

## 7.2.4 ENVIRONMENTAL MANAGEMENT PLAN ELEMENT 4: WEED MANAGEMENT

### Sub-element 4.1: General Weed Flora

#### Introduction

Weed management as outlined here relates to the current weed flora of the site (see for example Plates 5, 13 and 18) and especially the weed flora of the Council Conservation Zones. There are very important weed management issues for the golf course, wetlands and other areas within the proposed development area and some of these are discussed under separate EMP elements. Much of the current weed flora of the site will be destroyed during the construction period, thus weed control is generally not advocated before development commences, except for (i) areas that will be retained (notably the Council Conservation Zones), (ii) for some particularly serious weed species, and (iii) as part of site preparation (for revegetation). A Weed Management Plan (WMP) will be prepared to guide weed management.

The Advisory Committee (McKenzie and Westwood 2000, p. 33) appointed to hear and consider submissions to Amendment R60 of the Surf Coast Planning Scheme in relation to the proposed Golden Beach (Torquay Sands) development, recommended provision of a washing-down bay for vehicles to help in weed control. At its meeting on 12 December 2000, Surf Coast Shire also required that earthmoving and grass maintenance vehicles entering and leaving the site be washed to remove contaminating weed seed that may 'escape' to establish new weed populations, that materials be sourced from non-infected areas (including details of where imported fill will be sourced), and that a quality control certification process be used.

SUB-ELEMENT 4.1	General Weed Flora	Responsible Parties	Timing or Frequency
<b>Objectives</b>	<p>To eliminate some weed species (mostly woody weeds) from the entire property, to manage others to an acceptable level and minimise dispersal of weeds within, and to and from the site.</p> <p>To eliminate Regionally Prohibited weed species listed under the <i>Catchment and Land Protection Act 1994</i> (Appendix 8) within two years.</p> <p>To eliminate Regionally Controlled weed species listed under the <i>Catchment and Land Protection Act 1994</i> (Appendix 8) or control populations at a low level within two years.</p> <p>To eliminate additional weed species (listed in Appendix 8) or to control these weeds in designated areas on an ongoing basis.</p>		

SUB-ELEMENT 4.1	General Weed Flora	Responsible Parties	Timing or Frequency
<b>Implementation Actions</b>	<ul style="list-style-type: none"> <li>Engage a qualified environmental consultant to prepare a Weed Management Plan (WMP) documenting objectives, timing or seasonality considerations, and appropriate control/elimination methods (e.g. physical removal, herbicide application and monitoring requirements). Appendix 8 gives generic control methods for each species. The WMP must be submitted for approved by Council. The WMP must address the following issues: <ul style="list-style-type: none"> <li>Include a survey of areas outside the Council Conservation Zones to document the distribution and population size of the target weed species (carried out in late spring 2000 and May 2001) to provide the background information for the preparation of the Weed Management Plan.</li> <li>Weed management in the development area will be integrated with that proposed for the coast and foreshore in accordance with the 1998 Torquay Foreshore Masterplan and Management Plan.</li> <li>Detection and control of additional weed species on the site will be a priority.</li> <li>Appropriate design of wetland edge zones and hydrologic regimes to minimise conditions favourable to the spread of weed species.</li> <li>Ensure that 'clean' fill and other materials are sourced and recorded for use in the development area and are not infected.</li> <li>Control of weed movement (e.g. Terracina Spurge) within the site to prevent spread.</li> <li>Wash-down of earthmoving and grass maintenance vehicles entering and leaving the site as a routine hygiene measure.</li> <li>Design and implement initial wetland plantings and all amenity vegetation and indigenous revegetation to help outcompete weed species.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Developer</li> </ul>	<ul style="list-style-type: none"> <li>Prior to commencement of any subdivision or land formation works</li> </ul>

