

An Innovative Programme to Enhance and Support Community-based Coastal Weed Control on the NSW Far South Coast

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'There is, as yet, no sense of pride in the husbandry of wild plants and animals, no sense of shame in the proprietorship of a sick landscape'

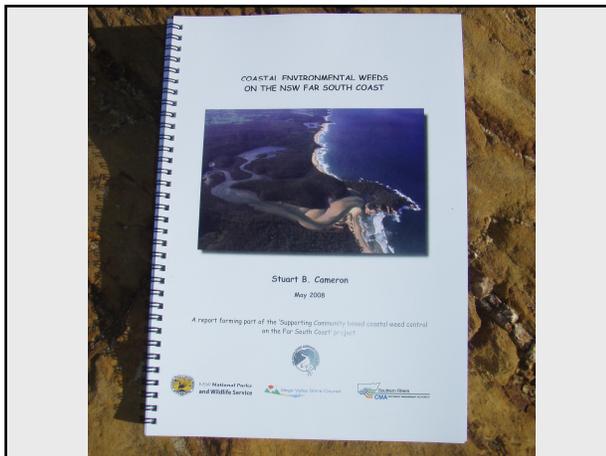
Aldo Leopold (1886-1948)

'The reality is that without much broader political, social, economic and environmental actions we stand little chance of stemming the tide of invasive plants threatening our local ecosystems.'

Adam Muyt, Bush Invaders of South-East Australia (2001)

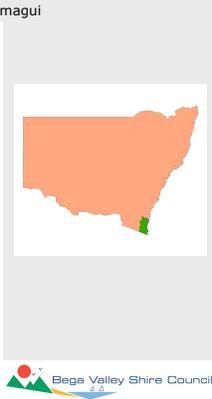
'Australians urgently need to adopt a new gardening ethos. We must accept that gardening within a kilometre or so of bushland entails an ecological responsibility. Weedy species should not be grown. New garden plants should be treated less like exciting new products to brighten our lives and more like wild organisms harbouring the drive to escape.'

Tim Low, Feral Future (1999)



Coastal Zone of Bega Valley Shire

- 220km coastline
- 1522 native vascular plants recorded
- 70% coastline in reserves
- 4 settlements:
 - Bermagui
 - Tathra
 - Merimbula-Pambula
 - Eden



NSW Scientific Committee Findings 29 August 2008

- ◆ Alien species in natural habitats internationally recognised as 2nd major cause of biodiversity decline (habitat destruction 1st)
- ◆ Weeds threaten half NSW flora & fauna
- ◆ Garden plants 2/3 of Aust. agricultural & environmental weeds
- ◆ Garden plants escape around human settlements 1st, then expand across landscape



Genesis of the CoastWeed Project

- ◆ Historical approach to coastal weeds ad-hoc, un-coordinated, non-strategic
- ◆ Agencies and groups active in some areas - focused on 1 or 2 weed species
- ◆ Community lobbied for funding for several years
- ◆ Funding received through Southern Rivers CMA - \$70,000 from NHT for 2007-08



The Project

- ◆ Inter-agency Steering Committee
- ◆ Dedicated Project Officer
 - Survey and Report
 - Community consultation/education
 - Database
 - On-ground – Koori work crews, professional contractors

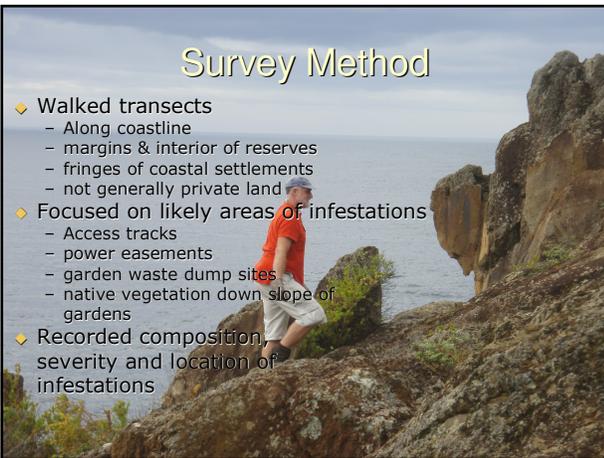


Project Officer Brief

- ◆ Complete survey of coastal environmental weeds based on field inspections and evaluation of existing data
- ◆ Provide situation report on coastal weed situation
- ◆ Develop action plan for coastal weed control
- ◆ Develop database mapping weed infestations
- ◆ Report survey findings to community and responsible agencies
- ◆ Assist community to develop local weed control plans
- ◆ Supervise on-ground work

