
Planning Scheme Policy 6 Ecological Assessment

1.1 Purpose of the Policy

The purpose of this Planning Scheme Policy is to outline Council's requirements for information that should be included in an Ecological Assessment Report and Property Vegetation Management Plan.

1.2 Information Requirements for an Ecological Assessment Report and Property Vegetation Management Plan

The following information is to be provided to assist with the assessment of the impact of development on ecological features:

(a) Ecological Assessment Report

(i) Background

Ecological assessment is an integral part of the development design and assessment process. The consultant undertaking the ecological assessment should have appropriate qualifications in environmental science, botany, ecology, zoology or other related disciplines. They must also have demonstrated experience in undertaking flora and fauna surveys, conservation assessments, and water quality and stream habitat assessments within the Southeast Queensland bioregion.

(ii) Information Requirements

An Ecological Assessment Report needs to include the following information:

- (A) A description of the existing environment of the site and surrounding area, including aesthetic quality. This information should be in sufficient detail to allow the environmental impacts of the proposal to be accurately and adequately assessed, and to provide a baseline against which predicted and future changes can be measured.
- (B) The full methodology used (including scope and duration) to identify any terrestrial and aquatic flora and fauna species present or likely to be present within the site and adjacent lands throughout any given year. A full list of flora and fauna species is to be included in the report and species of conservation significance outlined.
- (C) Reference to any limitations in duration, scope and techniques of the flora and fauna survey work.
- (D) The results of the fauna survey, expressed for each faunal group, including a summary description of the fauna values of the site, in which habitat/areas they occur and levels of abundance.
- (E) A discussion of the relationship between fauna species requirements and habitat and the likely effect of development on the specific fauna species, including in-stream fauna and ecological processes in receiving aquatic systems.
- (F) The extent, type, diversity and integrity of vegetation communities present (including details of species richness, abundance and conservation significance), including the representativeness of the community on a local and regional scale, and the extent of reservation outside of protected areas.
- (G) The regional ecosystems represented including that percentage of the site covered by each regional ecosystem.
- (H) The existence of ecological corridors and their integrity, connection and function within the surrounding landscape matrix.
- (I) The presence and distribution of fauna species in the area, including those likely to be found in the area such as migratory species of regional and international importance and other species of conservation significance. Existing databases should be utilized such as the Queensland Museum, Environmental Protection Agency Wildnet and Naturesearch data.
- (J) The identification of the habitat value of the site (including critical habitat for species of conservation significance or Fish Habitat Areas under the *Fisheries Act 1994*) and the presence of habitat trees including hollow bearing trees.
- (K) Contribution of the site to local, regional and state biodiversity values.
- (L) An assessment of the need for controlled fire to maintain the biodiversity values of the vegetation, reference should be made to the South East Queensland Fire and Biodiversity Consortium publication, *The Role and Use of Fire for Biodiversity Conservation in South East Queensland: Fire Management Guidelines* derived from ecological research.
- (M) The need for site-specific vegetated buffer Zones (of sufficient width to mitigate threatening processes), which may include the use of low flammability vegetation.

- (N) The identification of any declared or environmental weeds on the site (as identified in the Landscaping Planning Scheme Policy) and measures to control them, including mitigation of edge effects.
- (O) Identification of any existing or potential erosion problems on the site, including the extent of rill and gully erosion for land areas, and slumping and movement for creek banks.
- (P) The main potential impacts of the project (during the design, construction and operational phases) both spatial and temporal, whether beneficial or detrimental, including any altered surface or groundwater flow regimes, surface-groundwater interactions, interactions between aquifers, aquifer hydrology, nutrient, sediment and pollutant loads.
- (Q) Environmental monitoring, protection and management procedures – summarise the mitigation measures, standards and management procedures to protect the ecological values of the site and ameliorate or alleviate the potential impacts, including environmental monitoring provisions during and after construction. This information will form an environmental management plan for the site.

Note: *the whole structure of the vegetation community should be protected or rehabilitated where necessary, not just the canopy trees.*

- (R) A summary of the environmental impacts that cannot be mitigated and the subsequent consequences.
- (S) A summary of public consultation undertaken for the proposal with relevant/affected stakeholder groups and any mitigation measures adopted to address issues raised during consultation.
- (T) The alternatives to the proposed development; summarise the features of the alternatives considered and detail the reasons for choosing the preferred option.

