



Farming and national environment law

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Farmers need to know about Australia's national environment law as some agricultural activities may need federal government approval. This could be in addition to state or local government approvals.

National environment law protects matters that are of national environmental significance. Those most relevant to farmers are:

- nationally threatened and migratory species
- nationally threatened ecological communities
- wetlands of international importance
- world and national heritage properties, and
- the Great Barrier Reef.

New farm activities, such as land clearing, may require approval from the federal environment minister under national environment law.

If you are unsure, it is best to check by calling the Department on **1800 110 395**. You should also check state and local governments' approval requirements.



Images: Andrew Tatnell

Protected matters on your farm

National environment law only applies to matters of national environmental significance. You can check if there are likely to be protected matters on or near your property by using the environment reporting tool at www.environment.gov.au/farming

Do I need federal approval for all my farming activities?

No. You can continue routine farm activities without approval if they began before national environment law was introduced in July 2000. Only new farm activities that are likely to have a significant impact on a protected matter may need approval.

Will my activity have a significant impact?

Whether or not the impacts of an activity are significant depends on several factors, including how long the impact will last and the sensitivity of a nationally protected matter. Guidelines are available at www.environment.gov.au/epbc/guidelines-policies.html. If you are unsure, you should check, otherwise you may accidentally break the law.



How do I get approval?

If you think your activity could have a significant impact on a protected matter, or you just want to be certain that it won't, you will need to refer your actions to the federal environment Department. A referral form is available at www.environment.gov.au/epbc

Once referred the Department will notify you within 20 business days whether or not approval is required, and if so how it will be assessed.

What happens if I break the law?

If you think you may have broken the law, it is best to contact the federal environment Department as soon as possible to explain what has happened. The Department may be able to work cooperatively with you to repair any damage to the environment.

The Department investigates all alleged breaches of the law and takes compliance very seriously. Not knowing the law or your obligations under it is not an excuse. There can be significant penalties for non-compliance with the law including gaol terms and penalties of up to \$5.5 million.

Can I get government assistance?

There are several programs to help farmers and others manage our natural resources and nationally protected matters, such as threatened species and ecological communities. You can contact the Department for more information.

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Australian Government

Department of the Environment and Energy

Natural Temperate Grassland of the South Eastern Highlands: a nationally protected ecological community



This information guide is designed to assist land managers, owners and occupiers as well as environmental assessment officers and consultants to identify, assess and manage the Natural Temperate Grassland of the South Eastern Highlands ecological community; a threatened ecological community, listed as critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), Australia's national environmental law.

This guide is a companion document to the approved Conservation Advice, which can be found on the Australian Government's species profile and threats (SPRAT) database at: www.environment.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl.

On this webpage, click on the details link—alongside the ecological community name—to download the documents and the map for the listed ecological community.

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Images

Front cover—Natural Temperate Grassland of the South Eastern Highlands © Copyright David Eddy.

Back cover—Natural Temperate Grassland of the South Eastern Highlands © Copyright Matt White.

The Natural Temperate Grassland of the South Eastern Highlands ecological community. What is it? Why is it threatened? What does national protection mean for people in the region?

In summary:

- Australia's unique native grasslands have been placed under enormous pressure since non-Indigenous settlement. However, important remnants persist across several regions, including the South Eastern Highlands.
- The Natural Temperate Grassland of the South Eastern Highlands ecological community was listed on 6 April 2016 as Critically Endangered under Australia's national environment law, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- This listing updates and replaces a previous listing, for the Natural Temperate Grassland of the Southern Tablelands of New South Wales and the Australian Capital Territory, which was listed as Endangered in 2000. These revisions are based on new data collected after the original listing was made in 2000.
- This revised listing recognises a broader area of grasslands across the South Eastern Highlands and immediately adjacent areas in NSW, ACT and Victoria, and adds a 'minimum condition threshold', which identifies which areas of grassland are protected by the EPBC Act. Low quality grasslands that do not meet this threshold are not protected.
- The Natural Temperate Grassland of the South Eastern Highlands ecological community is dominated by native tussock grasses with a rich diversity of wildflowers and other grassland plants and animals, with few trees or shrubs.
- It provides vital habitat for at least nineteen threatened species, such as the grassland earless dragon, striped legless lizard, pink-tailed worm lizard, golden sun moth, and button wrinklewort daisy, and is a refuge for many other locally-rare species.
- These native grasslands are important for agriculture as they provide year round forage, and are drought tolerant, including recovering quickly from extended drought. This makes them useful in low input production systems, and for fine wool production.
- Native grasslands also provide other ecosystem services such as carbon storage, improving water infiltration, reducing soil erosion and suppressing weeds.
- The national Threatened Species Scientific Committee classified the ecological community as Critically Endangered as its extent has declined by more than 90 per cent and it has a highly fragmented and restricted distribution. This has resulted in large reductions in the number and size of regional populations of many plants and animals, including local extinctions, and loss of ecosystem function.
- National listing is an important step in securing the future of the Natural Temperate Grassland of the South Eastern Highlands by:
 - requiring consideration of the impact of new developments on the grasslands
 - encouraging priority support for conservation and recovery efforts, including opportunities through Australian Government funding initiatives
 - raising awareness of the ecological community and priority actions to combat threats.
- The Conservation Advice for these native grasslands builds on the 2006 grassland recovery plan, outlining a range of priority research and management actions that provide guidance on how to protect, manage and restore this Critically Endangered ecological community.

