



# **A Biodiversity Planning Assessment for the New England Tableland Bioregion**

Summary Report

Version 3.1



**Queensland  
Government**

Prepared by: Biodiversity Assessment Team, Queensland Herbarium and Biodiversity Science, Department of the Environment, Tourism, Science and Innovation

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Cover image: Turtle rock and the Sphynx, Girraween National Park - photo taken and provided by Shane Chemello, Department of the Environment, Tourism, Science and Innovation.

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## Glossary

Acronym	Description
BAMM	Biodiversity Assessment and Mapping Methodology
BPA	Biodiversity Planning Assessments
DETSI	Queensland Government Department of the Environment, Tourism, Science and Innovation
NET	New England Tableland Bioregion
WildNet	Department of the Environment, Tourism, Science and Innovation (DETSI)'s corporate wildlife application containing records and other information on Queensland flora and fauna

# 1 Introduction

This report summarises the results of a Biodiversity Planning Assessment (BPA) for the New England Tableland bioregion. For this report, the New England Tableland bioregion (NET) incorporates the northernmost extremities of two nationally recognised (IBRA) (Thackway and Cresswell 1995) bioregions that extend into Queensland, the New England Tableland (Granite belt region) and Nandewar (Traprock country). To date, BPA results have been used to inform a wide range of assessment, planning and referral activities including:

- regional plans and local planning schemes,
- government advice under the *Planning Act 2016*, and
- State government tenure dealings including identification of protected areas.

Biodiversity Planning Assessment results have also been used by environmental consultants, environmental non-government organisations and natural resource management groups to:

- identify priorities for protection, regulation, or rehabilitation of ecosystems,
- contribute to impact assessment of large-scale development,
- provide input to socio-economic evaluation and prioritisation processes, and
- inform natural resource management plans.

This project was led by the Department of the Environment, Tourism, Science and Innovation (DETSI) with significant contributions from regional stakeholders and experts. This report should be read in conjunction with the accompanying Expert Panel Report (DETSI 2024).

## 2 New England Tablelands study region

Covering 775,000 hectares, the study area is bounded to the south by the NSW border, and the Brigalow Belt bioregion to the north, east and west. The NET is comprised of three subregions: the Queensland sections of the Stanthorpe Plateau and Tenterfield Plateau subregions and the Nandewar subregion (refer to Table 1 and Figure 1). The study region falls within the national New England Tableland and Nandewar IBRA bioregions that extend into New South Wales.

**Table 1. Remnant vegetation (QHBS 2024a) extent in NET subregions.**

Subregion	Pre-clearing area (ha)	Remnant area (ha) as of 2021	Remnant area (% remaining) as of 2021
Stanthorpe Plateau	137,823	72,935	52.9
Tenterfield Plateau	7,464	3,549	47.6
Nandewar	629,339	203,161	32.3
<b>Total bioregion</b>	<b>774,626</b>	<b>279,645</b>	<b>36.1</b>

The Stanthorpe Plateau and Tenterfield Plateau subregions are characterised by a high altitude (>800m) granite batholith that continues into NSW, and many ridgelines are characterised by granite tors. These subregions hold a diversity of ecosystems including shrublands, mountain heaths, rock pavement gardens and sedgeland. Geology, altitude, and the pronounced moisture gradient from southeast to northwest has led to a diverse heathland and woodland flora with affinities to southern states and coastal areas. These subregions hold many endemic species.

The Nandewar subregion is characterised by metamorphosed sandstone known as ‘traprock’ and supports many similar granite flora species (Sattler and Williams 1999). It supports a mixture of temperate woodland fauna species as well as fauna associated with the Granite Belt and the Brigalow Belt bioregion (Garnett and Crowley 2000).

The rugged granite topography of the Stanthorpe Plateau has resulted in the retention of a greater proportion of natural vegetation cover than remains in the parts of the bioregion in New South Wales, which have been heavily cleared for pasture. However, most of the flatter country including alluvial plains has been cleared, and much of the remaining natural vegetation is along ridgelines.

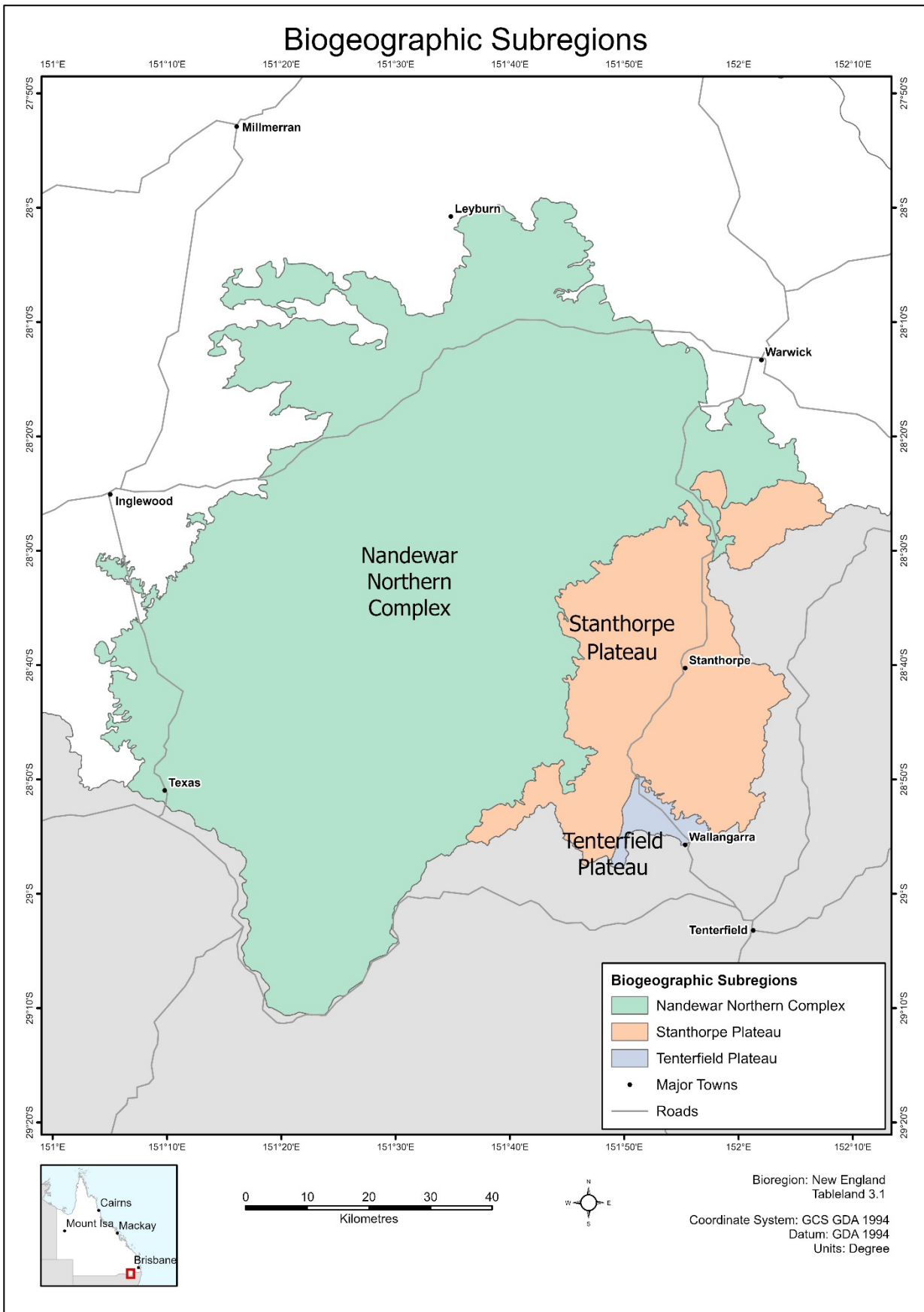
Land use in the bioregion is primarily agriculture, including fruit and vegetable production, wool growing and cattle grazing. The temperate climate and proximity to the major market of Brisbane has made growing of stone fruit, apples, grapes and vegetables the major agricultural industry of the region. Wine production and tourism are other important local industries. The major population centre is Stanthorpe.

