

## **Attachment 1 - BCD NE Branch Steps for Assessing Biodiversity in Planning Proposals**

### Introduction

Planning Proposals should demonstrate consistency with the strategic planning framework including the relevant Regional Plan.

To achieve biodiversity goals, directions, and actions in the relevant Regional Plan for areas with High Environmental Value (HEV), Planning Proposals should identify areas of HEV at the property scale and the current land uses in such areas should not be intensified.

Areas of HEV should instead be better protected by Planning Proposals through an appropriate zone which has strong conservation objectives and limited land uses, an appropriate minimum lot size so the land cannot be subdivided, and future management through a Biodiversity and Vegetation Management Plan (BVMP). Also, the residual biodiversity impacts of planning proposals should be offset.

Planning Proposals should also secure the provision of these biodiversity offsets and the preparation and implementation of the BVMP.

### Biodiversity assessment for Planning Proposals

Biodiversity assessment for Planning Proposals should be undertaken in accordance with the following seven steps:

#### **Step 1: Include the entire lot in the planning area**

The planning area should cover the entire cadastral lot unless only a part of the lot is identified in a growth management strategy, in which case the planning area could be limited to just that part of the lot.

#### **Step 2: Consider biodiversity certification**

The proponent should consider seeking biodiversity certification of the proposed future development land in the planning area as part of the Planning Proposal.

#### **Step 3: Identify HEV**

If biodiversity certification is not sought, then the Planning Proposal should identify and map areas of HEV in the planning area with desktop analysis and site investigations as set out in Attachment 1.

#### **Step 4: Avoid and minimise impacts on HEV**

The Planning Proposal should be designed to maximise avoiding land use intensification in HEV areas and should provide justification to demonstrate how the land use zones and minimum lot sizes (MLS) applied to HEV areas and to other parts of the planning area accord with the guidance in Attachment 2.

#### **Step 5: Protect HEV and SAIL**

The Planning Proposal should use planning mechanisms (e.g. E zones, MLS to preclude subdivision) and a BVMP to protect HEV.

#### **Step 6: Calculate biodiversity credits for future development impacts**

The Planning Proposal should apply Stage 1 of the Biodiversity Assessment Method to calculate the biodiversity credits for parts of the planning area rezoned for land use intensification.

#### **Step 7: Secure biodiversity credits and VMP**

The Planning Proposal should include a planning agreement to secure:

- a. the provision of the biodiversity credits from Step 6 at the development application (DA) stage unless the Biodiversity Offsets Scheme (BOS) is triggered by that DA, and more biodiversity credits are required by the BOS for the DA; and
- b. preparation and implementation of the BVMP for the E zoned land.

