

Best Practice Examples of Local Biodiversity Planning

As part of the delivery of the land use planning component of the Western Australian Natural Resource Management (NRM) program in 2011/12, the Perth Biodiversity Project was required to develop:

- **Practice notes** of acceptable subdivision or **structure plan** development conditions to provide for better consideration of biodiversity conservation
- Model text for improved biodiversity conservation provisions in **local planning strategies, schemes and policies**

This report provides **best practice** examples of local biodiversity conservation through land use planning, focusing on the incorporation of relevant guidance from local biodiversity strategies into **local planning strategies, schemes, policies and structure plans**.

Background

The *Local Planning Manual: A guide to the preparation of local planning strategies and local planning schemes in Western Australia* (WAPC, 2010) Appendix 5.7 'Guidelines and best practice examples' states that:

'Guidelines and best-practice examples will be prepared and distributed from time to time, to assist the preparation of local planning strategies, local planning schemes and scheme amendments.'

Additionally, the *Directions Paper on the Integration of NRM into Land Use Planning* (WAPC, 2011) recommends that the Department of Planning (DoP):

9. *Provide support to local governments to improve the integration of NRM into land use planning:*
 - a. *Prepare case studies and practice notes to support local government integration of NRM into local planning strategies, local planning schemes, local planning policies and local structure plans.*

The EnviroPlanning project has compiled a 'practice note' on integrating NRM into local planning strategies, as well as 'best practice examples' on special control areas relating to flood prone areas, catchment management and landscape protection, which are available for download from: <http://www.planning.wa.gov.au/681.asp>.

This report builds on the efforts of the EnviroPlanning project, and helps to fulfil the WAPC's commitments to provide guidance to local governments to address NRM in local planning frameworks, with a focus on integrating local biodiversity conservation objectives (adopted from local biodiversity strategies) into land use planning.

Best Practice Example of Local Biodiversity Planning - Shire of Mundaring -

The Shire of Mundaring is situated in the northeast portion of the Perth Metropolitan Region, covering an area of 645 km² with a population of approximately 38,000. The Shire is predominantly rural with large areas of national park and State forest. Most of the population resides on the suburban fringe of Perth as well as in numerous townships located predominantly in the west of the Shire.

The Shire of Mundaring received support from the Perth Biodiversity Project and the EnviroPlanning Project to prepare its local biodiversity strategy and integrate relevant aspects into its local planning strategy and local planning scheme. The Shire of Mundaring is the first local government to prepare its local planning strategy and scheme based on its Council endorsed local biodiversity strategy.

Local Biodiversity Strategy

The Shire of Mundaring Council adopted its Local Biodiversity Strategy (LBS) on 20 May 2009. The defining feature of the LBS is the categorisation of Local Natural Areas (LNAs) based on their conservation significance, land zoning, and other planning constraints such as structure plans and lot size. The three categories assigned to LNAs are:

- Conservation: LNAs generally have high ecological values and are either on Crown land vested for a conservation purpose, proposed to be within a Local Reserve for Conservation in the Shire's new Local Planning Scheme No. 4, or included in a Conservation Covenant
- Protection: LNAs have high ecological value but are located on private lands
- Retention: LNAs have a relatively lower ecological value and also generally located on private lands

The four goals of the LBS are:

1. To have 1,065 ha of LNA included in the Conservation Category and recognised by the Shire's Local Planning Strategy and Local Planning Scheme No. 4 (LPS4); and to endeavour to increase the amount of LNA in the Conservation Category to up to approximately 1,570 ha over time.
2. To have 5,830 ha of LNA included in the Protection Category and recognised in the Shire's Local Planning Strategy and LPS4; and to endeavour to increase the amount of LNA in the Protection Category to up to approximately 5,865 ha over time.
3. To have 510 ha of LNA included in the Retention Category and recognised in the Shire's Local Planning Strategy and LPS4; and to endeavour to increase the amount of LNA in the Retention Category to up to approximately 1,190 ha over time.
4. All Council's Local Reserves for Conservation in Town Planning Scheme No. 4 are actively managed for biodiversity conservation and half of all other Conservation Category LNAs and Protection Category (at least an estimated 2,925 ha) are actively managed for conservation.

The LBS established Council's position that no clearing will be permitted in Conservation Category LNAs, except for conservation-related infrastructure and compliance with fire management requirements; and in areas with a 'Protection' or 'Retention' status, there will be a strong presumption against allowing clearing, except for compliance with fire management requirements or where a residence cannot be located on an existing cleared area within a lot.

For some LNAs, the category of protection or retention is still to be determined or negotiated. These are where land use planning of a site is still in progress or where negotiations need to occur with vesting Government authorities. Other LNAs have been assigned to a 'Limited Protection/Already Committed by Zoning' category. These are mostly LNAs on existing or proposed small, residential zoned lots where the potential to formally protect the natural area is limited.

Key recommendations of the LBS include incorporating into the Shire's Local Planning Strategy (LPS) the LBS goals, maps of conservation priorities (Figure 1) and maps of preliminary LNA categories (Figure 2); and incorporating into the LPS and new LPS4 measures to protect LNAs specific to each zone.

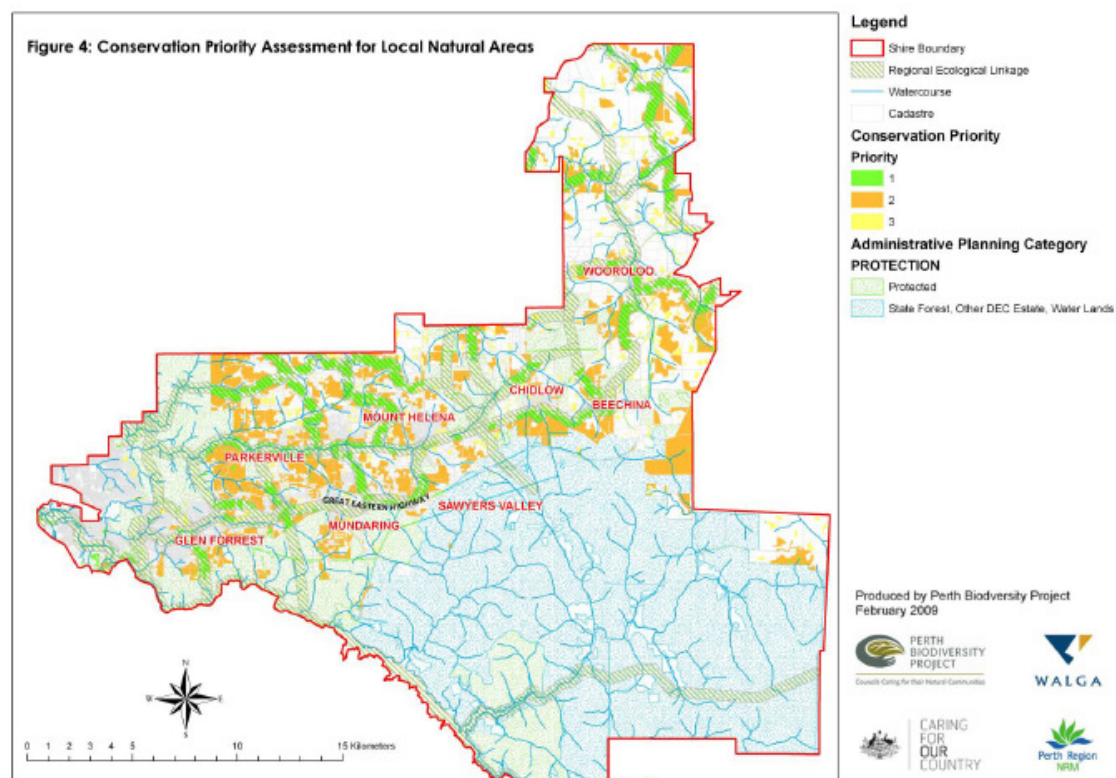


Figure 1: Map of Conservation Priorities (Source: Shire of Mundaring Local Biodiversity Strategy 2009)