National parks in the region include Girraween National Park and Sundown National Park. Approximately 4.5 percent of the bioregion falls within protected areas<sup>1</sup>.

Key threats to biodiversity values within the bioregion include:

- direct habitat loss, including from rural residential development, and indirect habitat loss from agricultural practices and intensive grazing.
- invasion by exotic and non-local plants and animals, and control measures such as use of herbicides.
- climate change: predicted increases in temperature and reduced precipitation is envisaged to impact both flora, fauna, as well as ecosystem composition within the region.
- inappropriate fire regimes (which vary in frequency and timing across the region) are recognised as the main threat to flora in the region, and similarly pose a threat to many fauna. Further research is needed to determine optimal fire regimes. Expected longer term rises in temperatures and reduced rainfall will also increase the risk of destructive wildfires (Low 2011).

<sup>1</sup> As defined under the Queensland *Nature Conservation Act 1992*



**Figure 1. Subregions of the New England Tableland**



### 3 Methods and implementation

The Biodiversity Assessment and Mapping Methodology version 2.2 (BAMM) (EHP, 2014) was used to generate this BPA<sup>2</sup>. The BAMM was developed to provide a consistent approach for assessing biodiversity values at the landscape scale using vegetation mapping data generated or approved by the Queensland Herbarium. The BAMM is used by DETSI to generate BPAs for bioregions across Queensland. The BAMM is published on the DETSI website at <https://www.qld.gov.au/environment/plants-animals/biodiversity/planning/>. The methodology was modified from an approach initially developed by Chenoweth EPLA (2000) and the results can be used by government departments, local governments or members of the community to advise on a range of decision-making processes.

The methodology is applied in two stages (Figure 2). The first stage uses existing data to assess seven diagnostic criteria (A to G, Table 2). These account for ecological concepts including rarity, diversity, fragmentation, habitat condition, resilience, threats and ecosystem processes. They are diagnostic in that they are used to filter available data and provide a 'first-cut' determination of significance. This initial assessment is generated on a geographic information system (GIS) and is then refined using a second group of expert panel criteria (H to K). These criteria rely more upon expert opinion than on quantitative data and focus on information that may not be available uniformly across the bioregion. A generalised terms of reference for the expert panels is provided in EHP (2014).

A single diagnostic biodiversity significance score is derived for each assessment unit by combining the ratings for criteria A to G according to fixed rules. This diagnostic score is then combined with the expert panel significance according to fixed rules to determine the overall biodiversity significance and scale of significance (State, Regional or Local) of that unit. The rule sets (combination rating table or filter table) used to evaluate the diagnostic criteria and assign an initial biodiversity significance are in [Appendix 2](#).

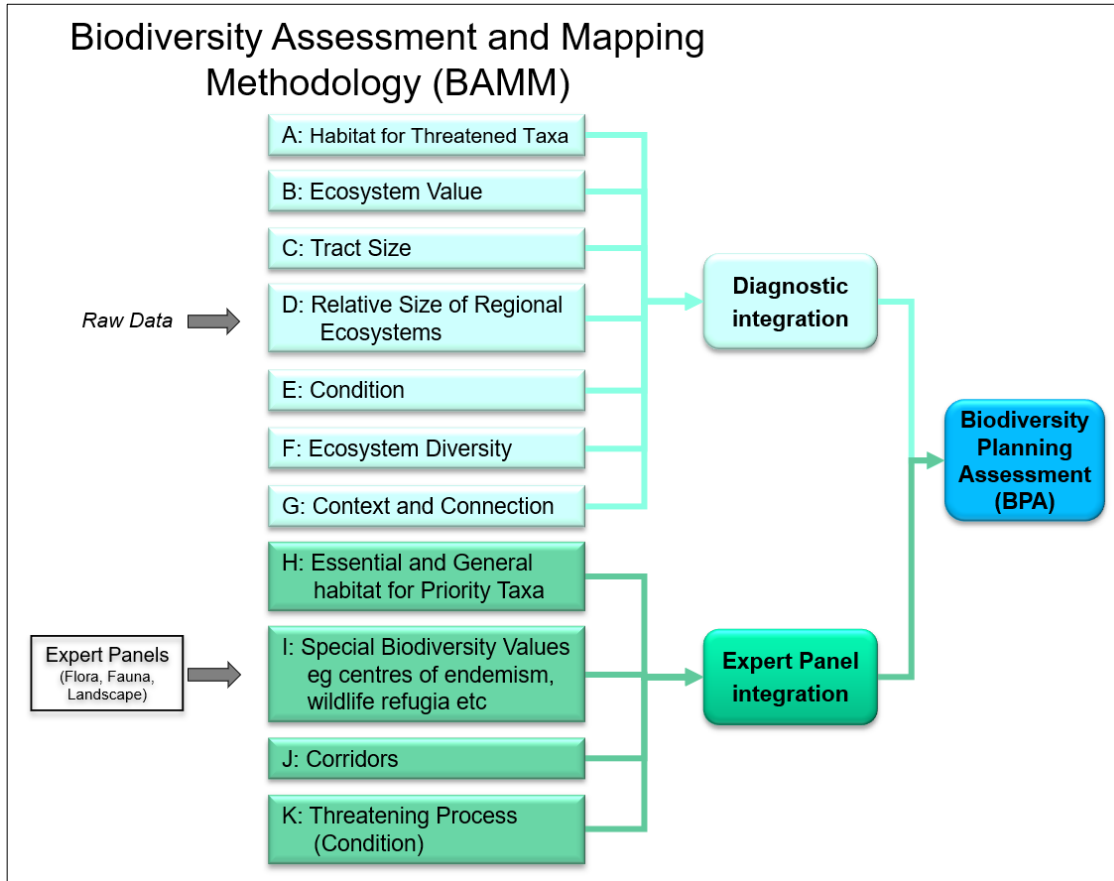
Results of the diagnostic and expert panel biodiversity significance scores are combined to provide an overall score of biodiversity significance. BPA biodiversity significance is reported at the following scales:

- **State significance.** Areas assessed as containing biodiversity values of bioregional or state significance. They also include areas assessed as being significant at national or international scales.
- **Regional significance.** Areas assessed as containing biodiversity values of sub-bioregional significance. These areas have lower biodiversity values than areas assessed as being of State significance.
- **Local significance and or other values.** Areas assessed as containing biodiversity values, but not significant at State or Regional scales.
- **Non bioregional ecosystem.** A regional ecosystem outlier from an adjacent bioregion.

Detailed information on the values within each criterion are also available, allowing the dataset to be flexibly applied to meet BPA end user requirements.

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<sup>2</sup> Note: The BAMM version 2.2 was implemented in Python and ArcGIS ModelBuilder. The method has been adjusted slightly to include minor method review elements as described in [Appendix 1](#). [Appendix 4](#) lists the Criterion C subregion thresholds used in this assessment. For Criterion F (ecosystem diversity), the calculated buffer distance was 129.1 metres.



**Figure 2. Biodiversity Assessment and Mapping Methodology (BAMM) process**

**Table 2. BAMM criteria. Diagnostic criteria are assessed using uniformly available data and Expert panel criteria are assessed by an expert panel using non-uniform data.**

Criteria	Description	Assessment method
A	Habitat for EVNT (Critically Endangered, Endangered, Vulnerable and Near Threatened) taxa	Diagnostic
B	Ecosystem value, at two scales: B1: State B2: Regional	Diagnostic
C	Tract size	Diagnostic
D	Relative size of regional ecosystem at two scales: D1: State D2: Regional	Diagnostic
E	Condition	Diagnostic
F	Ecosystem diversity	Diagnostic
G	Context and connection (relationship to water, endangered ecosystems and physical connection between contiguous remnant and regrowth units)	Diagnostic
H	Habitat for priority taxa	Expert panel
I	Special biodiversity values	Expert panel
J	Corridors	Expert panel
K	Threatening process (condition)	Expert panel

### **3.1 Datasets**

Typically, a BPA draws on a wide range of datasets with a wide range of formats. This will generally include published scientific documents, unpublished data and information (grey literature) and officially collated data from Queensland Government sources including data from the Queensland Museum, Queensland Herbarium and WildNet. A list of datasets used in this assessment is included in [Appendix 3](#).

