Action statement

Flora & Fauna Guarantee Act 1988

Central Gippsland Plains Grassland Community and Forest Red Gum Grassy Woodland Communities

Nomination number: 243 and 242

Action statements are developed under the *Flora and Fauna Guarantee Act 1988* (FFG Act). Their preparation and implementation complement the FFG Act strategy *Protecting Victoria's Environment – Biodiversity 2037* and its vision that "Victoria's biodiversity is healthy, valued and actively cared for".

This action statement is prepared to support the conservation and recovery of two threatened communities that co-occur in some locations and are often adjacent. They are subject to common or similar threats and both threatened communities will benefit from coordinated planning and implementation of common actions.

Threatened Communities and Distribution



The Forest Red Gum Grassy Woodland Community. Image by Stephen Platt.



Central Gippsland Plains Grassland Community. Image by Brad Farmilo.



The distribution map displays the indicative range of the threatened communities based on locations that share attributes of the listed communities' description in Victoria.

Conservation Status

Forest Red Gum Grassy Woodland Community: Threatened in Victoria

Listed under the FFG Act in 2000, as the following criterion were met:

Criterion 2.2 The community is significantly prone to future threats which are likely to result in extinction.

Sub-Criterion 2.2.1 The community is very rare in terms of the total area it covers, or it has a very restricted distribution, or it has been recorded from only a few localities.

Central Gippsland Plains Grassland Community: Threatened in Victoria

Listed under the FFG Act in 1993, as the following criterion was met:

Criterion 2.2 The community is significantly prone to future threats which are likely to result in extinction.

Sub-Criterion 2.2.1 The community is very rare in terms of the total area it covers, or it has a very restricted distribution, or it has been recorded from only a few localities.

Related national listings

Two Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) listed ecological communities that share attributes with these threatened communities are listed as Critically Endangered and can be found here:

• Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) grassy woodland and associated native grassland (environment.gov.au)

Descriptions

These threatened communities were originally a single vegetation type, an open grassy woodland, that formerly occupied much of the Gippsland Plain. It now occurs in two forms, grassy woodland, and grassland. These forms have developed as a result of past management history, which has resulted in a divergence of their structure and species composition.

Forest Red Gum Grassy Woodland Community is usually dominated by Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*), often with co-dominant Red Box (*E. polyanthemos*); Coast Grey Box (*E. bosistoana*) occurs towards the coast, however (*E. bridgesiana*) is often co-dominant on sandy sites. Beneath the eucalyptus, there are often scattered small trees of Lightwood (*Acacia implexa*), and groves of Black She-oak (*Allocasuarina littoralis*) occur in some places.

The herbaceous understory is co-dominated by a variety of species. Dominant grasses include Weeping Grass (*Microlaena stipoides*) and Wallaby-grasses (*Rytidosperma* spp.), often with Kangaroo Grass (*Themeda triandra*) and/or Veined Spear-grass (*Austrostipa rudis*). Rough Saw-sedge (*Gahnia radula*) is common on some sites. Dominant forbs include Kidney-weed (*Dichondra repens*) and Stinking Pennywort (*Hydrocotyle laxiflora*), plus an array of perennial and annual species.

Central Gippsland Plains Grassland Community is dominated by Kangaroo Grass and includes a range of native herbs including Golden Weather-glass (*Hypoxis hygrometrica*), Common Everlasting (*Chrysocephalum apiculatum*), Yellow Rush-lily (*Tricoryne elatior*), and Common Rice-flower (*Pimelea humilis*). Trees are rare, although in some places thickets of Drooping She-oak (*Allocasuarina verticillata*) occur and saplings of Gippsland Red Gum and Burgan (*Kunzea ericoides*) are present.