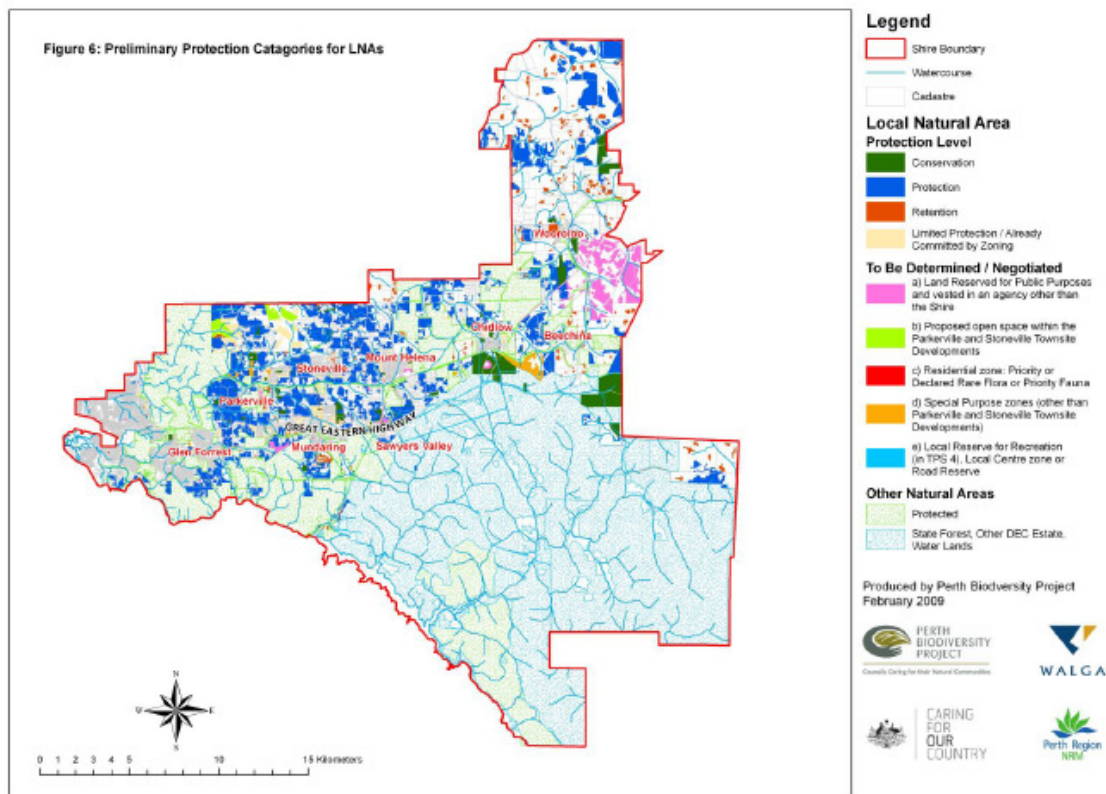


Figure 2: Map of Local Natural Area Categories (Source: Shire of Mundaring Local Biodiversity Strategy 2009)

Local Planning Strategy and Local Planning Scheme

The Perth Biodiversity Project's data provided the scientific basis for assigning values to the Shire of Mundaring's natural environment. The Shire's LBS interpreted these data and made recommendations for integrating LNAs and conservation priorities into the draft Shire of Mundaring LPS and Local Planning Scheme No. 4 (LPS4). These recommendations were translated into assessment criteria and development control provisions in the Shire's draft LPS and LPS4.

Following the consideration of public submissions on the draft LPS and LPS4, the Shire of Mundaring, at its special Council meeting on 31 July 2012, resolved to finally adopt the LPS and LPS4 subject to certain modifications, and to seek the approval of the WAPC and Minister for Planning.

Local Planning Strategy

The Shire of Mundaring's draft LPS comprised a background report and a strategies report. The background report acknowledged that the LBS was carefully prepared so as to be consistent with the LPS, and that it is intended that many of the recommendations of the LBS will be implemented through the LPS and LPS4.

The Shire profile and key issues chapter of the background report contained a summary of the Shire's flora and fauna, including the need to consider the representation of vegetation complexes and habitat for endangered black cockatoos. The background report also contained a section on biodiversity protection which included the following information:

- Basis for biodiversity conservation in the Shire's Strategic Plan
- Definitions for biodiversity and LNAs
- Background information on the Shire's local biodiversity strategy
- Statistics on the extent of native vegetation and protected areas in the Shire
- Vision and key mechanisms of the LBS
- Adoption of the LBS goals in the LPS
- Criteria for the determination of conservation priorities in the LBS
- Map of conservation priorities (Figure 1)
- Map of LNA categories (Figure 2)
- Description and recommendations for each of the LNA categories
- Description and recommendations for areas of the Shire yet to be determined and for areas already approved for development
- Background information on the Shire's Private Land Conservation Strategy
- Recommendations for environmental protection provisions in LPS4
- Recommendations for the implementation of Bush Forever in specific areas
- List of sites identified for inclusion in Local Reserves for Conservation

In the strategic directions chapter of the report it was clearly stated that:

'Biodiversity protection is a key theme of this Local Planning Strategy. This Strategy and Local Planning Scheme No. 4 implement recommendations of the Shire's Local Biodiversity Strategy. In particular, this Strategy recognises and protects Local Natural Areas according to Protection Categories and Conservation Priorities set out in the Local Biodiversity Strategy. Local Natural Area mapping is incorporated in this Local Planning Strategy: Strategies Document. There is a strong presumption against intensifying development potential by rezoning of Local Natural Areas and subdivision design is encouraged to minimise clearing of Local Natural Areas where possible.' (p. 10)

Importantly, the LPS contained multiple strategies relating to biodiversity protection (refer Table 1), as well as a series of maps showing the conservation priorities and LNA categories for native vegetation across the Shire (refer to Figures 1 and 2).

Table 1: Examples of biodiversity protection strategies included in the Shire of Mundaring's draft Local Planning Strategy

Seek to minimise loss of any vegetation complex, but in particular those vegetation complexes at high risk due to less than 30% of their original (pre-European) extent remaining within the Shire.
Prepare a local planning policy, to be adopted by the Shire and endorsed by the WAPC that sets out the types of subdivision which would be supported in order to maximise protection/retention of Local Natural Areas, the circumstances in which such subdivision would be supported, and any specific requirements applying to such subdivision.
Maintain a very strong presumption against rezoning of land containing Protection Category Local Natural Areas where such rezoning would confer additional subdivision/development potential that would necessitate further clearing of those Local Natural Areas.
Conservation priority mapping from the Local Biodiversity Strategy should be taken into account in the consideration of any planning proposal.
Scheme Amendments, structure plans and significant subdivision or development proposals which may adversely impact on Local Natural Areas are to provide vegetation, flora and fauna reports or management plans. Such reports should be provided at the earliest possible stage in the planning process. Preparation of such documents should have regard

to EPA Guidance Statements 33, 51 and 56 and matters of national environmental significance, and may include the involvement of environmental agencies where appropriate.

Special environmental features are to be identified at the rezoning or structure planning stages and, wherever possible, are to be included within Public Open Space; if special environmental features are to be included in residential lots, a larger lot size may be required to ensure a building site on such lots avoids and allows for protection of the special environmental feature.

Where a special environmental feature has been identified in this Strategy, including any updates made to protection category mapping from time to time, all development on a lot containing that feature should require planning approval, except where sufficiently precise information exists which can show that the proposed location of the development will not affect the special environmental feature.

Local Planning Scheme

The preparation of the Shire of Mundaring's new local planning scheme was largely informed by the Council endorsed local biodiversity strategy. As such, the provisions for local biodiversity conservation, including references to LNAs, are made throughout LPS4.

Part 1 – Preliminary

One of the aims of the Shire of Mundaring's draft LPS4 is:

'1.6 (d) preserve the Shire's biodiversity and environmental values through appropriate protection of areas of significant native vegetation, valuable habitat areas and other areas of environmental value'

Part 2 – Local Planning Policy Framework

Given the strategic role of the LPS in achieving the objectives of the Shire's LBS, it was prudent for LPS4 to include the following clause from the Model Scheme Text:

*'2.1 Scheme determinations to conform with Local Planning Strategy
Except to the extent that the Local Planning Strategy is inconsistent with the Scheme, determinations of the Shire under the Scheme are to be consistent with the Local Planning Strategy.'*

Part 3 – Reserves

In accordance with the recommendations of the Shire's LBS and LPS, Local Conservation Reserves have been included on the LPS4 maps. In relation to planning approval required for the use and development of local reserves, it was prudent for LPS4 to include the following clause from the Model Scheme Text:

*'3.4.2 In determining an application for planning approval the Shire is to have due regard to —
(b) the ultimate purpose intended for the Reserve.'*

Part 4 – Zones and the Use of Land

Local biodiversity conservation is provided for in the objectives of relevant zones:

'4.2.1 Residential

- (c) *In areas coded R2.5, to provide for low density residential development which is sensitive to the environmental characteristics of the area, including protection of native vegetation (trees and understorey) where practicable.*

4.2.2 Rural Residential

- (b) *To conserve the natural environment as far as possible for the enjoyment of residents as well as the maintenance of ecological and landscape values, particularly by the protection of native vegetation (trees and understorey) and by water-sensitive development.*

4.2.3 Rural Small Holdings

- (b) *To ensure use and development of land is sited, designed and managed in harmony with the natural environment and so as to protect ecological and landscape values.*

4.2.4 General Agriculture

- (c) *To ensure conservation of soil, watercourses and other water resources and the protection of ecological and landscape values.'*

Part 5 – General Development Requirements

The development requirements applicable to all zones and relevant to local biodiversity conservation are included in clauses 5.7.5 'Watercourse protection', 5.7.10 'Dieback management', 5.7.12 'Vegetation protection', 5.7.13 'Local Natural Areas' and 5.7.14 'Rehabilitation of land'. Clause 5.7.13 is of particular importance as it provides for the statutory consideration of LNA's:

'5.7.13.1 Local Natural Areas are identified in the Shire's Local Biodiversity Strategy and the Local Planning Strategy. In addition to provisions in this Scheme relating to Local Natural Areas within specific zones, the provisions of this clause apply to Local Natural Areas across all zones and reserves.