### **3.2 Expert panels**

A series of expert panels were held in Brisbane (Queensland Herbarium) from 6 to 8 June 2023 to identify flora, fauna and landscape ecological values. The findings from the NET BPA expert panel process are reported in the accompanying expert panel report (DETSI 2024).

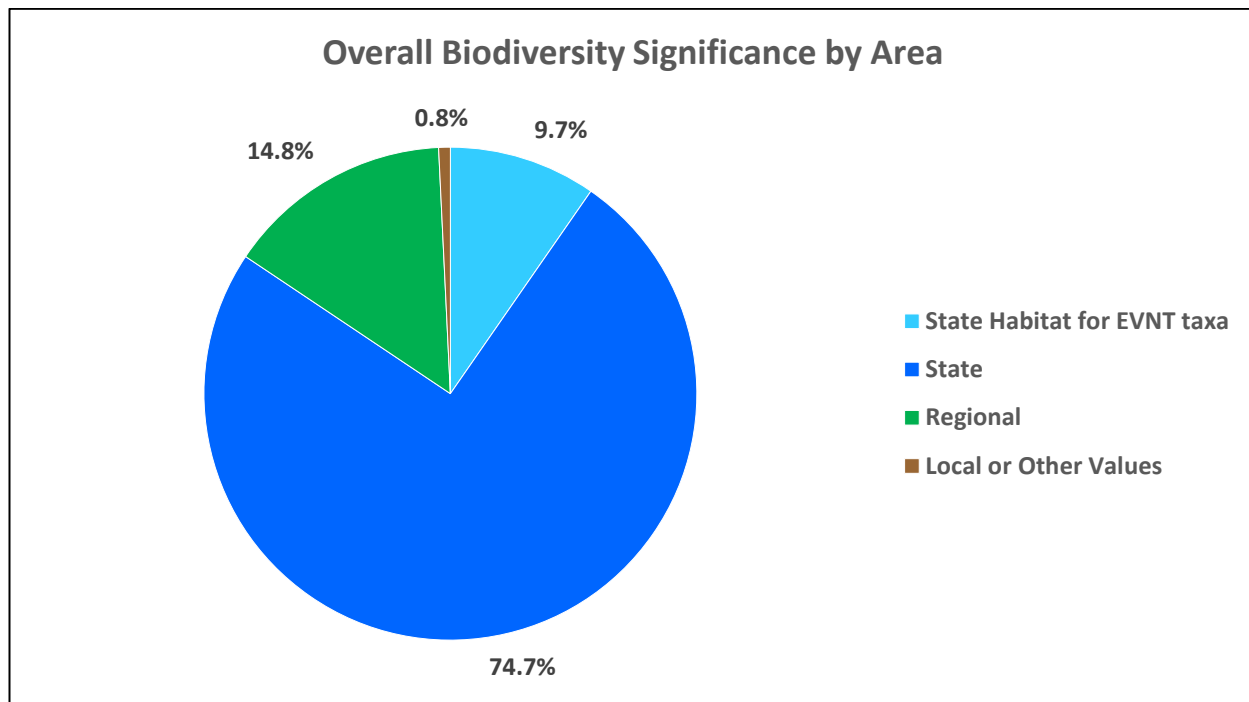
## 4 Results

Approximately 84 per cent of the remnant and regrowth vegetation of the NET was assessed as being of State biodiversity significance. The diagnostic criteria (Criteria A to G) accounted for 42 per cent of the vegetation mapped as being designated of State biodiversity significance, whilst 53%, was designated as Regional biodiversity significance.

The expert panel criteria assigned 88 per cent of remnant and regrowth vegetation within the NET as having biodiversity values of State or Regional significance. Please refer to the accompanying expert panel report for more detailed information on the special features identified during the BPA expert panel process.

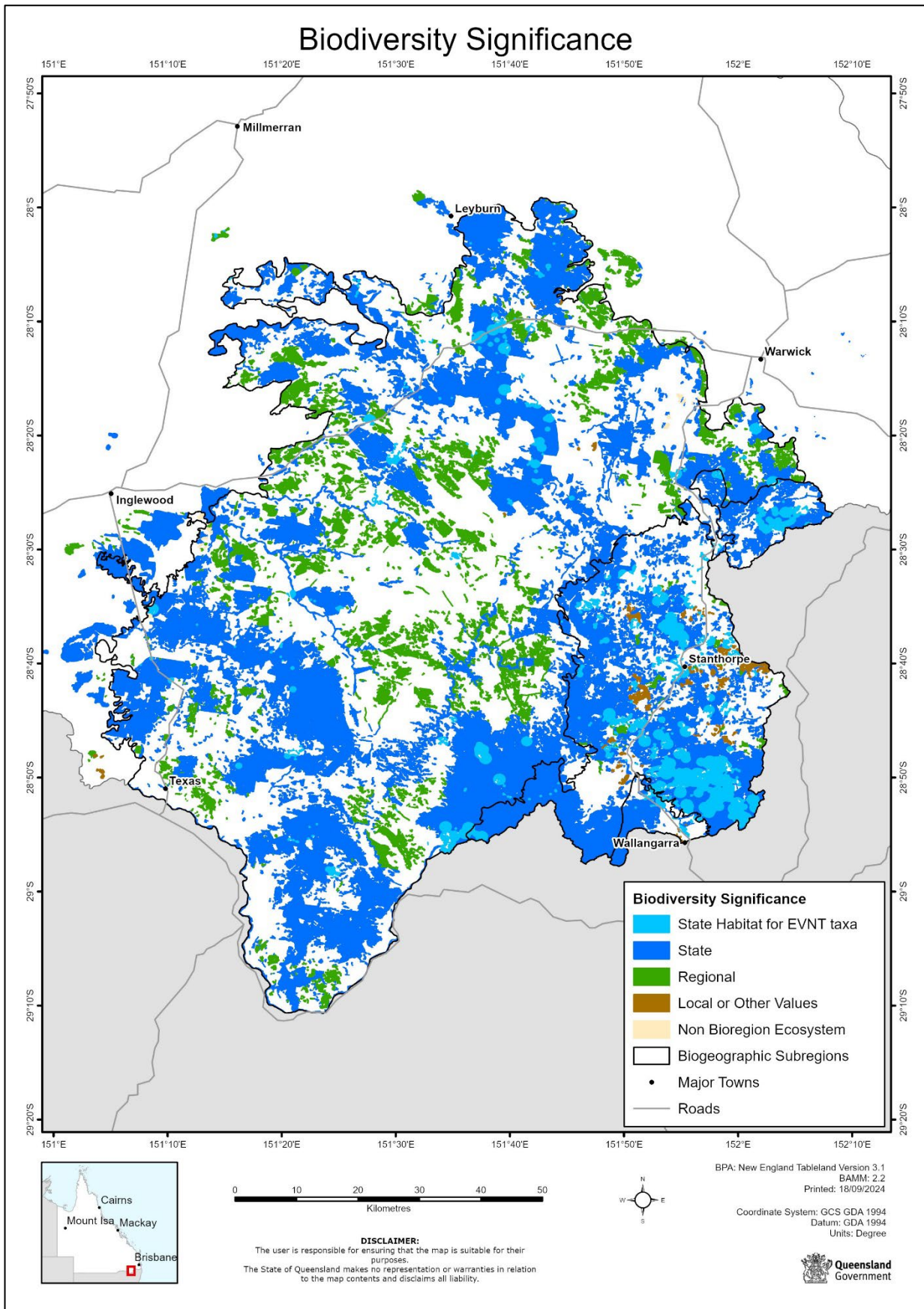
### 4.1 NET overall results

A summary of the NET BPA results is provided below. Overall, 84 per cent<sup>3</sup> (281,680 ha) of vegetation in the NET was found to have biodiversity values of State significance of which 10 per cent (32,239 ha) is State Habitat for EVNT taxa. Regional significance was attributed to 15 per cent (49,562 ha), with the remaining 1 per cent of remnant vegetation being assigned Local or Other Values (refer to Figure 3 and Figure 4).



