



Guidelines for the use of Biodiversity Offsets

in the local planning approval process



Southern Tasmanian
COUNCILS AUTHORITY

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1. INTRODUCTION


Biodiversity offsets are a practical tool used across Australia in the assessment and determination of proposals (actions) involving the removal or conversion of native vegetation. They are defined as measures that compensate for the residual adverse impacts of an action on the environment, when alternatives and options to avoid those impacts have been exhausted and it is still considered desirable for other economic, social or environmental reasons for the action to proceed.

While more established in other Australian states - often being supported through regulation and state wide schemes or programs - the use of biodiversity offsets in Tasmania is still emerging. Biodiversity offsets in Tasmania are primarily utilised by state-wide bodies, such as the Forest Practices Authority, the Environmental Protection Authority and the Department of Primary Industries, Parks, Water and Environment. These agencies all have guideline documents which assist in the application and formulation of offset packages. In addition, biodiversity offsets have been utilised in Tasmania as part of the approval of actions under the *Environmental Protection and Biodiversity Conservation Act 1999 (C'wealth)*.

At the local level, biodiversity offsets are becoming more prevalent as the decision making responsibilities of local planning authorities regarding the removal of native vegetation increase. There are however fundamental differences between local planning authorities (Councils) in the way they incorporate them into their assessment process and the scope of their powers to do so. The experiences of several Councils in Southern Tasmania when making provision for biodiversity offsets in permit conditions highlighted the need to establish a consistent set of guidelines for applying biodiversity offsets at the local government level.

It was also recognised that more effective conservation outcomes would be achieved through greater consistency in approach across the region as:

- Management of biodiversity values are best done at the landscape, bioregional or regional scale;
- Land use and development pressures and growth patterns transcend municipal boundaries (i.e. Greater Hobart);
- Greater awareness and participation would be achieved through commonality across Councils.



These guidelines are formed around seven key principles and are designed to cover high level issues and provide overarching direction to Councils. Planning schemes form the basis of the regulatory environment in which the use of biodiversity offsets sit. Dependent upon the local characteristics of the planning area, the land use, development issues and pressures within that area and the specific details of relevant planning schemes, there will continue to be some variation in approach to the assessment of clearance of native vegetation communities and when biodiversity offsets are utilised. The primary benefit of these guidelines will be greater commonality across the region as to when a Council does determine that a biodiversity offset is appropriate and desirable, and greater certainty for the community and developers working across the region by reducing the ad hoc nature of the current approach.



2. AIMS OF THE GUIDELINES

The Southern Tasmanian Councils Authority embarked upon developing these guidelines with four key aims:

- To achieve a net gain in the extent and quality of native vegetation communities that are threatened or provide significant habitat for threatened species, that is securely protected and effectively managed in Southern Tasmania;
- To provide a tool which assists planning and natural resource management officers across the twelve southern Councils in negotiating biodiversity offsets when they are identified as appropriate and desirable, within the specific functions and powers of Councils as local Planning Authorities;
- To provide a user guide for landowners and developers when considering using biodiversity offsets to support their proposal.
- To achieve an equitable, consistent and streamlined offset process for developers working across multiple municipalities by reducing the current ad hoc approach.



3. CONTEXT OF THE GUIDELINES

3.1 Characteristics of Southern Tasmania

Southern Tasmania has a diverse and high quality natural environment that is recognised throughout Australia and is a distinct characteristic of the region's sense of place.

A broad range of habitats, vegetation communities and flora are a result of large variations in altitude, water availability and soil types reflecting an east to west change in climatic conditions.

Three distinct bioregions occur across Southern Tasmania (figure 1): the West, the Southern Ranges, and the South-East. While the West bioregion is well protected and conserved (being a significant contributor to native vegetation cover in the State), the other two bioregions, while retaining high levels of native vegetation cover are under considerable pressure from land use changes and urban development. Native vegetation is often fragmented and degraded, restricting ecosystem connectivity, biodiversity and habitat.



Figure 1:
Bioregions of Tasmania
IBRA v 6.1
(Tasmanian Planning
Commission 2009)

Continuing loss of native vegetation in these areas contributes to a loss of biodiversity. Not only do many threatened vegetation communities or habitats for threatened species exist only in these unreserved and unprotected areas, decreasing vegetation cover arising from changing land uses and urban development affects our capacity to adapt and mitigate the effects of climate change. It can also affect broader landscape values which contribute to the region's desirability as a place to live and visit. Indeed the increasing conflict between urban expansion and biodiversity values continues to be a significant issue for many metropolitan planning authorities (figures 2 and 3 over page).

3.2 Management of Native Vegetation and Biodiversity in Tasmania

Management of native vegetation and biodiversity in Tasmania can be broadly categorised into two areas:

- management of protected flora and fauna species; and
- management of native vegetation communities.

The management of protected flora and fauna species in Tasmania is overseen by State Government through the *Threatened Species Act 1995*. Tasmania also has federally protected species protected under the *Environment Protection and Biodiversity Conservation Act 1999*. Both of these provide for their own specific permit process to 'destroy' or 'remove' a threatened species. It is however important to recognise that the State legislation does not directly protect 'habitat' for threatened species, as the permitting process under this legislation is not invoked until there is a direct intention to destroy species. The protection of habitat therefore falls into the broader management of native vegetation communities.

Management of native vegetation is based on the categorisation of forest and non-forest vegetation into 158 different ecological vegetation communities which forms the basis for mapping across the State (TasVeg). Some of these vegetation communities are listed as threatened under Schedule 3A of the *Nature Conservation Act 2002* (a result of obligations under the Regional Forest Agreement with the Commonwealth Government). These communities are however primarily forest based communities, resulting in a gap in the protection of rare or vulnerable non forest vegetation communities (i.e. grasslands) despite the listing of a few of these communities under the *Environment Protection and Biodiversity Conservation Act 1999*.



Figure 2:
Priority vegetation
shown as blue and yellow
in the Inner Hobart area
(Hobart City Council,
2013)

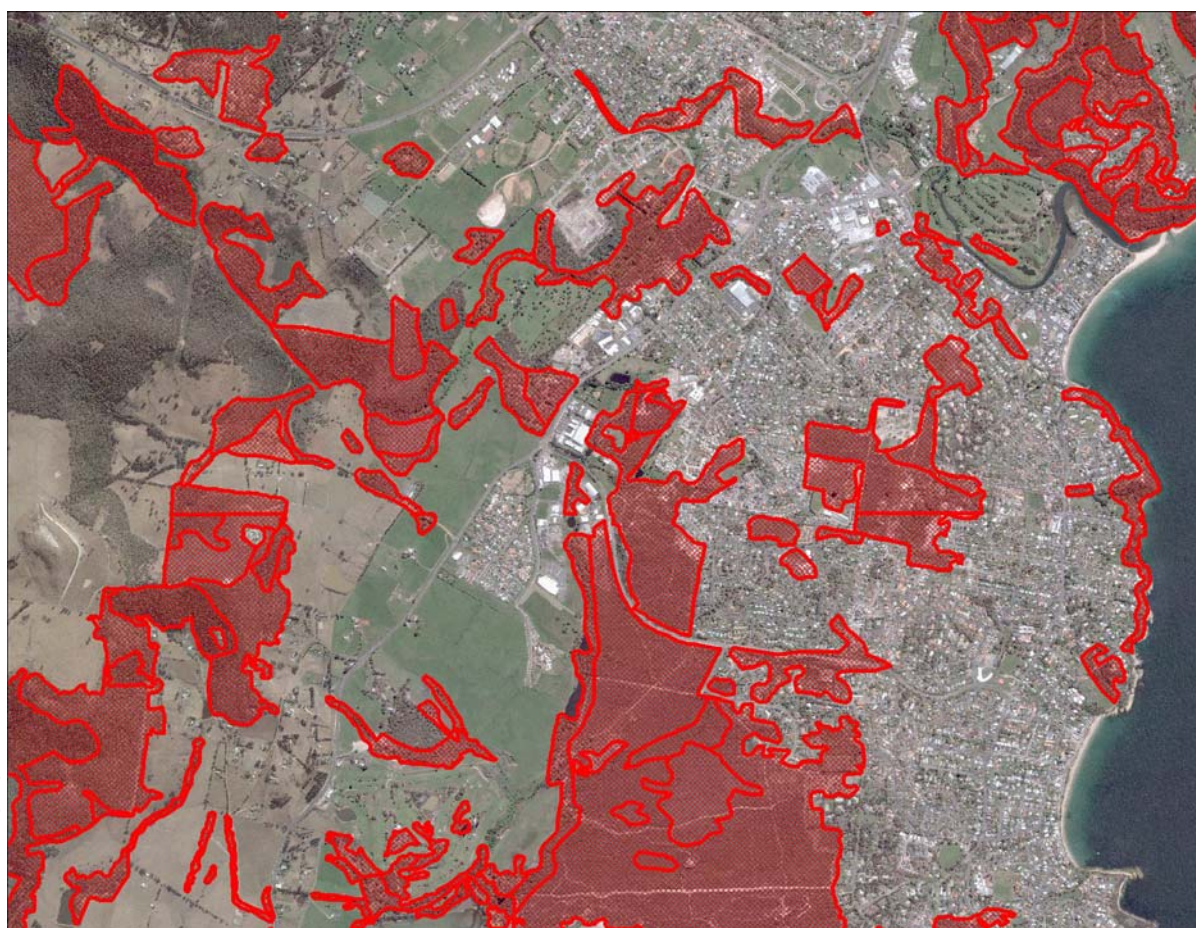


Figure 3:
Priority vegetation shown
as red in the Kingston
and Blackman Bay areas
(Kingborough Council,
2013)

3.3 Land Use Planning Approach within Southern Tasmania

While, ideally, improved management of native vegetation and biodiversity would be achieved through a comprehensive state-based management system, the planning approach at present relies upon regional strategies and local planning schemes. In Southern Tasmania the principle land use policy document guiding local planning schemes is The Southern Tasmania Regional Land Use Strategy 2010 – 2035 (the Strategy), declared on 25 October 2011.