5.7.13.2 Where clearing of vegetation in a Local Natural Area is proposed by or would be a consequence of a Scheme Amendment, Structure Plan, subdivision or development requiring planning approval, the Shire may require or recommend that the subdivider or landowner prepare, or cause to be prepared, a Native Fauna and Flora Report and Management Plan to the satisfaction of the Shire prior to supporting or approving the proposal, or prior to clearing the land.

5.7.13.3 The Shire may recommend or impose conditions of approval requiring actions to protect and manage fauna or flora identified pursuant to clause 5.7.13.2.'

Also in relation to local biodiversity conservation, Clause 5.8 'Development requirements for the Residential zone' states:

'5.8.1.1 The objectives of building envelopes within the Residential zone are to:
(a) protect features of special environmental significance (including but not limited to granite outcrops, Declared Rare Flora or under-represented vegetation complexes)'

and clause 5.9 'Development requirements for the Rural Residential zone' states:

- '5.9.2.2 The objectives of building envelopes within the Rural Residential zone are to:*
(a) protect Local Natural Areas, other vegetation, watercourses, damp areas and features of special environmental significance from development'

Clause 5.9.3 'Local Natural Areas' is also important as it makes reference to the LNAs mapped in the LPS and how these areas are to be considered in planning approvals:

- '5.9.3.1 Local Natural Areas are delineated in the Local Planning Strategy and are identified for either:*
(a) Conservation;
(b) Protection; or
(c) Retention
- 5.9.3.2 Where a lot is partly within one or more Local Natural Areas identified in the Local Planning Strategy, any development on that lot, including a Single House and associated structures (including outbuilding(s)), shall be:*
(a) located in that portion of the lot outside the Local Natural Area(s); and
(b) set back sufficiently from the Local Natural Area so as to avoid any need to remove or modify vegetation within the Local Natural Area in order to comply with the requirements of the Bush Fire Protection Guidelines (2010)...
- 5.9.3.3 Notwithstanding any other provision of the Scheme, planning approval shall be required for the construction of a Single House and/or associated structures (including outbuilding(s) and a swimming pool) if proposed to be located wholly or partly within a Local Natural Area identified in the Local Planning Strategy...*
- 5.9.3.4 In determining any application for planning approval that does not comply with clause 5.9.3.2 above, there shall be a very strong presumption against clearing of a Local Natural Area identified for Protection and a strong presumption against clearing of a Local Natural Area identified for Retention. Planning approval shall only be granted where it has been demonstrated that all alternative locations on the lot outside of any Local Natural Area are unviable, impractical or environmentally unsuitable. Development other than a Single House and/or associated structures (including ancillary accommodation, outbuilding(s) and a swimming pool) may be refused on the basis that no location for such development on a lot is acceptable given the abovementioned presumption against clearing. Under no circumstances shall the Shire grant planning approval for development, including a Single House and/or associated structures (including outbuilding(s)), located wholly or partly within a Local Natural Area identified in the Local Planning Strategy for Conservation.'*

LPS4 also provides for amendments to the LNAs maps in the LPS, as follows:

- ‘5.9.3.7 An owner of a lot wholly or partly affected by a Local Natural Area identified in the Local Planning Strategy may request in writing that the Shire reconsider the designation or boundary of that Local Natural Area as it affects that lot.*
- 5.9.3.8 On receipt of a request referred to in clause 5.9.3.7, the Shire, may determine:*
(a) that the Local Natural Area designation and/or boundary shown in the Local Planning Strategy does not reflect the true location, if any, of the Local Natural Area on or adjacent to the lot, and modify the Local Natural Area mapping accordingly; or
(b) that the Local Natural Area designation and/or boundary shown in the Local Planning Strategy affecting the lot are correct, and refuse to alter the designation and/or boundary. In making its determination the Shire will examine the vegetation on the lot and shall have regard to the definition of, and methods for determining, a Local Natural Area within the Shire’s Local Biodiversity Strategy.
- 5.9.3.10 The Shire may amend the Local Natural Area mapping within the Local Planning Strategy from time to time to reflect determinations pursuant to clause 5.9.3.8 and/or any other investigations or assessments the Shire conducts regarding Local Natural Areas within the Scheme Area.’*

The provisions for Local Natural Areas (listed above) are replicated within clause 5.10 relating to Rural Small Holdings zone and clause 5.11 relating to the General Agriculture zone.

Clause 5.17.6 ‘Details of proposed Structure Plan’ requires a proposed structure plan to contain ‘*a site analysis map showing the characteristics of the site including... conservation and environmental features including bushland, wetlands, granite outcrops, streams and water courses, foreshore reserves and any environmental policy areas*’; and ‘*a written report to explain the mapping and to address...the protection of any Local Natural Areas identified in the Local Planning Strategy*’.

Part 6 – Special Control Areas

Clause 6.5.14 relating to ‘Bush Fire Prone Areas’ states that ‘in its determination of any application for planning approval, and in providing a recommendation in relation to subdivision, the Shire is to have particular regard to...the effects of any proposed fire protection measures on the amenity and environmental values of the locality, including...Local Natural Areas’.

Part 8 – Development of Land

Clause 8.2 requires planning approval where:

‘vii) the development is on land zoned Rural Residential, Rural Small Holdings or General Agriculture, and will be located wholly or partly within a Local Natural Area identified in the Local Planning Strategy...

viii) within a Bush Forever site...

ix) the development is on a lot zoned Residential and identified in the Local Planning Strategy as containing Priority or Declared Rare Flora, Priority Fauna or granite outcrops'

Further information

Shire of Mundaring Local Biodiversity Strategy, May 2009

<http://www.mundaring.wa.gov.au/ResidentServices/Environment/Documents/Local%20Biodiversity%20Strategy%20FINAL.pdf>

Shire of Mundaring Draft Local Planning Scheme No. 4, September 2010

<http://www.mundaring.wa.gov.au/ResidentServices/Planning/draftlps4/Pages/LocalPlanningScheme4.aspx>

Shire of Mundaring Draft Local Planning Strategy, September 2010

<http://www.mundaring.wa.gov.au/ResidentServices/Planning/draftlps4/Pages/LocalPlanningStrategy.aspx>

Shire of Mundaring Special Council Meeting Minutes, 31 July 2012

<http://www.mundaring.wa.gov.au/AboutCouncil/MinutesAndAgendas/Lists/Minutes%20and%20Agendas/DispForm.aspx?ID=348&Source=http%3A%2F%2Fwww%2Emundaring%2Ewa%2Egov%2Eau%2FAboutCouncil%2FMinutesAndAgendas%2FLists%2FMinutes%2520and%2520Agendas%2Fcalendar%2Easpx%3FCalendarDate%3D18%252F07%252F2012>

Best Practice Example of Local Biodiversity Planning - Shire of Chittering -

The Shire of Chittering is situated approximately 55 km north of Perth, covering an area of 1,220 km² with a population of approximately 3,520, including the settlements of Muchea and Bindoon. The local government area adjoins the Perth metropolitan region and experiences relatively high demand for rural living opportunities.

The Shire of Chittering received support from the Perth Biodiversity Project, the EnviroPlanning Project and the Chittering Landcare Centre to prepare a local biodiversity strategy and address biodiversity conservation through strategic and statutory land use planning.

The Shire of Chittering's local biodiversity strategy is the first to have been tested in a case considered by the State Administrative Tribunal (SAT). The Shire of Chittering is also the first local government to revise its local planning strategy based on its Council endorsed local biodiversity strategy.