Survey Method

- ◆ Walked transects
 - Along coastline
 - margins & interior of reserves
 - fringes of coastal settlements
 - not generally private land
- ◆ Focused on likely areas of infestations
 - Access tracks
 - power easements
 - garden waste dump sites
 - native vegetation down slope of gardens
- ◆ Recorded composition, severity and location of infestations



Weed Assessment Criteria

- ◆ How serious is actual/potential impact of weed or infestation upon native vegetation?
- ◆ How large a proportion of the landscape (or of a specific site) is likely to be threatened by a particular weed species?
- ◆ What is weed's capacity to spread swiftly and easily?
- ◆ How serious is weed's impact upon amenity of landscape?
- ◆ How readily and inexpensively (money and effort) can the weed /infestation be controlled?

Key Survey Findings

- ◆ Environmental weeds already degraded much native vegetation on margins of coastal settlements
- ◆ Degree of degradation directly related to duration of settlement. Older gardens = worse weed infestation
- ◆ This process still at an early stage - will continue till weeds have occupied all suitable habitat
- ◆ 80% of local environmental weeds started in local gardens
- ◆ Dumping of garden waste and garden overflow major causes of exotic garden plants in native vegetation
- ◆ New generation of environmental weeds being widely planted



Pattern of weed infestations around Eden



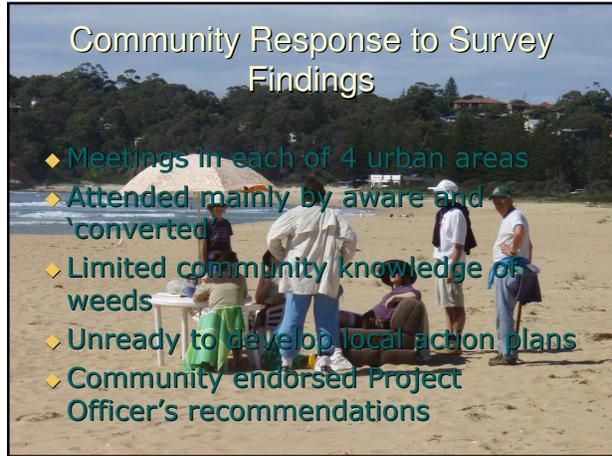
Weed Control Effort Prior to Project

- ◆ Environmental weed control undertaken by:
 - state and local government agencies
 - organised community volunteer groups and
 - concerned individuals (NAIs)
- ◆ Activities not well co-ordinated on landscape-wide basis or informed by unified regional strategy
- ◆ Environmental weed control effort uneven
 - small number of environmental weed species being controlled
 - different weeds being targeted in different places
- ◆ Resources available for environmental weed control meagre, uncertain
- ◆ Some notable local successes, e.g. bitou, bridal creeper, sea spurge



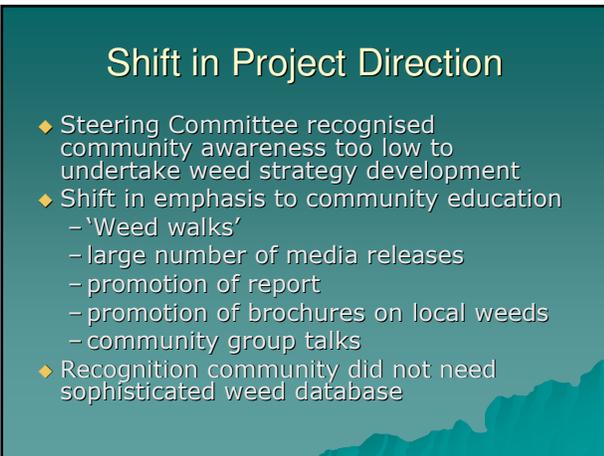
Community Response to Survey Findings

- ◆ Meetings in each of 4 urban areas
- ◆ Attended mainly by aware and 'converted'
- ◆ Limited community knowledge of weeds
- ◆ Unready to develop local action plans
- ◆ Community endorsed Project Officer's recommendations



