

WEEDS OF NATIONAL SIGNIFICANCE

Cabomba

(Cabomba caroliniana)

Strategic Plan
2011 to 2016

Draft actions table for comment

REVISED NATIONAL CABOMBA STRATEGIC PLAN –Actions Table

1. Protecting clean areas, prevent spread, early detection, and eradication of isolated and scattered infestations

Objectives	Strategic Actions	Responsibility	Priority	Performance Indicators
1A Monitor waterways to enable early detection of new infestations	Maintain cabomba (and high priority aquatic weeds) identification training initiatives for weeds staff, community members and waterway managers	State/Territory Govt, regional NRM groups	1	ID training workshops held annually in priority regions and training resources available
	Promote surveillance activities for cabomba in priority regions (as determined by national map) Link passive surveillance activities to fisheries, water quality and riverine monitoring programs, and community based NRM reporting	State/Territory Govt, regional weed committees, LCA's, Regional NRM groups	1	Surveillance initiatives built into regional and local weed management plans Number of new infestations reported
	Ensure ongoing supply of cabomba identification and awareness information	AG, State/Territory Govt	1	Brochures and flyers available (web and hardcopy) for use by key stakeholders
	Review effectiveness of existing aquatic weed early detection guidelines and revise where necessary	NAWMG	2	Guidelines revised and redistributed to key weeds staff by June 2012
1B Prevent spread from existing sites	Implement strategic control programs at infested boat ramps and other sites at high risk of spread	LCA's	1	All high risk sites identified and controlled
	Implement awareness programs for boating/fishing audiences to promote hygiene and other measures that reduce spread of cabomba (and aquatic weeds)	State/Territory Govt, regional weed committees, LCA's	2	Awareness programs implemented
1C Reduce invasion pathways for cabomba and other ornamental aquatic plants with weed risk.	Ban from sale all <i>Cabomba</i> spp. and other aquarium plants with high weed risk potential, as recommended by the Aquatic Plants Weed Risk Assessment project	State/Territory Govt.	1	Other high risk aquatic plants are banned from sale nationally by 2014 Cabomba is not replaced in the trade by other species with similar weed potential
	Continue risk assessments to identify additional aquatic plants in the ornamental plant trade with high weed risk and remove from sale	APWRA technical group, State/Territory Govt	2	High risk aquatic plants removed from sale nationally by 2014

	Maintain cabomba and aquatic weed awareness initiatives with aquatic plant wholesalers and retailers	NAWMG	2	Aquatic plant trade continues to be targeted with extension material
	Undertake inspection activities for aquatic plant retail outlets	State/Territory Govt, LCA's	2	Pathways inspected annually in relevant States/Territories
	Scope potential of a species labelling scheme for aquarium and aquatic ornamental plants at retail outlets	PIAA, NAWMG, aquatic plant wholesalers	3	Cabomba is not sold under another product name
1D Maintain and monitor outlier eradication and containment programs.	Continue cabomba eradication and containment programs at existing strategic locations	State/Territory Govt, regional weed committees, LCA's, regional NRM groups	1	Control programs continued at existing sites
	Assess eradication and containment feasibility of priority outlier sites in response to availability of new or improved control methods (see 3B1 and 3C1)	NAWMG, regional weed committees LCA's	1	Additional sites suitable for eradication/containment programs are identified
	Develop and implement management plans for priority eradicable/containable outlier infestations	State/Territory Govt, regional weed committees, LCA's regional NRM groups	1	Management plans developed and implemented within 12 months.

2. Strategic management of established infestations

Objectives	Strategic Actions	Responsibility	Priority	Performance Indicators
2A Identify key ecological assets at threat from cabomba and prioritise at national, state and regional levels.	Compile database of key national, state and regional ecological assets threatened or impacted by cabomba and develop management actions/strategies to protect assets	NAWMG, State/Territory Govt, regional NRM groups, regional weed committees, LCA's	1	Assets at risk identified by June 2011. Strategic actions/strategies identified and integrated into NRM plans
	Quantify the impacts of submerged aquatic weeds to aquatic ecology	Research organisations, international collaborators	2	Impacts of aquatic weeds are better understood
2B Pursue effective biological agents and strategies for use against cabomba.	Continue host specificity testing of potential biological control agents and seek approval for release of host specific agents	CSIRO	1	Agents are researched and suitability for release assessed
	Implement rearing, release and monitoring programs for approved biological control agents	State/territory Govt, local control authorities	1	Biological control agents are released and impact monitored.