The following maps are required to be submitted with the Ecological Assessment Report:

- (i) Development site map including:
 - (A) Up to date map of the site, preferably utilizing aerial photography. The minimum area likely to be affected by the construction, and where relevant, ongoing operation of the proposed development. In some instances this may include areas surrounding or adjoining the proposed development site.
 - (B) Any existing buildings or other infrastructure.
 - (C) The map should be submitted in A4 or A3 standard format at a scale of 1:100 or 1:200.
- (ii) Ecological features map including:
 - (A) Identification and extent of vegetation associations including any regional ecosystems.
 - (B) Ecological corridors.
 - (C) Essential habitat areas, including hollow bearing trees.
 - (D) Local drainage lines or watercourses (whether permanent or ephemeral).
 - (E) Wetlands or other waterbodies (whether permanent or ephemeral).
 - (F) Any areas of erosion or land degradation.
 - (G) Areas of declared or environmental weeds on the site.
 - (H) Flora and fauna survey transects or plots.
 - (I) Location and identification of scats, tracks and other traces of fauna.
- (iii) Assessment of impacts map including:
 - (A) Outline the spatial extent of the likely impacts of the development on ecologically significant areas, for example any areas where vegetation clearing is proposed.
- (iv) Mitigation or Protection measures map including:
 - (A) Vegetation areas proposed for retention.
 - (B) Vegetation rehabilitation areas (this may include degraded areas that are suitable for rehabilitation).
 - (C) Development setback distances from significant vegetation, waterways and wetlands.
 - (D) Location/type of erosion control measures.

- (E) Location of stockpile and disposal sites.
- (F) Location of machinery access ways.
- (G) Location of site sheds, amenities and activity centres.

(b) Property Vegetation Management Plan

(i) Background

A Property Vegetation Management Plan (PVMP) allows landholders to determine a sustainable balance of native vegetation to retain and clear. A PVMP is usually made up of a map(s) and written information showing or describing how and where vegetation clearing is proposed or vegetation management provisions for the site. It may be prepared by hand or computer.

(ii) Information Requirements

The PVMP must show:

- (A) Street address and real property description;
- (B) Area of the property in hectares and the dimensions of the site;
- (C) Present zoning;
- (D) A description of the vegetation on the property (including type and abundance) natural gully or drainage line/s;
- (E) Location of firebreaks;
- (F) Contours at 5m intervals;
- (G) Steep slopes on the property;
- (H) The location and extent of the area proposed to be cleared, by reference to easily identifiable fixed points (Global Positioning System readings, property infrastructure, natural features);
- (I) A description of the vegetation proposed to be cleared (include the name of dominant trees and some of the understorey where possible). Also indicate whether you think the vegetation is significant or regrowth. The location of the vegetation in the landscape should be identified (e.g. near creek flats, slopes);
- (J) The location, extent and description of any existing land degradation on the property (including areas affected by soil erosion, including gully and sheet erosion and mass movement, salinity, sodicity and environmental and declared weed infestations);
- (K) The action proposed to be taken to prevent the proposed clearing contributing to land degradation during and after the clearing (includes the selection of appropriate clearing methods, post-clearing management techniques including the establishment of ground cover on slopes, clearing timed to avoid high rainfall seasons);
- (L) The location, extent and description of vegetation remaining on the property after the proposed clearing (including corridors, clumps and vegetation buffers around watercourses);
- (M) Any proposed rehabilitation or restoration of vegetation on the property (development of corridors to connect isolated patches of vegetation, strategic replanting or regeneration of vegetation for managing a saline area).

Note: The Department of Natural Resources and Mines is able to provide property base maps to assist with the compilation of a PVMP.

(c) Environmental Management Practices

(i) Background

The ecological assessment report and Property Vegetation Management Plan (PVMP) should incorporate best practice environmental management, and Council may elect to approve assessment reports and management plans subject to conditions that support the outcomes of the nature conservation code and the Shire-wide desired environmental outcomes. The following section provides relevant examples with information on environmental practices that may be canvassed in assessment reports and management plans.

(ii) Information Requirements

The following environmental management practices are recommended by Council:

- (A) Cleared vegetation shall be chipped, shredded or tub ground and spread on-site as mulch for erosion control or otherwise removed from site and disposed of at an approved waste facility;

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- (B) Where a development borders a nature conservation area, measures are taken to prevent domestic animals and livestock entering the nature conservation area. For example, a covenant for a development may require a restricted area for domestic pets and fencing may be installed that prevents the escape of domestic animals. In some instances, fauna-friendly fencing may be required to allow movement of wildlife between habitats. Constructing fencing between trees with overlapping branches can assist tree-climbing fauna. Alternatively, a fence with timber posts or small gaps between timber palings can allow wildlife to climb over. A horizontal beam along the top of the fence can provide a walkway. For ground-dwelling animals, a gap below the fence of about 30cm will be required;
- (C) Site disturbance, including alterations to stormwater flows and nutrient availability, can facilitate the establishment and spread of weeds. Environmental weeds should be controlled as part of the development process to prevent weeds impacting on nature conservation areas, public and private open space, farmland, and any revegetation or landscaping works, including stormwater treatments. The staging of weed removal and the restricted use of chemical controls should be considered in the context of environmental features of the site, the habitat requirements of wildlife and potential ecological impacts. A list of environmental weeds is included in Schedule 8. Similarly, any areas that are disturbed as a result of the development, should be revegetated progressively during construction and be completed within one (1) month after construction is completed.