**Figure 3. Summary of overall biodiversity significance as a proportion of NET remnant and regrowth vegetation**

<sup>3</sup> Note that percentage area and area calculations mentioned throughout this report relate only to areas of NET remnant and regrowth vegetation. Non-remnant and non-regrowth areas (e.g. some significant wetland types, threatened species habitat, panel identified special areas etc.) have been excluded for the purposes of the report.



**Figure 4. Overall biodiversity significance**

As outlined in Table 2, the overall biodiversity significance is the result of a number of criteria that are assessed individually. Criteria A - G ratings are combined, via a filter table, to provide a diagnostic biodiversity significance, whilst Criteria H - K ratings, are combined to provide the expert panel biodiversity significance. Figure 5 shows the results for both the individual diagnostic and expert panel criteria.

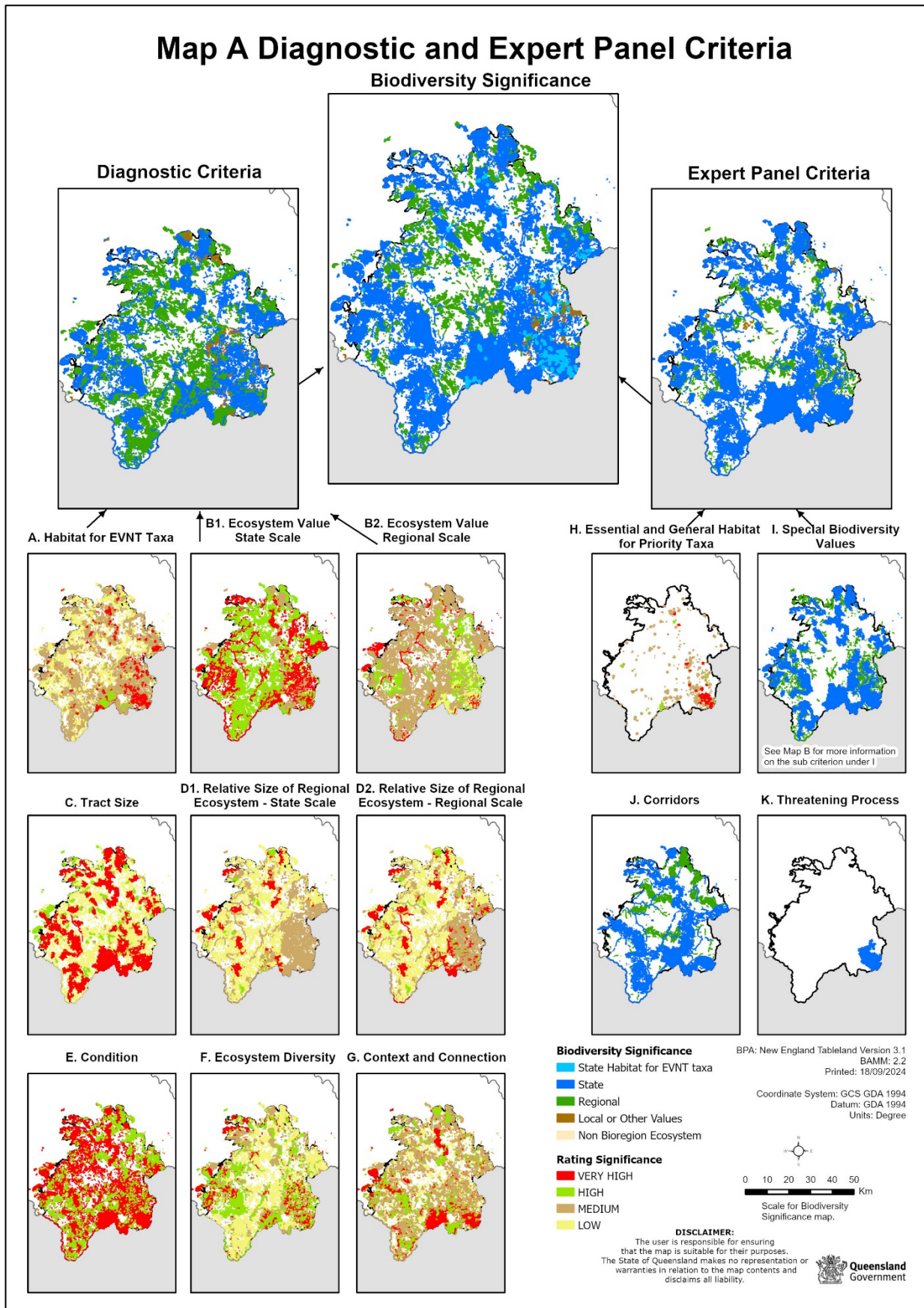


Figure 5. Diagnostic and expert panel criteria results.

## 4.2 Results of diagnostic criteria (A to G)

### 4.2.1 Overall

From the diagnostic criteria, 139,793 ha or 42 per cent of NET remnant and regrowth vegetation was assessed as being of State significant biodiversity value. Regional significance was attributed to 53 per cent (178,187 ha), and Local or Other Values 5 per cent (15,811 ha) of NET vegetation (Figure 6 and Figure 7).