Local Biodiversity Strategy

The Shire of Chittering Council adopted its Local Biodiversity Strategy (LBS) on 21 April 2010. The draft LBS was released for public comment in 2009 and finalised following extensive community consultation, which involved sending a copy to each affected land owner, as well as obtaining input from the Chittering Landcare Centre and the Department of Planning.

The LBS vision is: 'In 2050 the Shire of Chittering will have retained at least 20,000 ha of its remaining 22,421 ha of local natural areas and formally protected at least 6,328 ha within these areas'.

The defining feature of the LBS was the identification of 88 'Indicative High Conservation Value Areas' (IHCVAs) (Figure 3) which contain over 16,500 ha of local natural areas within patches larger than 4 ha. The sites selected as IHCVAs generally met the following criteria:

- Large (over 20 ha)
- Contain vegetation mapped as good or very good condition
- Occur within a regional and/or local ecological linkage
- Contain habitat for significant flora, fauna and/or ecological communities

The IHCVAs provide a spatial guide for focusing the Shire's efforts in achieving the LBS targets for the retention, protection and management of local natural areas. The intention was that the IHCVAs, or portions of them, should:

- Be priorities to achieve the LBS targets for protection of vegetation complexes found within the Shire;
- Be high priorities for protection within open space if they are within Local Planning Scheme zones with subdivision potential;
- Be priorities for subdivision incentives, where the natural areas can be protected under conservation covenant and zoning; and

- In some cases, be considered for acquisition by the State government given they are of regional significance and/or meet National Reserve System criteria.

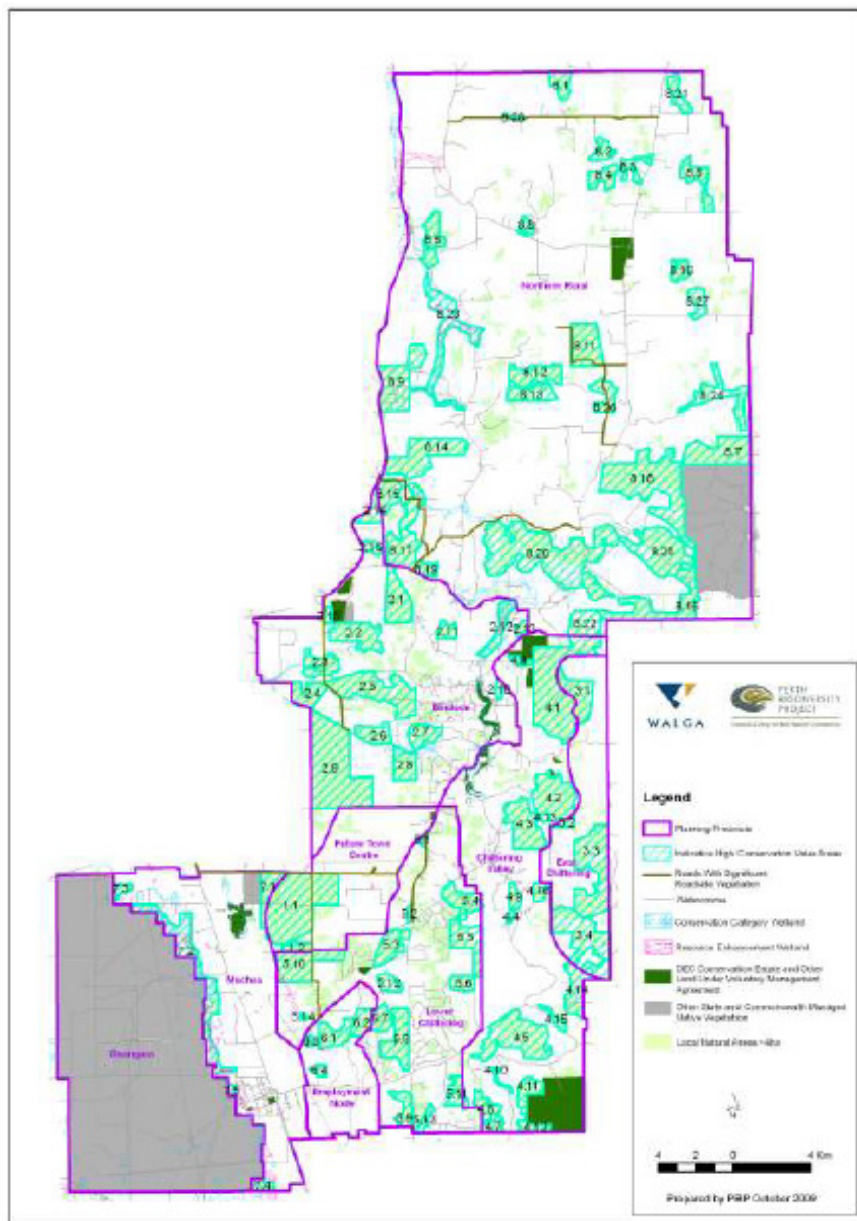


Figure 3: Map of Indicative High Conservation Value Areas (Source: Shire of Chittering Local Biodiversity Strategy 2010)

An appendix to the LBS incorporated detailed information on the recommended areas (in hectares) of each vegetation complex to be protected in each IHCVA, which allowed for clearing and other impacts on native vegetation associated with proposed future development (refer to Table 2).

Key recommendations of the LBS included the review of the Shire's Local Planning Strategy in order to minimise clearing of IHCVAs; and strengthening local planning scheme provisions, such as cluster development to minimise impact on native vegetation in rural living areas.

Table 2: Recommended targets for the protection of vegetation complexes within Indicative High Conservation Value Areas in Lower Chittering (Source: Shire of Chittering Local Biodiversity Strategy 2010, Part 2 – Appendix 5)

IHCVA	Vegetation complexes:	Remaining vegetation in IHCVAs (ha)	Potential loss of vegetation due existing planning decisions (ha)	All remaining native vegetation within the Precinct (ha)	Target for protection (ha)	Target for retention (ha)
	<div>Retained at less than 30% & protected at less than 10% regionally</div> <div>Protected at less than 10% regionally</div> <div>Retained at less than 30% locally</div> <div>Other vegetation complexes</div>					
5.9	Mogumber Complex South	150.3			12	
	Mogumber	63.3			61	
	Mogumber Complex South	33			33	
	Reagan	23.7			15	
5.10	Coonambidgee Complex	33.3	58		33	
	Mogumber Complex South	141.8			102	
	Moondah Complex	2.8			0	
	Reagan Complex	194			172	
	Yanga	17.7			17	
5.11	Coolakin	66.7			43	
	Murray 2	19.4			7	
	Yalanbee 6	8.6			7	
5.12	Mogumber	41.5			39	
	Mogumber Complex South	2.1			2	
	Moondah	1.9			1.9	
5.13	Mogumber	40.6			40	
5.14	Coonambidgee Complex	5.4			5	
	Reagan Complex	2.3			2	
TOTAL		1,763ha			1,038ha	1,450ha

Local Planning Strategy

The Shire of Chittering Local Planning Strategy 2001-2015 (LPS) identified extensive areas of land for future rural living purposes. Many of those areas contain native vegetation of significant conservation value, so it was timely for the LBS to identify IHCVAs that may be at risk from clearing associated with future development.

Since the release of the LPS, a Rural Conservation zone has been introduced to the Shire's local planning scheme, and some land has been rezoned to permit cluster development and retain large conservation lots.

In 2012 the Shire is revising its LPS with the view towards consolidating future rural residential development, and implementing key recommendations of the LBS. The most significant aspect of the draft revised LPS will be the inclusion of IHCVAs and associated designation of land for future conservation purposes, including criteria to guide the assessment of future rezoning and subdivision proposals.

At the time of publication of this document, the DoP/WAPC is considering granting consent to the Shire of Chittering for advertising the draft revised LPS for public comment, subject to certain modifications being made to the draft prior to its release.

Local Planning Scheme

Part 1 - Preliminary

The following aims of TPS6 provide for local biodiversity conservation:

- a. To provide environmental protection and enhancement of biodiversity and the natural resources including land, air and water quality*
- g. To protect and improve areas of remnant vegetation and waterways from further degradation*
- h. To facilitate vegetated wildlife corridors and greenways, particularly along the primary watercourses throughout the Shire by means of reserves and partnerships with government agencies and private landholders*

Part 3 - Reserves

TPS6 provides for local reserves to be designated for the purpose of 'Conservation'.