A more detailed description (including some of the component flora species which make up the threatened community), distribution and references are provided in the threatened communities listing recommendations:

- Forest Red Gum Grassy Woodland
- Central Gippsland Plains Grassland
- EPBC Act Gippsland Red Gum/Grassy Woodland and Associated Native Grassland Listing

Associated and component threatened species

The following FFG Act listed threatened species are associated with, or are components of, the threatened Forest Red Gum Grassy Woodland Community and Central Gippsland Plains Grassland Community in Victoria:

Plants: Floating Swamp Wallaby-grass (*Amphibromus fluitans*), Matted Flax-lily (*Dianella amoena*), Pale Golden Moths (*Diuris ochroma*), Purple Diuris (*D. punctata*), Blotched Diuris (*D.* sp. aff. *dendrobioides* (Bairnsdale)), Roughgrain Love-grass (*Eragrostis trachycarpa*), Coast Grey-box, Dwarf Milkwort (*Polygala japonica*), Gaping Leek-orchid (*Prasophyllum correctum*), Yawning Leek-orchid (*P. chasmogamum*), Maroon Leek-orchid (*P. frenchii*) and Metallic Sun-orchid (*Thelymitra epipactiodes*).

Birds: Swift Parrot (Lathamus discolor).

Mammals: Southern Brown Bandicoot (*Isoodon obesulus obesulus*). Note: the following species are no longer extant in the community: Eastern Quoll (*Dasyurus viverrinus*), Eastern Bettong (*Bettongia gaimardi gaimardi*), Spot-tailed Quoll (*Dasyurus maculatus maculatus*).

Reptiles: Lace Monitor (Varanus varius)

Action statements for associated listed threatened species can be found here: <u>Action statements</u> (environment.vic.gov.au).

Threats

Threats listed below have been identified through expert consultation and published literature and are listed in approximate order of severity of risk to the threatened communities.

Threat	Description
Loss, degradation or n	nodification of the threatened community
Excess biomass	 Excess growth of either native or introduced plant species can change the structure and composition of the threatened communities, particularly dense regeneration of native shrubs such as Burgan (<i>Kunzea ericoides</i>) and eucalypts in both woodland and grassland, and native (particularly Kangaroo Grass) and introduced grasses in grasslands.
Historic native vegetation clearing or damage	 The threatened community has been subject to extensive historic losses and fragmentation because of land use change, construction, development and/or infrastructure leading to alteration of vegetation extent and condition.
Land use change	 Land use changes, such as new urban development and changes in agricultural or horticultural practices altering vegetation extent and condition (including potential for tree dieback), are contributing to further loss and degradation of the threatened communities. Changes can include increased canopy density, reducing understorey diversity and abundance of native species.
Livestock	 Livestock can cause ecosystem degradation through the combined effects of herbivory, trampling, soil compaction, soil erosion, reduced native plant biomass and recruitment and excess nutrient loads. Livestock can also spread weed seeds, leading to weed incursion.
Reduced connectivity	 Loss of connectivity between remnant patches of the threatened communities reduces dispersal of organisms and genetic exchange between native species.
Species richness declines	 Local extinctions of species that form part of the threatened communities, such as native plants and the invertebrates that pollinate them, may result in declining ecosystem function. This may trigger further declines in vegetation condition, ecological function, and/or species richness.
Introduced species	
Introduced herbivores	 Introduced herbivores, including rabbits (Oryctolagus cuniculus), hares (Lepus europaeus) and deer species such as Sambar (Cervus unicolor) and Fallow Deer (Dama dama) may degrade the threatened communities through herbivory, trampling, increasing nutrient loads, reducing native plant recruitment and increasing the accessibility of habitat to other introduced species.
Introduced plants	 Introduced plants (particularly African Love-grass (<i>Eragrostis curvula</i>)) change the structure and composition of the vegetation community, impacting the assemblage of species and ecosystem function.