## Attachment 2 - BCD NE Branch HEV Criteria and Identification Methods at the Property Scale

High Environmental Value (HEV) Criteria and Components		Property Scale HEV Identification Method
Criterion 1. Sensitive Biodiversity Mapped on the Biodiversity Values Map		
1.1 Biodiversity Values Map		<ul style="list-style-type: none"> <li>a. Identify the parts of the land on the Biodiversity Values map which can be viewed at <a href="https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsets-scheme/about-the-biodiversity-offsets-scheme/when-does-bos-apply/biodiversity-values-map">https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsets-scheme/about-the-biodiversity-offsets-scheme/when-does-bos-apply/biodiversity-values-map</a>.</li> <li>b. Inspect those mapped areas on the land to verify accuracy and map as HEV where the map is accurate.</li> </ul>
Criterion 2. Native vegetation of high conservation value		
2.1 Over-cleared vegetation types		<ul style="list-style-type: none"> <li>a. Identify Plant Community Types (PCTs) on the land through field work.</li> <li>b. Register and visit the Vegetation Information System (VIS) database at <a href="mailto:vis@environment.nsw.gov.au">vis@environment.nsw.gov.au</a>.</li> <li>c. Use the VIS to determine whether the % cleared status of the PCTs identified through field work on the land is above 70%.</li> <li>d. Map all PCTs on the land with the % cleared above 70% as HEV.</li> </ul>
2.2 Vegetation in over-cleared landscapes (Mitchell landscapes)		<ul style="list-style-type: none"> <li>a. Identify over-cleared Mitchell landscapes by viewing map data from the SEED portal <a href="https://www.seed.nsw.gov.au/">https://www.seed.nsw.gov.au/</a> – selecting NSW (Mitchell Landscapes) – latest version, selecting Show on Seed Map and viewing the View Over Cleared Land Status.</li> <li>b. Map all native vegetation on the land as HEV if it is in an over-cleared Mitchell landscape.</li> </ul>
2.3 Threatened Ecological Communities - any vulnerable, endangered, or critically endangered ecological community listed under the BC Act, the FM Act 1994 or the EPBC Act and not mapped on the BV map		<ul style="list-style-type: none"> <li>a. Identify Plant Community Types (PCTs) on the land through field work.</li> <li>b. Register and visit the VIS database at <a href="mailto:vis@environment.nsw.gov.au">vis@environment.nsw.gov.au</a>.</li> <li>c. Use the VIS to determine whether the PCTs on the land have Threatened Ecological Community (TEC) Status.</li> <li>d. If not identified as a TEC from steps a – c above, then refer to the NSW <a href="#">Threatened Species Scientific Committee determinations</a> to consider whether any of the PCTs accords with the determinations.</li> <li>e. Map all PCTs on the land that are TECs as HEV.</li> </ul>
2.4 100m buffer on Coastal Wetlands and Littoral Rainforest areas as per the Coastal Management SEPP 2018		<ul style="list-style-type: none"> <li>a. Locate the land on the SEPP Coastal Management SEPP maps available at <a href="https://webmap.environment.nsw.gov.au/PlanningHtml5Viewer/?viewer=SEPP_CoastalManagement">https://webmap.environment.nsw.gov.au/PlanningHtml5Viewer/?viewer=SEPP_CoastalManagement</a></li> <li>b. Map any parts of the land shown as proximity areas for Coastal Wetlands and Littoral Rainforest as HEV.</li> </ul>
Criterion 3. Threatened species		
3.1 Key habitat for threatened species (vulnerable, endangered, or critically endangered species listed under BC Act)	Key breeding habitats with known breeding occurrence	<ul style="list-style-type: none"> <li>a. Search BioNet for threatened species records on and within 5km of the land</li> <li>b. Undertake field work to identify potential breeding habitats on the land for threatened species.</li> <li>c. Either assume breeding occurrence and map identified breeding habitats on the land as HEV or undertake targeted surveys during the breeding season and map these habitats as HEV if breeding occurs there.</li> </ul>
	Core Koala Habitat	<ul style="list-style-type: none"> <li>a. Check council records for approved comprehensive or individual property Koala Plans of Management (KPoM).</li> <li>b. Identify areas of core koala habitat on the land mapped in any approved KPoM and map these areas as HEV.</li> <li>c. If there are no approved KPoMs, then undertake field work in accordance with the relevant State Environmental Planning Policy (SEPP) for koalas, e.g. SEPP (Koala Habitat Protection) 2020, to determine whether Core Koala Habitat is present on the land.</li> <li>d. Map any core koala habitat identified on the land through field work as HEV.</li> </ul>

High Environmental Value (HEV) Criteria and Components		Property Scale HEV Identification Method
	Habitat for known populations of species-credit-species and SAI entities (species-credit species and SAI entities are identified in the Threatened Biodiversity Data Collection)	<ul style="list-style-type: none"><li>a. Search BioNet for threatened species records on and within 5km of the land.</li><li>b. Undertake field work to identify populations of threatened species credit species on the land and their habitats.</li><li>c. Map all habitats of known populations of species credit species on the land as HEV.</li></ul> <p>The Biodiversity Assessment Method and the Department's survey assessment guidelines should be referred to for suitable habitat assessment methodologies.</p> <p>If a recent Biodiversity Development Assessment Report has been prepared for the land, then this could be referred to in support of demonstrating how this criterion has been considered.</p>
	Key habitats for migratory species	<ul style="list-style-type: none"><li>a. Search BioNet for threatened migratory species records on and within 5km of the land.</li><li>b. Undertake field work to identify habitats of threatened migratory species on the land.</li><li>c. Map all habitats of threatened migratory species on the land as HEV.</li></ul>
Criterion 4. Wetlands, rivers, estuaries & coastal features of high environmental value		
4.1 Nationally important wetlands	Note: Rivers and their riparian areas comprising HEV are included in the Biodiversity Values Map under HEV Criterion 1 as protected riparian land	<ul style="list-style-type: none"><li>a. Search the Directory of Important Wetlands in Australia for those occurring in NSW available at <a href="http://www.environment.gov.au/cgi-bin/wetlands/search.pl?smode=DOIW">http://www.environment.gov.au/cgi-bin/wetlands/search.pl?smode=DOIW</a>.</li><li>b. Identify any nationally important wetlands listed in the directory that occur on the land and map these areas as HEV.</li></ul>
4.2 Vulnerable Estuaries and ICOLLS		<ul style="list-style-type: none"><li>a. Identify whether any vulnerable estuaries or ICOLLS occur on, or in the vicinity of, the land by reviewing the maps available at <a href="https://datasets.seed.nsw.gov.au/dataset/vulnerableestuariesandicolls">https://datasets.seed.nsw.gov.au/dataset/vulnerableestuariesandicolls</a>.</li><li>b. Map any vulnerable estuaries or ICOLLS that occur on, or in the vicinity of, the land as HEV.</li></ul>
Criterion 5. Areas of geological significance		
5.1 Karst landscapes		<ul style="list-style-type: none"><li>a. Identify whether limestone outcrops or caves occur on the land.</li><li>b. Consider any additional Karst landscapes that occur in the vicinity of the land, with reference to the NSW Government's <i>Guide to New South Wales Karst and Caves</i> available at <a href="https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Land-and-soil/nsw-karst-cave-guide-110455.pdf">https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Land-and-soil/nsw-karst-cave-guide-110455.pdf</a> and any other available karst mapping, such as karts maps associated with local environmental plans.</li><li>c. Map any limestone outcrops or caves on the land and any other karst landscapes that occur in the vicinity of the land as HEV.</li></ul>
5.2 Sites of geological significance included in the State Heritage Register or Heritage Inventory		<ul style="list-style-type: none"><li>a. Identify whether the land contains, or is in the vicinity of, the sites of geological significance listed in Appendix A.</li><li>b. Map any sites of geological significance that occur on, or in the vicinity of, the land as HEV.</li></ul>

