (2011);
- Queensland Biodiversity Offset Policy (2011); and
- Offsets for Net Gain in Koala Habitat in South East Queensland Policy (2010).

The policy also includes offset requirements for local government and for impacts to marine parks and *protected* areas (other than coordinated conservation areas).

This policy is a statutory instrument, given effect through section 12 of the *Environmental Offsets Act 2014* and prescribed under the *Environmental Offsets Regulation 2014*. It is a tool to support the relevant *administering agency*, including a local government, when it has identified that an offset is required for a *prescribed activity* that has a *significant residual impact* on a *prescribed environmental matter*.

# Chapter 1

## 1.1 Purpose, application and scope

## 1.1.1 Purpose

The purpose of this policy is to provide a decision-support tool to enable *administering agencies* to assess offset proposals to ensure they meet the requirements of the *Environmental Offsets Act 2014*.

## 1.1.2 Application and scope

Under section 12 of the *Environmental Offsets Act 2014*, this offsets policy is the only relevant policy unless an alternative policy is listed in the *Environmental Offsets Regulation 2014*. The policy can be considered for all offsets:

- where the offset proposal (notice of election) is submitted before an authority is granted; or
- following granting of an authority containing a condition for an offset under the Environmental Offsets Act 2014.

## Significant residual impacts

Where an offset proposal is submitted before an *authority* is granted, an *administering agency* must be satisfied that all reasonable on-site avoidance and mitigation measures for the *prescribed activity* have been or will be undertaken to address impacts on *prescribed environmental matters* before approving an offset proposal. For an offset proposal submitted after an *authority* is granted an *administering agency* may only impose an offset condition if it is satisfied that all reasonable on-site mitigation measures for the *prescribed activity* have been or will be undertaken.

In addition, an offset can only be required if residual impacts from a *prescribed activity* constitute a *significant residual impact*. In identifying whether an activity will, or is likely to, have a *significant residual impact*, an *administering agency* may refer to:

- the state guidelines that provide guidance on what constitutes a *significant residual impact* for matters of state environmental significance (MSES);
- the Commonwealth Significant Impact Guidelines for what constitutes a significant residual impact on matters of national environmental significance (MNES); and
- any relevant local government significant impact guideline for matters of local environmental significance (MLES).

For staged offsets, the full extent of potential impacts on *prescribed environmental matters* from the entire proposal needs to be taken into account as part of the *significant residual impact* assessment. For offsets to be provided in stages, the *authority* will need to include a condition that enables the project and offsets to be staged.

When an amendment to an existing *authority* is proposed (for example an amendment application for an existing environmental *authority* or development approval), the *significant residual impact* assessment relates to the cumulative impacts of the entire project - i.e. impacts proposed in both the existing *authority* and any additional impacts proposed in the amendment.

Further detail on the requirements for staged offsets is provided in section 2.4.3 of this policy.

# 1.1.3 Relationship between Commonwealth, state, and local government offsets

## State agency offsets

To avoid duplication of offset conditions between state agencies, the Act requires that the *administering agency*, in deciding whether to apply an offset condition, must consider any relevant offset condition that has already been imposed on an *authority* issued under another Act for the same or substantially the same impact and the same or substantially the same *prescribed environmental matter*. Where an applicant already has a relevant offset condition on another *authority*, this information should be provided to the *administering agency* with the application.

In the event that duplicate offset conditions are imposed by different state agencies, a *proponent* can apply to the relevant *administering agency* to remove one of the conditions in accordance with the following criteria - for an offset condition:

- in relation to a critically endangered, endangered, vulnerable or near threatened plant, the application may be made to any agency other than the agency that imposed the offset condition for that species on a clearing permit issued under the *Nature Conservation Act 1992*;
- for a *protected area*, the application may be made to any agency other than the agency that imposed the offset condition for the *protected area* under the *Nature Conservation Act 1992*;
- for a marine park, the application may be made to any agency other than the agency that imposed the offset for the marine park under the *Marine Parks Act 2004*;
- for koala habitat in South East Queensland, the application may be made to any agency other than the agency
  that imposed the offset condition for koala habitat under State Code 25 (Development in South East
  Queensland koala habitat areas) of the State development assessment provisions; and
- for any other matter, the application may be made to either *administering agency* that imposed the offset condition.

#### Commonwealth offsets

To avoid duplication of offset conditions between jurisdictions, state and local governments can only impose an offset condition in relation to a *prescribed activity* if the same or substantially the same impact and the same or substantially the same matter has not been subject to assessment under one of the following Commonwealth Acts:

- the Environment Protection and Biodiversity Conservation Act 1999, to the extent the assessment relates to an activity that has been declared a 'controlled action' by the Commonwealth Minister;
- the Great Barrier Reef Marine Park 1975: or
- another Commonwealth Act prescribed by regulation there are currently no listings.

This includes if the Commonwealth could have imposed an offset condition but did not do so. However, it does not apply if:

- the condition relates to a protected area; or
- the Commonwealth has decided that the activity itself is not a 'controlled action'. For example, an activity
  referred to the commonwealth that could impact on koalas (or another MNES) that receives a 'not a controlled
  action' or a 'not controlled action particular manner' notice, could still be subject to an offset condition imposed
  by state or local government.

If the Commonwealth imposes an offset condition for a *prescribed environmental matter* after the state or local government has already imposed an offset condition, a *proponent* can apply to the lower level of government to have the duplicate offset requirement removed provided the condition is for the same or substantially the same impact and *prescribed environmental matter*.

## Local government offsets

Local government may only impose an offset condition where there will be a *significant residual impact* on a matter of local environmental significance (MLES).

A MLES for which an offset is required must be specified in a local government planning scheme and be approved by the state in accordance with the Minister's Guidelines and Rules under the Planning Act 2016.

## 1.1.4 Self-administered offset code of compliance

A self-administered offset code of compliance, applying to certain *prescribed activities*, may be established under this policy with the approval of the Chief Executive administering the *Environmental Offsets Act 2014*. In this circumstance, the policy only applies to the extent identified in the relevant code of compliance. Further detail on self-administered offset codes of compliance is provided in Appendix 1.

## 1.2 Prescribed environmental matters

An offset condition may only be imposed on an *authority* for a *significant residual impact* to a *prescribed environmental matter*, which includes:

- o a MSES listed in schedule 2 of the Environmental Offset Regulation 2014;
- o an accredited MNES, should Queensland receive accreditation in relation to offsets for the purpose of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA); and
- o a MLES, as described in section 10(1)(c) of the Environmental Offsets Act 2014.

Note: A prescribed environmental matter that is essential habitat for near threatened wildlife is only MSES when it is subject to assessment under State Code 16 (Native vegetation clearing) of the State Development Assessment Provisions (SDAPs) of the Planning Act 2016.

## 1.2.1 Specific criteria for matters of state environmental significance

In relation to MSES the *Environmental Offsets Regulation 2014* refers to the policy to provide specific criteria for defining some matters, as follows:

- Schedule 2 item 1: A bioregion is a bioregion shown in a map called Bioregions of Queensland (Appendix 2).
- Schedule 2, items 2(5) and (6): the defined distance, for a regional ecosystem, means the distance identified as the relevant distance from the defining banks of a relevant watercourse in the table included in Appendix 3.
- Schedule 2, item 3(2) in considering whether a regional ecosystem:
  - o contains an area of land that is required for ecosystem functioning (a connectivity area); and
  - o is of sufficient size or configured in a way that maintains ecosystem functioning; and
  - o will remain despite a threatening process,

the local and regional landscape fragmentation needs to be quantified. The Landscape Fragmentation and Connectivity Tool is available as a decision support tool to quantify any significant impact on connectivity areas. This tool is available through the Queensland Government Information Service at: <a href="http://dds.information.qld.gov.au/DDS/Search.aspx">http://dds.information.qld.gov.au/DDS/Search.aspx</a>

To remove any doubt, a *protected area* is a separate *prescribed environmental matter* to other *prescribed environmental matters* that may be located within the *protected area*. For example, wallum froglet is a *prescribed environmental matter* (as a vulnerable species), and may be located within a national park, where the national park is a distinct *prescribed environmental matter* from the vulnerable species.

## 1.3 Offset principles

All offsets must meet the following seven offset principles.

- 1. Offsets will not replace or undermine existing environmental standards or regulatory requirements, or be used to allow development in areas otherwise prohibited through legislation or policy.
- 2. Impacts must first be avoided, then mitigated, before considering the use of offsets for any remaining impact.
- 3. Offsets must achieve a *conservation outcome* that counterbalances the *significant residual impact* for which the offset was required.
- 4. Offsets must provide environmental values as similar as possible to those being lost.
- 5. Offset provision must minimise the time-lag between the impact and delivery of the offset.
- 6. Offsets must provide additional protection to environmental values at risk, or additional management actions to improve environmental values.
- 7. Where legal security is required, offsets must be legally secured for the duration of the impact on the *prescribed* environmental matter.

## 1.4 Offset requirements

The offset requirements under this policy are divided into three chapters. Each chapter provides guidance on offset requirements for impacts on different *prescribed environmental matters*, as follows:

- Chapter 2: Offsets for impacts on prescribed environmental matters, other than protected areas;
- Chapter 2A: Additional requirements for offsets for impacts on koala habitat in South East Queensland (SEQ);
   and
- Chapter 3: Offsets for impacts on protected areas.

Chapter 2 of this policy applies to all *prescribed environmental matters*, other than *protected areas*, including koala habitat in SEQ. However, where no characteristics of an offset site are specified in Chapter 2 for a particular *prescribed environmental matter* (for example marine plants), a case-by-case determination is required in consultation with the *administering agency*. Where there will be an impact on a *prescribed environmental matter* within a *protected area* (for example, an endangered species that is in a national park), the requirements of both chapters are relevant. Chapter 2 will be applicable for the impact on the matter that is not a *protected area*, and Chapter 3 is applicable for the impact on the *protected area*.

## 1.5 Supporting materials

Supporting materials such as guidelines and tools that provide advice on how to meet requirements of this policy are available on the Queensland Government website at <a href="https://www.gld.gov.au//environment/pollution/management/offsets/">www.gld.gov.au//environment/pollution/management/offsets/</a>

# Chapter 2: Prescribed environmental matters (other than protected areas)

## 2.1 Application of this chapter

This chapter prescribes the approach for offsetting a *significant residual impact* on a *prescribed environmental matter*, other than a matter that is a *protected area*. Chapter 2, and in particular section 2.2.1, applies to offsetting a *significant residual impact* on koala habitat in South East Queensland. Chapter 2A provides additional requirements for offsetting koala habitat in South East Queensland.

An offset may be provided as a:

- proponent-driven offset, comprising:
  - o a land-based offset:
  - o actions in a Direct Benefit Management Plan (DBMP); or
  - o both of the above; or
- financial settlement offset; or
- combination of a *proponent*-driven offset and a financial settlement offset.

Where there is also an impact on a protected area, the provisions in Chapter 3 are also relevant.

## 2.2 Context

## 2.2.1 What all offsets must achieve under Chapter 2

Offsets delivered under this framework are to achieve a *conservation outcome* for the impacted *prescribed environmental matter(s)*. This will require the offset to maintain the viability of the *prescribed environmental matter*, relative to the status quo (i.e. what would have happened had the impact and the offset not occurred). This can be achieved by:

- providing tangible benefits for the impacted *prescribed environmental matter*, by providing an offset in the most strategic location to achieve a *conservation outcome* as follows:
  - wherever possible offsets should be delivered within a Strategic Offset Investment Corridor closest to the impacted site;
  - o in the case of a *land*-based offset, the most strategic location to achieve a *conservation outcome* is generally located in the following order of preference (in relation to the impact):
    - the same local government area (LGA); or
    - the same sub-region; or
    - the same bioregion; or
    - adjacent bioregion;
- effectively accounting for and managing the risks of the offset failing to achieve a conservation outcome, including risks from competing land uses such as timber, quarry material or mineral extraction which may be able to occur without the landholder's consent on state land. Information on existing timber, quarry material or mineral extraction which may be able to occur without the landholder's consent on state land and mineral interests can be found on the Queensland Government Open Data Website (www.data.qld.gov.au). For proponent-driven offsets, the risk should be managed as part of the offset delivery plan. This risk has been factored into the financial settlement calculation;
- achieve the offset principles in section 1.3 of this policy;
- being efficient, effective, timely, transparent, and scientifically robust;
- having transparent governance arrangements—including being able to be readily measured, monitored, audited, and enforced; and
- including no more than 10% of an offset as research or education programs (unless a greater benefit to the impacted matter can be demonstrated).

### 2.2.2 Size and scale of the offset

For all *prescribed environmental matters*, the size and scale of an offset is that which is necessary to achieve a *conservation outcome*.

The offset must be of a size and scale proportionate to the *significant residual impact* on a *prescribed environmental matter*. However, the offset requirement for a *significant residual impact* on a *prescribed environmental matter* will be set at a maximum multiplier of 4 (i.e. a maximum of four times the area of the residual impact), with the exception of impacts to connectivity and waterways providing for fish passage, for which the offset requirement is set at a multiplier of 1.

For financial settlement offsets, the size and scale of the offset is determined by the financial settlement calculation methodology in Appendix 4 of the policy.

For *land*-based offsets, the size and scale of the offset is determined by conducting a habitat quality assessment at both the impact and the offset site. For *land*-based koala habitat offsets outside of South East Queensland, the size and scale of the offset may be determined by conducting a habitat quality assessment at both the impact and offset site, or by calculating the size of an offset site on which three new *koala habitat trees* can be established for every one *non-juvenile koala habitat tree* removed, at densities that will produce a mature density reflective of the regional ecosystems present on the site.

The size and scale of an offset delivered through actions under a DBMP will be determined on a case-by-case basis with regard to the following:

- that the benefits provided by the management actions are sufficient to counterbalance the impacts of the prescribed activity; and
- that benefits provided by the management actions are best achieved through actions in a DBMP, in particular that benefits achieve landscape-scale conservation outcomes for those matters or, if the matter is localised, improved outcomes compared to a traditional land-based offset.

Where a *prescribed activity* impacts on multiple *prescribed environmental matters*, the impact for each *prescribed environmental matter* will be identified and assessed. However, this does not prevent delivery of an integrated offset package that meets offset requirements for multiple *prescribed environmental matters*.

## 2.3 Types of offsets

### 2.3.1 Proponent-driven offsets

A *proponent*-driven offset may take the form of a traditional *land*-based offset, be undertaken through actions under a DBMP, or a combination of both. For a *proponent*-driven offset, the offset delivery liability remains with the *proponent* and the offset must be delivered in accordance with an *offset delivery plan* approved by the *administering agency*.

The offset is to result in a *conservation outcome* for the impacted *prescribed environmental matters* and is to be delivered on *land*:

- owned by the *proponent*, or
- subject to contractual arrangement between the *proponent* and *offset provider*(s), and any other relevant third party for delivery of the offset.

The land on which a proponent-driven offset is being delivered may contain remnant regional ecosystems.

Where possible the *proponent* may choose to deliver an offset package that addresses multiple jurisdictional offset requirements. For example, if a state-listed species and a commonwealth-listed ecological community are impacted by the same *prescribed activity*, a single offset that meets offset requirements for both matters may be provided. This can also apply to offsets for local matters where agreed to by the local government.

A *proponent* delivering an offset is responsible for any costs associated with meeting the offset requirement and retains ongoing responsibility for ensuring the offset is delivered in accordance with the relevant *offset delivery plan*. The *proponent* can enter into contractual arrangements with an *offset provider*, who would then be responsible for delivering the offset under the terms of the contract.