As Southern Tasmania experiences further development pressures, it is essential that threatened vegetation communities, habitat for threatened species and biodiversity is not compromised. The foundation principle under the Strategy (Policy BNV 1.2) for managing natural values through the planning process is based upon a hierarchy of actions, as follows:

- Avoid;
- Minimise; then
- Offset.

Avoidance is primarily achieved through strategic land use planning and the subsequent identification of growth areas and zone boundaries. The Strategy aims to reduce the conflict between natural values and new development by avoiding new growth areas (for residential, commercial and industrial purposes) in locations where threatened communities and habitat for threatened species are located. This Strategy along with other local level strategies and structure plans form the starting point for zoning in planning schemes.

It is however recognised that not only is there a need for significantly more accurate spatial data on the location and importance of natural values to facilitate this approach, but it will not always be possible when balancing out the desired environmental, social and economic outcomes, particularly in light of the physical characteristics of the region. It is also recognised that there are established development rights and expectations that will be carried forward into the future, which have not had the benefit of early consideration of biodiversity impacts.

The Strategy (Policy BNC 1.1) therefore also encourages the comprehensive management of native vegetation and biodiversity through all planning processes and the subsequent monitoring of decisions and their effect on bioregions.

For example, the assessment of vegetation clearance should be taken into account at the earliest possible stage of the planning approval process (i.e. subdivision rather than dwelling approval), to minimise the incremental ad hoc loss of native

vegetation which can result in a significant cumulative loss of biodiversity through a 'death by a thousand cuts'. Specific tools within a planning scheme to achieve this will include the use of overlays, a Biodiversity Code and other codes relating to environmental values (e.g. waterways).

These further steps comprise the 'Minimise' action within the hierarchy of actions.

The Strategy further promotes the establishment of an improved legislative, management and monitoring system into the future (issues which have also been identified in the development of these guidelines). An improved system may include:

- Increased State involvement in the assessment and approval of development applications where threatened vegetation communities may be impacted;
- Additional listings of non-forest vegetation communities or threatened species habitats at the State level;
- Increased powers for Planning Authorities to take into account cumulative impacts at a bioregional or regional level;
- Additional statutory implementation tools available to local planning authorities;
- An overall monitoring system into which clearances and conversions approved by all permit authorities are fed, to provide an accurate and overall view of the health and condition of native vegetation, biodiversity and bioregions taking into account cumulative impacts of approvals; and
- A program to improve spatial data on vegetation communities through 'ground truthing' so that desktop assessment are more accurate and facilitate a quicker, more streamlined planning process.

Ideally into the future as part of the 'Minimise' actions, the planning system in Tasmania can also be adapted to include 'Strategic Assessments'. These are landscape scale assessments and, unlike project-by-project assessments which look at individual actions (such as the construction of a single subdivision or an industrial development), they can consider a much broader set of actions. Biodiversity offsets can then be developed as part of the Strategic Assessment process allowing for the identification of larger, more viable and effective offsets.

Strategic assessments are already utilised by the Department of Sustainability, Environment, Water, Population and Communities (C'wealth) where species or communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* are involved.

Melbourne's Strategic Biodiversity Assessment

As part of a new strategic approach to the management of Melbourne's growth, the Growth Areas Authority embarked on a new process to assess the loss of native vegetation arising from the growth of Melbourne's urban fringe at the time that the growth areas were being identified and planned for.

The approach, agreed to by the Victorian and Commonwealth governments, utilises a 'strategic assessment' process under the *Environment Protection and Biodiversity Conservation Act 1999* (C'wealth) and was conducted as part of an integrated planning process that also considered land use and transport needs, enabling biodiversity to be better protected and providing greater clarity to planners and developers about urban development opportunities in the growth areas.

The first step in the process was the preparation of a Strategic Impact Assessment Report (SIAR) that assessed the impacts of the urban growth program on matters of national environmental significance and recommended a range of measure to minimise and mitigate those impacts. The SIAR included an evaluation of threatened and migratory species, threatened communities and Ramsar wetlands of International significance. It also led the Victorian government to commit to a number of measures to protect matters of national environmental significance in the growth areas (Program Report commitments). These commitments were then endorsed by the Commonwealth minister, who is then responsible for giving approval for the types of activities taking place under the program.

In terms of environmental benefits, the program is resulting in the establishment of new grassland reserves of approximately 15,000 hectares west of Melbourne and a new reserve of approximately 1,200 ha grassy woodland in the north-east of Melbourne. Substantial areas of land will also be protected inside the urban growth boundary and some land has been excluded from urban development through zoning as Rural Conservation in the planning schemes.

These environmental benefits were only realised because of the large spatial scale of the assessment. Had the land been released as part of the growth area program with environmental assessment taking place at the structure plan/subdivision stage, it would not have been possible to create such large reserves and protection of land in a manner that was spatially desirable.

In addition the strategic assessment approach leads to increased certainty and reduced costs for development proposal covered by the Melbourne Strategic Assessment. Key benefits include:

- Substantial reduction in red tape.
- Absolute certainty about what land can and cannot be developed.
- Consistency of requirements across jurisdictions under a single approval process.
- A ready supply of native vegetation and species offsets that developers will purchase from the Victorian Government.

More information on the Melbourne Strategic Assessment can be obtained from www.dse.vic.gov.au/urbangrowthareas

(Source: Victoria Department of Sustainability and Environment, 2011 'A new approach to biodiversity in Melbourne's growth areas', Melbourne.)



4. SCOPE AND LIMITATION OF THE GUIDELINES

4.1 Scope

The *Land Use Planning and Approvals Act 1993* is the principal piece of legislation under the Tasmanian planning system. Under this act, Councils are designated as planning authorities. Their role is:

- the preparation and administration of planning schemes;
- the certification of amendments to planning schemes;
- the assessment and approval of applications for planning permits for the use and development of land; and

the enforcement of planning scheme provisions and permit conditions.

Planning controls determine what uses or developments can be undertaken within a specified area. These controls are applied through:

- planning schemes;
- planning directives; and
- special planning orders.

Each Council has a planning scheme and some Councils have several schemes that regulate the “use, development, protection or conservation of land” (s20 *Land Use Planning and Approvals Act 1993*).

These guidelines are for the use of Councils as planning authorities when acting in their planning control function by assessing use and development of land against a planning scheme. In particular, they relate to use or development that involves the clearance of native vegetation (communities) that do not meet the relevant permitted standards for clearance. In this instance the use or development requires assessment pursuant to Section 57 of the *Land Use Planning and Approvals Act 1993* and Council may wish to negotiate an offsets package in order to be satisfied that it should exercise its discretion and allow the use or development.

4.2 Limitations

As indicated above, the statutory functions of Councils in their role as a planning authority are conferred by the *Land Use Planning and Approvals Act 1993*. In assessing applications for use or development, planning authorities are limited in their powers by this Act. As a result there are a number of limitations associated with the use of biodiversity offsets in the local planning approval process which

should be recognised and acknowledged by any Council wishing to use biodiversity offsets.

4.2.1 Spatial Jurisdiction

A Council's jurisdiction as a planning authority is limited to its planning area. In most cases, the boundaries of a planning scheme coincide with the municipal boundary. A Council has no jurisdiction, or authority, to consider the impacts of an application that falls outside these boundaries.

Critically, a Council also has limited ability to condition a permit requiring any form of action to be undertaken outside the site of the development, and certainly no authority to require any actions to be undertaken outside its planning scheme area. At the preliminary level, there appears to be no means under the *Land Use Planning and Approvals Act 1993* for a Council to accept or consider in its determination of an application a proposed offset that is beyond its planning area.

At the conceptual level, these limitations potentially conflict with the central principle of biodiversity offsets; that impact occurring at the site of the action can be compensated by actions undertaken at a different site and that a regional or bio-regional approach is the most effective level of managing biodiversity values. At a practical level, as demonstrated by the existing use of biodiversity offsets by Councils within the region, a good biodiversity outcome can still be achieved in some instances despite the jurisdictional limitations.

In summary, the offset site must be within the same planning area (to which the planning scheme applies) as the site of the use or development. The development application should relate and be advertised as relating to both sites.

In those cases where an application triggers some other 'State' or 'Commonwealth' approvals requirement that has a broader jurisdiction (i.e. the *Environment Protection and Biodiversity Conservation Act 1999* C'wealth) there may be opportunities to integrate local level offset requirement with the broader offset package developed under that legislation.

4.2.2 Head of Power

Planning authorities are also restricted in their assessment considerations to the provisions of their respective planning schemes. Existing planning schemes within Southern Tasmania regulate clearance of native vegetation to varying degrees: a reflection of the primary role of the forest practices system in managing native

vegetation in Tasmania. At present only those Councils which regulate clearance of native vegetation communities and have specific controls within their planning schemes can potentially consider biodiversity offsets as part of a development application. Even then however, the legal ability to consider and include an offset package as part of any permit conditions will depend upon the specific wording of the provisions of the planning scheme.