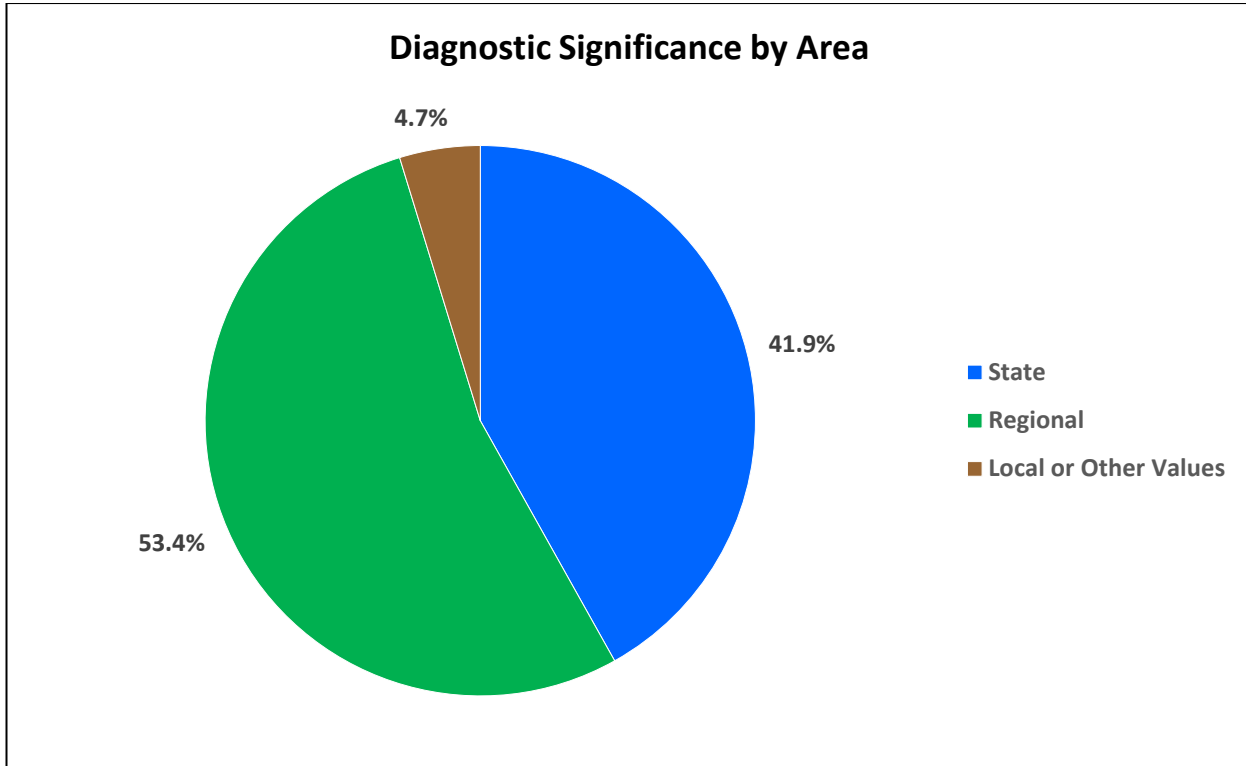
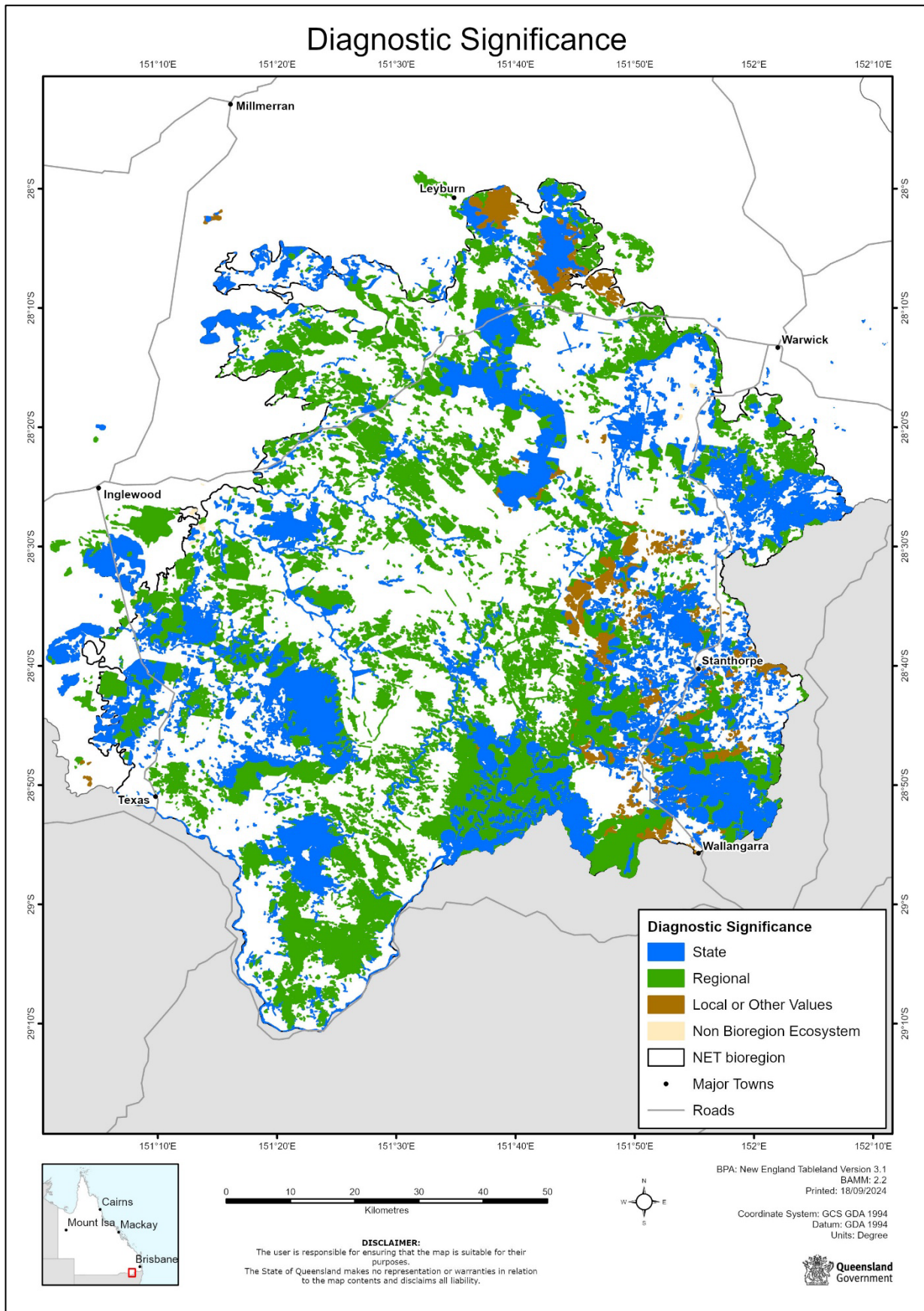


Figure 6. Summary of biodiversity assessment diagnostic criteria results as a proportion of remnant and regrowth vegetation





**Figure 7. Diagnostic criteria biodiversity significance**

The contribution of each diagnostic criterion to the diagnostic significance rating is summarised in Table 3 below.

**Table 3. Diagnostic criteria ratings (expressed as percentage of remnant and regrowth vegetation cover).**

Diagnostic criterion	Very High	High	Medium	Low
A: Habitat for EVNT taxa	9.7%	5%	60.9%	24.4%
B1: Ecosystem value (Bioregion)	21.2%	62.6%	12.8%	3.4%
B2: Ecosystem Value (Subregion)	4.2%	11.7%	70.5%	13.6%
C: Tract	64.6%	10.4%	1.9%	23.1%
D1: Relative RE Size (Bioregion)	17.3%	5.1%	38.4%	39.2%
D2: Relative RE Size (Subregion)	26.4%	7%	27.6%	39%
E: Condition	86.5%	13.5%	-	-
F: Ecosystem Diversity	10.8%	29.1%	24%	36%
G: Context and Connection	23.8%	25.2%	44.4%	6.6%

## 4.2.2 Hit analysis

A 'hit analysis' was performed to assess the influence of each diagnostic criterion to the assignment of State or Regional biodiversity significance. For this analysis, hits equate to a polygon assigned significance due to individual or combinations of criteria as defined in the queries table (see [Appendix 2](#)). The results of the hit analysis for the diagnostic criteria are presented in Table 4 below.

**Table 4. Diagnostic criteria hit analysis results. (Query number as per Appendix 2)**

Query No. <sup>4</sup>	Significance	Remnant area (ha)	Remnant area (%) of total	Query no. frequency (% of polygons triggered)
1a	State	32239	9.7%	5676
1b	State	62747	18.8%	6567
2a	State	36813	11%	584
4a	State	7994	2.4%	832
6a	Regional	12510	3.7%	886
6b	Regional	150714	45.2%	11939
7a	Regional	3319	1%	47
9a	Regional	8871	2.7%	431
10a	Regional	409	0.1%	98
10b	Regional	2364	0.7%	437
Default	Local or Other Values	15811	4.7%	1702

The results of the hit analysis reveal that the most widespread (by area) combination to trigger State significance is query 1b (18.8 per cent of vegetation). This query reflects vegetated units considered of Very High Ecosystem value (Criterion B1).

The most widespread (by area) combination to trigger Regional biodiversity significance is query 6b, with 45.2 per cent of remnant vegetation triggered. This query similarly reflects vegetated units considered of High Ecosystem value (Criterion B1).

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<sup>4</sup> The variations (a - i) of the queries refer to specific combinations of the criteria within the query (refer to [Appendix 2](#)).

### 4.3 Results of expert panel criteria (H to K)

#### 4.3.1 Overall expert panel results

Overall, 89 per cent of NET remnant and regrowth vegetation was assigned a significance rating by the expert panel (refer to Figure 8 and Figure 9). The expert panel attributed 79 per cent (264,105 ha) of the NET with biodiversity values of State significance. Regional significance was attributed to 9 per cent (30,925 ha) and 1 per cent as Local significance (as a result of priority taxa - Criterion H).