In delivering an offset obligation, the *proponent* may use an *advanced offset* where it meets the requirements of this policy (Appendix 5) for the impacted *prescribed environmental matter* and where it is legally secured by the *proponent* or a third party for the life of the impact.

#### 2.3.1.1 Land-based offsets

For *land*-based offsets, the suitability of the offset site relative to the impact site and the *prescribed environmental matters* is measured by undertaking a habitat quality assessment. This assessment can be undertaken using the Guide to Determining Terrestrial Habitat Quality or an alternative approach approved by DES as being able to measure a *conservation outcome*.

#### Specific requirements for local governments where the offset delivery is a land-based offset

For *land*-based offsets being delivered for MLES, a local government may use their own habitat quality assessment methodology to determine the offset obligation to be delivered for that matter, provided any area of *land* for the offset does not exceed the impact site area by more than a factor of 4.

## 2.3.1.2 Direct Benefit Management Plan offsets

*Proponent*-driven offsets can also be delivered through priority actions identified in a DBMP undertaken on *land*. DBMP priority actions are implemented through the management intent and offset actions in an *offset delivery plan*.

A DBMP is a pre-approved plan that outlines priority actions for addressing threats to, and providing substantial benefits for, a particular *prescribed environmental matter*. A DBMP may include direct actions as well as indirect actions such as research and education programs. A DBMP endorses actions and an approved methodology for achieving a *conservation outcome*.

Where research and/or education programs are proposed to be delivered as part of a DBMP offset, they will only be accepted as no greater than 10% of the offset, unless otherwise agreed; for example, in circumstances where it can be demonstrated that the level of investment in research and education will deliver a greater overall conservation outcome for the prescribed environmental matter than investment in other actions that could benefit that matter.

Actions identified in DBMPs must be pre-approved as priority actions-:

- where the matter is an accredited MNES or MSES by DES; or
- where the matter is a MLES by the relevant local government.

Refer to Appendix 6 for more information about delivering a DBMP offset.

#### 2.3.1.3 Offset delivery plan

When choosing to deliver a *proponent*-driven offset, a notice of election must include a proposed *offset delivery plan*. The *offset delivery plan* must:

- describe how an offset will be undertaken and how the conservation outcome will be achieved, including how the plan will:
  - o effectively account for and manage the risks of the offset failing to achieve the *conservation outcome*;
  - o ensure the offset provides benefits in relation to the *prescribed environmental matter* in addition to any other benefit provided under a requirement of, or an *authority* under an Act;
  - have transparent governance arrangements, including being able to be readily measured, monitored, audited, and enforced; and
  - o ensure the offset is of a size and scale proportionate to the *significant residual impacts* on the *prescribed environmental matter*;
- state that the *proponent*, and any other entity that owns *land* on which the offset will be undertaken, agrees to the offset being undertaken;
- be signed by the proponent, and any other entity that owns land on which the offset will be undertaken;
- describe the prescribed environmental matter to which the offset condition relates;
- state whether the offset condition will be delivered wholly or partly on the land on which the offset will be undertaken;
- include particulars of, or a description sufficient to identify, the *land* on which the offset will be undertaken;
- identify and contain details of any person with an interest in the land on which the offset will be undertaken;

- describe the existing land use of the land on which the offset will be undertaken and any impact that land use may have on the delivery of the offset;
- · state:
  - the measures the proponent will take to secure the land on which the offset will be undertaken as a legally secured offset area;
  - why the proponent considers the stated measures are reasonable and practicable;
  - o the period during which the measures will occur; and
  - o why the stated period is reasonable for the purpose of securing the offset.

### 2.3.1.4 Legally secured offset areas

Generally, the *land* on which an offset will be delivered is required to be a legally secured offset area. The exception to this approach may be where a DBMP is implemented across a number of tenures and parcels of *land* where legal security of all or part of the area is not required to achieve the *conservation outcome*.

An area of land will be a legally secured offset area if the area is:

- an environmental offset protection area under section 30 of the Environmental Offsets Act 2014; or
- an area declared as an area of high nature conservation value under section 19F of the Vegetation Management Act 1999, where it is secured for the purposes of an offset; or
- declared as a nature refuge under section 46 of the Nature Conservation Act 1992, where it is secured for the
  purposes of an offset; or
- declared as a protected area under section 29(1) of the Nature Conservation Act 1992, where it is secured for the purposes of an offset; or
- declared as a special wildlife reserve under section 43D of the Nature Conservation Act 1992, where it is secured for the purposes of an offset; or
- secured as a statutory covenant for environmental purposes under the Land Act 1994 or Land Title Act 1994; or
- declared as a fish habitat area under the Fisheries Act 1994; or
- declared as a highly protected area of a Marine Park under the Marine Parks Act 2004.

#### 2.3.1.5 When an offset obligation ceases

The requirement for a legally secured offset will cease to have effect once the:

- administering agency is satisfied the actions and obligations of the offset delivery plan have been completed in full; and
- the offset has been secured for at least the same duration as the impact on the *prescribed environmental* matters arising from the *prescribed activity*.

## 2.3.1.6 Characteristics of an offset site

For a *land*-based offset, an offset site must be capable of delivering a *conservation outcome* for the impacted *prescribed environmental matter*. This means that:

- in relation to endangered and of concern regional ecosystems—the offset site must be:
  - o of the same broad vegetation group as the impacted regional ecosystem;
  - o of the same regional ecosystem status; and
  - within the same bioregion;
- in relation to a plant or animal that is critically endangered, endangered, vulnerable, near threatened and special least concern wildlife under the *Nature Conservation Act 1992*—the offset site must contain, or be capable of containing, a self-sustaining population of that same impacted species;
- in relation to koala habitat outside of South East Queensland, a land-based offset:

- o must contain or be capable of containing a self-sustaining population of koalas; and
- o can be delivered as either:
  - a land-based offset that results in the establishment of three new koala habitat trees for every one non-juvenile koala habitat tree removed. Koala habitat trees can be established by either planting new koala habitat trees that are managed until they become non-juvenile koala habitat trees, or managing existing juvenile koala habitat trees (i.e. regrowth) until they become non-juvenile koala habitat trees. Koala habitat trees must be reflective of the species endemic to the site and be planted at densities that will produce a mature density reflective of the regional ecosystems present on the site; or
  - a land-based offset for which the suitability of the offset site is determined, and conservation outcome
    assessed, using the methodology prescribed for terrestrial fauna habitat in the Guide to Determining
    Terrestrial Habitat Quality;
- for koala habitat in SEQ, the offset must meet the requirements of Chapter 2 and the additional requirements of Chapter 2A;
- for vegetation intersecting a watercourse or drainage feature the offset site must be:
  - o of the same broad vegetation group as the impacted regional ecosystem;
  - o within the same bioregion; and
  - o associated with a watercourse or drainage feature;
- for vegetation intersecting a wetland the offset site must be:
  - o of the same broad vegetation group as the impacted regional ecosystem;
  - o within the same bioregion; and
  - o associated with a wetland;
- for wetlands the offset site must be:
  - o within the same wetland habitat type as the impacted wetland; and
  - o within the same bioregion;
- for connectivity the offset site must be:
  - o a non-remnant ecosystem; and
  - in the same subregion; however, if the subregion is intact, the offset should be in the nearest fragmented subregion;
- with some exceptions, multiple *prescribed environmental matters* may be co-located on the offset site, provided the site meets the offset requirements for each matter. Exceptions include:
  - o protected areas may not be co-located with other prescribed environmental matters; and
  - o species in different species functional groups may not be co-located;
- for protected areas, the offset must meet the requirements of Chapter 3;
- in relation to an offset site that is part of a DBMP offset, the site and the *offset delivery plan* must meet the requirements specified in Appendix 6 and section 2.3.1.2 of this policy; and
- where there are no characteristics or requirements specified in Chapter 2, 2A or 3 to offset a *prescribed* environmental matter (for example marine plants), these are to be determined on a case-by-case basis in consultation with the administering agency.

## Requirements for legally secured offset areas

Where a *prescribed activity* will have a *significant residual impact* on a legally secured offset area, the offset is required for both the impact on:

- the matters requiring offsetting as identified by the original authority requirements; and
- any other *prescribed environmental matter* that will be impacted as a result of the activity.

If a site that is currently a legally secured offset area is to be affected in whole or part by a *prescribed activity*, that *prescribed activity* cannot commence until the mechanism for legal security has been removed from the area that

will be impacted by the activity.

In addition, if the legally secured offset area is an *environmental offset protection area* declared under section 30 of the *Environmental Offsets Act 2014* or an area of high nature conservation value under section 19F of the *Vegetation Management Act 1999*, the mechanism cannot be removed until the *proponent* has entered into an *agreed delivery arrangement* for providing an *offset* for *significant residual impacts* to the area.

### 2.3.2 Financial settlement offsets

A *proponent* can meet an offset requirement for impacts on terrestrial or marine and aquatic *prescribed environmental matters*, including koala related offsets, by providing a payment in accordance with this policy.

All financial settlement offsets delivered by the State or local government must adhere to the offset principles and, to the greatest extent possible, achieve what all offsets must achieve in section 2.2.1 and the characteristics of an offset site as described in section 2.3.1.6 and Chapter 2A.

For financial settlement offsets required by the State, the financial settlement payment amount must be calculated in accordance with the Financial Settlement Offset Calculation Methodology in Appendix 4. The web-based Financial Settlement Offset Calculator on the Queensland Government website (https://environment.ehp.qld.gov.au/offsets-calculator/) may be used to support this calculation. The state is responsible for delivering a *conservation outcome* from a financial settlement offset payment.

For financial settlement offsets required by a local government, an alternative financial settlement payment amount may be determined provided that the:

- payment amount is no greater than what would have been required if calculated in accordance with the Financial Settlement Offset Calculation Methodology in Appendix 4; and
- the local government is able to achieve a *conservation outcome* for the nature, size and scale of the impact on the *prescribed environmental matter*(s) the subject of the offset payment.

In this regard, local government may use their own *land* or use money derived from sources other than financial settlement offset payments to ensure a *conservation outcome* is achieved.

Section 19B of the *Environmental Offsets Act 2014* requires that the *authority holder* must have entered into an *agreed delivery arrangement* before starting impacts on the *prescribed environmental matters* to which the condition relates; or any works for the stage that impacts on the *prescribed environmental matter*.

For financial settlement offsets (see section 24 of the *Environmental Offsets Act 2014*), unless agreement has been reached that the impact and offset will be staged (refer section 2.4.3), the full amount of the financial settlement offset must be paid prior to commencing the *prescribed activity* to which the offset condition relates. Once this amount has been paid the *authority holder's* offset obligation has been met and a *conservation outcome* for the impacted matter will be delivered by DES or the relevant local government.

Payments must be made:

- to the local government's trust fund in relation to offset requirements for which the local government was the administering agency. The trust fund is to be administered by the local government for the delivery of environmental offsets to achieve a conservation outcome, and the requirements for the use of the trust fund are outlined in section 89 of the Environmental Offsets Act 2014; or
- to the *offset account* administered by DES for all other financial settlement offsets. Further information on the *offset account* and trust fund administration is provided in Appendix 7.

## Specific requirements for local governments where the offset delivery is a financial settlement offset

When using the Financial Settlement Offset Calculation Methodology or web-based Financial Settlement Offset Calculator for financial settlement offsets for MLES, the local government may attribute a rating and associated multiplier to each local environmental matter that does not exceed a multiplier of 4. The following ratings and associated multipliers can be used:

- MLES 1 which relates to a multiplier of 1;
- MLES 2 which relates to a multiplier of 2;
- MLES 3 which relates to a multiplier of 3; or
- MLES 4 which relates to a multiplier of 4.

These ratings and associated multipliers can be attributed, for example, through the local government planning

instrument or via the offset condition. For example, a locally significant riparian corridor may be attributed an offset multiplier of MLES 3. In this instance the web-based Financial Settlement Offset Calculator will calculate a financial offset based on a multiplier of 3 for that matter.

Local government has discretion to seek a financial settlement offset that is less than what is determined by the Financial Settlement Offset Calculation Methodology or web-based Financial Settlement Offset Calculator.

## 2.4 Delivery of offsets

## 2.4.1 Notification of offset delivery

The *administering agency* must agree to the proposed offset delivery approach. There are two options for seeking the *administering agency*'s agreement:

- the *proponent* provides a notice of election to the *administering agency* prior to the issuing of the *authority* (i.e. before or during the assessment process for the *authority*); or
- the proponent provides a notice of election to the administering agency after the authority has been issued.

The notification must be made on the approved form, and is to identify that the offset will be delivered as a:

- proponent-driven offset;
- financial settlement offset; or
- combination of proponent-driven offset and financial settlement offset.

To the extent that the notification identifies the offset will be delivered as a *proponent*-driven offset, an *offset delivery plan* that identifies how the offset will be undertaken must accompany the notice. Section 2.3.1.3 provides further detail in relation to the requirements for an *offset delivery plan*.

The requirement to notify does not limit the potential to provide a staged offset delivery approach, provided that the condition of approval allows both the *prescribed activity* and offset to be staged. Where staging the offset delivery is reflected in the condition, the *proponent* will be required to notify the *administering agency* of:

- details about the entire proposal and its stages; and
- the intended offset delivery approach for each stage, before the activity for that stage commences.

Further detail about staging offset delivery is provided in section 2.4.3.

After receipt of the notice of election on the approved form, the *administering agency* has 40 business days to consider the notice of election.

## 2.4.2 Agreed delivery arrangement

Where agreement on offset delivery is reached, the *administering agency* and *proponent* must enter into an *agreed delivery arrangement* and, if a *proponent*-driven offset is elected, it must include the *offset delivery plan*. This agreement forms a contract about how the offset will be delivered and can be amended by agreement between the two parties.

For financial settlement offsets the *agreed delivery arrangement* must specify the agreed financial settlement amount to be paid in full and an agreed timeframe in which the payment will be made. Where there is a lengthy lag time of 18 months or more between agreement of the financial settlement amount and payment, the agreed amount will need to be recalculated using the Financial Settlement Offset Calculator to account for any changes, such as fluctuations in CPI.

Where the notice of election is provided prior to the issuing of the *authority*, and an *agreed delivery arrangement* is entered into prior to the issuing of the *authority*:

- the proponent:
  - o may start to deliver a *proponent*-driven offset, that is the subject of the *agreed delivery arrangement*, prior to the issuing of the *authority*;
  - must not pay any amount under a financial settlement offset, that is the subject of the agreed delivery arrangement, until after the authority is granted; and

- o must not commence any works that impact on the *prescribed environmental matter* until after the *authority* is granted.
- the administering agency, within 10 business days of issuing the relevant authority, may give the proponent a notice that states the offset may be required to be delivered in a different manner to that previously agreed upon, if:
  - o there is a change in the way the *prescribed activity* is proposed to be carried out that will result in a change to the impact on the *prescribed environmental matter*; and
  - o the *administering agency* decides that the impact that is counterbalanced under the early arrangement differs from the impact likely to arise from the *prescribed activity*.

## 2.4.3 Staged offset delivery

Where an applicant seeks to stage offset delivery in line with stages of a *prescribed activity*, this needs to be identified before the relevant *authority* is issued so that the conditions of the *authority* can reflect this.