Part 4 - Zones and the Use of Land

TPS6 contains a 'Rural Conservation' zone which has the following objectives:

- To maximise the long-term protection and management of significant environment values*
- To minimise the fragmentation of, and where deemed relevant, promote ecological linkages between, these values*
- To ensure that development is compatible, sympathetic and integrated with these values*
- To create lot/s that are of sufficient size to sustain the long-term protection and management of these values*
- Encourage innovative subdivision design, such as consolidated cluster style development, that maximises the long-term protection and management of these values*

Part 5 - General Development Requirements

TPS6 also contains development provisions for rural living (Rural Residential, Rural Retreat, Rural Smallholdings and Rural Conservation) zones, including:

- Requirement for a development plan
- Building envelopes/setbacks
- Planning approval
- Fencing
- Water supply, re-use and effluent disposal
- Land management
- Dams and watercourses
- Protection of vegetation and tree cover
- Fire control
- Agricultural activities and livestock management
- Environmental management plan (including use of conservation covenants)
- Vendor responsibility

Part 6 - Special Control Areas

The TPS6 maps delineate Landscape Protection Areas, the purpose of which is threefold:

- a) To secure areas delineated on the Scheme Map from undue subdivision and development that would detract from the landscape value of the rural environment*
- b) To conserve and enhance the character of the significant landscape area*
- c) To ensure land use and developments are compatible with the landscape values*

One of the Landscape Protection Areas is the Chittering Valley Landform System, which has been identified for the protection of the Brockman River Catchment and its biodiversity.

The provisions relating to the special control area apply in addition to the provisions of the underlying zone, and include controls against the removal of any natural vegetation from any ridgeline and the removal or lopping of trees except under certain circumstances. Furthermore, revegetation may be required as a condition of planning approval, to ensure no net loss of vegetation or to repair a degraded landscape.

State Administrative Tribunal

Bernardini and Western Australian Planning Commission [2010] WASAT 105

On 14 April 2010, the SAT considered the case of Bernardini against the WAPC. The matter involved the review of an application refused by the WAPC, which proposed to subdivide a 13.7 ha site zoned Rural Residential in Lower Chittering into six lots ranging between 2.1 ha and 2.8 ha in size. The WAPC was concerned that the proposed subdivision would be inconsistent with the existing development plan for the Rural Residential area, and that it would have an adverse impact on the remnant vegetation.

At the SAT hearing, an expert witness acting for the WAPC presented: (i) relevant information on the Shire's LBS, TPS6 and LPS; (ii) evidence of the degradation of vegetation caused by Rural Residential development in a nearby area; and (iii) advice from the Department of Environment and Conservation (DEC) and the National Heritage Trust of WA (NTWA) on conservation covenants, including the preferred size and condition of conservation lots and the preferred subdivision design to limit the potential impact of adjacent land uses on conservation lots.

The SAT recognised that the Shire's LBS, in identifying and categorising vegetation types and addressing the protection, retention and management of vegetation, should be integrated into a revised LPS and be a consideration in amendments to the provisions of TPS6. The SAT also recognised that the proposed subdivision would result in the loss of remnant vegetation, and that this would be inconsistent with the LBS goal of retaining all existing natural areas.

The SAT found that the subdivision would have an adverse impact on the remnant vegetation on the site, and therefore would be inconsistent with the objectives for the Rural Residential zone in the local planning scheme. Furthermore, the SAT formed the view that it would not be consistent with proper and orderly planning to approve the subdivision with a condition requiring that conservation covenants be agreed to

overcome the effects of the subdivision on the vegetation, in the absence of evidence that the agreement of an appropriate authority to the covenants could be obtained and the condition of approval could be satisfied. The SAT therefore decided to dismiss the application for review and affirm the refusal of the proposed subdivision.

Further information

Shire of Chittering Town Planning Scheme No. 6

[http://online.planning.wa.gov.au/lps/localplanningschemes.asp?f=Chittering%20-%20Shire%20of%20\(Scheme%206\)](http://online.planning.wa.gov.au/lps/localplanningschemes.asp?f=Chittering%20-%20Shire%20of%20(Scheme%206))

Shire of Chittering Local Biodiversity Strategy, April 2010

<http://chittering.wa.gov.au/sites/chitteringwagovau/assets/public/File/council/Adopted%20-%20Local%20Biodiversity%20Strategy%20-%2021%20April%202010.pdf>

State Administrative Tribunal decision report, 15 July 2010 – Bernardini and Western Australian Planning Commission [2010] WASAT 105

[http://decisions.justice.wa.gov.au/SAT/SATdcsn.nsf/PDFJudgments-WebVw/2010WASAT0105/\\$FILE/2010WASAT0105.pdf](http://decisions.justice.wa.gov.au/SAT/SATdcsn.nsf/PDFJudgments-WebVw/2010WASAT0105/$FILE/2010WASAT0105.pdf)

Best Practice Example of Local Biodiversity Planning - City of Wanneroo -

The City of Wanneroo is situated in the northwest portion of the Perth Metropolitan Region, covering an area of 685 km² containing bushland, wetlands, urban and rural areas, as well as 32 km of coastline. The City's population of approximately 156,000 is predicted to continue to grow at a very high rate due to the availability of urban zoned land along the coast.

The City of Wanneroo has received support from the Perth Biodiversity Project to prepare a local biodiversity strategy to assist land use planning and improve the management of Council's reserves which contain significant natural areas.

Local Biodiversity Strategy

The City of Wanneroo Council adopted the Local Biodiversity Strategy (LBS) on 3 May 2011, following the release of a Discussion Paper for public comment in 2008 and release of a draft LBS for public comment in 2010.

The defining feature of the City of Wanneroo LBS is the identification of six biodiversity planning precincts covering the local government area, which provide a spatial guide for achieving the City's targets for the retention, protection and management of local natural areas. The planning precincts correspond with broad land use planning activities, including the Alkimos-Eglinton and Yanchep-Two Rocks district structure plans that guide urban development along the coast.

For each planning precinct, the City has considered the potential for local natural areas to contribute towards proposed targets for protection of each vegetation complex, based on the current land zoning (e.g. refer to Figure 4 and Table 3).

Key land use planning actions from the LBS which will help the City to achieve its proposed protection targets include:

- Amending the City of Wanneroo District Planning Scheme No. 2 (DPS2) to include a 'Conservation and Passive Recreation' local reserve classification
- Giving consideration to biodiversity conservation in the review of DPS2 and development of a local planning strategy
- Reviewing, updating and developing local planning policies relevant to biodiversity conservation

Public Open Space Policy

A key mechanism for local biodiversity conservation in the City of Wanneroo is the retention, protection and management of local natural areas in public open space (POS). In this regard, it was important for the City to provide a formal position on conservation areas, in context of broader planning for POS.

The City of Wanneroo Local Planning Policy 4.3: Public Open Space (LPP 4.3) was adopted by Council on 19 October 2010. As per *Liveable Neighbourhoods* (WAPC 2007), the LPP classifies POS as restricted or unrestricted. The City's definitions for these terms are as follows:

- 'Restricted' POS means those spaces that are constrained in a way that restricts the use of the space for recreational purposes by the general public (e.g. wetlands, certain drainage swales, power easements, cultural heritage sites, significant topographical features)
- 'Unrestricted' POS means those spaces that are free from constraints or encumbrances (e.g. wetlands, easements, cultural heritage sites, significant topographical features) and are available at all times for recreational purposes by the general public. This includes conservation areas that are accessible by the public.

Liveable Neighbourhoods

The Liveable Neighbourhoods (LN) policy – Element 4 'Public Parkland' requires that a minimum contribution of 10% of the gross subdivisible area be ceded to the Crown free of cost by the subdivider for POS, and may comprise a minimum of 8% active and passive recreational purposes, where the remaining 2% (or one-fifth) comprises restricted use POS. According to the LN policy, restricted use POS includes natural areas and cultural features, natural wetlands, urban water management measures and/or artificial lakes. A POS contribution allowance will not be given for any land identified as restricted use POS over the 2% specified in the LN policy.

The City of Wanneroo's POS policy specifically includes accessible conservation areas in its definition of 'unrestricted' POS. Furthermore, while the LN policy states that the WAPC may allow for resource enhancement wetlands to be included in restricted use POS, the City's policies do not (refer to Schedule 2 of LPP 4.3, as well as LPP 4.1: Wetlands).

