

Review and update control sections of the existing Weeds of National Significance manuals

TERMS OF REFERENCE

Purpose

The Centre for Invasive Species Solutions (CISS) requires an update to the components of the best practice manuals for 27 Weeds of National Significance (WoNS). This requirement is limited to the chemical, mechanical and biological control sections of each manual, and it is envisaged would largely be a desktop study followed by the development of Addendums to the existing manuals. The WoNS manuals are generally of a similar format and tone, and any revisions/updates should be consistent with this format.

The review and revisions of herbicide and mechanical control options for the relevant WoNS should include reviewing recommended chemicals and rates; currency of available herbicides and off-label permits; the addition of any new chemicals, or application methods; and an assessment of best practice control methods in the current manuals to ensure they are still acceptable and best practice in the relevant State/ Territory. It is envisaged that this review may identify significant control gaps or issues for certain WoNS, which should be documented in a report to CISS.

The review of the biological control section of the manuals should identify where new agents may be available and any information that needs updating, including a report on the current status of research, where options have been exhausted, where there are barriers to agents, or new agent opportunities. This information should also be included in the control Addendum for each manual.

Please note, this is to be a species-based manual update, as some manuals include multiple WoNS species. Best practice control components for all WoNS species in the 27 manuals should be reviewed to the same extent as in the existing manuals. Please see Attachment 1 Table 1 for all species listings.

Exclusions

Six 2012 WoNS manuals are currently being completed or updated and should be excluded from this work (see Attachment 1 Table 2).

Terms of Reference

The consultant is expected to carry out the following tasks:

1. Establish the current state of the WoNS manuals for the WoNS (listed in Attachment 1 Table 1) and any supplementary information regarding control (eg guidelines, factsheets currently published on Weeds.org.au or State and Territory weed agency websites) that should also be updated or removed from circulation. Develop a summary list with details for each manual and supplementary documents (where feasible) and provide this to CISS for review before commencement of reviews.
2. Undertake a review and revision of herbicide and mechanical control options in the 27 WoNS species' manuals (Attachment 1 Table 1), and develop best practice control addenda for each manual.
3. Undertake a review and revision of biological control options for the 27 WoNS species' manuals (Attachment 1 Table 1 for list) and incorporate updated information into addenda for each manual.

4. Provide a report on the current status of research into biological control where i. options have been exhausted, ii. there are barriers to agents, or iii there are new agent opportunities.
5. In addition, the successful proponent will be required to present an update to the national Environmental and Invasives Committees Weed Working Group around the mid-term point and the end point of the project.

Timeframes

The project is to be completed by 30 June 2022.

Submission process

A response to these ToRs is due for submission by 6:00 pm Monday 20 December 2021.

Applications are to be submitted by email to Catherine Walsh, Weeds RD&E Manager, Centre for Invasive Species Solutions:

Catherine.walsh@invasives.com.au

Submissions should include:

- The proponent's understanding of the task and the challenges involved;
- An outline of the proposed approach, including stakeholder consultation, and timeline of tasks to be undertaken;
- Evidence of the experience of the proponent to undertake the task successfully;
- A budget detailing the costing of the resources and days required to complete each task. Budgets should include GST component.

Enquiries by telephone are welcome: Catherine Walsh (Mobile 0499 545 277)

It is expected that the successful tender will be notified before close of business for the Christmas break (24th December 2021).

20 December 2021: submissions close

24 December 2021: successful vendor chosen and notified

28 February 2022: summary list with details for each manual and supplementary document for all WoNS species listed in Tables 1

16 March 2022: present a status update, including report on all materials in scope for the review (e.g. manuals, supplementary WoNS documents related to control) to the national Environmental and Invasives Committees Weed Working Group mid-point

31 May 2022 (TBC): provide a written report detailing all materials subject to updates and addenda for each manual and present this information to the national Environmental and Invasives Committees Weed Working Group end-point

30 June 2022: Project finalised and final reports and addenda provided to CISS

Attachment 1

Table 1: The 27 WoNS to be included in the manual update (note 27 manuals as bitou bush and boneseed are separate, and two manuals for the Asparagus weeds).

<u>Common name</u>	<u>Species name</u>
Alligator weed	<i>Alternanthera philoxeroides</i>
Athel pine	<i>Tamarix aphylla</i>
Asparagus weeds (please note there are two manuals addressing different species of Asparagus weed)	<i>Asparagus spp.</i>
Bellyache bush	<i>Jatropha gossypifolia</i>
Bitou bush and boneseed (note there are two separate manuals)	<i>Chrysanthemoides monilifera subsp. monilifera</i> and <i>rotundata</i>
Blackberry	<i>Rubus fruticosus agg.</i>
Brooms	<i>Cytisus scoparius</i> , <i>Genista linifolia</i> , <i>Genista monspessulana</i>
Cabomba	<i>Cabomba caroliniana</i>
Chilean needle grass	<i>Nassella neesiana</i>
Gorse	<i>Ulex europaeus</i>
Hymenachne	<i>Hymenachne amplexicaulis</i>
Lantana	<i>Lantana camara</i>
Mesquite	<i>Prosopis spp.</i>
Mimosa pigra	<i>Mimosa pigra</i>
Parkinsonia	<i>Parkinsonia aculeata</i>
Parthenium weed	<i>Parthenium hysterophorus</i>
Pond apple	<i>Annona glabra</i>
Prickly acacia	<i>Vachellia nilotica ssp. indica</i>
Prickly pears	<i>Opuntia spp.</i>
Rubber vine	<i>Cryptostegia grandiflora</i>
Salvinia	<i>Salvinia molesta</i>
Serrated tussock	<i>Nassella trichotoma</i>
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>
Water hyacinth	<i>Eichhornia crassipes</i>
Willows except weeping willows, pussy willow and sterile pussy willow	<i>Salix spp.</i> except <i>S. babylonica</i> , <i>S. X calodendron</i> and <i>S. X reichardtj</i>

Table 2: The (six) 2012 WoNS **excluded** from this tender

<u>Common name</u>	<u>Species name</u>
African boxthorn	<i>Lycium ferocissimum</i>
Cat's claw creeper	<i>Dolichandra unguis-cati</i>
Fireweed	<i>Senecio madagascariensis</i>
Gamba grass	<i>Andropogon gayanus</i>
Madeira vine	<i>Anredera cordifolia</i>
Sagittaria (delta arrowhead)	<i>Sagittaria platyphylla</i>