Assessment of the application for the relevant *prescribed activity* will need to consider, for the whole project:

- avoidance and mitigation of impacts on prescribed environmental matters; and
- the maximum likely extent and duration of the significant residual impact on prescribed environmental matters.

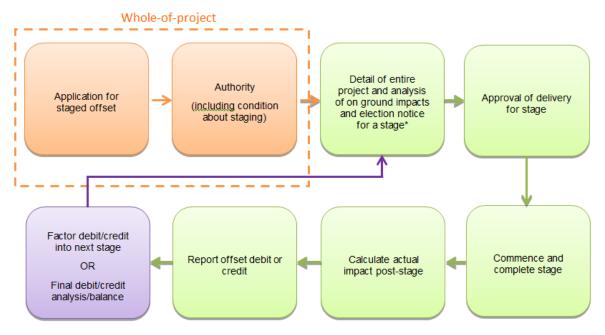
As a condition of the *authority*, detailed assessment of the impact of each stage of the activity—and the offset requirement for each stage—will need to be conducted prior to providing the notice of election for that stage. A notice of election will not be considered until the quantum of impact on *prescribed environmental matters* to be offset has been determined and approved for each stage. In addition, the *administering agency* will seek information in relation to any completed stages with the notice of election so that any offset credit or debits can be assessed for subsequent stages. Offset staging will provide *proponents* with flexibility to adapt offset provision to operational and development changes over time that were not evident at the time of application for the relevant activity.

This approach enables offset credits from one stage to be used in subsequent stages where the credit relates to the same *prescribed environmental matter*, for example, if an offset was provided for a matter but actual on-ground operations did not impact on that matter.

In unavoidable circumstances this approach can also be used for unforeseen impacts on matters where an offset debit is created. Notice of election for any debits should be provided at least three months before the proposed commencement of the subsequent stage, and within six months from the end of the final stage. However, where there is a significant offset debit, the *administering agency* may direct the *proponent* to undertake an additional or alternative approach to on-ground analysis prior to impacts occurring for future stages, and may consider any relevant compliance and enforcement action if the extent of impacts significantly exceeds that which was agreed to through the *agreed delivery arrangement*.

Where a staged *land*-based offset results in a credit at the end of the entire project, the *proponent* may choose to use this credit as an *advanced offset* (see Appendix 5). However, where a financial settlement has occurred, there can be no refund on payments made because the offset funds will have been committed to delivery of the offset obligation. Similarly, credits will not be considered for a DBMP offset as they are based on outcomes of management actions.

Where staging has not been identified in the conditions of the *authority*, and an amendment application has been made that proposes additional impacts to *prescribed environmental matters*, the *administering agency* is to have regard to the cumulative impacts. In this case, the *significant residual impact* assessment would consider the cumulative impacts of the entire project on each matter, i.e. impacts proposed in the existing *authority* and any additional impacts proposed in the amendment.



<sup>\*</sup>This step can occur for the first stage of a staged activity before the authority is granted

Figure one: illustration of the staged offset delivery approach

## 2.4.4 Strategic Offset Investment Corridors

Strategic Offset Investment Corridors identify areas where land may be suitable for land management activities that provide a benefit to matters likely to be impacted by development, whilst also providing landscape-scale benefits. These pre-identified areas can benefit proponents by making offsets more cost-effective and easier to find.

Landholder involvement in offsets within a *Strategic Offset Investment Corridor* is voluntary; however, *proponents* are expected to seek offset opportunities in these corridors wherever possible because they provide strategic landscape outcomes for *prescribed environmental matters*. These corridors connect conservation hubs (e.g. national parks) in corridor areas that are under low development pressure, and not zoned for activities such as urban development.

For further detail on *Strategic Offset Investment Corridors* refer to the Queensland Government website (https://www.qld.gov.au/environment/pollution/management/offsets/tools-corridors).

#### 2.4.5 Advanced offsets

An advanced offset is an area of land that has been identified and registered under section 14 of the Environmental Offsets Regulation 2014 as an advanced offset. Advanced offsets may be used as an offset to compensate for a future significant residual impact on one or more prescribed environmental matters.

Advanced offsets are encouraged, as they provide a means to manage the risks associated with the time delay in finding a suitable offset site and realising the conservation outcome for the prescribed environmental matters on that site. Advanced offsets within a Strategic Offset Investment Corridor are also encouraged because they will provide a landscape outcome for the prescribed environmental matter.

Appendix 5 outlines how to register an *advanced offset*, and the considerations for DES in approving and registering the *advanced offset*.

## Chapter 2A Koala habitat in South East Queensland

## 2A.1 Application of this chapter

Chapter 2 applies to offsetting a *significant residual impact* on koala habitat in SEQ (the area identified as the South East Queensland region in Schedule 1 of the *Planning Regulation 2017*). Chapter 2A provides further specific requirements for offsetting koala habitat in SEQ.

An offset can be required where a *significant residual impact* on a *prescribed environmental matter* that is koala habitat in SEQ occurs as a result of an approved *prescribed activity. Prescribed* activities (listed under Schedule 1 of the *Environmental Offsets Regulation 2014*) include:

- Development for which an *environmental offset* may be required under any of the following State codes of the State development assessment provisions:
  - State code 8 (Coastal development and tidal works);
  - o State code 16 (Native vegetation clearing);
  - State code 22 (Environmental relevant activities); or
  - State code 25 (Development in South East Queensland koala habitat areas);
- A resource activity carried out under an environmental authority under the Environmental Protection Act 1994
  for which an amendment application, a site-specific application or a variation application was made under that
  Act.
- A prescribed ERA under the Environmental Protection Act 1994; or
- An activity conducted under an *authority* granted, made, issued or given under the *Nature Conservation Act* 1992, section 34, 35, 38, 42AD or 42AE in a *protected area*.

The prescribed environmental matters that are relevant to koala habitat within SEQ are:

- Koala habitat areas identified in the Koala Conservation Plan Map under the Nature Conservation (Koala) Conservation Plan 2017 (see Schedule 2, section 6(3) of the *Environment Offsets Regulation 2014*);
- Essential habitat that is koala habitat (see Schedule 2, section 2(3)(b) of the Environment Offsets Regulation 2014); and
- An area that is not mapped as habitat, but which contains or is likely to contain koalas (see Schedule 2, section 6(4) of the *Environment Offsets Regulation 2014*).

# 2A.2 Significant residual impact

An offset condition for koala habitat in SEQ may be imposed on an *authority* for a *prescribed activity* where it is likely the *prescribed activity* will have a *significant residual impact* on koala habitat in SEQ.

Section 1.1.2 of this policy refers administering agencies to the State guidelines to assist in deciding whether a significant residual impact is likely to occur. A significant residual impact on koala habitat in SEQ is described in the State guidelines to be the removal of one non-juvenile koala habitat tree.

The relevant guidelines are the non-statutory Queensland Environmental Offsets Policy Significant Residual Impact Guideline, Department of Environment and Heritage Protection, December 2014; and the Department of State Development, Infrastructure and Planning Significant Residual Impact Guideline which refers to the State Planning Regulatory Provisions 2010 which requires an offset for the loss of mature *koala habitat trees*. Mature *koala habitat trees*.

# 2A.3 Electing offset delivery

Where an offset condition for koala habitat in SEQ has been imposed on an *authority* for a *prescribed activity*, a *proponent* may choose to deliver the offset as a:

- · financial settlement offset;
- land-based proponent-driven offset; or
- combination of financial settlement offset and land-based proponent-driven offset.

A DBMP cannot be used; however, threat management must be undertaken for all koala habitat offsets.

## 2A.4 Specific requirements for koala habitat offsets in SEQ

An offset site must be capable of delivering a *conservation outcome* for the impacted *prescribed environmental matter*. For koala habitat in SEQ, the only appropriate action to offset koala habitat within SEQ is the rehabilitation, establishment and protection of koala habitat and where the following requirements can be met:

- The offset site must contain, or be capable of containing, a self-sustaining population of koalas; and
- The offset must result in the establishment of three new non-juvenile koala habitat trees for every one non-juvenile koala habitat tree removed. Non-juvenile koala habitat trees can be established by either planting new koala habitat trees that are managed until they become non-juvenile koala habitat trees, or managing existing juvenile koala habitat trees (i.e. regrowth) until they become non-juvenile koala habitat trees; and
- The non-juvenile koala habitat trees established as part of the offset must be reflective of the species that are endemic to the offset site and be planted at densities that will produce a mature density reflective of the regional ecosystems relevant to the offset site; and
- The offset site can be legally secured for the duration of the impact (including in perpetuity) using one of the
  mechanisms outlined in section 2.3.1.4 of this policy; and
- The offset site is located in the following order of preference:
  - A restoration area identified on the Koala Habitat Restoration Areas Map<sup>1</sup> in the Koala Priority Area that is closest to the impact site; or where this is not possible
  - A restoration area identified on the Koala Habitat Restoration Areas Map in the next closest Koala Priority Area to the impact site; or where this is not possible
  - A restoration area identified on the Koala Habitat Restoration Areas Map that is as close as possible to a Koala Priority Area and the impact site; or where this is not possible
  - o As close as possible to the impact site where the proposed offset site:
    - Contains an area suitable for koala habitat restoration; and
    - Will result in the creation or improvement of connectivity, corridors or linkages between patches of koala habitat and/or Koala Priority Areas; and
    - Can be managed to protect koalas and koala habitat from threats and threatening processes; and
    - Can be legally secured for the duration of the impact for which the offset is required.

In assessing the suitability of a proposed offset site, the *administering agency* will consider the above order of preference when assessing an *offset delivery plan* or an application to register an *advanced offset* for SEQ koala habitat. It will also consider that not all restoration areas identified on the Koala Habitat Restoration Areas Map will be appropriate receiving sites for koala habitat offsets due to factors such as zoning, current or future land use, surrounding land use or the presence of unmanageable threats.

## 2A.5 Financial settlement offsets

The method for calculating financial settlement offsets for koala habitat in SEQ is in Appendix 4 of this policy with specific variations in 4.3.10.

The financial settlement offset calculation for koala habitat in SEQ requires the number of impacted *non-juvenile koala habitat trees* to be converted into an area in hectares. Based on an average tree density of 250 trees per hectare for koala habitat in SEQ, the total area of impact for a single *non-juvenile koala habitat tree* in SEQ is taken to be 40m² (0.004ha). Therefore, the impact area in hectares is:

Impact Area (ha) = Number of non-juvenile koala habitat trees being impacted X 0.004ha

<sup>1</sup> The Koala Restoration Areas Map is a non-statutory map developed to assist in identifying suitable locations to invest in koala habitat restoration activities in SEQ, both inside and outside of Koala Priority Areas. The map identifies cleared or degraded areas that would provide the best opportunities for koala habitat restoration based on the pre-clear habitat suitability as well as threats and constraints. This map can be accessed on QSpatial, Queensland Globe or by requesting a Vegetation Management Report from the DNRME website.

Where the *administering agency* has agreed that an offset for koala habitat in SEQ can be delivered as a financial settlement offset, the offset is to be paid into the State's *offset account*. Funds received into the State's *offset account* for koala habitat in SEQ will be used to deliver offsets that aim to meet the requirements outlined in Chapter 2 and section 2A.4 of this chapter.

## 2A.6 Offsets and habitat restoration for koala habitat in SEQ

SEQ local governments, NRM groups, other *offset providers* and landholders are encouraged to apply to register areas suitable for koala habitat restoration as an *advanced offset*, particularly within Koala Priority Areas, as DES can consider *advanced offsets* (see Appendix 5) when delivering on-ground outcomes using financial settlement offsets.

SEQ local governments, NRM groups and other *offset providers* are also encouraged to establish restoration programs or projects within areas identified as suitable for koala habitat restoration, particularly within Koala Priority Areas. DES may consider these programs when delivering on-ground outcomes using financial settlement offsets for koala habitat in SEQ.

Offsets must complement, be additional to and not replace existing programs of habitat restoration.

# **Chapter 3** Protected areas

## 3.1 Application of this chapter

This chapter outlines the offset requirements for *significant residual impacts* on a *prescribed environmental matter* that is a *protected area*, and the additional public benefit values that may be lost through an impact on a *protected area*. Chapter 2 sets out required offsets for the loss of *prescribed environmental matters* that are not a *protected area*, even where these occur within a *protected area*.

Offsets payable under this chapter will be additional to those under Chapter 2 Offsets for impacts on *prescribed* environmental matters (other than protected areas).

*Protected areas* are set aside in the public interest, in perpetuity, to protect unique values or to preserve the *land* for specific purposes, such as:

- permanent preservation of natural and cultural values;
- protection of land for public enjoyment and appreciation;
- protection of watersheds and productive resources;
- · iconic geological and landscape values; and
- significance to traditional owners/Indigenous peoples.

The impacts of activities on *protected areas* are two-fold. There is the loss of values that have environmental significance, and there is the loss of the associated 'public benefit' values, such as access, open space, tourism, recreation and cultural pursuits. Section 8 of the *Environmental Offsets Act 2014* describes what constitutes a *significant residual impact* in relation to a *protected area*.

This chapter explains how an offset liability is determined for a *protected area*. The calculation aims to ensure sufficient compensation is provided to replace the lost public benefit values through enhanced management of the existing *protected area* estate or, where appropriate, the acquisition and establishment of new *protected areas*. If the *protected area* is jointly managed with traditional owners, funding will be attributed to the joint management area that is impacted.

For the purposes of this chapter, *administering agency* is taken to mean the Chief Executive of DES who is responsible for administering *protected areas*.

## 3.2 Impacts to be offset

An offset is required for any *prescribed activity* that results, or may result, in a *significant residual impact* and one or more of the following after all reasonable on-site avoidance and mitigation measures have been undertaken:

- the authorised clearing or inundation of all or part of the *protected area* for the construction of private or publicly owned infrastructure on the area; or
- the exclusion of, or reduction in, the public use or enjoyment of all or part of the protected area; or
- a reduction in the natural or cultural values within the meaning of the *Nature Conservation Act 1992*, for all or part of the *protected area*,

#### except where:

- · the area is a nature refuge or special wildlife reserve; or
- the prescribed activity is conducted as part of a management action by the administering agency consistent with the principles for the protected area; or
- the administering agency of the relevant protected area determines that an offset will be waived or reduced or an alternative arrangement negotiated, noting that any alternative arrangement will be equal to or better than the agreed offset value.

For a nature refuge or special wildlife reserve, an offset is required for any *prescribed activity* that results or may result in *significant residual impact* as defined under section 8(1) of the *Environmental Offsets Act 2014*.

## 3.3 Determining offset liability

An offset should compensate for the full suite of natural and cultural values impacted by the *prescribed activity*, including current and future values relating to the provision of ecological services (such as clean air, water and carbon storage), recreation and tourism opportunities, grazing, scenic amenity, and cultural and spiritual significance.

In order to determine the quantum of the offset relative to the impact, a simple 'ratio' or multiplier is used.

These ratios are directly proportionate to the level of legislative protection and the corresponding level of public benefit (based on the significance of protection that the values are afforded). The ratios account for both the primary impacts that occur within the impact area (impact footprint), but also the secondary impacts that occur, such as habitat fragmentation, edge effects and changes to ecosystem function. The ratios also account for:

- the lost public benefit values that result from the *land* no longer being available for public enjoyment or community benefit;
- the lost effort and investment applied over time to maintain and improve the value and condition of the *protected* area, and the lost opportunity for future use caused by the impact; and
- the likely costs of replacing the values.

