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Threatened Environments Classification 2012

Title

Threatened Environments

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Description

LENZ (and hence the Threatened Environmental Classification) is a tool suitable for use at broad scales. For example, it can provide an understanding of the average status of a LENZ environment of LENZ environments, and it may be used to make broad comparisons about the degree of past loss and current protection status among regions and districts. However, it is important to note that LENZ (and hence the Threatened Environment Classification) is not a tool suitable for use in ecological assessment (or land-use capability assessment) at local or fine scales. Land environments are not uniform entities, and each land environment contains within it a variety of abiotic conditions, and of living ecosystems and habitats. Limited by the relatively coarse resolution of its underlying datasets, LENZ has insufficient resolution to distinguish variation within environments which may be important both ecologically and for human land use. Many ecosystems, habitats and community types are poorly discriminated by LENZ (including but not restricted to limestone outcrops (karst), saline habitats, geothermal, coastal habitats influenced by wind and salt spray, lowland forest types, and various freshwater, wetland and floodplain ecosystem types) and may be more or less reduced and protected than the LENZ as a whole. These include originally rare ecosystems, as well as induced-rare ecosystems (those that have been reduced to rarity in New Zealand since human settlement). Therefore even those environments that are less reduced and better protected on average may include ecosystem types that are distinctive and/or disproportionately reduced and poorly protected at national, regional, or at local scales. Criteria Acutely Threatened < 10% indigenous cover remaining Chronically Threatened 10–20% indigenous cover remaining 20–30% indigenous cover remaining Critically Underprotected < 10% legally protected Underprotected 10–20% legally protected Less Reduced and Better Protected > 20% legally protected The past level of habitat loss (represented by percentage remaining indigenous cover) is used as the primary threat criterion. Based on principles (species–area relationships and fragmentation effects described by Walker et.al. 2008), the remaining indigenous biodiversity within environments with less than 30% indigenous cover is considered ‘threatened’ by land clearance. Indigenous biodiversity is classified as ‘At Risk’ in environments where 20–30% of indigenous cover remains, and ‘Chronically Threatened’ in environments where 10–20% indigenous cover remains. When less than 10% of indigenous cover remains, indigenous biodiversity is considered to be ‘Acutely Threatened’. The terminology was chosen for these three threat categories to be consistent with the national system for classifying species according to threat of extinction. Two further threat categories are erected to take poor legal protection into account. Environments that have more than 30% indigenous cover remaining and are poorly protected (i.e. they have less than 20% of their area under legal protection) are categorised as ‘Critically Underprotected’ if less than 10% is protected, and ‘Underprotected’ if 10–20% is

protected. For convenience any of these five categories are referred to as 'threatened environments'. Environments that have been less preferred for intensive land uses in the past, and have a fifth or more of their land area protected against future loss, fall into a sixth category that are named 'Less Reduced and Better Protected' (more than 30% indigenous cover remains, and over 20% of it is protected). This name reflects that biodiversity within these environments is not entirely secure; rather, it remains vulnerable to future loss should land-use patterns change, and to ubiquitous pests and weeds. Vulnerable elements of the full range of biodiversity (e.g. large bodied, host-dependent and/or habitat-specialist species with a narrow range, and those dependent on large, contiguous habitats) will be lost from environments well before loss of 70% of original habitat has occurred. Therefore, environments that are less reduced and better protected today support indigenous species that can survive only in relatively intact, extensive and well-protected environments Their persistence will depend on the maintenance of extensive areas of native cover, and of healthy, functioning ecosystem processes that have been lost from the more fragmented landscapes represented in threatened environments

Coverage

-47.3137129627 166.122125175 -33.9577787509 179.601949844

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