

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

POLICY STATEMENT NO. XXX

ENVIRONMENTAL WEED MANAGEMENT

DRAFT - JUNE 1999

This policy should be read in conjunction with the "Environmental Weed Strategy for Western Australia 1999" and Policy Statements;

- N°. 9 (Conservation of Endangered Flora and Fauna in the Wild).
- N°. 10 (Rehabilitation of Disturbed Land).
- N°. 15 (Community Involvement - public participation and volunteers).
- N°. 27 (CALM's Role in Management of Vegetation in Rural Areas).
- N°. 31 (Management of Reserves for the Conservation of Nature) and,
- N°. 40 (Road Management).

**OPERATIONAL OBJECTIVE**

To achieve the safe, effective and coordinated management of environmental weeds on CALM lands, in accordance with established priorities and consistent with CALM conservation objectives.

**1. DEFINITIONS**

**declared weed:** A species of plant declared under section 35 of the Agriculture and Related Resources Protection Act 1976

**environmental weed:** often referred to as *bushland weed*; defined as "*plant species that have established self-propagating populations in native vegetation, terrestrial or aquatic, outside their natural range.*" (Csurhes 1995).

For the purpose of this policy, environmental weeds will include all introduced naturalized plants. Naturalized plants are, "*plants that are reproducing and expanding within the habitat and have maintained themselves over time, without human assistance.*" (Keighery 1993). These include species introduced from outside Australia, which may be "declared" plants under the ARR Act, also plants introduced into WA from elsewhere in Australia or plants native to Western Australia and growing outside of their natural range.

**2. BACKGROUND**

**Need for Management:**

The Department of Conservation and Land Management has statutory responsibilities to conserve and protect native flora and fauna throughout the state and to manage the variety of landuse opportunities present on CALM managed land. Weeds invading natural ecosystems whether marine, aquatic or terrestrial, are referred to as environmental weeds and are a major threat to these ecosystems and the native species they contain. Environmental weeds threaten biodiversity and disrupt ecosystem processes and function. Other important values of natural ecosystems such as cultural, social, scientific and aesthetic values are also threatened by weed invasion.

**Legal Requirements:**

The Department has responsibility for the conservation and protection of flora and fauna on land it manages under (Section 33(1)(d) Conservation and Land Management Act). It also has responsibilities in accordance with management plan requirements (Section 56 CALM Act) or in cases where there is no management plan as a necessary operation under Section 33(3)(b) of the CALM Act.

The Department has responsibilities on CALM managed lands for control of plants that are "declared" under Sections 39-41 of the Agriculture and Related Resources Protection Act 1976 (ARRP Act), viz. "A Government Department shall control declared plants and declared animals on and in relation to public land under its control". However, the Agriculture Protection Board Act, 1950 (APB Act) takes precedence over the ARRP Act to the limit of any inconsistency between the two Acts. Sections 22(1), (2) and (3) of the APB Act preserve the "rights, powers, authorities or duties of any Government department".

This is interpreted as allowing CALM, in carrying out its responsibilities under the ARRP Act, to reserve the right to decide priorities and the level of control in accordance with availability of funds.

**Coordination and Integration:**

Environmental weeds have the capacity to cross tenure, administrative and natural boundaries. These include State, Regional, District, local government, government agency, private property and bioregion boundaries. A coordinated and integrated approach to their management is essential to ensure successful and cost effective programs.

Whenever possible, programs on CALM managed lands should be coordinated and integrated with surrounding landholders and community programs. Agriculture WA Protection Officers, Landcare groups and the Agriculture Protection Boards' Regional Advisory Committees and Zone Control Authorities are appropriate vehicles for liaison with the rural community.

Coordination and integration at a senior level will be arranged through the State Environmental Weed Group, which was established under the Environmental Weed Strategy for Western Australia. The group is comprised of members from local government, State government agencies, private landowners, research institutions and community organizations and is committed to a whole of government and community approach to the environmental weed problem.