Table 1: Offset ratios for protected areas

Protected area category	Offset ratio (multiple of land value)
National parks	10
National parks (scientific)	10
National parks (Aboriginal land)	10
National parks (Torres Strait Islander land)	10
National parks (Cape York Peninsula Aboriginal land)	10
Special wildlife reserves	8
Conservation parks	5
Resources reserves	5
Nature refuges	5
Any protected area where:  comparable or better conservation values can be protected; and	2
exploration <i>authorities</i> and/or licences that may eventuate in impacts on the proposed offset area are surrendered.	

## 3.4 Offset delivery

An offset for an authorised impact on a *protected area* may be delivered as a financial settlement offset or, with the agreement of the Chief Executive, a *proponent*-driven offset.

A payment associated with a financial settlement offset is calculated by multiplying the total area (in hectares) of clearing, inundation, construction or exclusion by the average statutory *land* value for the LGA and then by the relevant ratio associated with the *protected area* category (as per Table 1). Where the average statutory *land* value is less than \$500 per hectare, a floor price of \$500 will be applied. The total area will also be rounded up to the nearest hectare. The costs associated with direct impacts to assets and infrastructure owned by the department will be added, where applicable, to this figure. These costs include, as an example, the replacement of fire control

lines, lookouts and other assets. Information will be provided by the department about these costs as part of the assessment process.

For example, an offset liability for infrastructure requiring five hectares of clearing on a national park would be based on the following formula:

offset liability = (5 [being the area in ha] x statutory *land* value [assume \$1200/ha] x 10 [ratio for national park]) + direct impact costs [assume nil]

offset liability =  $((5 \times \$1200) \times 10) + \$0$ 

offset liability = \$60,000

An offset will be payable by the *proponent* to the *offset account* prior to the commencement of works. The administrator of the *offset account* will ensure that any offset payments for impacts on a *protected area* will be given to the department responsible for administration of that *protected area*, who will then be responsible for the delivery of an offset.

# **Chapter 4** Review and amendment

## 4.1 Evaluation and review

Evaluation and review of the policy will be undertaken within five years of commencement. This evaluation will review the cap on multipliers and assess the level of compliance of individual offsets with their offset delivery plans, as well as evaluate the policy's overall success in achieving the goal of an overall conservation outcome for prescribed environmental matters.

This evaluation will be based on a combination of information sources including satellite analysis based on the Queensland Government's Statewide Landcover and Trees Study, regular reporting provided by *proponents* and *offset providers* and through targeted field audits by government officers. The outcomes of this review will be reported to the Queensland Parliament.

## 4.2 Policy amendment

Any policy amendment that does not constitute a minor or administrative amendment will be subject to the requirements of the Regulatory Impact Statement System guidelines, and detail about this can be found at <a href="https://www.treasury.qld.gov.au">www.treasury.qld.gov.au</a> (search for 'regulatory impact system'). A minor or administrative amendment to the Policy may be made where:

- the amendment is made merely to reflect a part of another statutory instrument, and adequate public consultation was carried out in relation to the making of that other statutory instrument;
- the amendment corrects or changes any of the following:
  - o an explanatory matter about the policy;
  - o the format or presentation of the policy;
  - o a spelling, grammatical or mapping error in the policy;
  - o a factual matter incorrectly stated in the policy;
  - a redundant or outdated term in the policy;
  - inconsistent numbering of provisions in the policy; or
  - a cross-reference in the policy.

# Appendix 1 Self-administered code of compliance

The Chief Executive administering the *Environmental Offsets Act 2014* may approve a self-administered code of compliance for *prescribed activities* requiring offsets that are undertaken by the following entities:

- Government departments and agencies; or
- Government-owned corporations.

In order to approve a self-administered code of compliance, the Chief Executive must be satisfied that the code:

- sets out the circumstances in which an offset may or may not be required, having regard to sections 14 and 15 of the *Environmental Offsets Act 2014*;
- sets out the characteristics of an area that is suitable for undertaking an offset;
- provides for the ongoing management and monitoring of, and reporting about, an offset;
- provides for deciding the size and scale of an offset so the offset is proportionate to the significant residual impact on a prescribed environmental matter, and
- describe how an offset will be undertaken and the conservation outcome will be achieved, including how the plan will meet the principles outlined in section 1.3 of this policy and the following:
  - o effectively account for and manage the risks of the offset failing to achieve the conservation outcome;
  - o ensure the offset provides benefits in relation to the *prescribed environmental matter* in addition to any other benefit provided under a requirement of an Act;
  - have transparent governance arrangements, including being able to be readily measured, monitored, audited and enforced; and
  - ensure the offset is of a size and scale proportionate to the significant residual impact on the prescribed environmental matter.

Where a *prescribed activity* and/or *prescribed environmental matter* is outside of the scope of a self-administered code, the standard requirements of the policy apply and the relevant entity will be required to submit an offset proposal to the *administering agency* that complies with the policy.

# **Appendix 2 Bioregions of Queensland**



Figure two: Map of Queensland's bioregions

# Appendix 3 Defined distance

The defined distance for a regional ecosystem is determined using the table and diagrams below, in accordance with Schedule 2 clause 2, subsections (5) and (6) of the *Environmental Offsets Regulation 2014*, and the bioregions shown in Appendix 2.

## Defined distance for a regional ecosystem

### Coastal bioregions and sub-regions:

- Townsville Plains (11.1), Bogie River Hills (11.2) and Marlborough Plains (11.14) Subregions, Brigalow Belt (SBRB) Bioregion
- · Central Queensland Coast (CQC) Bioregion
- Starke Coastal Lowlands (3.2) Subregion, Cape York Peninsula (CYP) Bioregion
- Hodgkinson Basin (9.3) Subregion, Einasleigh Uplands (EIU) Bioregion
- Wet Tropics (WET) Bioregion
- South East Queensland (SEQ) Bioregion.

Watercourse stream order	Distance from the defining bank (metres)
1 or 2	10
3 or 4	25
5 or greater	50

#### Non-coastal bioregions and sub-regions:

- Brigalow Belt (SBRB) Bioregion (excluding Subregions 11.1, 11.2 and 11.14)
- New England Tableland (NET) Bioregion
- · Northwest Highlands (NWH) Bioregion
- Gulf Plains (GUP) Bioregion
- Cape York Peninsula (CYP) Bioregion (excluding Subregion 3.2)
- Mitchell Grass Downs (MGD) Bioregion
- Channel Country (CHC) Bioregion
- Mulga Lands (MUL) Bioregion
- Einasleigh Uplands (EIU) Bioregion (excluding Subregion 9.3)
- Desert Uplands (DEU) Bioregion.

Watercourse stream order	Distance from the defining bank (metres)
1 or 2	25
3 or 4	50
5 or greater	100

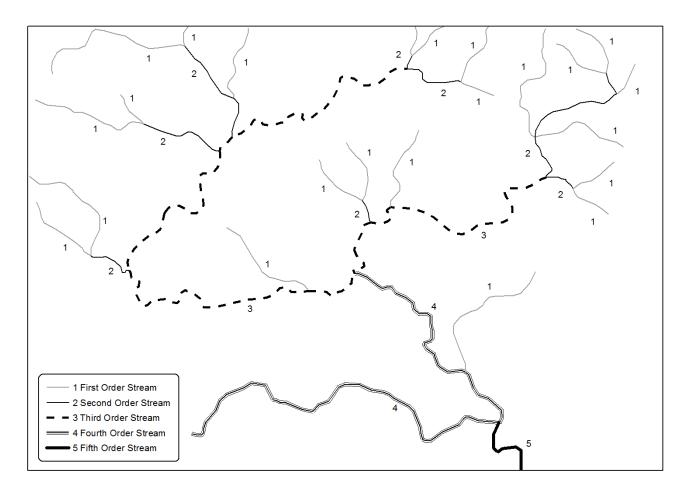


Figure three: Watercourse stream order map

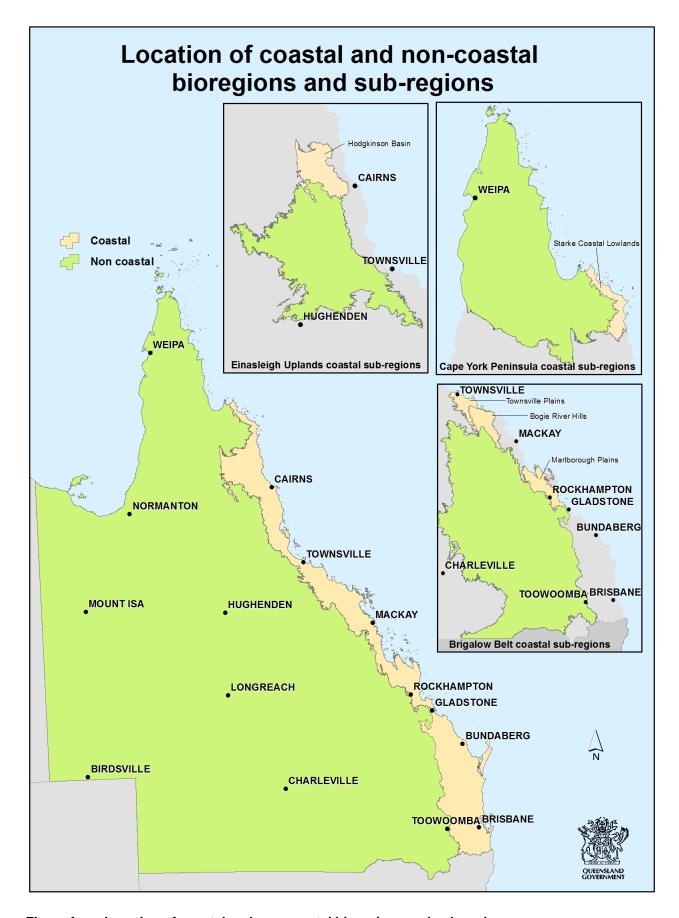


Figure four: Location of coastal and non-coastal bioregions and sub-regions

# **Appendix 4 Financial Settlement Offset Calculation Methodology**

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## 4.1 Purpose

This calculation methodology is to be used to calculate the payment amount for a financial settlement offset.

This methodology provides sufficient information to enable the calculation to be performed independently of the Financial Settlement Offset Calculator and provides the statutory basis for calculating the required financial payment under section 24(3) of the *Environmental Offsets Act 2014*.

# 4.2 Terms specific to the Financial Settlement Offset Calculation Methodology

Administrative cost is the estimated cost to the government to maintain and administer the *land*-based offset over its life.

**Landholder Incentive Payment** is a component of the Financial Settlement Offset Calculation Methodology. It is not intended to cover the full lost economic opportunity costs of a proposed offset, rather enough motivation for the individual landholder to be willing to participate in the market.

Multiplier is a number used to calculate the size of the offset requirement given the significant residual impact

area, for a given prescribed environmental matter. A significant residual impact area for a certain matter (for example a regional ecosystem) may be 1ha and the multiplier for that regional ecosystem may be 4. Thus the required offset area for the impacted matter would be  $1ha \times 4 = 4ha$ .

**On-ground cost** is an interim component (sub-total) of the Financial Settlement Offset Calculation Methodology, used in the calculation of total on-ground cost.

Section is defined as an impact area containing one or more matters where the area:

- · is contained in a single LGA; and
- · is contained in a single subregion.

**Species Functional Group** is a group of species (critically endangered, endangered, vulnerable and special least concern animals in the context of the Financial Settlement Offset Calculation Methodology) that has similar attributes and habitats.

**Sliding scale and sliding scale multiplier.** The sliding scale calculation produces a 'sliding scale multiplier' which is a percentage greater than 10% and up to 100%. To account for economies of scale for large offsets, a sliding scale of per hectare (ha) costs is applied to the financial settlement amount for certain matters. The financial settlement amount is multiplied by the sliding scale multiplier, which has the effect of reducing the financial settlement amount for those large offsets.

**Threatened animals** includes animals that are critically endangered, endangered, vulnerable, near threatened and special least concern.

Threatened plants includes plants that are critically endangered, endangered, vulnerable and near threatened.

Total on-ground cost is a component of the Financial Settlements Offset Calculation Methodology.

**Total on-ground section cost** is an interim (sub-total) result (for a section) in the calculation of *total on-ground cost*.

Note: Near threatened animals and plants are only applicable to assessments under State Code 16 (Native vegetation clearing) of the SDAPs of the Planning Act 2016.

## 4.3 Calculation methodology

### 4.3.1 Introduction

The components of the calculation methodology are summarised in this section.

The calculation of a financial settlement offset for a single matter is relatively straightforward. However, the calculation for impacts with multiple impact areas in different locations involving multiple matter types can be complex. This methodology document addresses a range of example impact types to assist in understanding.

## 4.3.2 Summary of calculation methodology

The location of the impact area(s) and the ability of some *prescribed environmental matters* to be co-located can affect the overall cost of a financial settlement offset. To determine this cost an impact site area needs to:

- be divided into one or more sections; and
- consider the ability for *prescribed environmental matters* to be co-located by firstly defining **one or more**Distinct Matter Areas (DMA) (as described in section 4.3.4).

A residual impact area in ha is multiplied by a defined multiplier to derive the total offset area.

The financial settlement calculation is based on the following formula:

Financial settlement = (total offset area x on-ground cost per ha) + landholder incentive payment + administrative cost.

Each of these components uses different inputs and has its own formula.

Variations apply to the financial settlement calculation described above for South East Queensland (SEQ) koala habitat, *protected areas*, and marine and aquatic matters.

In addition, a sliding scale multiplier may apply to larger offsets. The sliding scale multiplier has the effect of

reducing the total financial settlement offset amount.

Each component of the formula is described in more detail in the following sections:

•	Section 4.3.3	Section
•	Section 4.3.4	Distinct Matter Area
•	Section 4.3.5	Distinct Matter Area guiding principles
•	Section 4.3.6	Multipliers
•	Section 4.3.7	Calculate Total offset area X on-ground cost per ha
•	Section 4.3.8	Calculate Landholder incentive payment
•	Section 4.3.9	Calculate Administrative cost
•	Section 4.3.10	SEQ koala habitat matters variations
•	Section 4.3.11	Protected area matters variations
•	Section 4.3.12	Marine and aquatic matters variations
•	Section 4.3.13	Sliding scale calculation

## 4.3.3 Section

A section is defined as an impact area containing one or more matters where the area is contained in a single:

- LGA; and
- subregion.

The on-ground cost per ha varies by subregion.

The landholder incentive payment varies by LGA or subregion, depending on the bioregion.

If the impacted area covers two or more subregions or LGAs (e.g. a linear development such as a rail line or pipeline) it will need to be broken into separate areas (called sections) for the purposes of calculating the total financial settlement accurately.

## 4.3.4 Distinct Matter Area

An impact area may have more than one *prescribed environmental matter* located on it. In these cases, the calculation needs to know whether to count each matter separately or combine the matters for the impact area. Where *prescribed environmental matters* cannot be co-located, they are counted separately in the calculation of the financial settlement offset.

Where there is a requirement to account for each matter separately, the area that contains the matter is identified as a distinct matter area to the calculation. Each distinct matter area is termed a "Distinct Matter Area" or DMA. For a given residual impact area, DMAs (in a given section) that use the same sliding scale calculation (e.g. terrestrial DMAs – refer to section 4.3.13) are summed before the total on-ground cost, landholder incentive payment and administrative cost are calculated.