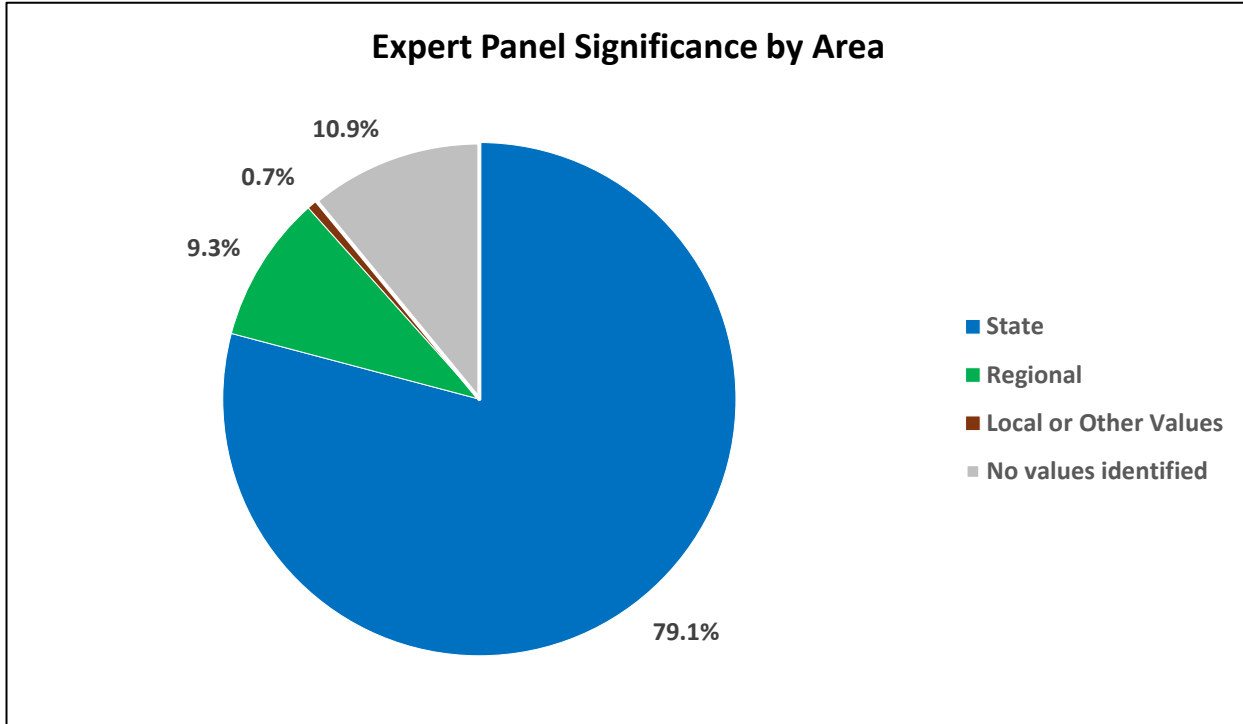
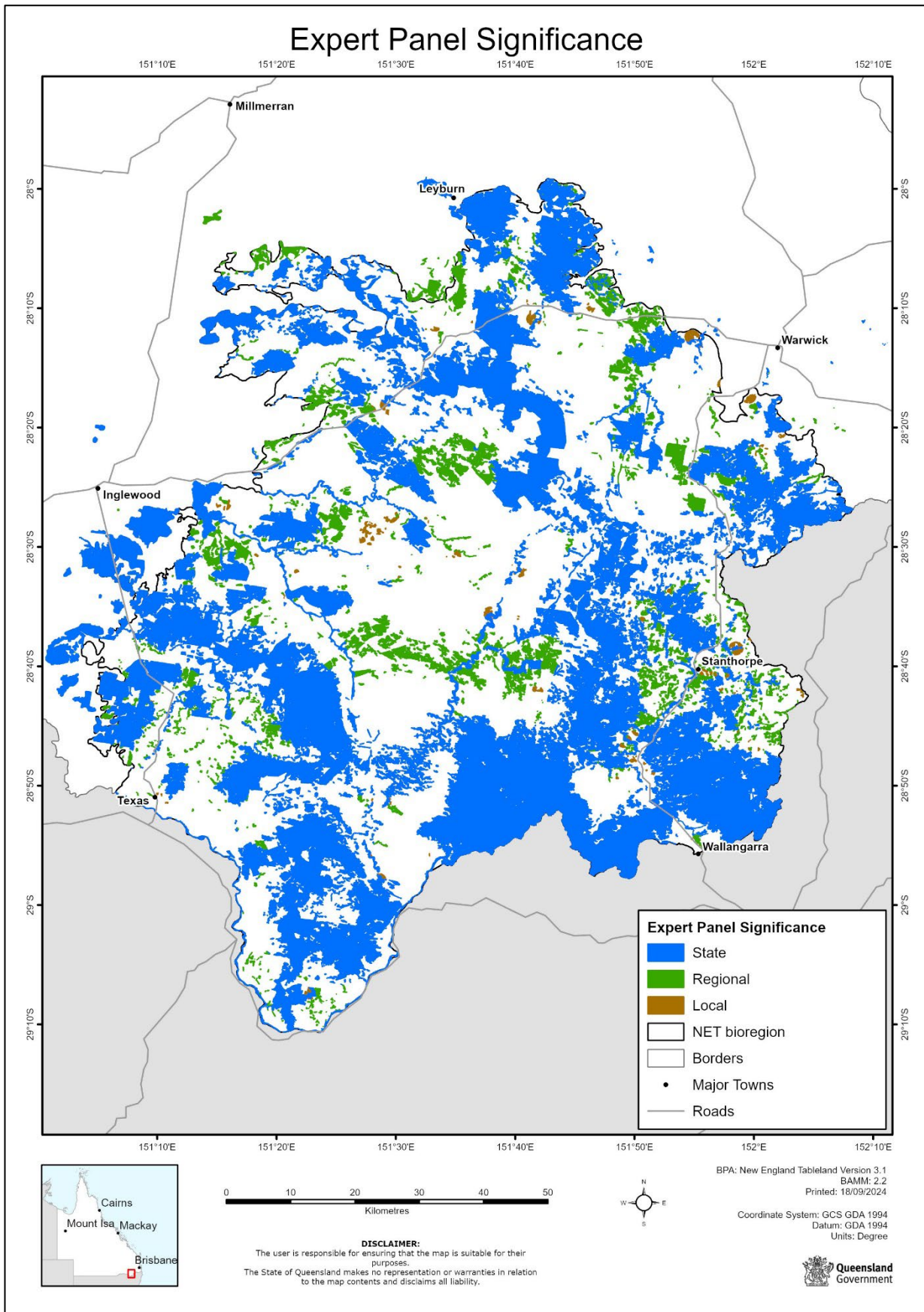


Figure 8. Summary of biodiversity assessment expert panel criteria results.



**Figure 9. Expert panel criteria biodiversity significance.**

### 4.3.2 Criterion H (priority taxa habitat) results

Priority species are those not listed as critically endangered, endangered, vulnerable or near threatened, however, are considered of conservation significance by the flora and fauna expert panels (DETSI 2024). There were 53 priority species identified in the NET (32 flora, 21 fauna), and 2,149 records for these species. Approximately, 3.2 per cent of NET (10,666 ha) achieved a value of Very High for Criterion H and 0.1% (2,949 ha) High (Table 5).

**Table 5. Criterion H (Priority taxa habitat) results as percentage of remnant and regrowth vegetation.**

Criterion rating	Very High	High	Medium	No information/Low
H rating (Priority taxa habitat)	3.2%	0.9%	7.1%	88.8%

### 4.3.3 Other expert panel criteria

Criterion I (special areas), Criterion J (corridors), Criterion K (intact landscapes and ecosystems) were identified by expert panel members. Approximately 77 per cent of NET remnant and regrowth vegetation has been identified as having Criterion I special biodiversity values (State or Regional). Figure 10 illustrates the special areas and their biodiversity rating.

Landscape scale corridors have been defined and mapped at a statewide level for all the state. The network is being refined as BPAs are updated. Their broad purpose is to provide for ecological and evolutionary processes at a landscape scale. Corridors considered of the greatest importance at the bioregional scale or above were assigned State significance. This mapped network (State and Regional terrestrial and riparian corridors) comprises almost 67 per cent of NET vegetation (Table 6).