Threat	Description
Native species	
Over-abundant native birds	 Over-abundant Noisy Miners (Manorina melanocephala) reduce bird diversity in the woodlands and may affect tree health as a result.
Over-abundant native mammals	 Herbivory by over-abundant native herbivores (e.g., Eastern Grey Kangaroos (Macropus giganteus)) can damage native habitats.
Fire	
Altered fire regime	 A hotter, drier climate may increase the likelihood, frequency and/or intensity of fire impacting the threatened community with the potential to reduce extent and/or condition of the communities.
	 Infrequent and/or too frequent fire may lead to population decline of component flora species and alter vegetation structure and condition, including increased density of woody native shrubs and trees and accumulation of plant biomass.
	 Planned burns that are more frequent than the component plants' tolerable fire interval can lead to seedbank exhaustion, reduced recruitment, and mortality of recruits. Burns can also result in death of obligate seeding plants, affecting ecosystem structure and function.
Fire management activities	 Fire management operations such as creation of fuel breaks (soil disturbance and slashing) may remove the threatened community, cause mortality of individuals, and reduce regeneration.
Human disturbance	
Construction, development and / or infrastructure	 Construction, development and maintenance of urban areas, utilities and infrastructure may result in direct removal of the threatened communities or component species or cause indirect impacts, such as through increased risk of weed and pathogen incursion, leading to loss of ecosystem structure and function.
Emergency response activities	 Some emergency response activities (e.g., vegetation clearance and/or earthworks, application of fire retardant) can inadvertently lead to alterations in vegetation structure and composition, and ecological function.
Firewood collection	 Firewood collection can result in disturbance and damage to the threatened community's habitats and result in loss of critical components such as large, mature trees and fallen timber.
Road and track construction or maintenance	 Roadside and railway reserve areas of the threatened communities are vulnerable to loss or damage as a result of direct impacts of road works (e.g., grading, mowing, slashing, lopping, weed spraying, ballast cleaning and discharge) and indirect impacts from associated run-off, soil erosion, and potential weed and pathogen introduction. Vehicle and agriculture machinery are potential sources of weed propagules.
Climate change	
Altered flowering or germination	 Climate change may change the timing and success of flowering and germination events of component flora, thus affecting species composition within the threatened communities.

Threat	Description
Altered rainfall and temperature regimes	 Climate change, increasing temperature and altered rainfall are likely to magnify existing threats and may reduce the extent or distribution of the threatened community and alter vegetation, composition, structure and function.
Increased frequency and/or length of droughts	 Drying and warming of the environment, including droughts, may to lead to changes in the threatened communities' composition and structure, and impact recruitment and/or mortality rates.
Temperature extremes	 Climate change may increase the frequency and duration of heat-wave events, leading to increased risk of mortality of component species of the threatened communities.
Pollutants and toxicants	
Pesticide use	 Pesticides (including chemicals used to control plants, fungi, invertebrates, and vertebrates) can impact recruitment and/or mortality rates, may alter habitat or ecosystem function, and may impact persistence of component species.
Knowledge	
Lack of awareness or knowledge	 Land managers, decision makers and/or community members, unaware of the significance, management needs, or efforts underway to conserve the threatened community, may undertake actions that inadvertently cause harm.

Conservation Objectives

Conservation objectives are informed by the criteria for listing the threatened community on the FFG Threatened List. This provides a framework to understand how we can work towards conservation and recovery of the threatened community and subsequent removal from the Threatened list.

The key objectives of this action statement are to:

- Identify, protect, and manage high value and/or significant areas and sites of the threatened communities.
- Minimise further decline and increase the extent and improve the condition of the threatened communities to improve connectivity and increase resilience.
- Improve knowledge and understanding of the distribution, condition, emerging threats, and conservation management requirements of the threatened communities.
- Support community participation and improve awareness for the protection and restoration of the threatened communities, component species and associated threatened species.

Conservation Actions

The actions below have been identified through expert consultation and published literature. Actions are grouped by types of activity and then listed alphabetically. This is to enable all interested parties to understand related or interconnected activities and prioritise based on their own context, capacity, and capability. Landscape scale actions may mitigate threats for adjacent threatened communities and other native species. For more information on where to undertake actions that benefit the threatened community and multiple species please refer to NatureKit.