Each area of impact for co-located matters is also termed a DMA. The calculation deals with the DMA as if it contains a single matter (the matter with the highest multiplier—see section 4.3.6 below).

Two DMAs are illustrated in the following hypothetical diagram of an impact area with a total area of 100ha, in which there are three matters:

- an endangered rainforest regional ecosystem that covers the impact area of 100ha;
- · an endangered marsupial that inhabits the regional ecosystem; and
- a colony of endangered ghost bats in a cave with an area of 10ha in the regional ecosystem.

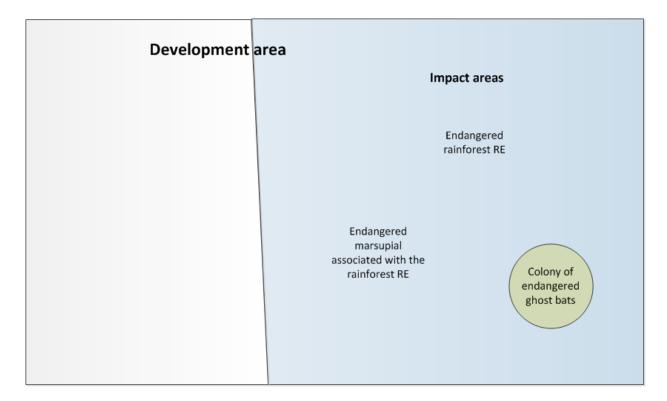


Figure five: Illustration of multiple DMAs

In this example, there are two DMAs:

- a DMA of 100ha with the endangered regional ecosystem and the endangered marsupial. The endangered marsupial can clearly be co-located with the regional ecosystem, because it is dependent on the regional ecosystem; and
- a DMA of 10ha with the colony of endangered ghost bats. The colony needs to be calculated separately because there is no guarantee that a cave could be found in that regional ecosystem. A separate offset site is likely to be needed for the ghost bats.

Thus, although the total impact area is 100ha, the calculation takes as input a DMA of 100ha (for the regional ecosystem and marsupial) and a DMA of 10ha (for the ghost bats) = a total of 110ha. Each DMA is counted separately in the calculation of the financial settlement offset.

## 4.3.5 Distinct Matter Area guiding principles

The Financial Settlement Offset Calculation Methodology starts with the assumption that all *prescribed environmental matters* on the impact site can be co-located if treated as a single DMA, and only one offset site should be needed in most cases.

However, separate DMAs must be based on the following principles:

- there should be one only regional ecosystem per DMA;
- wetlands must be in separate DMAs to non-wetland areas;
- koala habitat in SEQ (see section 4.3.10);
- impacts to protected areas are treated as a separate DMA to the other matters impacted;
- species that have very specific habitat requirements (such as rocks for rock wallabies or caves for certain bat species) must be in separate DMAs;
- each separate species functional group must be in a separate DMA; and
- matters imposed by Queensland Government agencies must be in separate DMAs from matters imposed by local governments.

## 4.3.6 Multipliers

#### 4.3.6.1 Introduction

The total offset area for each *prescribed environmental matter* is calculated by taking the impact area of the *prescribed environmental matter*, and multiplying it by the relevant multiplier.

The multiplier for each matter is described in sections 4.3.6.2 and 4.3.6.3 below, and tables of *prescribed environmental matters* and *multipliers* are included in section 4.5.

#### 4.3.6.2 Threatened animals

The multiplier for threatened animals that are critically endangered, endangered, vulnerable and special least concern are located in the last column of the threatened animals data table (table 4.5.1).

The multiplier for threatened animals that are near threatened is 4.

#### 4.3.6.3 Other matters

For other matters, the multiplier is provided in the last column in the other matters data table (table 4.5.2).

## 4.3.7 Calculate total offset area x on-ground cost per hectare

To derive the total offset area for each application, use the following approach:

- 1. within each DMA, select the matter with the highest multiplier;
- 2. multiply the area of the DMA by the highest multiplier to get the offset area required for that DMA;
- 3. repeat the previous two steps for each DMA in that section;
- 4. sum the offset area of each DMA in that section to get a total offset area for the section; and
- 5. multiply the total offset area for the section by the on-ground cost per ha for the subregion of the section to arrive at the total on-ground section cost.

The on-ground cost for the subregion is shown in the table in section 4.5.4 of this appendix.

Repeat the five steps above for each section.

Sum the total on-ground section costs for all sections to arrive at the total on-ground cost.

Multiply the total on-ground cost by the derived sliding scale multiplier to derive the total on-ground cost as described in section 4.3.13.2.

## **Example**

This example has two sections. Section 1 has one DMA which contains two matters, whilst Section 2 has two DMAs that each contain a single matter.

#### Section 1, DMA 1:

LGA Brisbane City CouncilBioregion South East Queensland

Subregion Moreton Basin

DMA area 10ha

Matter group Threatened regional ecosystem

Matter
 12.3.1 Gallery rainforest (notophyll vine forest) on alluvial plains

Matter multiplier

Matter group Other mattersMatter Connectivity

Matter multiplier 1

Section 2, DMA 1:

LGA Logan City Council

Bioregion South-east Queensland

Subregion Sunshine Coast-Gold Coast Lowlands

DMA area
 12 ha

Matter group Threatened regional ecosystem

Matter
 12.3.10 Eucalyptus populnea woodland on alluvial plains

Matter multiplier 4

#### Section 2, DMA 2:

LGA Logan City Council

Bioregion South-east Queensland

Subregion Sunshine Coast-Gold Coast Lowlands

• DMA area 3ha

Matter group Koala habitat

Matter Bushland habitat

Matter multiplier 3

#### The calculations are:

Section 1, DMA 1:

DMA area X multiplier X on ground cost

= 10 X 4 X \$20,000 = \$800,000

(the higher multiplier of the two matters is used (i.e. connectivity has a multiplier of '1' whilst the ecosystem has a multiplier of '4' – consequently '4' is used)

Section 2:

((DMA 1 area X multiplier) + (DMA 2 area X multiplier)) X on-ground cost

 $= ((12 \times 4) + (3 \times 3)) \times \$20,000 = (48 + 9) \times \$20,000 = \$1,140,000$ 

(as the area is not greater than 100ha there is no sliding scale)

## 4.3.8 Calculate landholder incentive payment

#### 4.3.8.1 Calculate landholder incentive payment for each section

The landholder incentive payment cost can vary depending on the bioregion, LGA and subregion. Therefore, where the impact areas occur in more than one bioregion, LGA or subregion these costs need to be considered separately.

Calculate the landholder incentive payment for each section:

For the bioregions South-east Queensland, Central Queensland Coast and Wet Tropics

The landholder incentive payment for each section = offset section area X LGA statutory *land* value (for each subregion/LGA pair) (see table 4.5.3 for LGA UV).

 For the Bioregions Brigalow Belt, Channel Country, Cape York Peninsula, Desert Uplands, Einasleigh Uplands, Gulf Plains, Mitchell Grass Downs, Mulga Lands, New England Tableland, Northwest Highlands The landholder incentive payment for each section = offset section area multiplied by the 20-year productivity loss per ha of the subregion in question.

The 20-year productivity loss for each subregion is provided in the last column in the bioregion and subregion data table 4.5.4.

#### 4.3.8.2 Calculate total landholder incentive payment

Sum the landholder incentive payments for each section to derive the total landholder incentive payment.

Calculate the sliding scale of per ha cost multiplier as described in section 4.3.13.

Multiply the total landholder incentive payment by the derived sliding scale multiplier to derive the landholder incentive payment as described in section 4.3.13.

If the result is less than \$10,000, set the landholder incentive payment to \$10,000.

### 4.3.9 Calculate administrative cost

Multiply the total on-ground cost (see section 4.3.6) by 25% to derive the administrative cost.

Apply the sliding scale multiplier as described in section 4.3.13.

For impacts over 2.5 hectares, if the result is less than \$50,000, set the amount to \$50,000; the administrative cost *floor price*. For impact less than or equal to 2.5 hectares, the administrative cost *floor price* will not be applied.

If the amount is greater than \$1,000,000, set the amount to \$1,000,000.

#### 4.3.10 SEQ koala habitat matters variations

The financial settlement offset calculation for koala habitats in SEQ (as identified in Schedule 1 of the Planning Regulation 2017) differs from the standard formula described in sections 4.3.7 to 4.3.9 in the following ways:

- koala habitat calculations for all SEQ LGAs are performed separately from any standard (as per sections 4.3.7 to 4.3.9) financial settlement offset calculations;
- koala habitat calculations in SEQ are counted in addition to any other prescribed environmental matters in the same impact area;
- the results of the koala habitat calculations for each LGA are calculated separately;
- the sliding scale multiplier is not applied to koala habitat calculations;
- for SEQ LGAs, the standard calculation described in sections 4.3.7 to 4.3.9 applies:
- however, the total settlement for SEQ LGAs is capped at \$230,000 per impact ha, calculated as follows:
  - o follow steps 4.3.7 to 4.3.9, ignoring the sliding scale components;
  - o multiply the total impact area in ha by \$230,000 to derive the upper limit of any financial settlement; and
  - compare the results of the standard calculation described in sections 4.3.7 to 4.3.9 and the calculation with a cap of \$230,000 per impact ha. The lower applies. Note that the cap of \$230,000 per impact ha may increase in line with the increase in statutory land values; and
- koala offset requirements in SEQ are based on an average tree density within koala bushland habitat of 250 trees per hectare. The total quantum of impact for a single koala habitat tree in SEQ, using this estimate, is 0.004 ha or 40 m<sup>2</sup>.

#### 4.3.11 Protected area matters variations

The calculation for protected areas is as follows:

multiply the total area (in hectares rounded up to the nearest hectare) of impact by the multiplier for the
protected area type. The multiplier is the last column in the protected area data table;

- multiply the result by the average statutory land value (Table 4.5.3) for the LGA; and
- where the average statutory land value is less than \$500 per hectare, apply a price of \$500 per ha.

**For example**, an offset liability for infrastructure requiring 4.5ha of clearing on a national park would be calculated as follows:

- offset liability = (5 [4.5 rounded up] x multiplier [10 for national parks] X statutory land value [assume \$1200/ha])
   + direct impact costs [assume nil])
- offset liability = ((5 x 10 X \$1200) + \$0)
- offset liability = \$60,000.

Direct impact costs are costs for replacement of infrastructure, such as toilet blocks, that will be advised by the Department of Environment and Science.

Note that *protected areas* are always a separate DMA to the other matters impacted that occur within the *protected area* (e.g. habitat for endangered animals).

The sliding scale multiplier is not applied where the impacted matter is a protected area.

### 4.3.12 Marine and aquatic matters variations

The area of a marine and aquatic offset is calculated by taking the impact area of the *prescribed environmental matter* and multiplying it by the relevant multiplier in the threatened animals data table (Table 4.5.1) or the other matters data table (Table 4.5.2).

The marine and aquatic calculation methodology contains some variations from the standard methodology described in sections 4.3.7 to 4.3.9. These are:

- the landholder incentive payment is \$0;
- there are marine bioregions. For the purposes of the calculation, they are shown in the subregion data table (Table 4.5.4) as Offshore, Inshore–Remote, Inshore–Non-remote, and Rivers and inland waterways. The landward boundary of the Inshore-Remote and Inshore-Non-Remote marine bioregions extends to the limits of Highest Astronomical Tide (HAT); and
- there are two sliding scales
  - o one for marine plants, marine parks, declared fish habitat areas, marine wetlands and aquatic threatened animals; and
  - o one for waterways providing for fish passage.

The application of sliding scales is described in section 4.3.13.

### 4.3.13 Sliding scale calculation

### 4.3.13.1 Timing and method of calculation

To account for economies of scale for large offsets, a sliding scale of per hectare (ha) costs is applied to the financial settlement amount for certain matters, listed below. The sliding scale calculation produces a sliding scale multiplier which is a percentage of costs ranging from 10% to 100%. The financial settlement amount is multiplied by the sliding scale multiplier, which has the effect of reducing the financial settlement amount for those large offsets.

The sliding scale multipliers should be applied as the second last step in the calculation methodology as described below in this section. The last step is the application, where required, of the floor for landholder incentive payment (section 4.3.8) and the floor or cap for the administrative charge (section 4.3.9).

Three sliding scales apply:

• terrestrial, which applies to threatened regional ecosystems, threatened plants, terrestrial threatened animals,

terrestrial wetlands, MLES and connectivity matters. The sliding scale is described in section 4.3.13.2.

- marine parks, marine plants, fish habitat areas, marine wetlands and aquatic threatened animals. The sliding scale is described in section 4.3.13.3.
- waterways providing for fish passage. The sliding scale is described in section 4.3.13.3.

Sum the areas of all matters in all value groups in all DMAs in all sections in the offset area (impact area multiplied by relevant multiplier) for each of the three types above, and apply the relevant sliding scale at the end to the sums of the areas.

As discussed in sections 4.3.10 and 4.3.11, the sliding scale multiplier is not applied to the SEQ koala habitat and protected areas.

#### 4.3.13.2 Terrestrial sliding scale of per ha cost

To account for economies of scale for very large offsets, a sliding scale of per hectare (ha) costs is applied according to the rules listed in the following table.

Table one: Sliding scale rules for determining the overall per hectare costs

Portion of total offset area (ha)	Percentage of cost
1 - 100	100%
100 - 1,000	75%
1,000 - 5,000	50%
5,000 - 10,000	25%
Greater than 10,000	10%

That is, the first 100ha of the total offset area attracts 100% of the per ha cost. The next 900 ha (1000 ha less the first 100 ha) attract 75% of the per ha cost, and so on.

For example, the percentage of cost for a 2500ha offset area would be calculated as follows:

$$((100 * 100\%) + ((1,000-100) * 75\%) + ((2,500-1,000) * 50\%))/2,500$$

- = 1,525/2,500
- = 61%, which is the sliding scale multiplier.

Thus, the approach for calculating the total offset area x on-ground cost per ha for an offset which had one impact matter is:

- calculate the total on-ground cost as described in section 4.3.7; and
- multiply the total on-ground cost by the derived sliding scale multiplier based on the total offset area as described above.

For impacts with multiple sections and/or DMAs and/or multiple matter groups, the sliding scale(s) of per ha cost is/are applied as the second last step in the calculations, when the areas of the relevant matter groups have been aggregated. In this context, 'relevant matter groups' means the following matter groups to which the sliding scale applies:

- terrestrial (excluding protected areas and SEQ koala habitat for which the sliding scale does not apply). For
  example, the sliding scale multiplier would be applied to the total area when the areas of all terrestrial offsets
  had been totalled;
- marine plants, marine parks, declared fish habitat areas, marine wetlands and aquatic threatened animals; and
- waterways providing for fish passage.

Note that the terrestrial sliding scale multiplier is applied to the total offset area x on-ground cost per ha, the landholder incentive payment and the administrative cost.

The floor price for the landholder incentive payment and the floor and ceiling costs for the administrative cost are applied as the last step in the calculation, as described in sections 4.3.8 and 4.3.9.

### 4.3.13.3 Marine and aquatic matters

The sliding scales for determining the overall per hectare costs for marine plants, marine parks, declared fish habitat areas, marine wetlands, aquatic threatened animals and waterways providing for fish passage are shown in the below tables.

