

Conservation Action Plan

Myriophyllum implicatum

This plan has been prepared in accordance with the requirements of s.78C of the National Parks and Wildlife Regulation 2019 (Reg.) in relation to an Asset of Intergenerational Significance (AIS) as declared under s.153G of the *National Parks and Wildlife Act 1974*.

Site details

AIS site	AIS-ES-136
Site location	An area of 47 hectares in Pilliga CCA Zone 3 State Conservation Area An area of 53 hectares in Pilliga CCA Zone 1 National Park
NPWS contact	Threatened Species Project Officer, Northern Inland Branch

Environmental values

This table sets out the environmental values for which the land was listed as an AIS (Reg. 78C(3)(a)).

Identified value(s)	Value description
Important habitat for Myriophyllum implicatum	Myriophyllum implicatum is a critically endangered creeping herb, growing only 2-10 centimetres high and can form dense mats. Myriophyllum implicatum occurs in moist environments in fresh water up to 10 centimetres deep. This species has been found growing in several inundated gilgai depressions in the Pilliga Outwash Ephemeral Wetlands in the Brigalow Belt South Bioregion. It grows on cracking clay soil and is thought to germinate with inundation. The Pilliga National Park and Pilliga SCA sites are the only known extant populations in NSW for this species.

Key risks to environmental values

This table sets out the key risks to the environmental values of the land (Reg. 78C(3)(b)).

Key risk(s)	Description
Weeds	Habitat degradation and competition through invasion, establishment, intensification and/or spread of weeds (e.g. Lippia, <i>Schoenoplectus sp.</i> , African carrion flower and other exotic grasses) to the extent that recruitment or establishment of plants is impaired.
Feral herbivores and pigs	Damage to individual plants and degradation of habitat, by feral pigs through browsing, trampling, wallowing and rooting may lead to a decline of <i>Myriophyllum implicatum</i> at the site. Damage to individual plants and degradation of <i>Myriophyllum implicatum</i> habitat by introduced herbivores, such as goats and horses, through grazing and trampling.
Disturbance	Visitor use that leads to degradation of habitat and damage to individuals by vehicles.

Conservation activities

This table sets out the conservation activities required to:

- 1. Control, abate or mitigate the key risks and
- 2. maintain, restore and remediate the environmental values of the land (Reg. 78C(3)(c)).

Key risk(s)	Impacted site(s)	Conservation activities
Weeds	All sites	 Remove weed species to the extent required to ensure weeds do not have a negative impact on Myriophyllum implicatum, by targeted application of physical, biological and/or chemical weed control.
Feral herbivores and pigs	All sites	 To the extent practicable, reduce pig densities to a level that is not having an ecologically significant impact on <i>Myriophyllum implicatum</i>, and maintain densities at or below that level, by trapping, baiting and shooting and other approved integrated control measures. To the extent practicable, reduce feral horse densities to levels that are not having an ecologically significant impact on <i>Myriophyllum implicatum</i> by trapping, mustering and removal in accordance with a wild horse plan of management approved by the Secretary.
Disturbance	All sites	 Undertake periodic reviews to identify whether visitor use is having an adverse impact on Myriophyllum implicatum. If adverse impacts are observed implement actions to mitigate the impacts. This may include: installation of signs, threatened species marker posts or barriers to delineate sites and minimise impacts from visitor use.

Other land management activities

Within the declared land there are existing assets and infrastructure of NPWS and other external service providers, including public utilities.

Maintenance operations (including inspection, emergency works and routine and standard maintenance) that are exempt development in accordance with the *Environmental Planning and Assessment Act 1979*, and which are performed on and around existing assets and infrastructure, are authorised under this conservation action plan (CAP) provided such operations are undertaken in a manner that aims to minimise the risk to the declared environmental values of the land and with any other required consents or approvals.

All maintenance operations on the declared land are to be undertaken in accordance with this CAP.

Measuring and reporting

This table sets out the requirements for measuring and reporting on health and condition (Reg. 78C(3)(d)).

Attribute	Metric	Method
Health and condition of the <i>Myriophyllum</i> implicatum population	Area of occupancy	Design and implement an assessment to calculate the area of occupancy of <i>Myriophyllum implicatum</i> , following inundation events of ephemeral wetlands.

A report on the health and condition of the value for which this AIS was declared will be prepared and published on the Department of Planning and Environment website: www.environment.nsw.gov.au. The report will summarise the baseline and current health and condition of the values of the declared land and its overall trajectory.

Evaluation of conservation action plans

This CAP will be amended or replaced as new information becomes available that helps improve our management of the identified asset (Reg. 78H).

The Secretary must appoint a scientist, or a panel of scientists, to conduct a review, as soon as possible after the period of five years from the first approval of a CAP, to examine whether CAPs have been effectively implemented (Reg. 78J(1)).

Date prepared	August 2022
Date approved	17 December 2022
Approved by	Atticus Fleming, Acting Coordinator General, Environment and Heritage
Due for review	August 2027

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