Shift in Project Direction

- ◆ Steering Committee recognised community awareness too low to undertake weed strategy development
- ◆ Shift in emphasis to community education
 - 'Weed walks'
 - large number of media releases
 - promotion of report
 - promotion of brochures on local weeds
 - community group talks
- ◆ Recognition community did not need sophisticated weed database



On-ground Works

- ◆ 3-person work crew employed from each of 3 Local Aboriginal Land Councils (LALCs)
- ◆ Worked within LALC boundary
- ◆ Trained and supervised by Project Officer
- ◆ Assisted by local volunteers
- ◆ Completed 750ha weed control, mainly sea spurge and *Polygala*
- ◆ Very positive community response to work



Future of the Project

- ◆ Volunteers and agencies satisfied
- ◆ Increased awareness in general community
- ◆ Demand for project to continue
- ◆ Funding secured for project to continue:
 - Retain Project Officer
 - Greater emphasis on education
 - Tackling source of infestations - gardens, landscapers, nurseries
 - Continue Koori work crews to support volunteer efforts
 - Foster new volunteer groups



Effective Strategies – Whole of Landscape Approach

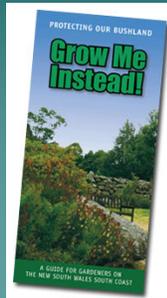
- ◆ Sought to engage all stakeholders/land managers
- ◆ Provided community and agencies for first time with:
 - an overview of state of vegetation along the entire coast
 - indication of the relative significance of various environmental weed species
 - awareness of key factors promoting the spread of environmental weeds
 - strategy for addressing the problem at both local and regional level

Effective Strategies – 'Weed Walks'

- ◆ Introduce potentially invasive plants
- ◆ Demonstrate how garden plants escape into the landscape
- ◆ Show how weeds vary in their impact and thus how they may be prioritised in control programs
- ◆ Help give participants a sense of the totality of their landscape
- ◆ Allow concerned locals to meet and form connections which can lead to formation of new volunteer groups

Effective Strategies – Talks to Community Groups

- ◆ equip gardeners with skills to:
 - assess a garden plant for potential invasiveness
 - assess riskiness of one's garden, how it sits in landscape, how likely its plants are to escape
- ◆ Give rise to a multitude of questions about specific plants and issues



Effective Strategies – Koori Work Crews

- ◆ Energetic, committed and quick to identify weed species and 'read' local vegetation
- ◆ Employment opportunity appreciated in area of high Aboriginal unemployment
- ◆ Funders view creation of employment opportunities for Aboriginal people very favourably
- ◆ Where relations between Aboriginal people & others sometimes difficult, valuable to have local non-Aboriginal volunteers and local Kooris working side by side



Major Challenges Ahead

- ◆ Like all environmental issues environmental weed problem is primarily located not in landscape but in human values, attitudes, beliefs and behaviours. This is where real work must be done.
- ◆ Great challenge is education and behaviour change NOT controlling problematic plant species. That is a secondary problem arising because primary one is unresolved.

Continuity



- ◆ The key to long term weed control is continuity. Continuity of:
 - ◆ attention to problem
 - ◆ monitoring on-ground situation
 - ◆ effort
 - ◆ resourcing
 - ◆ responsibility

'Ultimately, the future of a natural ecosystem depends not upon protection from humans but on its relationship with the people who inhabit it or share the landscape with it. This relationship must not only be respectful, it must also be ecologically robust, economically productive, and psychologically rewarding. This being the case, the central task of natural-area conservation is to provide a role for people inside the old, 'natural' system that is not only both active and constructive, but that engages and challenges all the human interests and abilities, including those for manipulation and invention as well as for observation, description, and care taking.'

The Sunflower Forest, William R. Jordan III, p16



NSW National Parks
and Wildlife Service



Natural Heritage Trust
Helping Communities Helping Australia



Southern Rivers
CMA CATCHMENT MANAGEMENT AUTHORITY



Bega Valley Shire Council