**Appendix A: Sites of geological significance included in the State Heritage Register or Heritage Inventory**

<b>Local Government Area</b>	<b>Name</b>	<b>Location</b>
Canterbury Bankstown	Enfield Brickpits	7 Juno Parade, Greenacre
Cessnock	Bow Wow Creek Gorge	Sandy Creek Road, Mulbring
Eurobodalla	Myrtle Beach - Wasp Head Coastal Area	Durras
	Melville Point	Red Hill Road, Tomakin
Goulburn-Mulwaree	Badgerys Lookout View	Tallong
Kiama	Bombo Headland Quarry Geological Site	Princes Highway, Bombo
Port Stephens	Seaham Quarry	Torrence Street, Seaham
Shellharbour	Bass Point Area	Bass Point Tourist Road, Shellharbour
Warrumbungle	Narangarie Quarry Geological Site	Narangarie Road, Coolah
Uralla	The Captain Thunderbolt Sites – Thunderbolt's Rock	New England Highway, Uralla

### **Attachment 3 - BCD NE Branch Guidance for Avoiding and Minimising Impacts on HEV Land**

Decisions about the location of land use intensification in Planning Proposals should be informed by knowledge of biodiversity values including High Environmental Values (HEV) recognising that this is an iterative process that should consider the guidance provided below.

#### Locating land use intensification to avoid and minimise impacts on native vegetation and habitat

1. Direct impacts on clearing of native vegetation and habitat can be avoided and minimised by:
  - (a) locating land use intensification in areas where there are no biodiversity values
  - (b) locating land use intensification in areas where the native vegetation or threatened species habitat is in the poorest condition (i.e. areas that have a lower vegetation integrity score)
  - (c) locating land use intensification in areas that avoid habitat for species that have a high biodiversity risk weighting or native vegetation that is a critically endangered ecological community (CEEC) or an endangered ecological community (EEC)
  - (d) locating land use intensification such that connectivity enabling movement of species and genetic material between areas of adjacent or nearby habitat is maintained.
2. In selecting locations for land use intensification, the following should be addressed, as they apply to the Planning Proposal:
  - (a) an analysis of alternative modes or technologies that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed mode or technology
  - (b) an analysis of alternative routes that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed route
  - (c) an analysis of alternative locations that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed location
  - (d) an analysis of alternative sites within a property on which land use intensification is proposed that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed site.
3. Justifications for decisions on the location of land use intensification should identify any other site constraints that the proponent has considered in determining the location and design of these areas, e.g. bushfire protection requirements including clearing for asset protection zones, flood planning levels, servicing constraints.
4. Actions taken to avoid and minimise impacts through locating areas for land use intensification must be documented and justified in the Planning Proposal.