Action	Description
Assessment and resea	rch
Research	 Improve understanding of management requirements for the threatened community and develop guidelines for land managers to support site restoration. Investigate and determine a suitable fire regime that meets the threatened
	community's ecological requirements and promotes its recovery.
	 Investigate and monitor the impacts of known threats and potential management actions.
Survey and monitoring	 Undertake field assessments to support preparation of, or review and update, maps of the extent and condition of the threatened community.
	 Monitor the threatened communities at known sites and other suitable locations to assess species composition, condition, threats, management requirements, and changes in these measures over time.
Collaboration and enga	agement

Collaboration and engagement

Community engagement	t
and awareness	

- Continue to identify, promote, and support opportunities for community involvement in conservation efforts to assist recovery of these threatened communities.
- Increase landholder awareness of the threatened communities, their ecological needs and impacts of activities such as cropping and livestock grazing. Provide guidance on the changes to management that may be required to support recovery.
- Install signs to inform the community of the presence and importance of the threatened communities.
- Promote citizen science for information gathering to inform improved management of the threatened communities.
- Work with land managers and planning authorities to confirm the presence, condition and distribution of the threatened communities.

Conservation planning and protection

Avoid and/or mitigate impacts associated with	 Ensure that the threatened community's distribution data and ecological information is available and considered in fire management activities.
fire management	 Undertake biodiversity values check prior to fuel management in areas where the threatened community occurs, to confirm treatment suitability and timing.
Biomass management	 Manage biomass, such as dense regrowth of trees or shrubs and/or dense grass cover, in priority sites as required to enhance the threatened community's structure and composition using ecologically and culturally appropriate means.
Compliance and enforcement	 Undertake risk-based compliance and enforcement activities to limit the impacts of identified threats to the threatened community, including unauthorised removal of areas or component species and/or habitat elements.
Conservation management planning	 Determine areas and sites of highest value or significance and prioritise protection, management, restoration and/or revegetation.
	 Review conservation management plans, and update as needed, to support recovery of the threatened communities including for priority areas or sites.

Action	Description
	 Investigate local government provisions and planning tools to support conservation and management of the threatened communities.
Control introduced herbivores *	 Implement and maintain effective control of introduced herbivores, domestic and feral, in priority areas.
Control introduced plants*	 Implement and maintain effective control of introduced plants in priority areas and undertake revegetation with appropriate native species, where required.
Ecological fire regime *	 Implement fire management actions that promote an appropriate fire regime for the threatened community, including supporting fire informed by cultural knowledge.
Manage over-abundant native species	 Develop and apply management techniques to maintain appropriate abundance and diversity of native species where required, including native herbivores.
Manage road and track works	 Protect the threatened communities from disturbances caused by road, track, and path construction and maintenance.
Permanent protection *	 Investigate incentives, voluntary agreements, covenants, and other permanent protection arrangements to enable protection and restoration of priority sites.
Protect remnant areas	 Ensure that the threatened communities' distribution data and ecological information are available and considered in planning for developments, land use changes, infrastructure, and utilities planning and maintenance. Ensure that the cumulative impact of previous loss and degradation is factored into consideration of potential losses.
	 Support the development of coordinated programs to encourage protection and management of priority sites of the threatened communities.
Restoration and/or revegetation *	 Restore and/or revegetate priority areas and buffers to improve ecosystem condition, connectivity and function of the threatened communities, including strategic works to address landscape scale threats as needed.
Translocation	 Design and implement a translocation program for important threatened and/or keystone plant species of the threatened communities to meet the objectives of the action statement.

^{*}Indicates landscape-scale actions that may deliver benefits to other threatened communities and multiple species

Past Actions

A representative sample of key conservation management actions delivered in the past 10 years are listed below.

Past action	Description
Biomass management and ecological fire regime	 Regular burning/weed control undertaken every 3-5 years at Stratford Woodland Reserve.
Community engagement and awareness	 Programs have been delivered in regions and catchment areas to promote awareness of the threatened communities and provide information and incentives to improve protection, management, and restoration.