Conservation public open space

Consistent with the City of Wanneroo's LBS, LPP 4.3 requires a minimum of 3% of the gross subdivisible area be provided as POS for the purposes of conservation and passive recreation, where the following significant natural assets exist:

- Threatened and Priority Ecological Communities
- Declared Rare and Priority Flora species
- Specially Protected and Priority Fauna species
- Matters of National Environmental Significance (as per the *Environment Protection and Biodiversity Conservation Act 1999*)
- Wetlands
- Karstic features (e.g. caves and pinnacles)
- Vegetation complexes protected below 30% of their original extent (as detailed in the City's LBS)
- Coastal vegetation
- Significant trees (as defined by the City's Tree Preservation Policy)

POS provided for conservation and passive recreation should be ecologically viable and meet the minimum viability criteria described in Schedule 6 of the policy. The viability assessment has been adapted from the *Local Government Biodiversity Planning Guidelines for the Perth Metropolitan Region* (Del Marco *et al.*, 2004) and requires a minimum score to be achieved in order for a conservation POS area to be considered viable.

The City's policy also requires that POS provided for the purpose of local conservation shall be accessible by the community for recreational use. This may be

achieved through controlled access to walk trails through the site, or the co-location of natural areas with developed active and/or passive open space (refer to Schedule 5 for example concept). LPP 4.3 clearly states that the provision of restricted access conservation areas (*i.e.* fenced off from the public with no controlled access) will not be accepted and shall not contribute to the overall 10% POS obligation.

Local Planning Scheme Amendment

Amendment No. 109 (Amd 109) to the City of Wanneroo District Planning Scheme No. 2 (DPS2) was adopted by Council on 23 August 2011. The proposal involves: (i) amendment of the Scheme Map in DPS2 to create a new local reserve classification titled 'Conservation'; and (ii) amendment of the classification of designated local reserves in DPS2.

The scheme amendment helps the City to fulfil a key commitment under its LBS. Importantly, it will provide for the designation of important natural areas in structure plans and creation as 'Conservation' reserves through the subdivision process, thereby ensuring that native vegetation is protected as the City is urbanised.

Following modifications arising from the public consultation period, Amd 109 includes 48 reserves with a total area of approximately 154 ha. The reserves proposed to be classified as 'Conservation' reserves have been selected to protect local natural areas that contain vegetation in good condition, significant fauna habitat and/or rare and endangered species, and that can be rehabilitated as part of offset proposals.

In order to change the reserves' purpose to 'Conservation' (e.g. from 'Public Recreation'), Council must have specifically addressed the change of purpose of the Management Order for the affected reserves, in addition to the change of reservation in DPS2. The City of Wanneroo has therefore pursued concurrent advertising of the proposed scheme amendment and changes to the Management Orders of affected reserves. The City has proposed to prepare a new local planning policy to explain the proposed Scheme Map classification and provide detailed guidance on the purpose, use and management responsibilities for different reserve classifications.

The City has suggested that the creation of the new 'Conservation' reservation in DPS2 will enable developers to more easily meet their obligations for the protection of native vegetation and threatened species habitat under State and Federal environmental legislation. The proposed Scheme amendment and associated local planning policy will ensure that the City can comply with conditions of clearing/development approvals set through State and Federal statutory environmental processes, and avoid potential future delays on major infrastructure projects as a result of these offset conditions.

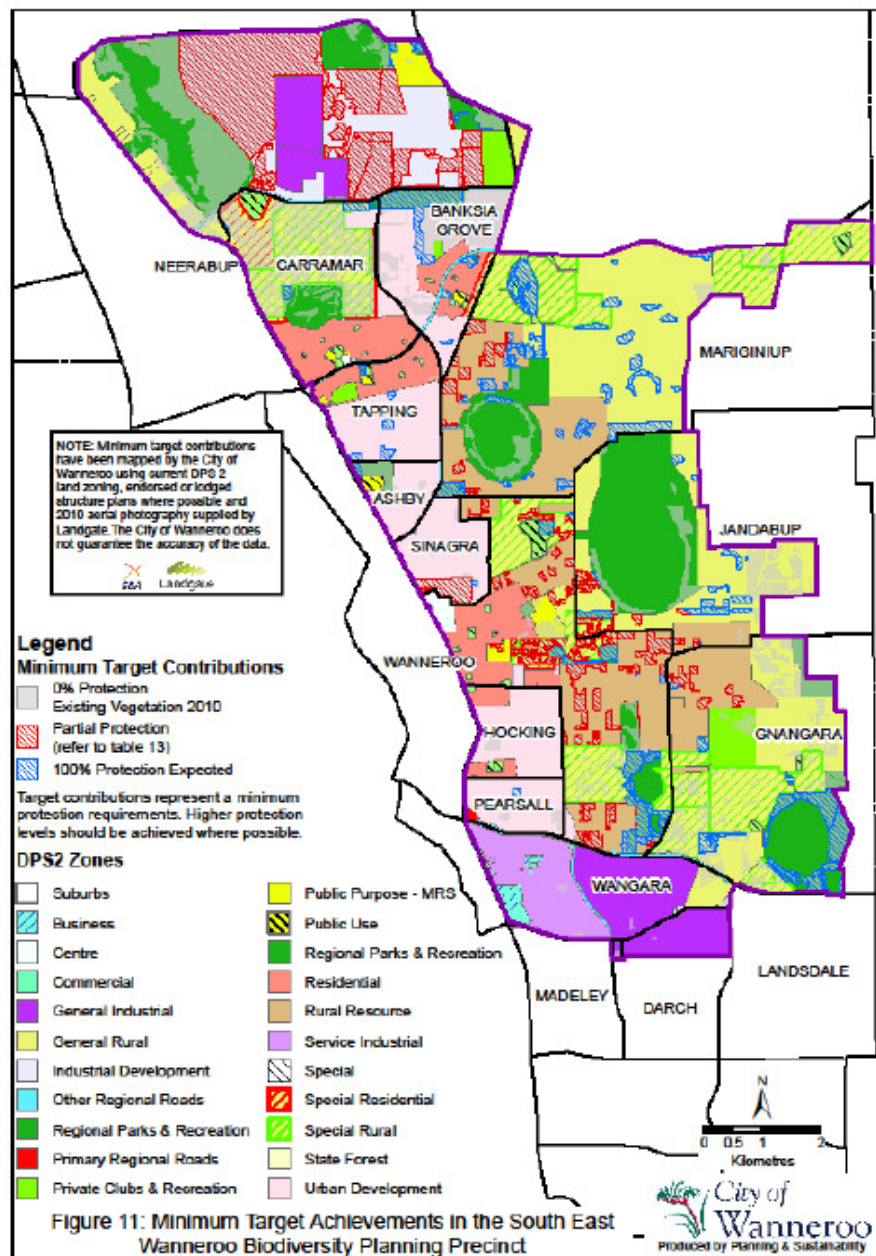


Figure 4: Map of recommended protection of local natural areas in the East Wanneroo area (Source: City of Wanneroo Local Biodiversity Strategy 2011)

Table 3: Recommended targets for the protection of vegetation complexes according to different land zones within the East Wanneroo area (Source: City of Wanneroo Local Biodiversity Strategy 2011)

Table 13: Expected contribution to the biodiversity targets in the Southeast Biodiversity Planning Precinct (City of Wanneroo, 2009)

Current Zoning under DPS No.2	Vegetation Complexes (LNA)							Contribution to Targets (ha)							Rationale
	Bass-C&S	Bass-N	Bass-NTrans	Cott-C&S	Herds	Karra-C&S	Pinjar	Bass-C&S	Bass-N	Bass-NTrans	Cott-C&S	Herds	Karra-C&S	Pinjar	
Business	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Highly constrained land zoning, some biodiversity retention will be expected but difficult to ensure viability
Centre	0.0	0.0	0.0	0.0	0.0	29.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4ha in Wanneroo Town Centre
General Industrial	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Highly constrained land zoning, some biodiversity retention will be expected but difficult to ensure viability
General Rural	0.2	8.2	28.6	6.2	28.6	52.9	116.2	0.0	0.0	14.0	0.0	29	15	78	20% of GR land subject to future planning under EW concept
Industrial Development	0.0	0.0	0.0	444.3	0.0	146.2	0.0	0.0	0.0	0.0	31	0.0	42*	0.0	Neerabup Industrial Estate – retention of BF Site & TEC, land swap with State for other industrial land as per GSS
Other Regional Roads	0.0	0.0	0.0	2.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Highly constrained land zoning not suitable for biodiversity retention
Parks & Recreation (Local Reserve)	3.6	0.0	0.0	1.4	0.0	40.5	34.4	4	0.0	0.0	0.0	0.0	37	34	Improved protection of Golfview Park, Vintage Park, Belgrade Park, Caporn Park, Edgar Griffiths Park, Waldburg Park, Vindian Park, Benmuri Park, Chioquita Park, Lake Adams & Damian Park.