#### Designing a planning proposal to avoid and minimise impacts on native vegetation and habitat

1. Planning Proposal design, including the potential location of future temporary and permanent ancillary construction and maintenance facilities, should avoid and minimise clearing of native vegetation and habitat by:
  - (a) reducing the clearing footprint of future development
  - (b) locating ancillary facilities in areas where there are no biodiversity values
  - (c) locating ancillary facilities in areas where the native vegetation or threatened species habitat is in the poorest condition (i.e. areas that have a lower vegetation integrity score)

- (d) locating ancillary facilities in areas that avoid habitat for species and vegetation in high threat status categories (e.g. an EEC or CEEC)
- (e) providing structures to enable species and genetic material to move across barriers or hostile gaps
- (f) making provision for the demarcation, ecological restoration, rehabilitation and/or ongoing maintenance of retained native vegetation habitat on the development site.

2. Efforts to avoid and minimise impacts through design must be documented and justified in the Planning Proposal.

#### Other Impacts on HEV

Some future development to be enabled by a Planning Proposal may have other impacts on HEV in addition to, or instead of, impacts from clearing vegetation and/or loss of habitat. For many of these impacts, HEV may be difficult to quantify, replace or offset, making avoiding and minimising impacts critical.

Other impacts on HEV can include:

- (a) impacts of future development on the habitat of threatened species or ecological communities associated with:
  - i. karst, caves, crevices, cliffs and other geological features of significance, or
  - ii. rocks, or
  - iii. human made structures, or
  - iv. non-native vegetation
- (b) impacts of future development on the connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range
- (c) impacts of future development on movement of threatened species that maintains their life cycle
- (d) impacts of future development on water quality, water bodies and hydrological processes that sustain threatened species and threatened ecological communities (including from subsidence or upsidence resulting from underground mining)
- (e) impacts of wind turbine strikes on protected animals
- (f) impacts of vehicle strikes on threatened species or on animals that are part of a Threatened Ecological Community.

#### Locating a planning proposal to avoid and minimise other impacts on HEV

1. Other impacts on HEV can be avoided and minimised by:

- (a) locating areas of land use intensification to avoid direct impacts on such habitat features
- (b) locating areas of land use intensification to avoid and minimise future operations beneath such habitat features, e.g. locating future development away from geological features of significance or water dependent plant communities and their supporting aquifers
- (c) locating areas of land use intensification to avoid severing or interfering with corridors connecting different areas of habitat, migratory flight paths to important habitat or local movement pathways

- (d) optimising the locations of land use intensification to minimise future interactions with threatened species and ecological communities, e.g. allowing for buffers around features that attract and support aerial species, such as forest edges, riparian corridors and wetlands, ridgetops and gullies
  - (e) locating areas of land use intensification to avoid direct impacts on water bodies.
2. In selecting areas of land use intensification, the following should be addressed, as they apply to the Planning Proposal:
- (a) an analysis of alternative modes or technologies that would avoid or minimise such impacts and justification for selecting the proposed mode or technology
  - (b) an analysis of alternative routes that would avoid or minimise such impacts and justification for selecting the proposed route
  - (c) an analysis of alternative locations that would avoid or minimise such impacts and justification for selecting the proposed location
  - (d) an analysis of alternative sites within a planning area that would avoid or minimise such impacts and justification for selecting the proposed site.
3. Justifications for decisions about areas of land use intensification should identify any other site constraints that the proponent has considered in determining the locations of such areas and design of the Planning Proposal, e.g. bushfire protection requirements including clearing for asset protection zones, flood planning levels, servicing constraints.
4. Efforts to avoid and minimise impacts through locating areas of land use intensification must be documented and justified in the Planning Proposal.

#### Designing a Planning Proposal to avoid and minimise other impacts on HEV

1. Other impacts on HEV can be avoided and minimised by:
- (a) engineering solutions, e.g. proven techniques to minimise fracturing of bedrock underlying features of geological significance, water dependent communities and their supporting aquifers, proven engineering solutions to restore connectivity and favoured movement pathways
  - (b) design of project elements to minimise interactions with threatened and protected species and ecological communities, e.g. designing turbines to dissuade perching and minimise the diameter of the rotor swept area, designing fencing to prevent animal entry to transport corridors
  - (c) design of the project to maintain environmental processes critical to the formation and persistence of habitat features not associated with native vegetation
  - (d) design of the project to maintain hydrological processes that sustain threatened species and TECs
  - (e) design of the project to avoid and minimise downstream impacts on rivers, wetlands and estuaries by control of the quality of water released from the site.
2. Efforts to avoid and minimise other impacts on HEV through design must be documented and justified in the Planning Proposal.