**Finance:**

Finance and manpower limit environmental weed management. At the present level of funding, control of all environmental weeds on all CALM managed land, is not possible. Regional/District budgets should reflect priorities defined in policy 3.2 of this policy statement and achieve the maximum value for each dollar spent. All environmental weed management operations need to include resources for appropriate follow up action and monitoring.

### 3. POLICIES

The Department will:

- 3.1 Develop and review a strategic approach to environmental weed management and control based on four key activities. This model is based on a strategic approach to the management of pest animals or assemblage of pest animals by Braysher 1993.

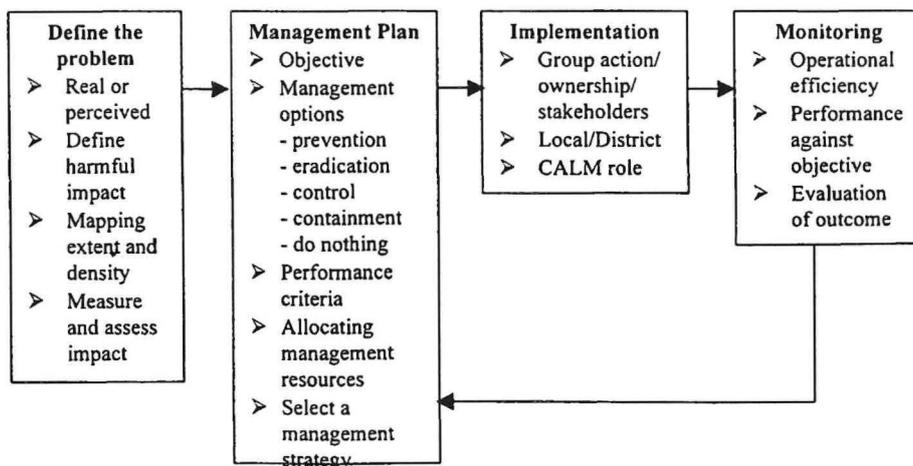
**Defining the Problem** - The problem should be defined in terms of impact on or threat to conservation values or CALM assets and the level of control required to reduce or prevent the damage.

**Developing a Management Plan** - Regions and Districts are to prepare Weed Control Action Plans. Managers must establish clear objectives in terms of the desired conservation outcome sought. Options for environmental weed management include prevention, eradication, control, containment or do nothing.

It is clearly the preferred option to prevent the introduction of environmental weeds to natural ecosystems through appropriate management of cultural operations such as nursery and establishment practices, silvicultural practices, entry hygiene, fertilizer applications, importation of basic raw materials, burning and road works. Eradication will rarely be a feasible goal.

**Implement the Plan** - A large-scale (regional) approach to environmental weed management is usually most effective. This requires a cross boundary approach to weed management between CALM and surrounding land holders. It also requires liaison with other land management and research agencies, voluntary organizations and interested individuals to achieve coordination and integrated management of weeds.

**Monitoring and Evaluating the Plan** - Monitoring has two aspects. Operational monitoring assesses the efficiency of any specific control operation. Performance monitoring involves gathering information to determine whether the strategy is meeting the desired long-term conservation goal.



- 3.2 Environmental weed management on CALM managed land will address the following priorities in the Weed Control Action Plan:
- Priority 1: Any weed impacting on threatened flora, fauna or ecological communities, or any weed threatening priority 1 or 2 listed flora or fauna.
  - Priority 2: Any weed listed in the Environmental Weed Strategy for WA that occur in areas of high conservation value, or any weed threatening priority 3 or 4 listed flora or fauna.
  - Priority 3: Small infestations of weeds listed in the Environmental Weed Strategy for WA with an Environmental Weed Rating of high or moderate.
  - Priority 4: Any weed with an Environmental Weed Rating of high or any weed affecting CALM assets or values.
  - Priority 5: Any other weed with an Environmental Weed Rating.
- 3.3 Support and implement the recommendations of the Environmental Weed Strategy for Western Australia 1999.
- 3.4 Support legislative controls on the introduction into Western Australia of any potential weed species, and seek legislative powers for CALM to manage such plants already established in Western Australia, including on private land.
- 3.5 Support national controls on the introduction into Australia of any plant that is considered likely to become invasive weeds of native ecosystems.
- 3.6 Provide funds on a continuing basis for weed management.
- 3.7 Promote and sponsor research on the identification, distribution, biology, impact and control of environmental weeds.
- 3.8 Train appropriate staff in weed identification and management practices for the control of environmental weeds.
- 3.9 Consider all available methods of control (physical, chemical, ecological suppression, biological). The final choice will depend on a comparison of the feasibility, cost-effectiveness and environmental efficacy of the alternatives.
- 3.10 Promote local species as alternatives to potential environmental weeds for rehabilitation and commercial uses.
- 3.11 Heighten community awareness of the serious threat to native ecosystems posed by environmental weeds.