# Table Two: sliding scale for marine plants, marine parks, declared fish habitat areas, marine wetlands and aquatic threatened animals

Portion of total offset area (ha)	Percentage of cost
0 – 25	100%
25 – 100	75%
100 – 500	50%
Greater than 500	25%

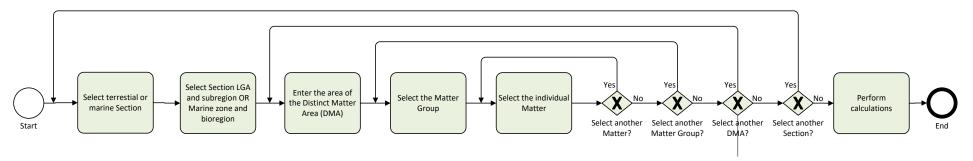
#### Table Three: sliding scale for waterways providing for fish passage

Portion of total offset area (ha)	Percentage of cost
0 – 100	100%
100 – 1000	75%
1000 – 2000	50%
Greater than 2000	25%

## 4.4 Calculation data selection and entry process

An impact area may consist of one or more sections. Each section may consist of one or more DMA. Each DMA may consist of one or more matter groups, and each matter group may consist of one or more matters.

As a result, the selection and entry of the various section(s) details, DMA area(s), matter group(s) and matter(s) to the calculation follows a looping process illustrated in the following diagram:



Financial Settlements Offsets Calculation data selection and entry process

## 4.5 Data tables

## 4.5.1 Threatened animals data table

Scientific name	Common name	Species functional group	NCA class	Multiplier
Acanthophis antarcticus	common death adder	21	V	4
Acanthophis hawkei	plains death adder	22	V	4
Acrodipsas illidgei	Illidge's ant-blue	4	V	4
Adclarkia cameroni	brigalow woodland snail	23	V	4
Adclarkia dawsonensis	boggomoss snail	24	Е	4
Adclarkia dulacca	Dulacca woodland snail	25	Е	4
Adelotus brevis	tusked frog	11	V	4
Amytornis barbatus barbatus	grey grasswren (Bulloo)	26	E	4
Amytornis dorotheae	Carpentarian grasswren	27	Е	4
Anilios insperatus	Fassifern blind snake	28	CR	4
Anomalopus mackayi	long-legged worm skink	10	Е	4
Antechinus argentus	silver-headed antechinus	29	E	4
Antechinus arktos	black-tailed antechinus	30	Е	4
Anthochaera phrygia	regent honeyeater	18	CR	4
Arctocephalus tropicalis	Subantarctic fur seal	1	V	4
Ardenna pacifica	wedge-tailed shearwater	6	V	4
Argyreus hyperbius inconstans	Australian fritillary butterfly	4	E	4
Atrichornis rufescens	rufous scrub-bird	8	V	4
Bettongia tropica	northern bettong	11	E	4
Bolemoreus hindwoodi	Eungella honeyeater	31	V	4
Botaurus poiciloptilus	Australasian bittern	73	Е	4
Calidris canutus	red knot	13	Е	4
Calidris ferruginea	curlew sandpiper	15	CR	4
Calidris tenuirostris	great knot	13	CR	4
Calyptorhynchus lathami	glossy black-cockatoo	2	V	4

Scientific name	Common name	Species functional group	NCA class	Multiplier
Calyptotis thorntonensis	Thornton Peak calyptotis	32	V	4
Carcharias taurus	greynurse shark	1	E	4
Caretta caretta	loggerhead turtle	6	E	4
Casuarius casuarius johnsonii (northern population)	southern cassowary (northern population)	11	V	4
Casuarius casuarius johnsonii (southern population)	southern cassowary (southern population)	11	Е	4
Chalinolobus dwyeri	large-eared pied bat	16	V	4
Charadrius leschenaultii	greater sand plover	13	V	4
Charadrius mongolus	lesser sand plover	13	E	4
Chelonia mydas	green turtle	6	V	4
Chlamydogobius micropterus	Elizabeth Springs goby	3	Е	4
Chlamydogobius squamigenus	Edgbaston goby	3	Е	4
Concinnia frerei	Bartle Frere bar-sided skink	8	Е	4
Conilurus penicillatus	brush-tailed rabbit-rat	33	V	4
Cophixalus concinnus	elegant frog	8	CR	4
Cophixalus crepitans	northern nursery frog	8	V	4
Cophixalus exiguus	dainty nursery frog	8	V	4
Cophixalus hosmeri	rattling nursery frog	74	CR	4
Cophixalus mcdonaldi	Mount Elliot nursery frog	8	CR	4
Cophixalus monticola	Mountain-top nursery frog	8	CR	4
Cophixalus neglectus	neglected nursery frog	8	CR	4
Cophixalus peninsularis	Cape York nursery frog	8	V	4
Cophixalus saxatilis	Black Mountain boulderfrog	7	V	4
Cophixalus zweifeli	Cape Melville boulder frog	7	V	4
Crinia tinnula	wallum froglet	4	V	4
Crocodylus porosus	estuarine crocodile	15	V	4
Cryptoblepharus fuhni	Fuhn's snake-eyed skink	34	V	4
Cryptophis incredibilis	pink snake	35	V	4

Scientific name	Common name	Species functional group	NCA class	Multiplier
Ctenotus monticola	Atherton ctenotus	36	V	4
Ctenotus rawlinsoni	Cape Heath ctenotus	37	V	4
Ctenotus serotinus	gravel-downs ctenotus	38	CR	4
Cyclopsitta diophthalma coxeni	Coxen's fig-parrot	11	E	4
Cyclopsitta diophthalma macleayana	Macleay's fig-parrot	16	V	4
Dasycercus cristicauda	crest-tailed mulgara	10	V	4
Dasyornis brachypterus	eastern bristlebird	8	E	4
Dasyuroides byrnei	kowari	10	V	4
Dasyurus maculatus gracilis	spotted-tailed quoll (northern subspecies)	11	Е	4
Dasyurus maculatus maculatus	spotted-tailed quoll (southern subspecies)	11	V	4
Delma torquata	collared delma	9	V	4
Denisonia maculata	ornamental snake	10	V	4
Dermochelys coriacea	leatherback turtle	6	Е	4
Diomedea antipodensis antipodensis	Antipodean albatross	14	V	4
Diomedea antipodensis gibsoni	Gibson's albatross	14	V	4
Diomedea exulans	wandering albatross	14	V	4
Dugong dugon	dugong	1	V	4
Eclectus roratus macgillivrayi	eclectus parrot (Australian subspecies)	16	V	4
Egernia rugosa	yakka skink	11	V	4
Elseya albagula	white-throated snapping turtle	40	CR	4
Elseya lavarackorum	gulf snapping turtle	3	V	4
Elusor macrurus	Mary River turtle	3	Е	4
Emoia atrocostata australis	littoral whip-tail skink	41	V	4
Emydura subglobosa subglobosa	Jardine River turtle	42	V	4
Epthianura crocea crocea	yellow chat (gulf)	5	V	4

Scientific name	Common name	Species functional group	NCA class	Multiplier
Epthianura crocea macgregori	yellow chat (Dawson)	4	E	4
Eretmochelys imbricata	hawksbill turtle	6	E	4
Erythrotriorchis radiatus	red goshawk	18	E	4
Erythrura gouldiae	Gouldian finch	2	E	4
Esacus magnirostris	beach stone-curlew	13	V	4
Euastacus bindal	Mount Elliot crayfish	43	CR	4
Euastacus jagara	Jagara hairy crayfish	75	CR	4
Falco hypoleucos	grey falcon	44	V	4
Furina dunmalli	Dunmall's snake	9	V	4
Geophaps scripta scripta	squatter pigeon (southern subspecies)	2	V	4
Grantiella picta	painted honeyeater	18	V	4
Halobaena caerulea	blue petrel	76	V	4
Hemiaspis damelii	grey snake	10	E	4
Hippocampus whitei	White's seahorse	77	Е	4
Hipposideros cervinus	fawn leaf-nosed bat	16	V	4
Hipposideros semoni	Semon's leaf-nosed bat	16	Е	4
Hipposideros stenotis	northern leaf-nosed bat	16	V	4
Hirundapus caudacutus	white-throated needletail	78	V	4
Hypochrysops apollo apollo	Apollo jewel (Wet Tropics subspecies)	4	V	4
Hypochrysops piceatus	bulloak jewel butterfly	2	CR	4
Jalmenus eubulus	pale imperial hairstreak	2	V	4
Karma tryoni	Tryon's skink	45	V	4
Lasiorhinus krefftii	northern hairy-nosed wombat	2	Е	4
Lathamus discolor	swift parrot	2	Е	4
Lepidochelys olivacea	olive ridley turtle	6	Е	4
Lerista allanae	retro slider	10	Е	4
Lerista ameles	limbless fine-lined slider	9	V	4

Scientific name	Common name	Species functional group	NCA class	Multiplier
Lerista cinerea	vine-thicket fine-lined slider	47	V	4
Lerista ingrami	McIvor River slider	4	V	4
Lerista storri	Chillagoe fine-lined slider	48	V	4
Lerista vittata	side-striped fine-lined slider	9	V	4
Liburnascincus scirtetis	Black Mountain skink	7	V	4
Limosa lapponica baueri	Western Alaskan bar-tailed godwit	13	V	4
Limosa lapponica menzbieri	Northern Siberian bar-tailed godwit	49	Е	4
Litoria andiirrmalin	Melville Range treefrog	12	V	4
Litoria dayi	lace-eyed treefrog	12	V	4
Litoria freycineti	wallum rocketfrog	4	V	4
Litoria kroombitensis	Kroombit tree frog	12	CR	4
Litoria lorica	armoured mist frog	12	CR	4
Litoria myola	Kuranda treefrog	50	CR	4
Litoria nannotis	torrent tree frog	12	Е	4
Litoria nyakalensis	mountain mist frog	12	CR	4
Litoria olongburensis	wallum sedgefrog	4	V	4
Litoria pearsoniana	cascade treefrog	12	V	4
Litoria rheocola	common mist frog	12	Е	4
Litoria serrata	tapping green-eyed tree frog	51	V	4
Litoria subglandulosa	New England treefrog	12	V	4
Lophochroa leadbeateri	Major Mitchell's cockatoo	2	V	4
Lygisaurus tanneri	Endeavour River litter-skink	52	V	4
Macroderma gigas	ghost bat	11	Е	4
Macronectes giganteus	southern giant petrel	19	Е	4
Macronectes halli	northern giant-petrel	19	V	4
Macrotis lagotis	greater bilby	10	Е	4
Magmellia luteilateralis	orange-speckled forest-skink	8	V	4
Malurus coronatus	purple-crowned fairy-wren	5	V	4

Scientific name	Common name	Species functional group	NCA class	Multiplier
Megaptera novaeangliae	humpback whale	1	V	4
Menetia sadlieri		9	V	4
Mixophyes fleayi	Fleay's barred frog	12	Е	4
Mixophyes iteratus	giant barred frog	12	E	4
Murina florium	tube-nosed insectivorous bat	16	V	4
Nacaduba pactolus cela	bold blue-line	53	V	4
Nactus galgajuga	Black Mountain gecko	7	V	4
Nangura spinosa	Nangur skink	12	CR	4
Nannoperca oxleyana	Oxleyan pygmy perch	3	V	4
Natator depressus	flatback turtle	6	V	4
Neochmia phaeton evangelinae	crimson finch (white-bellied subspecies)	5	Е	4
Neochmia ruficauda ruficauda	star finch (eastern subspecies)	5	Е	4
Ninox strenua	powerful owl	18	V	4
Notomys aquilo	northern hopping-mouse	4	V	4
Notomys fuscus	dusky hopping-mouse	10	Е	4
Numenius madagascariensis	eastern curlew	54	Е	4
Nyctophilus corbeni	Corben's long-eared bat	2	V	4
Onychogalea fraenata	bridled nailtail wallaby	10	Е	4
Orcaella heinsohni	Australian snubfin dolphin	55	V	4
Ornithoptera richmondia	Richmond birdwing	12	V	4
Ornithorhynchus anatinus	platypus	15	SL	4
Orraya occultus	McIlwraith leaf-tailed gecko	8	V	4
Pedionomus torquatus	plains-wanderer	10	CR	4
Petauroides volans	greater glider	56	V	4
Petaurus australis unnamed subsp.	Yellow-bellied glider (northern subspecies)	8	Е	4
Petaurus gracilis	mahogany glider	16	Е	4
Petrogale coenensis	Cape York rock-wallaby	57	V	4

Scientific name	Common name	Species functional group	NCA class	Multiplier
Petrogale penicillata	brush-tailed rock-wallaby	7	V	4
Petrogale persephone	Proserpine rock-wallaby	7	Е	4
Petrogale purpureicollis	purple-necked rock-wallaby	7	V	4
Petrogale sharmani	Sharman's rock-wallaby	7	V	4
Petrogale xanthopus celeris	yellow-footed rock-wallaby	58	V	4
Pezoporus occidentalis	night parrot	10	E	4
Pezoporus wallicus wallicus	ground parrot	4	V	4
Phaethon rubricauda	red-tailed tropicbird	6	V	4
Phascolarctos cinereus	koala	11	V	4
Philoria kundagungan	red-and-yellow mountainfrog	46	V	4
Phoebetria fusca	sooty albatross	14	V	4
Phyllurus caudiannulatus	ringed thin-tailed gecko	12	V	4
Phyllurus gulbaru	Gulbaru gecko	12	CR	4
Phyllurus isis	Mount Jukes broad-tailed gecko	12	V	4
Phyllurus kabikabi	Oakview leaf-tailed gecko	8	CR	4
Podargus ocellatus plumiferus	plumed frogmouth	12	V	4
Poephila cincta cincta	black-throated finch (white-rumped subspecies)	2	Е	4
Potorous tridactylus tridactylus	long-nosed potoroo	11	V	4
Probosciger aterrimus	palm cockatoo	59	V	4
Psephotus chrysopterygius	golden-shouldered parrot	2	Е	4
Pseudomugil mellis	honey blue-eye	3	V	4
Pseudomys australis	plains rat	10	Е	4
Pseudomys novaehollandiae	New Holland mouse	60	V	4
Pseudomys oralis	Hastings River mouse	9	V	4
Pseudophryne covacevichae	magnificent broodfrog	12	V	4
Pterodroma heraldica	Herald petrel	19	CR	4
Pteropus conspicillatus	spectacled flying-fox	61	Е	4
Pygmaeascincus sadlieri	Magnetic Island dwarf skink	79	V	4

Scientific name	Common name	Species functional group	NCA class	Multiplier
Rheobatrachus vitellinus	northern gastric brooding frog	12	Е	4
Rheodytes leukops	Fitzroy River turtle	3	V	4
Rhinolophus philippinensis	greater large-eared horseshoe bat	16	Е	4
Rhinonicteris aurantia	orange leaf-nosed bat	16	V	4
Rostratula australis	Australian painted snipe	15	Е	4
Saccolaimus saccolaimus nudicluniatus	bare-rumped sheathtail bat	16	Е	4
Saproscincus eungellensis	Eungella shadeskink	62	V	4
Scaturiginichthys vermeilipinnis	redfin blue-eye	3	Е	4
Sminthopsis douglasi	Julia Creek dunnart	10	Е	4
Sminthopsis leucopus	white-footed dunnart	63	V	4
Sousa sahulensis	Australian humpback dolphin	64	V	4
Sternula nereis exsul	New Caledonian fairy tern	65	Е	4
Stiphodon pelewensis	daintree cling goby	66	V	4
Stiphodon rutilaureus	orange cling goby	67	V	4
Stiphodon surrufus	emerald cling goby	68	V	4
Stipiturus malachurus	southern emu-wren	4	V	4
Tachyglossus aculeatus	echidna	11	SL	4
Taudactylus eungellensis	Eungella tinkerfrog	12	Е	4
Taudactylus pleione	Kroombit tinkerfrog	12	CR	4
Taudactylus rheophilus	northern tinkerfrog	12	Е	4
Techmarscincus jigurru	Bartle Frere cool-skink	8	V	4
Tenuibranchiurus glypticus	swamp crayfish	69	Е	4
Thalassarche bulleri	Buller's albatross	14	V	4
Thalassarche carteri	Indian yellow-nosed albatross	14	V	4
Thalassarche cauta	shy albatross	14	V	4
Thalassarche chrysostoma	grey-headed albatross	14	Е	4
Thalassarche steadi	white-capped albatross	14	V	4