In the future, new planning schemes within the region - prepared as a result of the Southern Tasmania Regional Planning Project and in accordance with the Southern Tasmania Regional Land Use Strategy – will include provisions relating to the management of native vegetation communities and biodiversity values. Councils will have the option of including the regulatory head of power for use of biodiversity offsets in that assessment process.

4.2.3 Capacity

The assessment of specific ecological and biodiversity values requires specialist expertise. While the proponent (or applicant) often employs an ecological specialist to undertake appropriate surveys and make recommendations, only a few Councils have the expertise on staff to evaluate the specialist information associated with the application.

Councils therefore need to be aware of the resourcing requirements when implementing the guidelines.

4.2.4 Effectiveness

Large scale clearance of native vegetation communities is highly unlikely to occur as a result of the type of use or development which local planning authorities will be assessing and managing through the local planning process. Most large scale clearance would continue to be managed under the Forest Practices System.

The predominantly small scale of native vegetation clearance that usually falls under the jurisdiction of local planning authorities means that offsets required may often be small scale. This raises challenges in ensuring the effectiveness of any offset package developed through the local planning process. Depending upon the community type, the minimum size of an area of native vegetation required to be viable and function ecologically as a community can vary. Indeed, the Department of Primary Industries, Parks, Water and Environment will usually not consider offset sites less than 10 hectares in area as suitable for reservation under the *Nature Conservation Act 2002*.

This challenge can be substantially overcome by requiring high levels of spatial connectivity to existing biodiversity networks (i.e. reserve estate), promoting clumped outcomes in the location of offset sites, where off-site offsets are involved or by using indirect offsets.

4.2.5 Implementation Framework & Enforceability

The existing legal mechanisms under the *Land Use Planning and Approvals Act 1993* do restrict the implementation options available to local planning authorities, when considering an offset package.

Security and permanency of an offset are important priorities. Unfortunately the most secure and permanent implementation tool for biodiversity offsets – being a Conservation Covenant under the *Nature Conservation Act 2002* – is not directly available to local planning authorities as they are administered by the State Government. A Council cannot require a Conservation Covenant to be entered into and if a Conservation Covenant is seen as desirable, then it requires the State to be a willing participant in the development application. Even then, the offset must also be consistent with the criteria set at the state level, which are aimed at achieving state level objectives, rather than local level objectives.

An agreement entered into between a Council and applicant landowners under Part 5 of the *Land Use Planning and Approvals Act 1993* (a Part 5 Agreement), as a permit condition, is the predominant mechanism used to secure biodiversity offsets at a local level. There are however some issues undermining the enforcement, monitoring and jurisdiction of such agreements that impede their use:

- When approval is conditional and made reliant upon a Part 5 Agreement for the ongoing management of biodiversity values, Councils must enforce the Part 5 Agreement if and when management is discontinued or substandard.
- The enforcement provisions under the *Land Use Planning and Approvals Act 1993* for a Part 5 Agreement are costly and cumbersome and require significant resources in an often resource limited area of Council.
- The enforcement mechanisms for a Part 5 Agreement are also largely untested;
- Similarly, if the offset secured by a Part 5 Agreement is for a threshold action by one applicant (i.e. subdivision), upon which subsequent approvals for other applicants are reliant (i.e. dwellings), and if conservation management ceases or is substandard, enforcement is complicated by multiple ownership.

The risks associated with enforcement, can be minimised (although not eliminated) by preferencing on-site offsets.

Alternatively, as has occurred with some existing offset packages developed and approved by local planning authorities within the region, enforcement risks can also be minimised by accepting a financial contribution. This approach does allow a more pro-active, strategic and coordinated approach to biodiversity conservation, and goes some way to addressing issues of effectiveness.

There is however a risk associated with financial contributions in themselves: in that there is not an explicit provision in the *Land Use Planning and Approvals Act 1993* that establishes a system for cash –in-lieu payments for clearance of native vegetation (unlike financial payments for public open space or infrastructure). In the absence of any legislative change, this should be addressed by including specific wording within a planning scheme. In addition, it is clear that any financial contribution must be dedicated to a reserved account for the purposes of biodiversity conservation and supported by transparent accounting practices. Monies within that account should then be expended in accordance with an endorsed plan or strategy associated with management of biodiversity values and acquisition of land for biodiversity protection purposes.



5. WHAT ARE BIODIVERSITY OFFSETS?

Biodiversity offsets refer to measures that compensate for the residual impact of an action on a biodiversity value(s), such as clearance of native vegetation. Offsets provide environmental benefits to counterbalance the impacts that remain after avoidance and mitigation measures are exhausted.

Biodiversity impacts can be both direct and indirect. Direct impact is usually the 'footprint of the development'. For instance for a house in a bushland area, the direct impact would be the clearance required for the construction of the house and the implementation of the associated bushfire management plan. Indirect impacts include associated outcomes resulting from the action, such as a subdivision in a residential area facilitating future housing development

Offsets can help to achieve long-term environmental outcomes, when seeking to undertake an action that will have residual impacts, on protected biodiversity value (s). In the context of the local planning approval process in Tasmania to which these guidelines relate, protected biodiversity value(s) will be communities or habitat specifically identified and protected within local planning schemes.

The use of offsets does not mean that all proposals (development applications) with unacceptable impacts will be approved. They simply provide an additional tool that can be used during the assessment process.

5.1 Types of Offsets

Offset packages are a suite of actions that a proponent undertakes in order to compensate for the residual impact of a use or development on a biodiversity value(s). Offset packages can comprise a combination of direct and indirect offsets and include a combination of some or all of the following: protection in situ, protection off site, restoration, rehabilitation, research, monitoring and financial contributions (see examples in Table 1). When taken as a whole, the benefit of the offset actions must be greater than the scope of the adverse impacts on biodiversity value.

Offsets should align with the conservation priorities for the impacted matter. For example in Tasmania ideally offsets involving threatened vegetation communities should aim to contribute to the CAR (comprehensive, adequate and representative) Reserve System.

Offsets should also be tailored specifically to the attribute of that being affected. For instance, if the proposal results in the loss of foraging habitat for the Swift Parrot (such a *Eucalyptus globulus* or *Eucalyptus ovata*) then the offset should create, improve and/or protect that foraging habitat.

Offsets that also deliver other social, economic or environmental benefits are encouraged, provided that they are compatible with the primary aim of net biodiversity benefit.

5.1.2 Direct Offsets

Direct offsets are those actions that provide a measurable conservation gain for an impacted biodiversity value(s). They are an important component of a suitable offsets package and often comprise the majority of the offset requirements for any given impact.

Conservation gain is the net benefit that a direct offset delivers to the protected biodiversity value(s), which maintains or increases its viability or reduces any threats of damage, destruction or extinction. A conservation gain may be achieved by such things as:

- Protecting in perpetuity existing unsecured biodiversity value(s);
- Improving existing or creating new habitat; and
- Improving the quality and condition of a biodiversity value(s).

Matters to be considered at the impact site include:

- Presence and conservation status of the biodiversity value(s) likely to be impacted by the proposal.
- Specific attributes being impacted at a site. For example, the type and condition of vegetation community, the quality of habitat, threatened species population within a community or landscape attributes such as connectivity or clumped outcomes.
- Scale and nature of the impact, both direct and indirect; and
- Duration of the impact.

Matters to be considered at the offset site include:

- Extent to which the value(s), condition and attributes of the offset site correlate to, and adequately compensate for, the impacts on the impact site; and
- Conservation gain to be achieved by the offset. This may be through such things as improved security or positive management activities.

Offset packages that do not comprise all or a majority of direct actions are generally only acceptable where it can be demonstrated that there is a greater biodiversity benefit by employing the indirect actions.

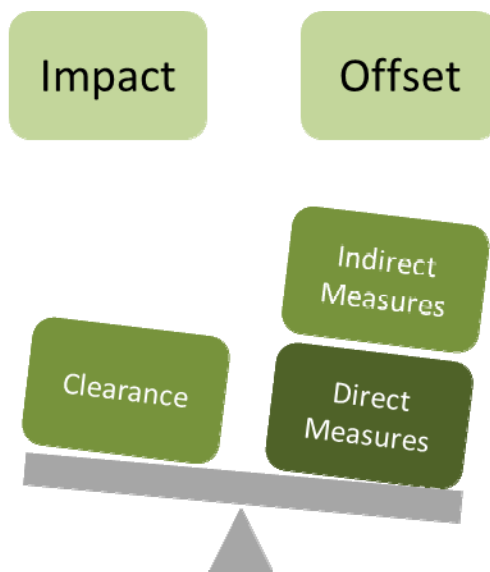


Figure 4:
Offsets should tip the balance
towards an improvement in
biodiversity conservation in
net benefit to conservation
(Source Pitt & Sherry 2012)

5.1.3 Indirect Offsets

Indirect offsets involve actions other than the protection, conservation or direct management of a biodiversity value. While primarily occurring as financial contributions, they may include other forms of contributions toward specific management or recovery programs or research.

Indirect offsets are particularly useful for smaller impacts where financial offsets held in trust can deliver a more strategic outcome.