Further information

Local Government Biodiversity Planning Guidelines, June 2004 (refer to Chapter 6)
http://pbp.walga.asn.au/Documents/BiodiversityProject/MemberResources/1820_3_p_a.pdf

Liveable Neighbourhoods Policy, October 2007 (as updated January 2009)
<http://www.planning.wa.gov.au/publications/919.asp>

City of Wanneroo Council Agenda, 1 June 2010 (refer to item PS06-06/10)
http://www.wanneroo.wa.gov.au/files/c55f8937-95dc-4ac2-b2d5-9e9100ce8ade/Planning_Sustainability_Part_3.pdf

City of Wanneroo Local Planning Policy No. 4.1: Wetlands, June 2010 and
 City of Wanneroo Local Planning Policy No. 4.3: Public Open Space, May 2011
http://www.wanneroo.wa.gov.au/Planning/Schemes_Policies_and_Legislation/Planning_Policies

City of Wanneroo Local Biodiversity Strategy 2011-2016, May 2011
http://www.wanneroo.wa.gov.au/files/22617c1a-922d-4361-a31d-9eed00a20fdc/FINAL_Local_Biodiversity_Strategy_Council_Adopted_3511.pdf

City of Wanneroo Council Agenda, 23 August 2011 (refer to Item PS05-08/11)
http://www.wanneroo.wa.gov.au/files/1c85afd3-1a96-45aa-9366-9f440104ce01/PS04_to_PS07.pdf

Best Practice Example of Local Biodiversity Planning - City of Greater Geraldton -

Geraldton is situated approximately 430 km north of Perth, and is the main regional centre for the local government area that has been created through the amalgamation of the City of Geraldton, the Shire of Greenough and the Shire of Mullewa. The City of Greater Geraldton covers an area of 12,625 km² with a population of more than 33,000.

The City of Greater Geraldton has received support from the Perth Biodiversity Project and the EnviroPlanning Project to prepare a local biodiversity strategy and address biodiversity conservation through land use planning. Information to assist local biodiversity planning has been provided by the Geraldton Regional Flora and Vegetation Survey, which was funded through EnviroPlanning, LandCorp and the local government.

Geraldton Regional Flora and Vegetation Survey

The Geraldton Regional Flora and Vegetation Survey (GRFVS), covering more than 40,700 ha in the City of Greater Geraldton and the Shire of Chapman Valley, aims to provide a regional context for land use planning and the environmental impact assessment of proposals affecting native vegetation in the Geraldton region. The need for identification, retention and conservation of remnant vegetation was recognised by the Environmental Protection Authority (EPA) in Bulletin 891, which was prepared in response to the draft Geraldton Region Plan released by the WAPC in 1998.

The GRFVS involved desktop analysis of existing information on vegetation and soils, field survey of 81 floristic quadrats, statistical analysis of quadrat data that identified floristic groups, and further interpretation of floristic groups that determined recognisable plant communities.

The GRFVS report, published by the WAPC in March 2010, provides information on vegetation types, mapped and described at the regional scale as Beard vegetation associations, and at the local scale as GRFVS plant communities. Each of the 17 plant communities identified through the GRFVS has been discussed in terms of extent, rarity, representation, diversity, vegetation condition, and relationship to Beard vegetation associations, in order to assist in determining conservation significance.

In May 2010 the EPA released Environmental Protection Bulletin No. 10 to endorse the GRFVS as a key information source to help minimise the environmental impact of future development in the Geraldton region. In particular, the EPA noted that:

- biodiversity conservation is a significant issue in the region, due to extensive clearing of native vegetation, the high level of fragmentation, and the very low protection of remaining vegetation in conservation reserves;
- the primary protection of remnant native vegetation is best achieved by developing cleared areas in preference to uncleared lands;
- the survey provides important guidance in planning to firstly avoid, and then minimise the impacts of development proposals and planning schemes on flora and vegetation;

- the information contained in the survey will be used by the EPA to assess the impact of proposals on regionally significant flora and vegetation; and
- the use of the GRFVS information to assist strategic regional and conservation planning, and the extension of the survey methodology to other areas is supported.

The bulletin also provided a summary of key findings from the GRFVS, which made specific reference to plant communities of conservation significance. These included plant communities that are restricted to a small or localised area, and those that are representative of communities that were formally widespread but are now largely degraded or threatened (such as GRFVS plant community 13 'Sandplain: *Banksia prionotes* / *Acacia rostellifera*' which occurs in the Glenfield/Waggrakine area).

Vegetation Condition Survey

The GRFVS identified that the Banksia-dominated vegetation in the Glenfield/Waggrakine area is of high conservation significance. According to pre-European vegetation mapping published by Beard in 1976, the Banksia-dominated vegetation occupied almost half of the GRFVS area. About 12% of the GRFVS area is now occupied by this plant community (13 'Sandplain: *Banksia prionotes* / *Acacia rostellifera*'), with most of the best examples occurring in the Glenfield/Waggrakine area.

In order to assist structure planning of the Glenfield (urban) and Waggrakine (rural-residential) areas, a vegetation condition survey was undertaken in the spring of 2008. The survey categorised areas according to the vegetation condition scale developed by Keighery (1994), from 'completely degraded' to 'excellent' (refer to Figure 5). In the Glenfield structure plan, the two largest areas in 'very good' condition were designated for conservation in public open space; and all areas of vegetation in 'good' or better condition were identified on the Waggrakine structure plan map (Figure 6).

Waggrakine Rural-Residential Structure Plan

The Waggrakine Rural-Residential Structure Plan was adopted by the City of Geraldton-Greenough Council on 21 December 2010. The structure plan was prepared in response to the findings of the GRFVS, and aims to improve environmental outcomes through appropriate subdivision design and management of remnant vegetation.

Key objectives of the Waggrakine Rural-Residential Structure Plan include:

- *Identify areas of native vegetation worthy of conservation and protection and achieve a positive biodiversity outcome for such areas*
- *Support the development of rural residential areas with appropriate lot sizes that promote revegetation and the retention of significant remnant vegetation*
- *Give conservation, landscape and biodiversity values an economic worth by providing for limited subdivision in exchange for protecting and enhancing remnant vegetation*

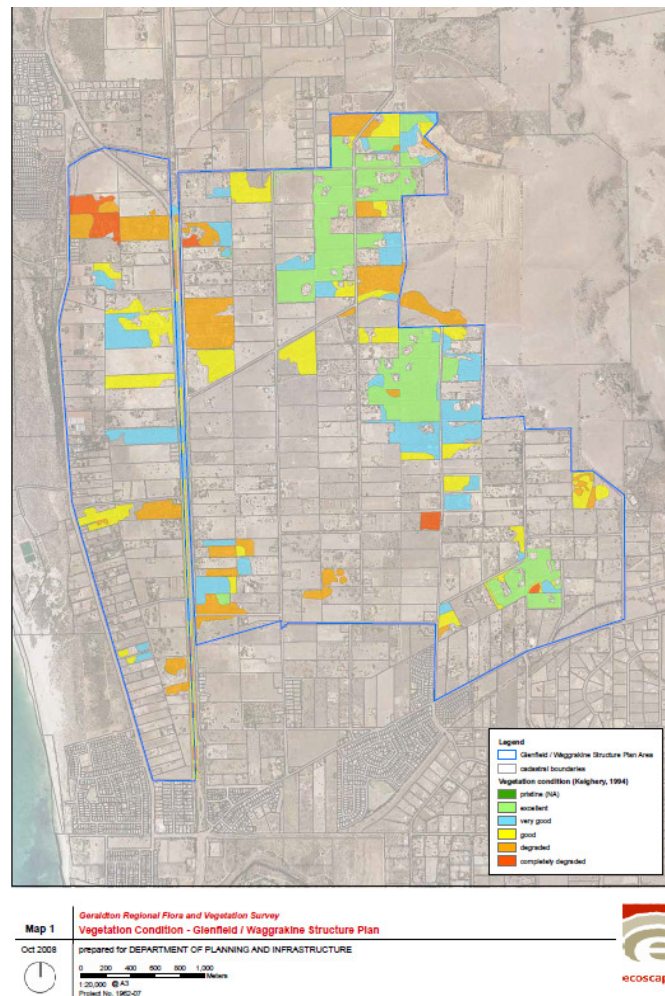


Figure 5: Map of vegetation condition in the Glenfield/Waggrakine area

The structure plan map shows areas of regionally significant vegetation in 'good' or better condition (refer to green shading on Figure 6), as well as proposed lot boundaries which would accommodate future subdivision and development without adversely impacting on native vegetation. Some areas do not have proposed boundaries indicated on the structure plan map (refer to stars on Figure 6), and proponents will need to demonstrate an appropriate subdivision design to retain native vegetation. The structure plan also identifies land parcels where 'innovative strata development' and 'possible land exchanges' with Council should be investigated, in order to achieve the best outcomes for biodiversity conservation.