Past action	Description
Conservation management planning	 Planning for the protection, management and/or restoration of this and other threatened communities has occurred through regional, catchment and parks and forests management planning.
	 Management plan written for Briagolong Forest Red Gum Reserve and distributed to the community.
	 Management plans written for five environmental not-for-profit organisation's reserves and covenanted land.
Control introduced plants	 Introduced plants, including thistles and African Love-grass, controlled in locations near Bengworden in 2014-16.
Deliver Landscape-scale programs	 Programs have been implemented in regions and catchment areas to promote awareness of this and other threatened communities and provide information and incentives to improve its protection, management, and restoration. See <u>Biodiversity On-Ground Action</u> programs which includes:
	Regional Landscapes and Target Action (2018) project 'Recover Red Gum Woodlands and Threatened Species on the Gippsland Plains'.
Manage problematic native plants	 Burgan density reduced over approximately 500 ha of habitat on five reserves as part of a West Gippsland tender program.
Permanent protection	 Approximately 3,000 ha of the threatened community has been protected via land purchases or covenants.
Research	 Ecological thinning trial conducted and monitored over a ten-year period on an environmental not for profit organisation's reserve.
Restoration and/or revegetation	 Key plants re-established or small populations supplemented at multiple protected sites on private land.
Survey and monitoring	 A map of the likely extent and distribution of the threatened communities has been prepared.

Decision Support Tools

Decision making for conservation actions is supported through the following Victorian Government tools which may be of assistance in choosing the most appropriate or beneficial actions for biodiversity:

- Choosing actions for nature: NatureKit
- Biodiversity Knowledge Framework

Further Information

- FFG Act listing recommendation Forest Red Gum Grassy Woodland
- FFG Act listing recommendation Central Gippsland Plains Grassland
- EPBC Act Gippsland Red Gum/Grassy Woodland and Associated Native Grassland Listing
- EPBC Gippsland Red Gum/Grassy Woodland and Associated Native Grassland Conservation Advice
- Victorian Deer Control Strategy
- Victoria's changing climate understanding the impacts of climate change in Victoria
- Commonwealth Threat Abatement Plans
- Flora and Fauna Guarantee Regulations 2020

FFG Act action statements

Get Involved and Take Action

If you are interested in supporting the recovery of these threatened communities, and associated threatened species, there are some important things you need to consider.

The Department of Energy, Environment and Climate Action (DEECA) is committed to engaging and partnering with Traditional Owners on how they wish to be involved in the planning and implementation of actions for this species. Steps must be taken to avoid harm and where appropriate ensure actions can deliver cultural benefits.

You can find advice about required approvals, land manager and/or owner permissions, options and incentives for private land conservation, and engagement with Traditional Owners and public land managers here: <u>Action</u> statements (environment.vic.gov.au)

To identify the relevant Traditional Owners, use the <u>Aboriginal Cultural Heritage Register and Information System</u> (ACHRIS) Welcome to Country and Acknowledgements Map.

You can also register your interest in taking action so we can connect you to other people or organisations working to help us secure the future for these threatened communities at threatened.species@deeca.vic.gov.au.

Reporting Actions

Activity data is critical to monitoring the implementation and progress of actions and evaluating action statements. These data are also used to:

- Determine progress towards achieving the contributing targets for <u>Protecting Victoria's Environment Biodiversity 2037</u>.
- Inform the five-yearly State of the Environment Report.

For guidance on reporting actions undertaken on these threatened communities, refer to Activity Data.

Submitting Monitoring Data

For species that occur in these threatened communities the Victorian Biodiversity Atlas (VBA) provides a foundational dataset showing where biodiversity occurs across the Victorian landscape and how it may have changed over time. This is a core input for decision support tools that inform conservation action, public land management, research activities and reporting. We encourage all participants in the delivery of on-ground actions to submit species records and observations, including for introduced species, to the VBA as they carry out projects.

For further information see: Victorian Biodiversity Atlas (environment.vic.gov.au)

Sign up and begin submitting your data today at: https://vba.biodiversity.vic.gov.au/

Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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