The usual methodology in other jurisdictions for calculating the offset payment is:

$$\text{Offset payment} = \text{Land value} + \text{Administrative costs} + \text{Management cost.}$$

The detail on how the land value and administrative and management costs are calculated does vary considerably and is based on specific conditions in that jurisdiction. For example under the Queensland Biodiversity Offset Policy land value is calculated as follows:

$$\text{Land value} = \text{area impact (ha)} \times 5 \times \text{value (\$)} \text{ with the \$ value set at \$32,000 for S-E Queensland and \$5,000 elsewhere.}$$

Kingborough Council is the only planning authority in Tasmania that has an existing schedule of costs.

Table 1:

Possible approaches to biodiversity offsets available to local Planning Authorities under the Land Use Planning and Approvals Act 1993

Offset type	Offset location	Example	Summary
Direct	Onsite	Conservation measures on the balance of the land	Direct onsite offset measures within the planning area administered by the planning authority. The management of the biodiversity conservation is secured through an appropriate permit condition. Such a condition may itself include direction actions, or it may involve the use of a Conservation Covenant, Part 5 Agreement or similar.
Direct	Offsite (within planning area)	Conservation measures on a different site to where the impact is occurring	Direct offsite offset measures, located within the planning area administered by the planning authority and submitted as part of the development application. The management of the biodiversity conservation is secured through an appropriate permit condition. Such a condition may itself include direction actions, or it may involve the use of a Conservation Covenant, Part 5 Agreement or similar.
Indirect	Expended within planning area)	Acceptance of a financial contribution compensating for impact on biodiversity value.	<p>Indirect offset measures if the planning scheme contains a suitable 'head of power' for such contributions. The monies from such contributions are maintained separate to general revenue and directly expended on such things as:</p> <ul style="list-style-type: none"> the acquisition or maintenance of land in accordance with a strategy or plan endorsed by Council (i.e. Kingborough's Tree Preservation fund); or the development of management strategies, surveys or mapping that is consistent with recovery plans or state strategies.

5.2 Biodiversity Offsets in Tasmania

In comparison to other Australian States, biodiversity offsets are still an emerging planning tool in Tasmania.

The Forest Practices Authority, the Department of Primary Industries, Parks, Water and Environment (DPIPWE) and the Assessment Committee for Dam Construction (ACDC) already utilise biodiversity offsets in the assessment of vegetation clearance under their jurisdiction. For DPIPWE these are most commonly used in the assessment of Level 2 activities under the *Environmental Management and Pollution Control Act 1994*.

In the development of these guidelines the existing approaches to the use of offsets by these organisations were reviewed and taken into account.

Both the DPIPWE and the ACDC operate under the same planning system as local Planning Authorities and both have established guidelines for the use of biodiversity offsets.

In order to maintain consistency throughout the planning system these documents, *General Offset Principles* (Department of Primary Industries, Parks, Water and Environment) and *Guidelines for Establishing Offsets for Impacts on Natural Values within the Dam Assessment Framework* (Assessment Committee for Dam Construction) were given particular attention and a number of common principles were identified.

Local planning authorities within the region have also recognised that an approach to local planning approvals which encompasses biodiversity offsets can allow development to progress in a manner that will result in an overall improvement in biodiversity.

Biodiversity offset measures are currently being implemented in a limited way by a number of Councils within the region and their experiences have provided valuable input into the development of these guidelines.

5.2.1 Greatest Demand on the Urban Fringe & Peri-Urban areas

The greatest demand for offsets is from areas on the urban fringe, and existing use of offsets is generally associated with residential development, including larger scale residential subdivisions, dwellings and linear infrastructure such as roads.

Example 1: On-site local approach to offsets

In 2009, a development proposal for a retirement village and community centre in Kingston involved the clearance of 1.85 hectares of the vegetation community *Eucalyptus amygdalina* forest on sandstone. This vegetation community is listed as threatened under the *Nature Conservation Act 2002*, is a priority community under the Kingborough Planning Scheme and is recognised as important potential habitat for the endangered Chaostola Skipper. This development was approved subject to an on-site offset protecting all the native vegetation in the Environmental Management Zone as 'secure conservation land' under either the *Land Use Planning and Approvals Act 1993* or the *Nature Conservation Act 2002*. In addition, a financial offset of \$15 000 was required to be paid to Kingborough Council to fund research and a management strategy to assist in the recovery of the Chaostola Skipper in the municipality.

Example 2: Off-site regional approach to offsets

In 2009 the Kingston By-pass development proposed by the State Government required the removal of 4.37 hectares of *Eucalyptus ovata* forest, which is a threatened vegetation community under the *Nature Conservation Act 2002*, a priority community under the Kingborough Planning Scheme and is also important habitat for the endangered Swift Parrot. Despite the proposed loss of this vegetation, it was accepted that the development would also have significant benefits for the community and the economy. Therefore the By-pass was approved on condition that the loss of the vegetation be offset by the protection of 12 hectares of the same vegetation community within the boundaries of the south east bioregion by means of a perpetual covenant under the *Nature Conservation Act 2002*. This regional offset approach was only possible because the development triggered the *State Forest Practices Act 1985* and the *Federal Environment Protection and Biodiversity Conservation Act 1999*. However, the recent amendments to the *Forest Practices Regulations 2007* will make it far more difficult to achieve regional-scale biodiversity offsets without changes to the *Land Use Planning and Approvals Act 1993* and local government planning schemes.

Figure 5:
Two examples of the use of
Biodiversity Offsets by a
Planning Authority

In some cases, proposals such as the rezoning of land from a rural type zone to a residential zone have entailed the use of biodiversity offsets. This approach seeks to acknowledge the strategic merit in other aspects of a proposal (i.e. proximity to infrastructure and services, urban consolidation etc) yet compensates for the impact on biodiversity values.

The actual use of biodiversity offsets to date by local planning authorities is largely confined to urban development in bushland areas surrounding Greater Hobart. It is predominantly the metropolitan-based Councils of Clarence City, Hobart City and Kingborough that have implemented biodiversity offsets under their existing planning schemes.

The current predominance of urban locations in the use of offsets by planning authorities is unsurprising because:

- The majority of development activity requiring a permit under the *Land Use Planning and Approvals Act 1993* are likely to be in urban areas;
- Recent growth within Greater Hobart has moved into the fringe bushland areas, and this growth has coincided with improved awareness of biodiversity conservation within the community and relevant professions;
- Fringe and remnant bushland areas of Greater Hobart contain a high proportion of significant biodiversity values, including threatened vegetation communities; and
- Activities in rural areas, such as agricultural use and forestry operations, may not be assessed under the *Land Use Planning and Approvals Act 1993* but are considered under other legislation, such as the *Forest Practices Act 1985*.



6. PLANNING A BIODIVERSITY OFFSET

6.1 When an offset might be required

In the local planning approval process, the planning scheme will provide initial guidance as to when an offset might be required. For instance, is the area and type of vegetation to be cleared meeting the criteria for exemption of the permitted¹ standards?

Often, to establish the type of vegetation community and habitat values present on a site, an on-site assessment will be required. While some Councils have access to relatively accurate and spatially detailed information on native vegetation communities, the availability, quality and accuracy of current spatial data is limited.

In this context, a determination of biodiversity significance is a critical stage of assessing the potential environmental impact of a proposal. Once known, biodiversity significance is also necessary to assess the appropriateness of any proposed offset as an impact on a value of higher biodiversity significance is likely to necessitate a greater offset than an equivalent impact of lesser biodiversity significance.

6.2 Assessing Biodiversity Significance

A robust and consistent means of determining biodiversity significance is necessary to achieve part of the aims of these guidelines, an equitable and consistent process.

The elements that make up biodiversity significance of vegetation and habitat are complex and are not easily assessable by non-specialist methodologies. It is therefore likely that a considerable degree of specialist expertise will be necessary to determine the biodiversity significance of a habitat or ecosystem. The key components include:

- The type and location of the biodiversity value(s) – particularly the type of vegetation community or habitat, including its viability;
- The condition of the biodiversity value(s) – including the cost and viability of its ongoing maintenance;
- The conservation significance of the biodiversity value(s); and
- The reservation status of the biodiversity value(s).

Within Tasmania, there are a number of commonly used resources that can be used for each of these components. These are outlined in Appendix A.

6.3 Developing an offset package

Any proponent (applicant) who is considering an offsets package to facilitate the approval of their proposal should do so in consultation with the local planning authority, prior to the lodgement of a development application.

Pre-application consultation will minimise time-delays and issues throughout the formal assessment process and ensure that all information necessary is provided with the application. As there is not a 'one size fits all' approach to developing an offsets package, pre-application consultation provides an opportunity to determine what types of activities would be appropriate as an offset for a given impact and the specific size and scope of the offsets package.

As part of any pre-application consultation the planning authority can also advise if other State or Commonwealth approvals associated with management of biodiversity values will be required. If they are, pre-application consultation will assist in minimising conflicts between authorities when it comes to the point of determination.

1 The Land Use Planning and Approvals Act 1993 categorises use or development into exempt, permitted as of right, permitted or discretionary. Only discretionary use or development requires formal public notification and may be refused by a planning authority



7. THE GUIDELINES

These Biodiversity Offset Guidelines have been formed around seven key principles which form the overarching philosophical framework for guiding their use by local Planning Authorities.

The principles have been designed to cover high level issues and provide the overarching direction for the use of biodiversity offsets. They address such strategic issues as when offsets should be taken, what actions are appropriate along with the location, timing and magnitude of the offset package.