The structure plan requires that a Detailed Area Plan be prepared and implemented as a condition of subdivision or development approval, and should address the following:

- Location and condition of remnant vegetation
- Revegetation areas, species and management actions
- Bushfire hazard assessment and mitigation actions (e.g. firebreaks)
- Location of fencing and vehicle access ways
- Proposed areas for stocking
- Building envelopes and/or building exclusion areas

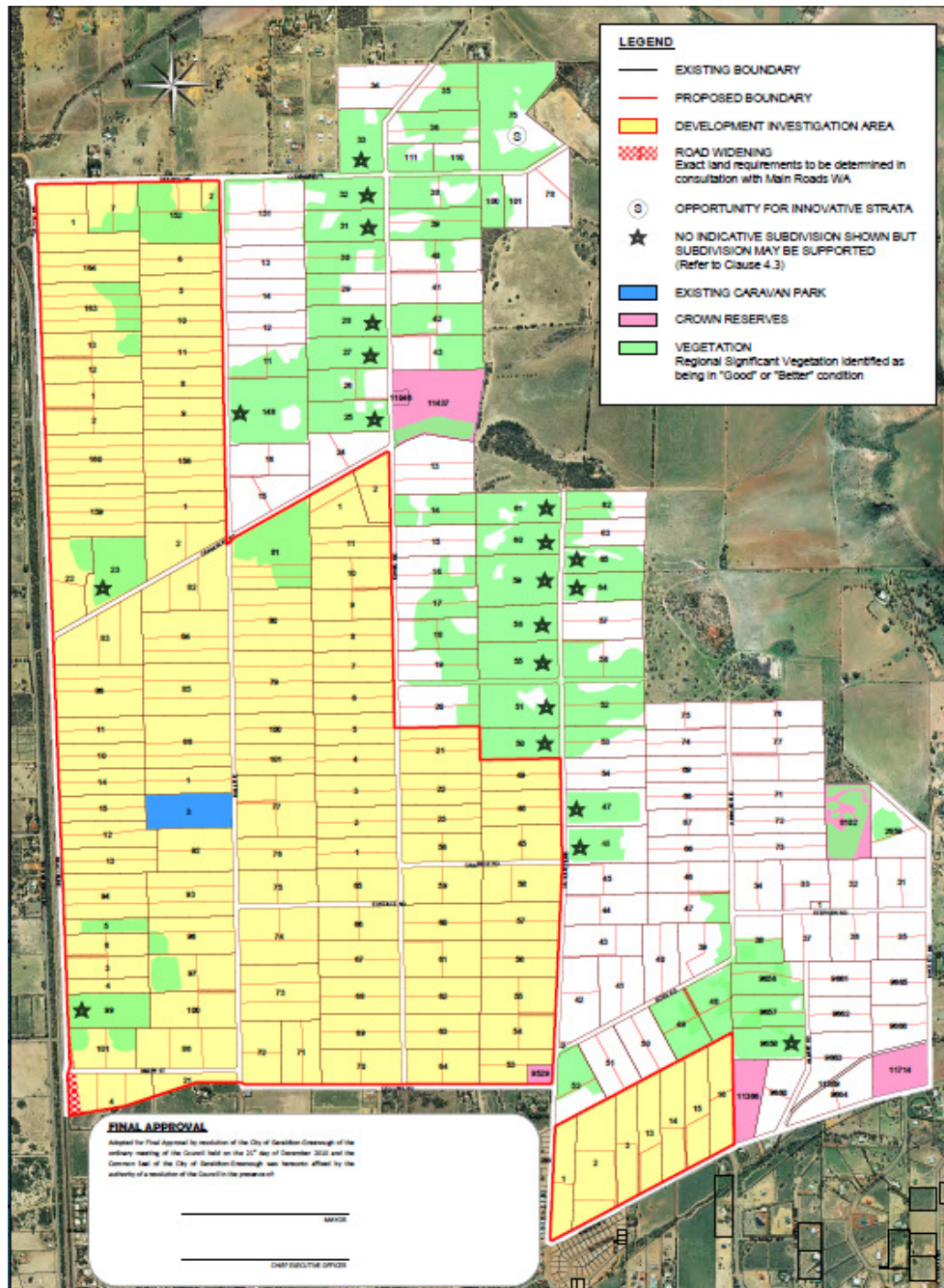


Figure 6: Waggrakine Rural-Residential Structure Plan Map

All development is required to be either contained within a building envelope (where the amount of remnant vegetation restricts the location of development), or not located within a building exclusion area (where a lot has some areas of remnant vegetation that should be protected and the remaining land is unencumbered in terms of development location). The structure plan contains examples of preferred subdivision design to accommodate development within existing cleared areas (Figure 7).

Also, the structure plan provides guidance on tree planting requirements under clause 5.14.4 of the City of Geraldton Town Planning Scheme No. 5, whereby cleared land parcels are required to be revegetated to a greater extent than land parcels containing remnant vegetation in 'good' or better condition.

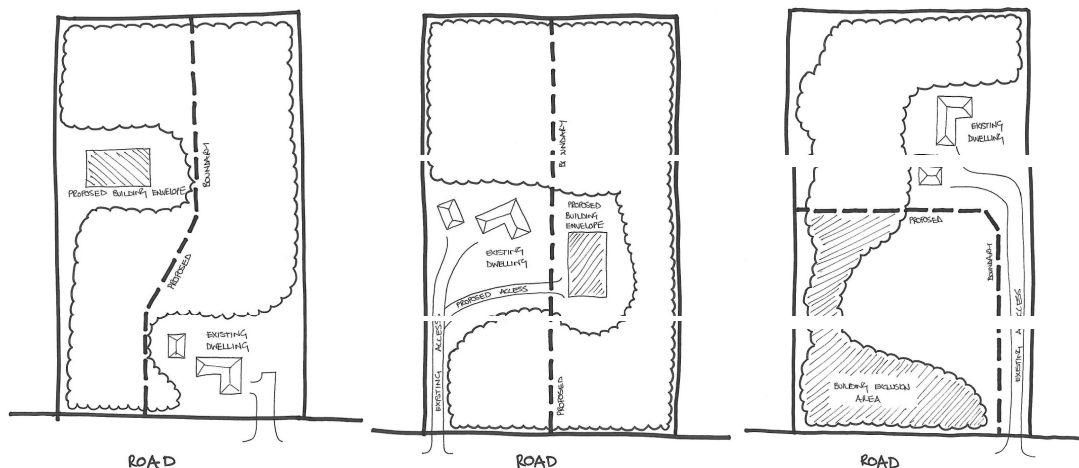


Figure 7: Examples of preferred subdivision design to accommodate development in existing cleared areas.

Local Biodiversity Strategy

On 28 August 2012 the City of Greater Geraldton Council endorsed the draft Geraldton Local Biodiversity Strategy (LBS) for public comment. It is proposed that the LBS be endorsed as a local planning policy under Town Planning Scheme No. 3 (Geraldton) and Town Planning Scheme No. 5 (Greenough). It is also expected that the LBS will inform the preparation of the City's Local Planning Strategy, which will then be endorsed by the WAPC.

Further information

City of Geraldton Town Planning Scheme No. 5

[http://online.planning.wa.gov.au/LPS/data/Local%20Planning%20Schemes/Geraldton-Greenough%20-%20City%20of%20\(Scheme%205\)/Scheme%20Text.pdf](http://online.planning.wa.gov.au/LPS/data/Local%20Planning%20Schemes/Geraldton-Greenough%20-%20City%20of%20(Scheme%205)/Scheme%20Text.pdf)

Environmental Protection Authority Bulletin 891: Geraldton Region Plan, May 1998

http://epa.wa.gov.au/EPADocLib/854_B891.pdf

Geraldton Region Plan, June 1999

<http://www.planning.wa.gov.au/publications/853.asp>

Geraldton Regional Flora and Vegetation Survey, March 2010

<http://www.planning.wa.gov.au/publications/854.asp>

Environmental Protection Bulletin No. 10: Geraldton Regional Flora and Vegetation Survey, May 2010

http://epa.wa.gov.au/EPADocLib/3186_GRFVSEPB103510.pdf

Waggrakine Rural-Residential Structure Plan, June 2011

<http://www.cgg.wa.gov.au/sites/default/files/Waggrakine%20Rural-Residential%20Structure%20Plan%20Complete%20Document%20%28September%202010%29.pdf>