SUB-ELEMENT 4.1	General Weed Flora	Responsible Parties	Timing or Frequency
	<ul style="list-style-type: none"> <li>Commence weed management activities identified in the WMP.</li> </ul>	<ul style="list-style-type: none"> <li>Developer / Golf Course Manager</li> </ul>	<ul style="list-style-type: none"> <li>Upon approval of the WMP by Council.</li> </ul>
<b>Follow-up and Ongoing Actions</b>	<ul style="list-style-type: none"> <li>Review Weed Management Plan at appropriate intervals</li> <li>Ongoing weed management as documented in the WMP and any other weed management activities identified through the monitoring process.</li> <li>Implement regular monitoring of weeds to determine outcomes of treatments or management actions as well as identify 'new' weed species that may appear on the site.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Management Trust</li> <li>Body Corporate, Golf Course Manager</li> <li>Golf Course Manager</li> </ul>	<ul style="list-style-type: none"> <li>Annually, as detailed in the WMP</li> <li>As detailed in WMP</li> <li>As detailed in WMP</li> </ul>
<b>Performance Measures and Monitoring</b>	<ul style="list-style-type: none"> <li>Current populations of species targeted for elimination will be removed within two years, or, as an interim measure, they will be prevented from seeding.</li> <li>Populations of species targeted for control in designated locations will be kept to a minimum.</li> <li>No additional, seriously-invasive weed species will persist on the site six months to two years after detection (depending on weed species and its management requirement).</li> <li>Monitoring of cultivated plants (with follow-up actions as deemed appropriate when rules breached).</li> </ul>	<ul style="list-style-type: none"> <li>Golf Course Manager</li> <li>Golf Course Manager</li> <li>Golf Course Manager</li> <li>Body Corporate</li> </ul>	<ul style="list-style-type: none"> <li>July 2003</li> <li>July 2003</li> <li>Six monthly monitoring of any additional, seriously invasive weed species.</li> <li>As detailed in WMP</li> </ul>

## ENVIRONMENTAL MANAGAGEMENT PLAN ELEMENT 4: WEED MANAGEMENT

### *Sub-element 4.2: Potential Horticultural Escapees*

#### **Introduction**

A large proportion (some 70%) of the Victorian weed flora has 'escaped' from cultivation (Carr 1993) including some of the most important weed species recorded in the study area (as indicated in Appendix 8). There is a high potential for weed species to 'escape' from cultivation in the development area – either as cultivated garden plants in residential areas or amenity garden and landscape plantings in public open-space areas. Such potential problems can be avoided by adopting a policy for the development which recognises the weed potential of some horticultural species and avoids their use in the development area and discourages or forbids residents from planting such species.

The Advisory Committee (McKenzie and Westwood 2000, p. 11) notes that Council had accepted changes to Part 9 of the EMP relating to the weediness of cultivated plants. Under this agreement the Developer (proponent) will prepare a list of preferred species for planting in private gardens to be approved by Council and distributed to all new landowners. An enormous range of plant species and cultivars is available in horticultural and in the horticulture trade, the great majority of which are not weedy. Appendix 10 provides a list of cultivated species which are weedy and should not be planted.

SUB-ELEMENT 4.2	Potential Horticultural Escapees	Responsible Parties	Timing or Frequency
<b>Objective</b>	<p>To prevent the cultivation of species in the development area which have invasive potential as environmental weeds on adjoining or local lands (e.g. Council Conservation Zones and the coastal reserve).</p> <p>To prepare a list of plant species which must not be planted, and publish and distribute a list of preferred species that residents are encouraged to cultivate in private gardens.</p>		
<b>Implementation Actions</b>	<ul style="list-style-type: none"><li>Engage a qualified environmental consultant to prepare a list of plant species that must not be cultivated including weeds listed in the publication <i>Environmental Weeds. Invaders of our Surf Coast</i> (Surf Coast Shire and Angair 1998) (Appendix 10).</li><li>Distribute the weeds list and supporting information in Residents' Information Kits.</li></ul>	<ul style="list-style-type: none"><li>Developer</li><li>Developer</li></ul>	<ul style="list-style-type: none"><li>Forms part of this EMP</li><li>As part of the sale of each allotment</li></ul>

<b>SUB-ELEMENT 4.2</b>	<b>Potential Horticultural Escapees</b>	<b>Responsible Parties</b>	<b>Timing or Frequency</b>
<b>Follow-up or Ongoing Actions</b>	<ul style="list-style-type: none"> <li>Periodically update information to residents to ensure that it remains current.</li> </ul>	<ul style="list-style-type: none"> <li>Body Corporate</li> </ul>	<ul style="list-style-type: none"> <li>Every three years</li> </ul>
<b>Performance measures and Monitoring</b>	<ul style="list-style-type: none"> <li>No species appearing on the list of undesirable plants will be cultivated.</li> <li>Residents will be aware of the need for responsible horticulture and will willingly comply with guidelines or restrictions.</li> </ul>	<ul style="list-style-type: none"> <li>Body Corporate</li> <li>Developer</li> </ul>	<ul style="list-style-type: none"> <li>Constant monitoring. Immediate notification to land owner should this situation be identified.</li> <li>As part of the sale of each allotment.</li> </ul>