Scientific name	Common name	Species functional group	NCA class	Multiplier
Trisyntopa scatophaga	antbed moth	70	E	4
Turnix melanogaster	black-breasted button-quail	11	V	4
Turnix olivii	buff-breasted button-quail	10	Е	4
Tympanocryptis condaminensis	Condamine earless dragon	10	Е	4
Tympanocryptis wilsoni	Roma earless dragon	71	V	4
Tyto novaehollandiae kimberli	masked owl (northern subspecies)	18	V	4
Wollumbinia belli	Bell's turtle	72	V	4
Xeromys myoides	false water-rat	4	V	4

## 4.5.2 Other matters data table

Category	Sub-Category	Multiplier
Connectivity	Connectivity	1
Local Government Matter	MLES 1	1
Local Government Matter	MLES 2	2
Local Government Matter	MLES 3	3
Local Government Matter	MLES 4	4
Marine	Waterway providing for fish passage	1
Marine	Fish Habitat Area	4
Marine	Marine Park	4
Marine	Marine plants	4
Protected areas	National park	10
Protected areas	National parks (scientific)	10
Protected areas	National parks (Aboriginal land)	10
Protected areas	National park (Torres Strait Islander land)	10
Protected areas	National park (Cape York Peninsula Aboriginal <i>land</i> )	10
Protected areas	Special wildlife reserves	8

Protected areas	Conservation parks	5
Protected areas	Resources reserves	5
Protected areas	Nature refuges	5
Koala Habitat (SEQ LGAs)	Essential habitat (s. 2(3)(b), Schedule 2, Environmental Offsets Regulation 2014)	3
	Koala habitat area (s. 6(3), Schedule 2, Environmental Offsets Regulation 2014)	
	Habitat for koalas (s. 6(4), Schedule 2, Environmental Offsets Regulation 2014)	
Threatened plants	Critically endangered, endangered, vulnerable and near threatened plants <sup>2</sup>	4
Endangered regional ecosystems		4
Of Concern regional ecosystems		4
Least Concern regional ecosystems (intersecting a watercourse or associated with a wetland)		4
Wetlands		4
Watercourses		4

### 4.5.3 Local Government Area data table

LGA Name	Statutory Land Value (\$/ha³)
Aurukun Shire Council	100
Balonne Shire Council	687
Banana Shire Council	1202
Barcaldine Regional Council	449
Barcoo Shire Council	107

<sup>&</sup>lt;sup>2</sup> Near threatened plants are only applicable to assessments under State Code 16 (Native vegetation clearing) of the SDAPs of the *Planning Act 2016*.

<sup>&</sup>lt;sup>3</sup> The dollar figure is the average \$/ha for the LGA for all lots of 10ha or greater

LGA Name	Statutory Land Value (\$/ha³)
Blackall Tambo Regional Council	308
Boulia Shire Council	452
Brisbane City Council	229626
Bulloo Shire Council	101
Bundaberg Regional Council	4641
Burdekin Shire Council	3149
Burke Shire Council	168
Cairns Regional Council	12724
Carpentaria Shire Council	222
Cassowary Coast Regional Council	4438
Central Highlands Regional Council	2466
Charters Towers Regional Council	2854
Cherbourg Aboriginal Shire Council	100
Cloncurry Shire Council	5832
Cook Shire Council	5681
Croydon Shire Council	100
Diamantina Shire Council	2006
Doomadgee Aboriginal Shire Council	100
Douglas Shire Council	7531
Etheridge Shire Council	288
Flinders Shire Council	191
Fraser Coast Regional Council	6399
Gladstone Regional Council	4990
City of Gold Coast	58443
Goondiwindi Regional Council	972
Gympie Regional Council	6281
Hinchinbrook Shire Council	3188
Hope Vale Aboriginal Shire Council	100
Ipswich City Council	23071

LGA Name	Statutory Land Value (\$/ha³)
Isaac Regional Council	1914
Kowanyama Aboriginal Shire Council	100
Livingstone Shire Council	7280
Lockhart River Aboriginal Shire Council	100
Lockyer Valley Regional Council	7329
Logan City Council	34751
Longreach Regional Council	301
Mackay Regional Council	5454
Mapoon Aboriginal Shire Council	100
Maranoa Regional Council	1083
Mareeba Shire Council	6550
Mckinlay Shire Council	137
Moreton Bay Regional Council	26983
Mornington Shire Council	100
Mount Isa City Council	23057
Murweh Shire Council	872
Napranum Aboriginal Shire Council	100
Noosa Shire Council	13170
North Burnett Regional Council	1053
Northern Peninsula Area Regional Council	100
Palm Island Aboriginal Shire Council	100
Paroo Shire Council	225
Pormpuraaw Aboriginal Shire Council	100
Quilpie Shire Council	168
Redland City Council	64283
Richmond Shire Council	129
Rockhampton Regional Council	3761
Scenic Rim Regional Council	8462
Somerset Regional Council	6288

LGA Name	Statutory Land Value (\$/ha³)
South Burnett Regional Council	2184
Southern Downs Regional Council	3361
Sunshine Coast Regional Council	19141
Tablelands Regional Council	8283
Toowoomba Regional Council	3765
Torres Shire Council	23767
Torres Strait Island Regional Council	100
Townsville City Council	18202
Weipa Town Council	21984
Western Downs Regional Council	1753
Whitsunday Regional Council	4304
Winton Shire Council	152
Woorabinda Aboriginal Shire Council	100
Wujal Wujal Aboriginal Shire Council	100
Yarrabah Aboriginal Shire Council	100

## 4.5.4 Bioregion and subregion data table: on ground cost per hectare and 20-year loss

Bioregion name	Subregion name	On-Ground cost per ha (\$)	20-year loss (\$)
Brigalow Belt	Anakie Inlier	4000	105
Brigalow Belt	Arcadia	4000	298
Brigalow Belt	Banana - Auburn Ranges	4000	195
Brigalow Belt	Barakula	4000	154
Brigalow Belt	Basalt Downs	4000	416
Brigalow Belt	Belyando Downs	4000	397
Brigalow Belt	Beucazon Hills	4000	272
Brigalow Belt	Bogie River Hills	2000	170
Brigalow Belt	Boomer Range	4000	96
Brigalow Belt	Buckland Basalts	2000	66
Brigalow Belt	Callide Creek Downs	4000	712
Brigalow Belt	Cape River Hills	2000	149
Brigalow Belt	Carnarvon Ranges	2000	55
Brigalow Belt	Claude River Downs	4000	325
Brigalow Belt	Culgoa - Bokhara	4000	458
Brigalow Belt	Dawson River Downs	4000	688
Brigalow Belt	Dulacca Downs	4000	771
Brigalow Belt	Eastern Darling Downs	4000	428
Brigalow Belt	Inglewood Sandstones	4000	91
Brigalow Belt	Isaac - Comet Downs	4000	670
Brigalow Belt	Macintyre - Weir Fan	4000	513
Brigalow Belt	Marlborough Plains	4000	249
Brigalow Belt	Moonie - Barwon Interfluve	4000	388
Brigalow Belt	Moonie R Commoron Creek Floodout	4000	582
Brigalow Belt	Mount Morgan Ranges	4000	182
Brigalow Belt	Narrandool	4000	128
Brigalow Belt	Nebo - Connors Ranges	4000	253
Brigalow Belt	Northern Bowen Basin	4000	239

Bioregion name	Subregion name	On-Ground cost per ha (\$)	20-year loss (\$)
Brigalow Belt	South Drummond Basin	4000	279
Brigalow Belt	Southern Downs	4000	318
Brigalow Belt	Tara Downs	4000	771
Brigalow Belt	Taroom Downs	4000	1055
Brigalow Belt	Townsville Plains	2000	287
Brigalow Belt	Upper Belyando Floodout	4000	335
Brigalow Belt	Warrambool - Moonie	4000	458
Brigalow Belt	Weribone High	4000	385
Brigalow Belt	Woorabinda	4000	112
Brigalow Belt	Wyarra Hills	2000	164
Channel Country	Bulloo	2000	78
Channel Country	Bulloo Dunefields	2000	22
Channel Country	Coongie	2000	45
Channel Country	Cooper - Diamantina Plains	2000	45
Channel Country	Dieri	2000	22
Channel Country	Georgina - Eyre Plains	2000	45
Channel Country	Goneaway Tablelands	2000	22
Channel Country	Lake Pure	2000	22
Channel Country	Noccundra Slopes	2000	22
Channel Country	Simpson Desert	2000	22
Channel Country	Strzelecki Desert	2000	22
Channel Country	Sturt Stony Desert	2000	45
Channel Country	Toko Plains	2000	22
Central Queensland Coast	Byfield	20000	238
Central Queensland Coast	Clarke - Connors Ranges	20000	238
Central Queensland Coast	Debella	20000	434
Central Queensland Coast	Manifold	20000	122

Bioregion name	Subregion name	On-Ground cost per ha (\$)	20-year loss (\$)
Central Queensland Coast	Proserpine - Sarina Lowlands	20000	835
Central Queensland Coast	Whitsunday	20000	753
Cape York Peninsula	Battle Camp Sandstones	2000	21
Cape York Peninsula	Cape York - Torres Strait	2000	82
Cape York Peninsula	Coastal Plains	2000	255
Cape York Peninsula	Coen - Yambo Inlier	2000	21
Cape York Peninsula	Jardine - Pascoe Sandstones	2000	21
Cape York Peninsula	Laura Lowlands	2000	21
Cape York Peninsula	Northern Holroyd Plain	2000	21
Cape York Peninsula	Starke Coastal Lowlands	2000	23
Cape York Peninsula	Weipa Plateau	2000	50
Desert Uplands	Alice Tableland	2000	74
Desert Uplands	Cape - Campaspe Plains	2000	95
Desert Uplands	Jericho	4000	136
Desert Uplands	Prairie - Torrens Creeks Alluvials	2000	113
Einasleigh Uplands	Broken River	2000	99
Einasleigh Uplands	Georgetown - Croydon	2000	86
Einasleigh Uplands	Herberton - Wairuna	2000	111
Einasleigh Uplands	Hodgkinson Basin	2000	61
Einasleigh Uplands	Kidston	2000	107
Einasleigh Uplands	Undara - Toomba Basalts	2000	217
Gulf Plains	Armraynald Plains	2000	270
Gulf Plains	Claraville Plains	2000	46
Gulf Plains	Donors Plateau	2000	189
Gulf Plains	Doomadgee Plains	2000	75
Gulf Plains	Gilberton Plateau	2000	44
Gulf Plains	Holroyd Plain - Red Plateau	2000	32

Bioregion name	Subregion name	On-Ground cost per ha (\$)	20-year loss (\$)
Gulf Plains	Karumba Plains	2000	517
Gulf Plains	Mitchell - Gilbert Fans	2000	38
Gulf Plains	Wellesley Islands	2000	87
Gulf Plains	Woondoola Plains	2000	351
Inshore (remote)	East Cape York	50000	0
Inshore (remote)	Karumba-Nassau	50000	0
Inshore (remote)	Wellesley	50000	0
Inshore (remote)	West Cape York	50000	0
Inshore (non-remote)	Lucinda-Mackay Coast	30000	0
Inshore (non-remote)	Shoalwater Coast	30000	0
Inshore (non-remote)	Tweed-Moreton	30000	0
Inshore (non-remote)	Wet Tropic Coast	30000	0
Mitchell Grass Downs	Barkly Tableland	2000	224
Mitchell Grass Downs	Central Downs	2000	262
Mitchell Grass Downs	Flinders	2000	190
Mitchell Grass Downs	Georgina Limestone	2000	69
Mitchell Grass Downs	Kynuna Plateau	2000	157
Mitchell Grass Downs	Southern Wooded Downs	2000	181
Mitchell Grass Downs	Southwestern Downs	2000	224
Mulga Lands	Cuttaburra - Paroo	2000	19
Mulga Lands	Eastern Mulga Plains	4000	28
Mulga Lands	Langlo Plains	4000	19
Mulga Lands	Nebine Plains	4000	19
Mulga Lands	North Eastern Plains	4000	19
Mulga Lands	Northern Uplands	2000	19
Mulga Lands	Urisino Sandplains	2000	26
Mulga Lands	Warrego Plains	2000	52
Mulga Lands	West Balonne Plains	4000	83
Mulga Lands	West Bulloo	2000	26

Bioregion name	Subregion name	On-Ground cost per ha (\$)	20-year loss (\$)
Mulga Lands	West Warrego	2000	26
New England Tableland	Nandewar Northern Complex	4000	102
New England Tableland	Stanthorpe Plateau	4000	110
New England Tableland	Tenterfield Plateau	4000	123
Northwest Highlands	McArthur	2000	42
Northwest Highlands	Mount Isa Inlier	2000	52
Northwest Highlands	Southwestern Plateaus & Floodouts	2000	88
Northwest Highlands	Thorntonia	2000	88
Offshore	Arafura	50000	0
Offshore	Carpentaria	50000	0
Offshore	Central Reef	50000	0
Offshore	Mackay-Capricorn	50000	0
Offshore	Marion Plateau Province	50000	0
Offshore	Northern Coral Sea Province	50000	0
Offshore	Pompey-Swains	50000	0
Offshore	Queensland Plateau Province	50000	0
Offshore	Ribbons	50000	0
Offshore	Torres Strait	50000	0
Rivers and inland waterways	Inland Waterways	20000	0
Rivers and inland waterways	Rivers	20000	0
Southeast Queensland	Brisbane - Barambah Volcanics	20000	568
Southeast Queensland	Burnett - Curtis Coastal Lowlands	20000	147
Southeast Queensland	Burnett - Curtis Hills and Ranges	20000	176
Southeast Queensland	Burringbar - Conondale Ranges	20000	637

Bioregion name	Subregion name	On-Ground cost per ha (\$)	20-year loss (\$)
Southeast Queensland	Great Sandy	20000	37
Southeast Queensland	Gympie Block	20000	325
Southeast Queensland	Moreton Basin	20000	568
Southeast Queensland	Scenic Rim	20000	1273
Southeast Queensland	South Burnett	20000	637
Southeast Queensland	Southern Great Barrier Reef	20000	176
Southeast Queensland	Sunshine Coast - Gold Coast Lowlands	20000	494
Southeast Queensland	Woodenbong	20000	597
Wet Tropics	Atherton	20000	637
Wet Tropics	Bellenden Ker - Lamb	20000	637
Wet Tropics	Daintree - Bloomfield	20000	637
Wet Tropics	Herbert	20000	687
Wet Tropics	Innisfail	20000	941
Wet Tropics	Kirrama - Hinchinbrook	20000	372
Wet Tropics	Macalister	20000	637
Wet Tropics	Paluma - Seaview	20000	298
Wet Tropics	Tully	20000	741

## **Appendix 5** Advanced offsets

An advanced offset is an area of land that has been identified and registered under section 14 of the Environmental Offsets Regulation 2014 as an advanced offset. Advanced offsets may be used as an offset to compensate for a future significant residual impact on one or more prescribed environmental matters. Advanced offsets are encouraged where practical, as they provide a means to better manage the risks associated with the time delay in finding a suitable offset site and realising the conservation outcome for the prescribed environmental matters on that site. Advanced offsets within a Strategic Offset Investment Corridor are also encouraged because they will provide a landscape outcome for the prescribed environmental matter.