#### 4. STRATEGIES

To accomplish the Department's objective and policy, the Department will:

- 4.1 Support the State Environmental Weed Group (SEWG).
- 4.2 Assist the SEWG to develop appropriate consultative and administrative mechanisms to prevent further undesirable introductions.
- 4.3 Establish and maintain operational procedures for the safe control and management of environmental weeds in line with strategies given in Policy N<sup>o</sup>. 9 (Conservation of Endangered Flora in the Wild), N<sup>o</sup>. 10 (Rehabilitation of Disturbed Land), N<sup>o</sup>. 27 (CALM's Role in Management of Vegetation in Rural Areas), N<sup>o</sup>. 31 (Management of Reserves for the Conservation of Nature) and N<sup>o</sup>. 40 (Road Management).
- 4.4 Manage and continue to develop the environmental weed database "weedBase" prepared as part of the Environmental Weed Strategy for WA.
- 4.5 Establish and maintain "weedBase" on the intranet and internet.
- 4.6 Develop a suitable Geographical Information System (GIS) compatible with "weedBase", to assist effective weed management.
- 4.7 Ensure that each District or Region surveys environmental weed infestations on CALM lands and waters in particular any infestations impacting on threatened flora, fauna or ecological community.
- 4.8 Record weed management information on an operation control system appropriate to CALM and other interested agencies.
- 4.9 Lodge voucher specimens of weed species in the regional herbaria with vouchers also sent to the State Herbarium.
- 4.10 Prepare and maintain District or Region Weed Control Action Plans. After consultation with other interested agencies and the environmental protection officer, the action plan will form the basis for a works program, which will include recording details of weed treatment undertaken, the success of the treatment, and follow-up required.
- 4.11 Encourage and conduct necessary research on environmental weeds, with particular emphasis on understanding their identification, geographical distribution, ecology, reproductive biology, impact, control, and investigate alternative plants to environmental weeds for rehabilitation and commercial uses.
- 4.12 Contribute to the investigation and development of non-chemical control methods.
- 4.13 Ensure that spraying of environmental weeds does not have an unacceptable harmful effect on threatened species or communities nor cause undue long term harmful effects to other native plant communities.

- 4.14 All herbicide application will be in accord with the Public Health Guidelines on the use of chemicals in rural areas contained in the Health Act (1911) – Health (Pesticides) Regulations 1956 and applied in accordance with the Country Water Supply Act 1947. Aerial application of herbicides will adhere to the Aerial Spraying Control Act 1966.
- 4.15 Seek advise from the Water and Rivers Commission before any herbicide application is undertaken in a “Water Catchment Area” as defined by the Executive Director, Public Health in Public Service Circular 88.
- 4.16 Train CALM personnel in the identification, control and safe management of environmental weeds.
- 4.17 Publicize information on environmental weeds and the threats they pose.
- 4.18 Encourage involvement of the community and other land management agencies in the monitoring, control and management of environmental weeds.
- 4.19 Ensure the Departmental nursery operations, seed and seedling operations and tree planting programs do not result in the introduction of potential environmental weeds to native ecosystems, and liaise with other nursery or revegetation groups for the same purpose.
- 4.20 Ensure that all operations on CALM lands are managed with appropriate hygiene practices to ensure that environmental weeds are not introduced or spread.

Syd Shea  
EXECUTIVE DIRECTOR  
Distribution: Lists A, B, D, E and L