Vegetation within the Girraween complex was considered of outstanding natural condition (accounting for approximately 7 per cent of NET vegetation).

**Table 6. Criteria I, J, K biodiversity significance results as percentage of remnant vegetation.**

Criterion rating	State	Regional
I rating (Special Areas)	69.7%	7%
J rating (Corridors)	52.1%	14.5%
K rating (Threatening Process)	6.8%	-

### 4.3.4 Criterion I sub-criteria results

Areas exhibiting special biodiversity values are identified by flora, fauna and landscape expert panel members based on their own knowledge and experience. Expert panel members were tasked with identifying what they considered to be the most important areas in the bioregion. For the most part, only Very High and High category values were identified. These identified areas are determined by selection and assignment of specific sub-criteria I values as defined in Table 7. Approximately 70 per cent of remnant vegetation (232,592 ha) was identified by the expert panel as exhibiting very high sub-criteria values for special features (Criteria I). The expert panel report (DETSI 2024) has detailed information relating to these areas. Most areas exhibited more than one sub-criteria value, with many exhibiting up to six sub-criteria values. Each of the sub-criteria were assessed and valued separately by the expert panel and the results are shown in Table 7 and Figure 10.

Areas identified as important for wildlife refugia (Ib rating of Very High or High) accounted for 76 per cent (252,927 ha) of remnant and regrowth vegetation. Areas identified as exhibiting Very High or High species richness (Ic rating), accounted for approximately 48 per cent (159,265 ha) of vegetation.

**Table 7. Criterion I sub-criteria results as percentage of remnant and regrowth vegetation.**

<b>Criterion I sub-rating</b>	<b>Very High</b>	<b>High</b>
la rating (centre of endemism)	11.4%	9.0%
lb rating (wildlife refugia)	68.5%	7.2%
lc rating (disjunct populations)	21.0%	9.0%
ld rating (species at geographic range limit)	21.1%	2.3%
le rating (high species richness)	22.6%	25.1%
lf rating (areas with concentrations of relictual populations - ancient and primitive taxa)	-	-
lg rating (REs show distinct variation in species composition)	17.4%	12.1%
lh rating (artificial waterbody or managed/manipulated wetland of ecological significance)	-	-
li rating (high density of hollow-bearing habitat trees)	7.9%	17.1%
lj rating (significant breeding or roosting sites)	<0.1%	0.4%
lk rating (climate change refugia)	0.3%	0%

## Map B Criterion I Special Biodiversity Values

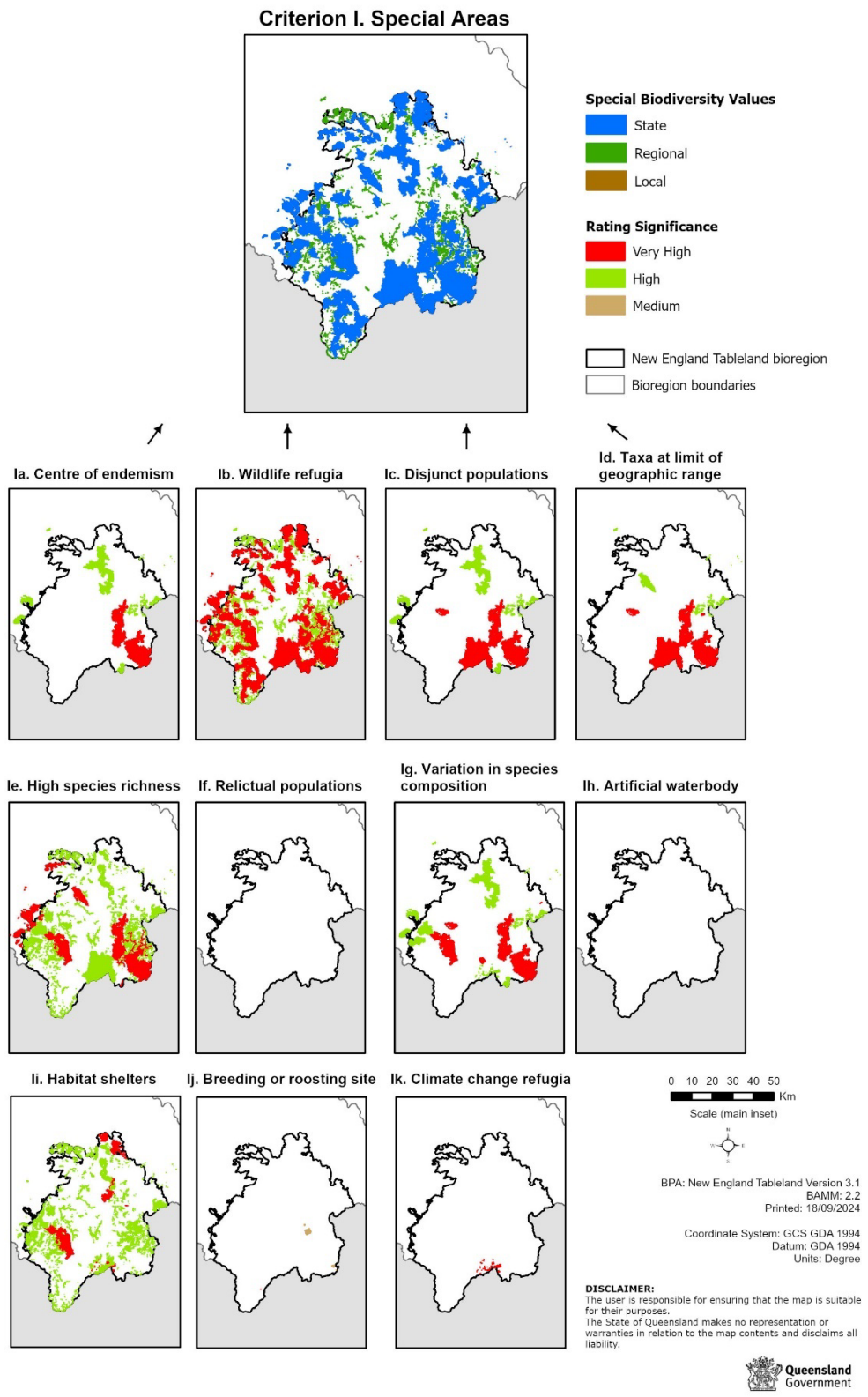


Figure 10. Criterion I special biodiversity values



## 5 Caveats and limitations

It must be emphasised that the overall biodiversity significance rating attributed to each spatial unit should only be used as an initial flag to identify known/perceived areas of high biodiversity value. In addition, individual criterion ratings should be used to address specific questions depending upon the exercise at hand. End users should also be aware that within a BPA, whilst some criteria ratings are calculated in a deterministic manner (for example high confidence of the presence of an endangered species results in a locality being assigned as Very High under Criterion A), the majority of criteria ratings are calculated relevant to the values present in a bioregion. As such, whilst providing representation at a bioregion scale, direct comparison of criterion results across bioregions is not appropriate. For example, areas containing 30 vertebrate species can be given a species richness (Ie rating) rating of Very High in one bioregion and Medium in another. Furthermore, several criteria are influenced by the size distribution of remnant/regrowth vegetation polygons within a bioregion. As a result, these will vary between bioregions/subregions and versions of a BPA.

The accuracy and representativeness of the BMM criteria is also largely reliant upon available information. Even within bioregions with comparatively high levels of survey effort, significant knowledge gaps can be present resulting in data layers that are not spatially uniform across the bioregion. For example, areas close to populated centres, roads, and accessible areas of public land (i.e. national parks) are generally subject to greater levels of species survey effort, whilst ranges, escarpments, vegetated tracts on private land and the interior parts of major floodplain wetland systems are often under-represented. The BMM expert panel process is used, in part, to moderate and fill such knowledge gaps, however the outcomes from the expert panel process are only as comprehensive as the range of experts who attend and the extent of their knowledge of the bioregion. The increasing availability of predictive habitat suitability models will help reduce reliance on sightings records for identifying conservation significant habitat and hot spots.

