

Guidelines for controlled activities

Vegetation Management Plans

Controlled activities carried out in, on or under waterfront land are now regulated by the *Water Management Act 2000* (WMA). The Department of Water and Energy is required to assess the impact of a controlled activity to ensure that minimal harm will be done to any waterfront land, ie the bed and a distance inland of 40 metres from a river, lake or estuary.

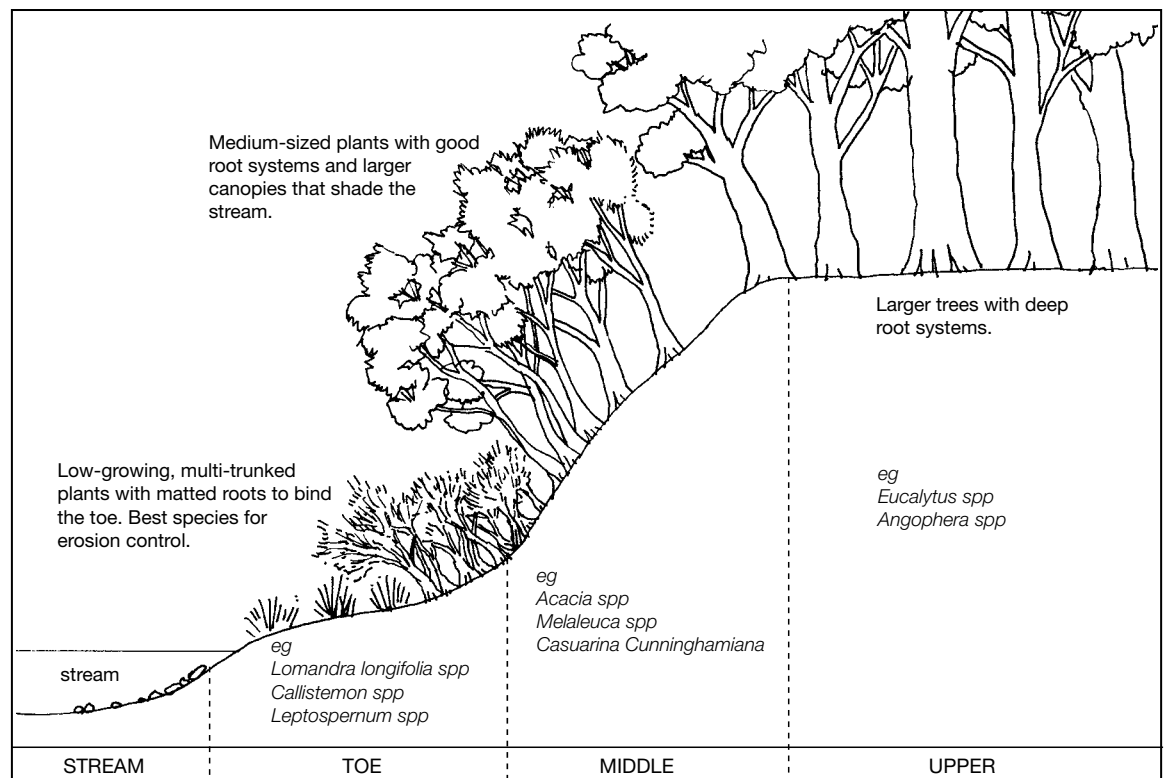
This means that a controlled activity approval must be obtained from the Department prior to carrying out a controlled activity.

Riparian corridors form a transition zone between terrestrial and aquatic environments and perform a range of important environmental functions. The protection or restoration of vegetated riparian areas is important to maintain or improve the geomorphic form and ecological functions of watercourses through a range of hydrologic conditions in normal seasons and also in extreme events.

A Vegetation Management Plan (VMP) which outlines the criteria for the establishment and management of a riparian corridor may be required to be prepared and submitted to the Department for assessment and approval prior to the issuing of a controlled activity approval for works in or within 40 metres of a river, lake or estuary.

The objective of a VMP is to provide for a stable watercourse and riparian corridor which emulates the native vegetation communities in the area. Figure 1 illustrates a typical riparian cross section.

Figure 1. Typical riparian cross section



Adapted from *Rivercare: Guidelines for Ecological Sustainable Management of Rivers and Riparian Vegetation*:
Raine, A.W & Gardiner, J.N, (1995), LWRDC, Canberra.



A VMP should be prepared by a suitably qualified person and should consider but not be limited to the following criteria:

- An appropriate width for the riparian corridor should be identified in accordance with the Department's *Guidelines for controlled activities – Riparian corridors*. The VMP should consider the full width of the riparian corridor and its functions including accommodating fully structured native vegetation.
- The location of the bed and banks or foreshore of waterfront land and the footprint of the riparian corridor should be clearly identified.
- Measures for controlling access and encroachments (bollards, fences, etc.) into the riparian corridor should be identified.
- Vegetation species composition, planting layout and densities should be identified. Plantings should emulate the ecotone of vegetation naturally or previously occurring along the waterfront land. Mature vegetation communities are generally well structured, comprising trees, shrubs and groundcover species. The required mix of these species relates to the actual community to be emulated and the size of the area/s to be rehabilitated. Planting densities should achieve quick vegetative cover and root mass to maximise bed and bank stability along the subject watercourse.
- Seed/plant sources should be identified and where possible native plants and seed sources of local provenance should be utilised.
- Exotic vegetation should be avoided. Use of exotic species for the purposes of temporary soil stabilisation is permitted provided they are sterile, non-invasive and easily eradicated when permanent vegetation is established.
- Details of the planting program, rehabilitation methods and staging should be provided. Other revegetation techniques such as hydro-seeding, direct seeding, brush matting or assisted natural regeneration may be considered.
- Maintenance requirements should extend for a minimum of two years after the completion of works or until such time as a minimum 80% survival rate for all plantings and a maximum five percent (5%) weed cover for the treated riparian corridor (controlled activity) is achieved.
- Project tasks should be defined and described, including a schedule detailing the sequence and duration of works necessary for the implementation of the VMP.
- Maps or diagrams which identify the proposed riparian area, existing vegetation, vegetation to be retained, vegetation to be cleared, footprint of construction activities, areas of proposed revegetation etc should be prepared.
- Photographs of the site should be supplied and photo points should be identified for future monitoring and reporting purposes. The photo points should be identified by GPS coordinates or by survey particularly for large scale earthworks or extractive industries.
- Costings for the implementation of all components and stages of the work including materials, labour, watering, maintenance, monitoring and reporting, etc should be prepared.
- Processes for monitoring and review, including a method of performance evaluation, should be identified. This should include assessing the need for replacing plant losses, addressing deficiencies, problems, climatic conditions, successful completion of works, etc.

Further information

If you require more information about controlled activity approvals please contact your local DWE office or visit our website www.dwe.nsw.gov.au

Important notes

DWE has prepared these guidelines in good faith. In the case of any inconsistency between the guidelines and the controlled activity approval or legislation, the controlled activity approval or legislation will prevail to the extent of that inconsistency.

Nothing in these guidelines is taken to authorise a controlled activity. These guidelines are designed to provide information to assist in the design of any development or work that constitutes a controlled activity and the preparation of an application for a controlled activity approval. Users are advised to seek professional advice and to refer to the legislation and any relevant approvals, as necessary, before taking action in relation to any matters covered by the guidelines.

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