The guidelines have been based upon background research which has examined amongst other things:

- Use of offsets in other state jurisdictions;
- Existing use of offsets in Tasmania;
- The powers and statutory functions of local planning authorities; and
- The strategic land use planning approach within Southern Tasmania.

While there was scope for a large suite of potential principles, the preferred approach has been to limit the number of principles and address the more detailed aspects of implementation through lower order criteria.

It is important to recognise that these guidelines have adopted a broad approach to biodiversity, focusing upon habitat or ecosystem diversity as:

- Ecosystems most accurately reflect vegetation communities which are a fundamental basis of ecological planning and management;
- Conservation of ecosystems and habitat is a practical means to conserve biodiversity; and
- Species diversity is currently managed under other legislation, particularly the *Threatened Species Protection Act 1995*.

The guidelines are based upon a 'case by case' methodology for determining the ecological significance and therefore magnitude of the offset required. This is consistent with the approach adopted by both the Commonwealth and Tasmanian Governments.

Background information on each of the principles is available at **Appendix B**.

Offsets are the final component of a mitigation hierarchy	<i>Impacts should in the first instance be avoided; alternatives to minimise and remedy must also be thoroughly addressed and only in the event that these actions cannot achieve satisfactory results for biodiversity conservation, impacts should be offset.</i>
Offsets must deliver a net benefit for biodiversity conservation	<i>When taken as a whole, the benefits of an offset action(s) must be greater than the scope of the adverse impacts on biodiversity values.</i>
An offset must aim to be permanent	<i>An offset must be permanent. As impacts on biodiversity are generally permanent, any offset to compensate must also be permanent, as must its management. As far as practical, permanency entails security from revocation or circumvention in perpetuity, an ability to monitor and enforce the offset and on-going management.</i>
Offsets must aim to be 'like for like'	<i>Those values adversely impacted upon by the approved action, should be the same as those values benefitting from the offset. Only where an offset will provide a net gain for a biodiversity value of equal or greater conservation significance in the region, can the impacts upon one value be offset by a net benefit to another value.</i>
Indirect offsets are acceptable in limited circumstances only	<i>Indirect offsets (financial contributions) are acceptable where the losses are small and it can be demonstrated that there will be a more significant and strategic conservation outcome, provided that Council has endorsed a strategy outlining how contributions are to be spent and Council can guarantee that contributions will be spent in accordance with that strategy. The calculation of the value of the contribution is based on the actual costs of the proposed offset action(s).</i>
Retention of native vegetation onsite is preferred.	<i>Preference should be given to offsets that secure the formal protection and management of conservation values on the same property, except where a greater biodiversity benefit can be gained through an off-site offset. If there is limited opportunity for adequate offset on-site then off-site offsets may be pursued.</i>
Offsets are formulated and approved in the context of the established planning system.	<i>The use of biodiversity offsets at the local level should not duplicate assessment and offsetting processes regulated by other 'authorities'. When a Planning Authority is using offsets it must be undertaken in a manner that meets the administrative requirements of the Land Use Planning and Approvals Act 1993.</i>

Figure 6:
The Principles
for the use of
Biodiversity
Offsets

Principle One

Offsets are the final component of a mitigation hierarchy

- 1.1 Offsets should only be pursued where all opportunities to avoid and minimise adverse affects on biodiversity values have been exhausted. This approach suggests that:
- Impacts should be avoided to obviate the need for an offset.
 - The extent of impact should be limited to the maximum degree possible, thus reducing the scale of any offset.
 - Opportunities for rectification and repaid such as site rehabilitation following the impact should be investigated.
 - Only offset the residual impact (provided that all other principle are met).
- 1.2 The offsetting of impacts of Threatened Vegetation Communities as listed in Schedule 3A of the *Nature Conservation Act 2002* (Tas) is to be avoided in preference to no-impact except:
- The planning authority is satisfied there are 'special circumstances';
 - The patch of affected vegetation is of poor of very poor condition, that despite ecological restoration works us unlikely to be viable in the long term; and
 - The path of vegetation is limited in extent in proportion to the total area remaining of that vegetation community on the site.

Principle Two

Offsets must deliver a net benefit for biodiversity conservation

- 2.1 The impact must be properly estimated taking into account both direct and indirect impacts brought about by the action:
 - Direct impact is the 'footprint of the development'.
 - Indirect impact includes associated outcomes resulting from the action. For example subdivision in a residential area implies future housing development with changes to land management associated with permanent human occupancy.
- 2.2 If the offset is unlikely to result in a net positive gain then the development application should not be approved.
- 2.3 Offsets should be consistent with the State principles and policies and should aim to contribute to comprehensive, adequate and representative (CAR) reserve system.
- 2.4 Use established standards (such as the Protected Areas on Private Land criteria) and reservation targets to identify where an offset can contribute to the (CAR) reserve system.
- 2.5 Offsets should be of a size to ensure that they are ecologically viable and can be managed effectively in the long term.
- 2.6 To deliver a net benefit, a direct offset should exceed the impact in value of environmental service as a minimum. As a guide the offset ratio should aim for the conservation of an area:
 - 1:1 of similar value for non-threatened vegetation communities;
 - 3:1 to 5: 1 for threatened vegetation communities; or
 - or other ecological values determined to be of significant by the planning authority within the planning area (such as threatened species habitat).
- 2.7 The management of the offset is as important as the security of the offset:
 - Offsets should include costed management actions which are compared with the equivalent management costs of the impacted area.
 - Offset should include financial contribution or commitment to management costs for a minimum of 5 years.
- 2.8 Where the planning authority believes a proposed offset has a high risk of failing to return a 'net benefit' over time due to such things as the effort and cost involved in managing the offset, consideration should be given to:
 - Not allowing the use or development to proceed; or
 - Incorporating multipliers that reduce the risk such as higher offset ratios that provide some redundancy or additional direct actions that are complementary to indirect offset.

- 2.9 Offsets that are largely reliant upon the future success of actions may include:
- Replacement of loss through additional planting and revegetation works.
 - Restoration of existing secured area that requires management actions.
 - Fencing of degraded areas to improve habitat condition.
- 2.10 An offset should include a suite of actions designed to minimise risk and create a net benefit for biodiversity conservation. These actions may be direct or indirect and include a combination of some or all of the following: protection in situ, protection offsite, restoration, rehabilitation, research, monitoring and financial contributions. When taken as a whole, the benefit of the offset actions must be greater than the scope of the adverse impacts on biodiversity value.
- 2.11 The condition of the biodiversity value(s) potentially impacted and the condition of any biodiversity value(s) proposed to be protected or enhance must be considered and compared when determining whether a proposed offset will achieve a net benefit.
- 2.12 The existing vulnerability of any biodiversity value(s) proposed to be protected or enhanced must be considered when determining whether a proposed offset will achieve a net benefit.

Principle Three

Offsets must aim to be permanent

- 3.1 All proposed offset measures must be included as a condition on the permit authorising the use or development causing the impact. The condition should:
- Identify the location of the offset by title reference.
 - Identify what and how values are to be conserved.
 - Identify the means to secure that offset.
- 3.2 Legally enforceable mechanisms to secure, monitor and enforce any offset must be provided. Preferred mechanism in descending order:
- Covenant under *Nature Conservation Act 2002*—subject to acceptance from State Government, and where the offset is greater than 10ha in area.
 - Conservation Agreement under *Environment Protection and Biodiversity Conservation Act 1999*.
 - Part 5 Agreement under *Land Use Planning and Approvals Act 1993* (where a Part 5 Agreement is used, it must be recorded on the title of the offset site).
 - Condition of approval on the planning permit.
 - Covenant between Council and the title holder.
 - Term Management Agreement under *Nature Conservation Act 2002*.
- 3.3 Management of the offset will usually is necessary to ensure it delivers a permanent conservation outcome;
- Implementation of offset should be audited by the applicant/developer and reported to those party to the offset agreement.
 - Management of the offset should be subject to reporting after Year 1, 2, 5 and 10.
 - Management of the offset should be available to the broader community where the land is provided for public use.
- 3.4 Implementation and management of the offset over time must be demonstrated. This may require funding and contractual agreements to be in place prior to the approval.
- 3.5 Consideration should be given to the transfer of the of the offset site to the Council or other public authority, where significant management measures are not required or where funding is available to the public authority to cover the cost of the required management action. Examples include:
- Acquisition of the offset site as a public open space contribution for subdivision approved under the *Local Government (Building and Miscellaneous Provisions) Act 1993*
 - Incorporation of the offset site into an existing Council or State reserve or other component of an existing open space network, provided that public use of the land will not jeopardise the biodiversity value(s) intended to be protected.

Principle Four

Offsets must aim to be 'like for like'

- 4.1 Offsets should generally be for the same species, habitat or vegetation community that is being impacted.
- 4.2 The Vegetation Condition Assessment Method is to be used as a basis for categorising and comparing the condition of vegetation communities.
- 4.3 Offsets that are not 'like for like' are only appropriate where:
 - No suitable offset that provides 'like for like' is available or appropriate;
 - An offset will provide a net benefit for a biodiversity value of equal or greater ecological significance in the bioregion; and
 - It is in accordance with a Council endorsed biodiversity conservation strategy for the planning area
- 4.4 Offsets are designed to assist in the conservation of biodiversity values. However, where consistent with this principle, consideration can be given to offsets that also conserve other 'social values' that may be impacted upon such as:
 - Offsets that also conserve important skyline or hill face areas
 - Offsets that conserve biodiversity values in the same neighbourhood, suburb or catchment as that within which the impact is proposed
 - Offsets that provide some recreational or other open space value to the local community.
- 4.5 Offsets that are not like for like should be subject to third party validation, by the State or other peer review body, to ensure their appropriateness.