	Conduct further native range surveys for potential biological control agents	CSIRO	3	Entire native range of cabomba surveyed for potential enemies
2C Strategic control to minimise the impacts of existing infestations	Develop and implement site specific management plans (in addition to 2A) that protect key assets and values at priority infestations	State/Territory Govt, regional weeds committees, LCA's	1	Management plans developed and implemented for priority infestations.

3. Increased capacity and will to manage

Objectives	Strategic Actions	Responsibility	Priority	Performance Indicators
3A National collation of mapping data and decision support	Utilise national online data storage and mapping tool (Weed Watcher) for ongoing reporting and access to cabomba dataset	AG	1	Mapping system available to all stakeholders by June 2012
	Collate and utilise national data to revise national cabomba map and strategic actions	AG, State/Territory Govt.	1	National map and strategic actions updated annually.
3B Effective techniques for managing cabomba and other submerged aquatic weeds	Implement research and development programs to investigate new control techniques or refine existing approaches. Priority areas include: <ul style="list-style-type: none"> evaluating new aquatic herbicide formulations improving herbicide delivery techniques to submerged weeds improving cost effectiveness of current non herbicide techniques developing integrated control strategies 	Research organisations, State/Territory Govt, LCA's international collaborators	1	cost effective and user friendly control methods identified
	Investigate impacts of submerged aquatic weed control measures on non target organisms	Research organisations, international collaborators	2	Impacts quantified and control methods adjusted if necessary
	Maintain or establish networks and information sharing with cabomba (or submerged aquatic weed) managers and researchers from other countries	Research organisations, international collaborators	2	Increased information exchange with other countries
3C Adoption of best practice management	Promote adoption of new control methods (including new herbicides approved for use) and evaluate their effectiveness in control programs	NAWMG, State/Territory Govt, LCA's	1	New methods are adopted and monitored Strengths and limitations of new control methods are documented and reviewed

	Ensure ongoing availability of cabomba best practice information, including best management practice manuals	AG, State/Territory Govt	1	Manuals and other best practice information available on national weeds website
	Update awareness and management information to reflect new developments in best practice	State/Territory Govt	1	Factsheets or similar updated
	Seek appropriate declaration status of cabomba in response to future availability of effective control options	State/Territory Govt, Regional weed committees	2	Cabomba declaration is revised in key states/territories and regions
	Develop training initiatives for weed managers on submerged aquatic weed management and aquatic herbicide use	State/Territory Govt	3	Training initiatives developed Number of weed managers trained
3D Regulatory and community support for cabomba and submerged aquatic weed control programs	Increase cooperation with herbicide regulatory authorities to seek approval for use of additional aquatic herbicides (through minor use permits or similar) against cabomba and other high priority aquatic weeds	NAWMG, State/Territory Govt, herbicide companies, APVMA and other herbicide regulatory agencies	1	Additional aquatic herbicides are available for use against cabomba
	Establish and maintain cooperative relationships with waterway regulators to seek support for cabomba and other strategic aquatic weed management programs	State/Territory Govt, LCA's	2	Control programs comply with waterway legislation and best practice
	Promote the importance of cabomba management to community and seek acceptance for use of best practice methods (herbicides, draw down, shading)	LCA's	2	Community consultation held and/or media releases issued at strategic sites Community support for cabomba control obtained
3E Maintain capacity for coordinated management.	Maintain existing cabomba management networks, from local to national level	State/Territory Govt, regional weed committees, LCA's, regional NRM groups	1	Coordination across states and weed control jurisdictions continues
	Integrate national strategic plan objectives throughout regional and state policy and planning approaches	State/Territory Govt, regional weed committees, LCA's, regional NRM groups	1	Local, regional and state weed/biodiversity plans (where appropriate) address key priorities of the National Strategic Plan

Priority

- 1 = What has to be done
- 2 = What should be done
- 3 = What could be done

Glossary

AG – Australian Government

APWRA – Aquatic Plants Weed Risk Assessment

LCA's – Local Control Authorities

NAWMG – National Aquatic Weeds Management Group

NRM – Natural Resource Management