The Queensland Department of Environment and Science (DES) has updated the Biodiversity Planning Assessment for the Brigalow Belt (BRB) bioregion (Figure 1) using the Biodiversity Assessment and Mapping Methodology (BAMM).

Results from the assessment indicate that approximately 81% of the remnant vegetation of the bioregion is considered of State significance with 11% as Regional significance. This high proportion is not unexpected as the region is highly fragmented and the remaining vegetation is critical for biodiversity. The region contains a wide variety of underlying geomorphology and climatic gradients. It also contains many ecosystems that are recognised for their importance at a national scale.

Diagnostic criteria (including habitat for threatened taxa, vegetated tract size, ecosystem diversity and connectivity) accounted for 36% of the remnant vegetation being assigned as being of State biodiversity significance.

In addition, fauna, flora and landscape ecologists identified 80% of the remnant vegetation as having State or Regionally significant biodiversity values. Values attributed by experts included the identification of wildlife refugia, areas containing high species richness and species at their geographic range limit, concentrations of endemic species or which contain important habitat for priority taxa, as well as the delineation of landscape scale ecological corridors.

Biodiversity within the Brigalow Belt is facing several threats as a result of rapid population growth, unsustainable land management practices and native vegetation clearing. BPAs, such as the updated BRB BPA can be used as a decision support tool to aid in land planning and conservation prioritisation to manage and protect biodiversity values.

For more information please see the links at the end of this information sheet.
What is BAMM?

The Biodiversity Assessment and Mapping Methodology (BAMM) has been developed to provide a consistent approach for assessing biodiversity values at the landscape scale in Queensland. It is being used by DES to generate Biodiversity Planning Assessments (BPAs) for each of Queensland’s bioregions.

The methodology (Figure 2) has application for identifying areas with various levels of significance solely for biodiversity reasons. These include threatened ecosystems or species, large tracts of habitat in good condition, ecosystem diversity, landscape context and connection, and buffers to wetlands or other types of habitat important for the maintenance of biodiversity or ecological processes.

The methodology:
- provides a consistent approach for assessing relative biodiversity values at the landscape scale,
- presents raw and synthesised spatial information about biodiversity to a broad range of potential users,
- aims to optimise the use of existing data and information,
- uses existing Regional Ecosystem (vegetation) mapping created by the Qld Herbarium, and
- generates BPAs for each bioregion.

BPA applications

A BPA is the result of applying BAMM to a particular bioregion. BPAs can be used by Agency staff, other government departments, local governments or members of the community to advise a range of planning and decision-making processes. For example:
- Matters of State Environmental Significance (MSES),
- determining priorities for protection, regulation or rehabilitation of terrestrial ecosystems,
- development assessment,
- local and regional planning processes,
- contributing to impact assessment of large-scale development.

Assessments conducted to date

BAMM was initially developed in 2002 and since this time, has been used to assess biodiversity values of all Queensland bioregions, except the Wet Tropics and Northwest highlands. (Figure 3).

Accessing BPA results

The BAMM methodology and assessment results (including summary report, expert panel reports and GIS results) for the released BPAs are available from the Queensland Spatial Catalogue: http://qldspatial.information.qld.gov.au/catalogue/custom/index.page

Online reports which summarise BPA values for a given area of interest can be generated here: https://environment.ehp.qld.gov.au/report-request/environment/

The summary and expert panel reports as well as further details about BAMM or the BPAs can be obtained from: https://www.qld.gov.au/environment/plants-animals/biodiversity/planning/ or by emailing: biodiversity.planning@des.qld.gov.au

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