Principle Five

Indirect offsets (financial contributions) are acceptable in limited circumstances where direct offsets are unachievable

- 5.1 Notwithstanding Principle 4, indirect offsets must also contribute to the conservation of those same values being impacted upon.
- 5.2 Indirect offsets can be considered where insufficient direct actions are available or where direct actions are less desirable from a biodiversity conservation perspective.
- 5.3 Only where Council has endorsed a clear strategy outlining how any financial contributions are to be spent, and can guarantee that contributions will be spent in accordance with that strategy, will financial contributions be accepted.
- 5.4 Indirect offsets can include some or all of the following (subject to third party validation):
 - A contribution to other programmes when a direct link to the offset can be accounted. Any such programme should be endorsed by the relevant State authority.
 - A broadly accredited offset bank or credit scheme if it becomes available.
 - Funding for appropriate research, recovery action, or education programme that contributes to securing the conservation of the impacted value..

Principle Six

Retention of native vegetation onsite is preferred.

- 6.1 Preference should be given to offsets that secure the formal protection and management of conservation values on the same property that is subject to the impact, except where a greater biodiversity benefit can be gained through an offsite offset..
- 6.2 In circumstances where there is a limited opportunity for an adequate offset to be implemented onsite , then off-site offsetting should be pursued.
- 6.3 Where offsite offsetting is pursued, preference is given to:
 - Offsets that are contiguous with, or near to, other reserved or managed habitat; or
 - Offset in the same neighbourhood, suburb or catchment as the impact.
- 6.4 Unless the offset forms part of a package developed at the State or Federal level, the offset must be within the planning area of the relevant planning authority.
- 6.5 The location of an offset, being either onsite or offsite, is a balance between implementation and management of the offset, and the best location where conservation gains can be made within the planning area.

Principle Seven

Offsets are formulated and approved in the context of the established planning system.

- 7.1 Recognise where native vegetation clearance is regulated by other 'authorities':
- Ensure planning schemes avoid unnecessary duplication of assessment; and
 - Where there are dual assessment responsibilities between a local planning authority and other authority, avoid duplication in the development of offset packages.
- 7.2 Provided a planning scheme controls native vegetation clearance, planning authorities should regulate non-threatened native vegetation clearance based on local biodiversity values.
- 7.3 Local planning authorities may set thresholds for loss of non-threatened native vegetation (where it does not contain habitat for threatened species) in some areas, or for some communities, below which approval may either not be required or may be 'permitted'.
- Offset packages should not be developed for impacts that are below these thresholds. In other words use or development subject to offset packages, are identified as 'discretionary' applications.
- 7.4 For threatened species and significant habitat for threatened species:
- Impacts to State and Commonwealth threatened species and habitat are best addressed by the appropriate regulating authority. The proponent should inform the planning authority of the advice/determination made by the relevant authority to help inform appropriate planning decisions. The mechanisms for approval and offsetting in these instances are addressed outside of the *Land Use Planning and Approvals Act 1993*.
 - Recognise however the *Threatened Species Protection Act 1995* is limited to regulating direct impacts and cannot regulate impacts to habitat.
- 7.5 All proposed offsets must form part of the development application resulting in the adverse impact.
- 7.6 All consents required to facilitate a proposed offset should be obtained prior to the approval of the development application.
- 7.7 Where an off-site offset is proposed, the development application must be treated (and advertised) as relating to both the site of the use or development and the offset site.



8. IMPLEMENTATION

8.1 Compliance and Enforcement

The use of biodiversity offsets by local planning authorities does over time require the creation of a compliance and enforcement process to support their implementation. Councils should consider the potential future resourcing requirements before embarking on developing planning scheme requirements and an offsets process. Not only is compliance with any Part 5 Agreement a potentially resource hungry exercise, but the utilisation of financial contributions does require the preparation of an endorsed 'plan' or 'strategy' that outlines how the monies will be expended.

8.2 A guide to implementing biodiversity offsets in the local planning process.

For some local planning authorities, the utilisation of biodiversity offsets is a new element of the approval process. A flow chart has been developed to assist planning authorities and potential proponents (applicants) on the various considerations relating to the development and approval of an offsets package.

SEE SEPARATE A3 FLOW CHART

GLOSSARY

ACDC	means the Assessment Committee for Dam Construction (Tas).
Conservation Covenant	means a covenant between a landowner and the Minister under Part 5 of the <i>Nature Conservation Act 2002</i> to manage land for nature conservation.
DPIPWE	means the Department of Primary Industries, Parks, Water, and Environment (Tas).
Forest practices system	means the system of forest practices managed by <i>the Forest Practices Act 1985</i> .
FPA	means the Forest Practices Authority.
Native vegetation community	means native vegetation communities as described in Harris, S and Kitchener, A (2005). <i>From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation</i> . DPIPWE, PAT. Hobart
	Land that is :
	<ul style="list-style-type: none"> • Actively use for pasture, orchards or cropping; or • Is previously cleared rural land, but with less than 50% native vegetation:
	Is not defined as a 'native vegetation community'
Part 5 Agreement	means an agreement between a landowner and a planning authority under Part 5 of the <i>Land Use Planning and Approvals Act 1993</i> .
Planning Area	means the area to which a Planning Scheme applies.
Planning authority (local)	means a Council as defined under Section 3 of the <i>Land Use Planning and Approvals Act 1993</i> .

Planning system (or RMPS)

means the suite of legislation comprising:

- *Land Use Planning and Approvals Act 1993;*
- *Tasmanian Planning Commission Act 1997;*
- *Resource Management and Planning Appeal Tribunal Act 1993;*
- *State Policies and Projects Act 1993;*
- *Environmental Management and Pollution Control Act 1994;*
- *Historic Cultural Heritage Act 1995; and*
- *Major Infrastructure Development Approvals Act 1999.*

And supported by the following additional legislation :

- *Approvals (Deadlines) Act 1993;*
- *Crown Lands Act 1976;*
- *Gas Act 2000;*
- *Gas Pipelines Act 2002;*
- *Living Marine Resources Management Act 1995;*
- *Local Government Act 1993;*
- *Marine Farming Planning Act 1995;*
- *Mineral Resources Development Act 1995;*
- *National Parks & Reserves Management Act 2002*
- *Nature Conservation Act 2002;*

	<ul style="list-style-type: none"> • <i>Public Land (Administration and Forests) Act 1991;</i> • <i>Strata Titles Act 1998;</i> • <i>Threatened Species Protection Act 1995;</i> • <i>Water Management Act 1999; and</i> <p><i>α Wellington Park Act 1993.</i></p>
b Special circumstances	<p>c means particular circumstances associated with the proposed use or development that may justify reduction in biodiversity. Special circumstances are considered to exist if one or more of the following apply:</p> <ul style="list-style-type: none"> (a) The use or development will result in significant long term social and economic community benefits and there is no feasible alternative location or design; (b) Ongoing management cannot ensure the survival of the native vegetation community on the site and there is little potential for recruitment or for long term persistence. (c) The extent of proposed removal of the native vegetation community on the site is insignificant relative to the extent of that community elsewhere.
STCA	means the Southern Tasmanian Councils Authority
TasVeg	means the Department of Primary Industries and Water. TASVEG Version 2_0_Released Feb 2009. Tasmanian Vegetation Monitoring and Mapping Program, Resource Management and Conservation Division.
Threatened vegetation community	Means the native vegetation communities listed under Schedule 3A of the Nature Conservation Act 2002



Appendix A

COMPONENTS OF BIODIVERSITY SIGNIFICANCE

Biodiversity significant component	Potential Resources
Type of biodiversity value	<p><i>Guidelines for Natural Values Assessment (DPIPWE)</i></p> <p>Adherence to this methodology will ensure a site assessment considers vegetation communities and species and will provide a sound base for determining subsequent offset requirements.</p> <p>The guidelines also provide opportunity to consider habitat values of the vegetation, including presence of significant or potential habitat for threatened or high conservation species, presence of or proximity to known threatened species locations and other biodiversity values such as refugia and range limits of component species.</p>
Condition of biodiversity value	<p><i>A Manual for Assessing Vegetation Condition in Tasmania (DPIPWE)</i></p> <p>This manual outlines a detailed methodology for assessing vegetation condition. Adherence to the methodology in the manual will return a Final Habitat Score.</p> <p>A number of limitations have been identified with the methodology in the manual, including:</p> <ul style="list-style-type: none"> • Limited recognition of fauna habitat values (for example presence of tree hollows); • Confounding criteria in some vegetation types (for example a grassland loses condition score for lacking structural components not associated with that type such as trees and ferns which is actually an indication of high quality grassland); • Limitation of the benchmark descriptions for such things as tree density and life forms; • Limited discrimination between sites (for example a site that most ecologists would agree is in very poor condition scores too high, say 40-50, while a site in excellent condition may only score 70-80); • The open ended nature of some statements in the condition criteria; and

- The risk that a sample is inadequate to represent the whole area

The last two points in particular can contribute to differing condition scores between ecologists.

Notwithstanding these limitations, the manual should be applied, unless an alternate method of assessment is necessary and justified and then the modified approach consistently applied to the impact area and offset area. For example including a measure of tree hollow density in a region known to be important for hollow nesting birds.