### 5.1 Positional accuracy

Boundaries may be approximate at the scale of the individual spatial unit due to uncertainties in the underlying mapping. For most diagnostic criteria, and many of the special areas identified by the expert panel, spatial units are derived from Remnant and pre-clearing regional ecosystem (RE) mapping version 13.1 (QHBS 2024b). The positional accuracy of RE data, mapped at a scale of 1:100,000, is 100 metres. NET regional ecosystem mapping is at 1:50,000 scale and has a positional accuracy of approximately 50m.

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## Appendix 1. Methodological updates

Table 8. BAMB method changes.

Criterion	Change in NET Version 3.1	Implemented in BPA(s)
A	Inclusion of non 1-to-1 habitat models - i.e. the inclusion of habitat models that do not necessarily spatially align/coincide with the boundary of remnant units.	Southeast Queensland v4.1; Brigalow Belt v2.1; Northwest Highlands v1.1; Wet Tropics v1.1; New England Tableland v3.1
B	<p>1. For depicting B1 "Very High" significant wetlands, the base spatial unit was derived from the Queensland Wetland Program mapping product. "Significant wetlands" included those relatively natural wetlands which overlapped with Ramsar, Directory of Important Wetlands, Fish Habitat Areas, and/or State Marine Parks (exclusive of General Use zones). <i>Nb. no "Significant wetlands" are present within the NET bioregion.</i></p> <p>2. EPBC listed threatened ecological communities were incorporated in Criterion B1 and assigned a significance rating of "Very High".</p>	Southeast Queensland v4.1; Brigalow Belt v2.1; Northwest Highlands v1.1; Wet Tropics v1.1; New England Tableland v3.1
C	The method of tract delineation was reviewed and altered to account for pinch-points, edge effects and small gaps in tracts. Thresholds used to assign "Low", "Medium", "High" and "Very High" Criterion C significant ratings were calculated at the subregion level.	Southeast Queensland v4.1; Brigalow Belt v2.1; Northwest Highlands v1.1; Wet Tropics v1.1; New England Tableland v3.1
E	Inclusion of regrowth vegetation under Criterion E (rating = High). Note: to be replaced once a state-wide BioCondition layer becomes available.	New England Tableland v3.1
H	<p>1. Revised the justifications for nomination of priority species.</p> <p>2. New category was incorporated - "Taxa particularly vulnerable to climate change"</p> <p>3. Altered the spatial implementation to be more consistent with Criterion A and reduced the disproportionate impact of priority species records on the overall biodiversity significance value.</p>	Southeast Queensland v4.1; Brigalow Belt v2.1; Northwest Highlands v1.1; Wet Tropics v1.1; New England Tableland v3.1
I	Addition of a new Sub-criterion, Ik: Climate change refugia.	Southeast Queensland v4.1; Brigalow Belt v2.1; Northwest Highlands v1.1; Wet Tropics v1.1; New England Tableland v3.1

## Appendix 2. Filter table

Table 9. The rule sets (combination rating table or filter table) used to evaluate the diagnostic criteria and assign biodiversity significance.

Query No.	A: Essential habitat for EVNT spp.		B: Ecosystem value		C: Tract size		D: Relative size of ecosystem		E: Condition		F: Ecosystem diversity		G: Context & connection	Biodiversity significance
1	very high	or	B1: very high		n/r		n/r		n/r		n/r		n/r	State (S)
2	n/r		B1: high		n/r	&	D1: very high		n/r		n/r		n/r	State (S)
3	n/r		B1: high	&	high	&	D1: high	&	very high <sup>1</sup>	or	very high <sup>1</sup>	or	very high <sup>1</sup>	State (S)
4	n/r		n/r		very high	&	D1: very high	&	very high		n/r		n/r	State (S)
5	n/r		n/r		n/r		D1: very high	&	very high <sup>1</sup>	or	very high <sup>1</sup>	or	very high <sup>1</sup>	State (S)
6	A: high	or	B1: high		n/r		n/r		n/r		n/r		n/r	Regional (R)
7	n/r		B2: very high		n/r		n/r		n/r		n/r		n/r	Regional (R)
8	n/r		B2: high	&	very high	or	D2: very high		n/r		n/r		n/r	Regional (R)
9	n/r		n/r		very high	&	D2: very high	&	very high		n/r		n/r	Regional (R)
10	n/r		n/r		very high		n/r	&	very high	&	very high	or	very high	Regional (R)
11	n/r		B2: high	&	high	&	D2: high <sup>2</sup>	or	very high or high <sup>2</sup>	or	very high or high <sup>2</sup>	or	very high or high <sup>2</sup>	Regional (R)

Query No.	A: Essential habitat for EVNT spp.	B: Ecosystem value	C: Tract size	D: Relative size of ecosystem	E: Condition	F: Ecosystem diversity	G: Context & connection	Biodiversity significance			
12	n/r	n/r	n/r	D2: very high	&	very high or high <sup>2</sup>	or	very high or high <sup>2</sup>	or	very high or high <sup>2</sup>	Regional (R)
13	n/r	B2: high	n/r	n/r		n/r		n/r		n/r	Local (L)

Notes:

The assessment is progressive, i.e. a query is 'triggered' only if the preceding set has not been satisfied.

Criteria B & D vary according to the scale (State, Regional, Local)—all other criteria are independent of scale.

N/R: Not relevant.

Very High<sup>1</sup>: A single 'Very High' score is not sufficient—at least two of the criteria marked as Very High<sup>1</sup> must be rated as Very High to qualify as significant.

High<sup>2</sup>: A single 'High' score is not sufficient— at least two of the criteria marked as High<sup>2</sup> must be rated as 'High' to qualify as significant.

'or': Options which apply only to the query immediately preceding the 'or' (i.e. A & B or C or D means A+B or A+C or A+D; A or B & C means A+C or B+C; A or B & C or D means A+C or A+D or B+C or B+D)

## Appendix 3. List of datasets

Table 10. List of datasets used in NET BPA version 3.1

Dataset	Version	Release date	Custodian
Core Habitat Suitability Models Queensland	3.0	Published 04/03/2024	Biodiversity Assessment Team, DETSI
Biogeographic regions - Queensland, Brisbane.	5.0	2017	Queensland Herbarium and Biodiversity Science, DETSI
Nature refuges - Queensland	2	Published 27/04/2018	Queensland Parks & Wildlife Service, DETSI
Protected areas of Queensland	Edition Date 11/06/2021	Revision date 21/07/2021	Queensland Parks & Wildlife Service, DETSI
Queensland Wetland Data Version 6.0 – Wetland Areas 2019	6.0	Published 31/01/2023	Wetlands, DETSI
Remnant, regrowth, and pre-clear regional ecosystem mapping	13.1	Published 15/05/2024	Queensland Herbarium and Biodiversity Science, DETSI
Species records - CORVEG	-	EVNT flora extracted 08/01/2024; Priority flora taxa extracted 26/05/2023	Queensland Herbarium and Biodiversity Science, DETSI
Species records - Herbreccs	-	EVNT flora extracted 08/01/2024; Priority flora taxa extracted 26/05/2023	Queensland Herbarium and Biodiversity Science, DETSI
Species records - Queensland historical fauna database (QHFD)	-	EVNT fauna extracted 31/01/2024; Priority fauna taxa extracted 26/05/2023 <i>Nb. Includes additional species records provided by the expert panel 2023.</i>	Biodiversity Assessment Team, DETSI
Species records - WildNet	-	EVNT flora extracted 31/01/2024; EVNT fauna extracted 29/01/2024; Priority taxa extracted 06/11/2023	WildNet, DETSI

## Appendix 4. Criterion C subregions thresholds

Table 11. Subregion thresholds applied to criterion C in the NET BPA version 3.1

Subregion	Low	Medium	High	Very High
Stanthorpe Plateau	<166	<252	<726	14848
Tenterfield Plateau	<286	<572	<859	3311
Nandewar	<159	<237	<661	19584