## Requirements for identification and registration of an advanced offset

For section 14 of the *Environmental Offsets Regulation 2014*, this section of the policy must be considered when deciding an application for an area of *land* to be identified as an *advanced offset*.

An application to register an advanced offset must:

- be properly made in the approved forms;
- demonstrate that the land contains, or is capable of containing, a prescribed environmental matter, and
- include a baseline habitat quality assessment of the land. This assessment may be undertaken using the Guide
  to Determining Terrestrial Habitat Quality or an alternative approach that has been approved by DES and
  endorsed by the relevant technical agency for the matter.

The administering agency will have regard to Chapters 1, 2 and 2A of this policy when assessing an advanced offset application, including how the application demonstrates that the offset will result in additional protections or management actions than would have occurred otherwise.

How the *advanced offset* is managed to achieve a *conservation outcome* is at the discretion of the landholder—it is not a consideration under section 14 of the *Environmental Offsets Regulation 2014*. A landholder does not need to submit an *offset delivery plan* or legally secure the site for the site to be registered as an *advanced offset*.

## Assessing an offset application using an advanced offset

Once the *advanced offset* is identified to deliver a specific offset condition, the site and management of the site must satisfy all requirements in this policy, including those relating to offsets required by other legislation and *authority* requirements. In assessing the suitability of the *advanced offset* the *administering agency* must consider any *conservation outcome* achieved for the *prescribed environmental matter*/s from the date that the *advanced offset* was recorded in the offsets register.

It is important to note that *advanced offsets* do not in any way prejudice the outcome of any future assessment of a *prescribed activity*.

## **Appendix 6 Direct Benefit Management Plans**

A DBMP is a pre-approved plan that outlines priority actions for addressing threats to, and providing substantial benefits for, a particular *prescribed environmental matter*. A DBMP may include direct actions as well as indirect actions such as research and education programs that will improve knowledge, understanding and management of *prescribed environmental matters* and lead to improved *conservation outcomes* for those matters. A DBMP endorses actions and an approved methodology for achieving a *conservation outcome*.

One or more priority actions identified in a DBMP can be undertaken to fulfil all or part of an obligation to provide an offset for one or more *prescribed environmental matters*. The *proponent* should apply the approved methodology to fulfil the offset obligation and demonstrate that substantial benefits can be achieved by undertaking actions from a DBMP for the relevant *prescribed environmental matters* compared to a traditional *land*-based offset.

## **Approval of DBMPs**

A DBMP action can only be used as part of an offset for impacts on MSES or MNES if the DBMP has been approved by DES. DES will seek endorsement of the DBMP from the relevant technical agency or experts and, if necessary, DES can establish a Scientific Technical Committee to assess the DBMP to ensure it meets the criteria outlined in this policy. Once approved the DBMP will be listed on the publicly available offset register. To expedite the process, the relevant technical agency should be consulted prior to requesting that DES approve the DBMP.

For MLES the DBMP must be approved by the relevant local government.

## Offset delivery plans and DBMPs

An application to undertake actions identified in a DBMP as part of a *proponent*-driven offset is subject to the assessment of an *offset delivery plan*, which must demonstrate that the proposed management actions will achieve the required *conservation outcome*. Final approval of the *offset delivery plan* is at the discretion of the relevant *administering agency*.

In electing to provide an offset (or part of an offset) by undertaking actions in a DBMP the *proponent* must include as part of the notice of election:

- the pre-approved DBMP relating to an assessment of the *significant residual impacts* for the impacted prescribed environmental matter;
- demonstration that the actions selected from the DBMP proposed to be undertaken are additional to existing
  activities or measures being undertaken for that prescribed environmental matter, are cost-effective and in
  themselves can provide a conservation outcome for the impacted prescribed environmental matter; and
- an offset delivery plan outlining how the actions in the DBMP will be implemented to achieve a conservation outcome for the impacted prescribed environmental matter. An offset delivery plan to deliver on one or more of the actions listed in the DBMP needs to include:
  - justification of the actual benefit achieved for the *prescribed environmental matter* so that the impact is counterbalanced:
  - the performance criteria that will be used to monitor success of the management actions;
  - the actual cost of delivery;
  - · any site-specific details;
  - risks of the action not achieving the conservation outcome and how these risks are to be managed;
  - possible impacts on other MSES;
  - · details and agreement from all landholders and/or interested parties; and
  - the proposed legal security mechanism (if appropriate).

Offsets utilising priority actions in a DBMP will be listed and tracked in Queensland's offset register. As DBMP actions are utilised DES should be notified (offsets@des.qld.gov.au) and the State's offset register updated.

### Criteria for a DBMP

A DBMP is to achieve the principles of this policy by:

- identifying actions that address threats to, and provide substantial benefits for, the prescribed environmental matter;
- demonstrating how a conservation outcome can be achieved by undertaking the listed priority actions; and
- prioritising actions that are efficient, effective, scientifically robust, measurable and enforceable.

A DBMP may be developed for:

- an individual species, or range of species, or its habitat (except for koala habitat in South East Queensland);
- ecosystems, such as wetlands or mangroves, that are difficult to replicate through a land-based offset; and
- fish passage, fish habitat and marine environment.

## **Examples of actions in a DBMP**

Priority actions listed in a DBMP may include, for example:

- implementing part of a Queensland Government 'back on track' priority program;
- implementing part of a species recovery plan developed by the Queensland Government or Australian Government;
- a plan developed by a *natural resource management group*, *offset provider*, *authority holder* or landholder, that is approved by the Chief Executive of DES as suitable for providing a *conservation outcome* for *prescribed environmental matters*; or
- for MLES, a plan approved by the local government as meeting a conservation outcome for that matter.

#### **Direct actions**

Examples of direct actions that may achieve a conservation outcome include but are not limited to the following:

- o enhancing, restoring and establishing key habitat and connectivity across multiple tenures or properties;
- threat mitigation activities such as (but not restricted to) safe movement opportunities or weed or feral animal control on a landscape scale or across multiple properties;
- propagating and planting a vulnerable plant species or establishing and intensively managing new populations of a vulnerable animal in appropriate habitat;
- o protecting and restoring significant freshwater, marine or estuarine ecosystems;
- o landscape-scale fire management activities such as patch burning or protective burns; and
- fencing or other management techniques to manage access impacts on the prescribed environmental matter including legal security where relevant to all or part of the area.

In reaching agreement about the *agreed delivery arrangement* the *administering agency* must ensure that delivery of the DBMP actions will achieve the principles of this policy.

#### Indirect actions - research and education

A DBMP may include indirect actions such as research and education. However, unless otherwise agreed by DES, research and education must not comprise more than 10% of the offset.

A suitable research or education program under a DBMP must:

- endeavour to improve the viability of the impacted prescribed environmental matters, for example:
  - o signage in key areas to educate the public regarding the risks to a threatened or migratory species, where it

can be demonstrated that this is likely to improve the viability of the species: or

- research into effective revegetation techniques for a threatened ecological community or regional ecosystem;
- be targeted toward key research/education activities as identified in 'back on track' actions for biodiversity or relevant commonwealth approved recovery plan and threat abatement plan. Where approved guidance documents are not available or are insufficient in detail, the additional information sources such as state and territory management plans or peer reviewed scientific literature may be suitable to inform priority offset activities;
- be undertaken in a transparent, scientifically robust and timely manner;
- be undertaken by a qualified individual or organisation; and
- be evidence based.

#### Additional requirements for research programs

The following additional requirements apply for research programs:

- the research will be conducted by a group or individual with postgraduate or higher qualifications, however there will be scope to engage other educational levels in educational programs (see below);
- the research will generate findings that can be peer-reviewed;
- the findings will be published in an internationally recognised peer-reviewed scientific journal or be of a standard that would be acceptable for publication in such a journal. Publications should be submitted to free, open access journals. Data and information collected should have creative commons licensing and be free and accessible; and
- research outputs should be able to inform future management decisions on the *prescribed environmental* matters and, where possible, be readily applicable to other similar matters (e.g. species groupings).

#### Additional requirements for educational programs

The following additional requirements apply for educational programs:

- the program should vary in scope, mode of delivery and duration according to the target audience and the prescribed environmental matters (for instance, school or community programs, signage or printed materials);
- the program should be targeted toward behavioural change and subsequent improvement in the viability of the prescribed environmental matters; and
- the program should seek to attain measurable outcomes. Whilst it may be difficult to ascertain the scope of
  influence of educational programs in facilitating behavioural change and subsequent improvement in the viability
  of the prescribed environmental matters, the program must demonstrate to a reasonable extent how it will assist
  to counterbalance a significant residual impact of the prescribed activity on the prescribed environmental
  matters.

## Appendix 7 Offset account and trust fund administration

Financial settlement offset payments for state-required offsets will be managed by DES, in accordance with Part 11, Division 1 of the *Environmental Offsets Act 2014*. The funds will be quarantined for offset projects throughout the state. This approach will direct investment to benefit the relevant impacted *prescribed environmental matters*, whilst acquitting *authority holders* of all offset obligations upon payment.

DES will be responsible for ensuring delivery of *conservation outcomes* for the impacted *prescribed environmental matters* through the facilitation of strategic offset projects. Offset projects will deliver *conservation outcomes* that may be based on a single financial offset project, or pooling a number of offset payments in order to achieve more effective and strategic outcomes for the impacted matters. The use of a DBMP and investment of offsets in *Strategic Offset Investment Corridors* will avoid piecemeal offset investment.

Management of the offset funds will be subject to best practice governance policies and a transparent reporting regime to ensure that objectives of the projects are met on time and on budget. The quarantined offset account will be audited by the Queensland Audit Office and details of offsets will be entered into the offset register that will be available on the Queensland Government website.

The exception to this approach is in relation to impacts on a *protected area* (excluding nature refuges and special wildlife reserves). In these circumstances, DES will allocate funds for such impacts to ensure that an offset is delivered for a *protected area*.

Where there has been a financial settlement payment made for the known impacts on a matter/matters at the time of assessment, no refund will be made should the actual development result in less impact than originally calculated.

## Local government offsets

Under sections 24(2)(a) and (b) and 89 of the *Environmental Offsets Act 2014*, financial settlement offset payments must be credited to the local government's trust fund. The trust money may be used by the local government to pay for the delivery of an offset to achieve a *conservation outcome*, and fees associated with administering the trust fund.

## **Glossary**

Administering agency has the same meaning as the Environmental Offset Act 2014.

**Administrative cost floor price** is the set minimum amount of the administrative cost component of a financial settlement offset, regardless of the area of impact. It is applied to impacts that are greater than 2.5ha.

**Advanced offset** is an area of *land* identified and registered as an advanced offset under section 14 of the Environmental Offsets Regulation 2014. Refer to Appendix 8 for detail.

Agreed delivery arrangement has the same meaning as the Environmental Offsets Act 2014.

Authority has the same meaning as the Environmental Offsets Act 2014.

#### Authority holder, for:

- an offset condition, has the same meaning as in the Environmental Offsets Act 2014.
- a self-administered offset code of compliance, is an individual or organisation (including a government or government owned corporation) who is required to provide an *environmental offset* under the framework.

**Broad Vegetation Group** (BVG) represents a combination of regional ecosystems grouped by similar vegetation communities. There are three scales of BVGs mapped in Queensland; 1:1,000,000 (regional), 1:2,000,000 (state) and 1:5,000,000 (national). The 1:1,000,000 (regional) scale mapping is applicable to the offsets framework.

**Commonwealth Significant Impact Guideline** is a significant impact guideline for a matter of National environmental significance made by the department that administers the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (www.environment.gov.au/resource/draft-koala-referral-guidelines).

Conservation outcome has the same meaning as the Environmental Offsets Act 2014.

Direct Benefit Management Plan (DBMP) see Appendix 6 for more details.

Environmental offset has the same meaning as the Environmental Offsets Act 2014.

Environmental Offset Protection Area has the same meaning as the Environmental Offsets Act 2014.

Government Owned Corporation has the same meaning as the Government Owned Corporations Act 1993.

**Highest Astronomical Tide** means the highest tidal levels which can be predicted to occur under average meteorological conditions and any combination of astronomical conditions.

Koala habitat tree means a tree of any of the following genera:

- (a) Angophora;
- (b) Corymbia;
- (c) Eucalyptus;
- (d) Lophostemon;
- (e) Melaleuca.

Land has the same meaning as the Environmental Offsets Act 2014.

Non-juvenile koala habitat tree means a koala habitat tree that:

- (a) is more than 4m high; or
- (b) has a trunk with a circumference of more than 31.5cm at 1.3m above the ground.

Offset Account has the same meaning as the Environmental Offsets Act 2014.

Offset Delivery Plan has the same meaning as the Environmental Offsets Act 2014.

**Offset Provider** is a person or organisation that has entered into contractual arrangements with the Government or an *authority* holder to deliver an offset in accordance with the contractual arrangements.

Prescribed activity, in relation to an application made:

- after 1 July 2014 has the same meaning as the Environmental Offsets Act 2014;
- before 1 July 2014, and to which section 95A or 95B of the *Environmental Offsets Act 2014* applies, means the activity that is subject to the application for an *authority* under another Act, for which an *environmental offset* (however described) may be required.

Prescribed environmental matter, in relation to an application made:

- after 1 July 2014 has the same meaning as the Environmental Offsets Act 2014;
- before 1 July 2014, and to which section 95A or 95B of the *Environmental Offsets Act 2014* applies, means the environmental values that will be, or are likely to be, impacted by an activity that is subject to the application for an *authority* under another Act, for which an *environmental offset* (however described) may be required.

**Proponent** is an *authority holder* or person who has submitted an application and may be the holder of an *authority* once granted.

Prescribed ERA has the same meaning as the Environmental Protection Act 1994.

**Protected area** has the same meaning as the *Environmental Offsets Act 2014*. **Significant residual impact** has the same meaning as the *Environmental Offsets Act 2014*.

**Strategic Offset Investment Corridor** is an area that is approved by the Chief Executive administering the *Environmental Offsets Act 2014* as being identified for the benefit of *prescribed environmental matters* using the Strategic Investment Corridor Mapping Method. The location and extent of mapped areas is available in digital electronic form on the Queensland Government website.

**Wetland Habitat Type** is a typology developed for the Queensland wetland classification scheme. This scheme provides attribute information for wetland habitats in Queensland based on hydro-geo-ecological drivers, using a scientifically robust and logical methodology.

## **Abbreviations**

DBMP is a Direct Benefit Management Plan

DES is the Department of Environment and Science

DMA is the Distinct Matter Area

LGA is a Local Government Area

MLES is a Matter of Local Environmental Significance

MNES is a Matter of National Environmental Significance

MSES is a Matter of State Environmental Significance

SEQ is South East Queensland Region as identified in Section 4 and Schedule 1 of the Planning Regulation 2017