The manual also does not provide a method for calculating the cost and viability of ongoing maintenance.

Conservation significance of biodiversity value

Vegetation types in Tasmania have been classified according to TASVEG. The conservation status of a vegetation type relates to its current extent compared with the modelled extent prior to European settlement. This allows for calculations of the extent of loss to land clearing.

As part of the Comprehensive Regional Assessment that lead to the Tasmanian Regional Forest Agreement (RFA) 1997, threatened forest communities were defined and identified applying the following criteria which collectively are recognised as threatened communities:

Rare Communities

- R1 - total area generally less than 10 000 ha
- R2 - total area generally less than 1 000 ha
- R3 - patch sizes generally less than 100 ha.

Vulnerable Communities

- V1 - approaching greater than 70 % depletion
- V2 - where threatening processes have caused either loss or significant decline in species that play a major role within the ecosystem or have caused a significant alteration to the ecosystem process.

Endangered Communities

- E1 - distribution has contracted to less than 10 % of pre-1750 range
- E2 - less than 10 % of pre-1750 area remains
- E3 - 90 % of area is in small patches and is subject to threatening processes.

At the bioregional level the status is similarity determined albeit with modified area thresholds for the rare category of less than 1000ha.

Threatened vegetation communities are now listed under the *Nature Conservation Act 2002* in accordance with their conservation status. This is based on state-wide assessments undertaken in 2007. They did however exclude some non-forest communities, such as Themeda grassland (GTL). Although this community and other grasslands which meet certain size and condition thresholds are protected under the *Environmental Protection and Biodiversity Conservation Act 1999* (c'wealth).

The conservation status of a vegetation type is further enhance where it supports habitat for threatened flora and fauna species, notwithstanding the fact that these values are addressed by existing threatened species legislation.

Reservation status of the biodiversity value

To gauge the need to conserve habitat, it is necessary have an understanding of how well reserved that habitat type is. Such an understanding should inform the decision as to whether the value should be impacted upon, and also inform the scale of any necessary offset.

In other words, impacts on 'under-reserved' habitat type may not be appropriate in the first instance, and if approved, should require a larger offset than an offset for a 'well reserved habitat type'.

The reservation status of a habitat type can be based on a review of the state-wide and bioregional reservation status of the vegetation communities. This will be in accordance with the CAR (Comprehensive Adequate and Representative) reserve system. The 'JANIS criteria' have been developed as nationally agreed criteria for the establishment of a Comprehensive Adequate and Representative (CAR) reserve system for forests in Australia.

These criteria set out targets for the conservation of ecosystems:

- 15 per cent of the pre-1750 distribution of each forest type
- 60 per cent of the existing distribution of each forest type if vulnerable
- 60 per cent of the existing old-growth forest
- 90 per cent, or more, of high quality wilderness forests
- all remaining occurrences of rare and endangered forest ecosystems including rare old-growth.

This level of protection compares favourably with IUCN guidelines of achieving 10% reservation of pre 1750 extent.

Data on the reservation status of habitat values is incomplete. As discussed, the 1996 Native Forest Area dataset is the baseline against which the limits in the Tasmanian Government Policy for Maintaining a Permanent Native Forest Estate are measured by the FPA. The FPA produces a quarterly report detailing forest clearance against the 1996 Native Forest Area for each bioregion.

A bioregional and state analysis of forest communities was completed in 2007 for the Forest Conservation Fund '*Conservation Value Index Technical Report*'. This work includes analysis of the reservation status of these communities.

There is however no similar baseline for non-forest vegetation communities, and no recent analysis exists for non-forest vegetation. As such, the discussion of reservation status will need to be supplemented with discussion of the local context.



Appendix B

BACKGROUND TO THE OFFSET PRINCIPLES

Principle One: Offsets as part of a Mitigation Hierarchy

As discussed in Section 3.3 the foundation principle for managing biodiversity values through the planning process (as set by Southern Tasmania Regional Land Use Strategy) is based upon the hierarchy of actions:

- Avoid;
- Minimise; then
- Offset.

This approach is not only a consistent theme across other approval bodies in Tasmania (ACDC and DPIPWE) but other jurisdictions throughout Australia (for example the Victorian Planning Provisions and the Principles for the use of biodiversity offsets in New South Wales).

The hierarchy suggests that offsets should not be applied in the first instance or in all circumstances. Inherent within this hierarchy is that if impacts cannot be avoided or minimised *and the project should still be approved* then offsets are necessary. Therefore the principle also includes criteria that will guide when a project should be able to go beyond avoidance and minimisation to employ offsets.

Principle Two: Net Benefit

There is a common theme that impacts should result in no net loss of biodiversity value. In reality however even the improved reservation security of a value, in exchange for clearance or loss of species elsewhere, results in a loss of biodiversity.

Numerical concepts of net loss and net gain are dependent upon what type – or at what scale – biodiversity is being considered, and how that loss or gain is to actually be measured. To know a proposal will result in a gain or a loss requires a comprehensive system that seeks to quantify biodiversity values. An offset can include a suite of actions (direct and indirect) designed to minimise risk and create a net benefit for biodiversity conservation. When taken as a whole the benefit of the offset actions must be greater than the scope of the adverse impacts on biodiversity values.

Other systems that require a calculated gain, such as the Habitat Hectares (Victoria) or BioBanking (NSW), are enabled by a comprehensive ‘metric’ that seeks to reduce biodiversity into a suite of numerical values upon which such gains or

losses can be determined. For example, the whole philosophy behind the Victorian system is for vegetation management to return a 'net gain'.

In order to measure any such gain, or loss, a means to objectively quantify such gains or losses is required. This is essentially a form of metric for measuring biodiversity values. There is currently no metric readily available in Tasmania to perform this role. In addition use of a metric is inconsistent with the approach employed by other approval bodies under the RMPS (ACDC & DPIPWE).

A more flexible concept is that of 'net benefit'. Net benefit is more flexible in that it potentially allows a loss to occur if a proposed action is of broader benefit and significance. Likewise, it is more realistic (and honest) in that it acknowledges that any adverse impact on biodiversity, particularly vegetation clearance, is a loss in biodiversity – but allows a broader benefit to be achieved by an offset required by the conditional approval of that loss.

Avoiding the more numeric approach of net loss or net gain allows a broader scope for offsets, and is also more compatible with the preference for allowing a limited scope for offsets that are not 'like for like'.

Importantly, the concept of net benefit shifts the focus of an offset onto the improvement of biodiversity conservation, rather than the maintenance of current biodiversity. These actions may be direct or indirect and include a combination of some or all of the following: protection in situ, protection off site, restoration, rehabilitation, monitoring and financial contributions. It raises the bar from acceptance of the status quo and suggests that when considered as a whole, offset actions should actually tip the balance in favour of further biodiversity conservation.

It is acknowledged that it is inherently difficult to demonstrate net benefit and that the determination of a net benefit is reliant upon expert advice. Therefore, such an approach is largely inaccessible to non-specialists and is potentially subjective.

Even so, metrics for measuring biodiversity value, such as the Habitat Hectares (Victoria) and BioBanking (NSW) methodologies, still require a high degree of expertise to determine ecosystem qualities such as vegetation condition. Rather than replace specialist expertise – such methodologies simply detail and accredit an objective and explicit methodology by which experts are to determine an offset.

If offsets are to be used as a 'last resort' in accordance with the recommendation above, it is reasonable the test be quite substantive and supported by expert opinion – in a similar manner to which many other planning matters are addressed (i.e. traffic impacts assessment, land instability and the proposed approach to bushfire hazard management).

In the absence of a fully developed methodology, and with only the most basic inputs, there is little practical alternative than to continue to rely upon such expert advice. Even if such a metric were available, there remain a number of significant concerns with those approaches that seek to 'quantify' biodiversity values.

Principle Three: Security and Permanency

The loss of biodiversity values is generally final; in that once a value is lost or severely impacted upon, that value is unlikely to recover without direct intervention. For example, if native vegetation is cleared for residential subdivision and the development of houses, that vegetation and the biodiversity values it contains, is, in all practical sense, lost forever. As such adverse impacts are permanent; it follows that any offset to compensate for such adverse impacts, must also be permanent.

Permanency includes the interrelated components of security and perpetuity. Perpetuity is about maintenance of the offset over time. As an impact on – or loss of – biodiversity is permanent, the compensating offset and appropriate management of that offset, should also be permanent.

Security is about the guarantee of safety for the offset from subsequent change that would undermine its original intent. An offset measure that is easily revoked or circumvented, risks further loss of biodiversity values. An important component of security is enforcement; whereby the offset mechanism must include the ability for Council to monitor compliance and readily take action to ensure sufficient compliance. These observations are consistent with the needs recognised by the Assessment Committee for Dam Construction and DPIPWE whereby offsets must be legally enforceable through permit conditions or some other legal mechanism established as a condition of approval.

Without such ability, it is difficult to ensure the proposed mechanisms will continue to return the intended conservation outcome overtime.

Principle Four: Like for Like

The concept of 'like for like' requires that those values impacted upon, are those values addressed by the offset. For example, if a vegetation community is cleared for subdivision, any associated offset must secure that same vegetation community.

Conversely, a non-like for like approach would allow the offset to address an 'unrelated' aspect of biodiversity (i.e. a financial contribution toward the recovery efforts of a threatened species).

Any system not requiring offsets to be on a like for like basis demands some form of biodiversity values trading; it requires a means to determine that impact 'X' on value 'Y', is appropriately offset by benefit 'A' to value 'B'. This is an inherently complex system and for this reason has been avoided in the development of these guidelines.

The Victorian Habitat Hectares model is explicitly designed to ensure like for like offsets are achieved for the same value where condition varies.

The Vegetation Condition Manual developed for Tasmanian vegetation communities can be applied similarly. A stand of vegetation of similar condition can be attributed a score. Where this varies then the practitioner needs to subdivide different vegetation types or the same type where there is a perceivable difference in condition. These scores can be multiplied by area to create effective habitat hectare scores.

In the absence of any holistic monitoring or evaluation across municipal areas, it is possible such a system could readily benefit some values at the expense of others. In other words, the cumulative impact may result in the approval of the clearance of a vegetation community from a specific locality, but additional resources provided for unrelated recovery efforts elsewhere.

The challenge is that in reality an impact may affect several different vegetation types or values which cannot be directly scored against each other. Similarly an offset may include a mixture of values, further complicating the comparison.

Were some means of addressing the issues raised above to be endorsed (particularly the need for holistic monitoring), a system that allows greater use of non like for like offsets could be considered. However, a preference for 'like for like' offsetting, is a pragmatic response to the available implementation framework.

The like for like approach is also consistent with other offset principles developed under the RMPS, being those adopted by ACDC and DPIPWE. These approaches state that offsets should generally be for the same species, native vegetation community or other natural value that is to be adversely impacted.

Even the NSW approach, which has an explicit principle for offsets to be quantifiable, retains a complimentary principle that states wherever possible offsets should be located in areas that have the same or similar ecological characteristics as the area affected by the development. At the Commonwealth level, the use of offsets under the EPBC Act generally requires a offset to relate to the specific matter that will be impacted (i.e. matter of national environmental significance)

Furthermore, a 'like for like' approach is the best response to furthering the Objectives of the RMPS; which requires all planning decisions to '...promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity'.

As the default, a like for like approach to offsets is most appropriate, as opposed to a less prescriptive approach based around equal or greater conservation value. There may however be proposals when the situation provides opportunity for an offset that returns a better outcome for biodiversity conservation as a whole. This approach suggests the loss of a value of low significance, could be offset by a substantive gain for another of equal, or greater, conservation value. Again, this is consistent with the approach of the Commonwealth under the *Environmental Protection and Biodiversity Conservation Act 1999*.

This approach recognises the concept of 'opportunity' whereby the best outcome for biodiversity may not actually be a like for like offset. But like indirect offsets, this approach does have significant risks. Therefore, any approach that allows the impact on one value, to be offset by a net gain for another value, needs careful consideration.

Any such approach should:

- Only be on an 'opt in' basis, whereby the default remains 'like for like'
- Provide a net gain for a biodiversity value of equal or greater conservation significance

- Be undertaken in accordance with an endorsed biodiversity conservation strategy that documents biodiversity values and their significance, along with measures for their conservation, for the planning area.

Principle Five: Indirect Offsets

Offsets can be both direct (i.e. reservation or conservation of biodiversity values) or indirect (i.e. contributions toward programs or related measures), or a combination of both.

There are however constraints associated with the use of indirect offsets as outlined in Section 4.2.5. In addition there are generally concerns that some types of indirect offsets can not be enforced, delivered, monitored or audited.

As a result specific criteria about the use of indirect offsets have been outlined.

Principle Six: Preference for On-site Offsets

Direct offsets can be applied both onsite (i.e. measures such as improved reservation and management of the balance of the land where the impact is to occur) and offsite (i.e. measures that improve the reservation and management of values at a different site to the approved impact).

As discussed in Section 4.2.1 the use of offsite offsets is constrained to the same planning area as the proposed action, and only then when all sites subject to either the impact or the offset, are part of the permit application under the *Land Use Planning and Approvals Act 1993*.

This is fundamental limitation that restricts the location of an offsets to a site within the planning area, rather than allowing an offset elsewhere within the bioregion.

There is some question of the security of ongoing management of an offsite offset where the direct nexus between the applicant and the party responsible for managing the offset is broken. However this concern is equally valid concerning an onsite offset where the nexus between impacting action and offset is broken by tenure (i.e. subdivision of land offset by reservation of the balance lot).

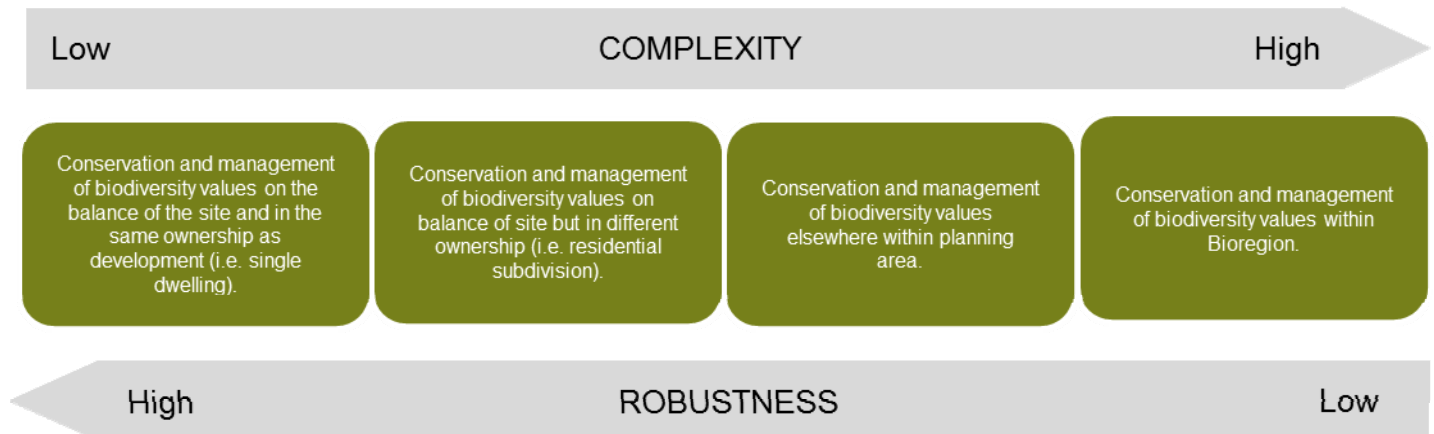
Indeed, the only time where this nexus is not broken is when the offset remains in the same tenure as the site where the impacts occur. An example would be where a dwelling is approved (impact) with the balance land being reserved and managed for the conservation of biodiversity values (offset).

These observations suggest there is a trade-off between administrative complexity and biodiversity conservation:

- The conservation of the balance lot around a dwelling is potentially the simplest offset to achieve. At the other extreme (and currently unachievable) are those impacts offset by actions secured elsewhere within the bioregion;

- However, it may be best for biodiversity conservation to secure the offset at an alternative location, potentially where the nexus between impact and offset is broken and administrative requirements are inherently more complex.

This can be pictured as a continuum; at one end onsite offsets are likely to be the least complex and the most robust, while offsets outside the planning area are the most complex and probably the least robust – if not impossible under the current system .



Significant administrative complexity is likely to undermine the robustness of an offset. Therefore, under the current system, preference should be for the simplest offset mechanisms.

Aside from administrative benefits, there is a preference for onsite offsets as they retain biodiversity values in that immediate area. This is important; vegetation has a biodiversity value in its own right along with its value as habitat. An offsite offset may not necessarily serve the same habitat function. Therefore, preference should again be given to those onsite offsets that are retained in the same ownership as the development.

This approach is again consistent with both the DPIPWE and ACDC guidelines. Under these guidelines (which share many similarities), it suggests that ‘where it is not practical for offsets to be provided on the site of the property where the impact will occur, consideration should be given to other proposed locations for offsets.’

The implied approach under these guidelines is that onsite offsets are preferred, and only when they cannot be achieved, should offsite offsets be considered.

In addition to these merit type arguments, it is important to remember that both the ACDC and DPIPWE seek offsets under a different legislative framework than local planning authorities. Under the *Land Use Planning and Approvals Act 1993* there is potentially a significant administrative need for onsite offsets.

While better conservation outcomes may well be achievable through offsite offsets – such outcomes are largely irrelevant if they are not administratively achievable.

However, onsite offsets may not always be possible (i.e. the subdivision of land) and at times, a better biodiversity outcome may be attainable through an offsite offset. Therefore, the choice between onsite and offsite offsets must be informed by both the conservation outcomes of the offset and the administrative arrangements.

Principle Seven: Offsets occur within an established planning system

Due the overall complexity of the management of native vegetation and biodiversity values within Tasmania, there is considerable scope for a single proposal resulting in the clearance of native vegetation, to require approval through several different approval processes. As part of the aims of these guidelines is to provide a more streamlined approach to the use of biodiversity offsets, it is therefore critical that local planning authorities in using offsets as a tool for mitigating impact arising from use or development do not unnecessarily duplicate existing processes at either the State or Commonwealth level.

In addition as discussed in Section 4.2, the regulatory powers of local planning authorities are determined by the *Land Use Planning and Approvals Act 1993* and the relevant planning scheme. The legislative in particular has strict requirements around what planning authorities can and cannot do. In order to ensure an equitable process and natural justice, it is critical that in using biodiversity offsets in the development assessment process, that planning authorities work within the bounds of the legislation and the planning scheme.