- Protecting and restoring the native grasslands will conserve ecosystem services for people in the region, and support more resilient agriculture production.
- As has been the case since the original listing, routine property maintenance, land management and other established practices (e.g. most farming activities and managing fire breaks) do not typically require consideration under national environment law, particularly if carried out in line with other national and state laws covering native vegetation.
- Only activities that are likely to have a significant impact on the ecological community need to be considered under national environment law—activities such as large new developments, works or infrastructure. For example, permanently clearing areas of high-quality native vegetation for mining and energy infrastructure, changed agricultural production (e.g. cropping), telecommunication cabling, roadworks or residential/ industrial subdivision.

National ecological communities

Australia's national environment law provides a legal framework to list, protect and manage Matters of National Environmental Significance; including nationally threatened species and ecological communities.

The EPBC Act defines an ecological community as an assemblage of native species which inhabit a particular area in nature. In other words, ecological communities are groups of native plants, animals and other organisms that naturally occur together and interact in a unique habitat. Nationally listed ecological communities include forest, grassland, shrubland, wetland, woodland, marine, ground spring and cave communities.



Creamy candles *Stakhousia monogyna* in kangaroo grass *Themeda triandra* © Copyright Department of the Environment and Energy



Grassland earless dragon *Tymanocryptis pinguicollis* © Copyright Steve Wilson.

The native plants and animals in an ecological community have different roles and relationships that, together, contribute to a healthy functioning natural environment.

Listed ecological communities may become extinct, through loss of extent and/or function, unless threats are removed or better managed. However, remnants retain important natural values and have the potential to provide more habitat and ecosystem services if recovered.

Protecting wildlife communities also protects ecosystem services such as clean air, land and water. These benefit people and society both within and beyond the local areas where they occur and are essential to the greater productivity of our land and water.

National (EPBC Act) protection complements other conservation measures and is particularly vital for temperate grasslands as few remnants are protected in conservation reserves.

What is the Natural Temperate Grassland of the South Eastern Highlands ecological community?

The Natural Temperate Grassland of the South Eastern Highlands is dominated by native tussock grasses with a diversity of wildflowers and other grassland-specialist plants and animals. The composition of a particular area (patch) of the ecological community is primarily influenced by its disturbance history (e.g. clearing, grazing and fire), but also by its size, recent rainfall and drought conditions.

Previously, the Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory ecological community was listed in 2000. Since then, new data has shown that these grasslands occur more broadly across the south eastern highlands and adjacent areas. Therefore a review was conducted to assess the broader distribution and take account of new information, including the outcome of work associated with the 2006 Recovery Plan. The updated listing also introduced a minimum condition threshold, to help determine which patches should be considered a matter of national environmental significance (see *Are all patches protected under the EPBC Act listing?*), and which removed protection from low-quality patches.

The ecological community can be identified by these general features:

Landscape and soils

- The ecological community occurs at altitudes up to around 1200 m, and as low as 250 m in some parts of its distribution.
- It occurs on a wide range of topographic positions and on soils derived from a variety of substrates, including granites, basalts, sediments, colluvium and alluvium.

Vegetation

- It is a naturally treeless or sparsely treed community (less than 10% projective foliage cover from woody plants), which is characterised by native tussock grasses that are typically up to 1.0 m in height.
- There is usually a second, lower stratum of shorter perennial and annual grasses and forbs growing between the taller tussocks, and there may be a third discontinuous layer of even smaller forbs and grasses. Sedges and rushes may also occur, particularly in seasonally wet areas.
- The major dominant or co-dominant grass species are: *Themeda triandra* syn. *T. australis* (kangaroo grass), *Poa sieberiana* (snowgrass), *Poa labillardierei* var. *labillardierei* (river tussock grass), *Austrostipa bigeniculata* (kneed speargrass), *Austrostipa scabra* var. *falcata* (slender speargrass), *Bothriochloa macra* (red grass), various *Rytidosperma* species syn. *Austrodanthonia* species (wallaby grasses), and *Lachnagrostis filiformis* (blowngrass).
- The dominant or co-dominant grasses occur in association with a range of other native herbaceous species, including many forb and grass-like species.
- Wildflowers and other species that are most common with the grasses include *Acaena ovina* (sheep's burr), *Asperula* spp. (woodruffs), *Chrysocephalum apiculatum* (common everlasting, yellow buttons), *Convolvulus* spp. (bindweed), *Euchiton* spp. (cudweeds), *Leptorhynchus squamatus* (scaly buttons), *Lomandra* spp. (mat-rushes), *Plantago varia* (variable plantain) and *Vittadinia muelleri* (narrow-leaf New Holland daisy).
- The grasslands often intergrade with adjacent grassy woodlands, such as the nationally listed White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community.



Billy buttons *Craspedia variabilis* © Copyright Chris Watson



Natural temperate grassland with the endangered daisy *Rutidosia leptorrhynchoides* (button wrinklewort) at the Majura training area, ACT
© Copyright ACT Government



Top left: Kangaroo grass *Themeda triandra*; Top middle: Hill wallaby grass *Rytidosperma erianthum*; Bottom left: Bare-backed wallaby grass *Rytidosperma laeve*; Bottom middle: snowgrass *Poa sieberiana* © Copyright Michael Bedingfield; Right: Kneed speargrass *Austrostipa bigeniculata* © Copyright Michael Bedingfield.

Fauna

- Some characteristic and specialist fauna species of the ecological community are listed below:
 - Frogs: *Crinia signifera* (eastern common froglet), *Limnodynastes tasmaniensis* (spotted marsh frog)
 - Reptiles: *Pseudonaja textilis* (brown snake), *Tiliqua scincoides* (eastern blue-tongue), *Egernia cunninghami* (Cunningham's skink), *Aprasia parapulchella* (pink-tailed worm-lizard), *Delma impar* (striped legless lizard), *Tympanocryptis pinguicolla* (grassland earless dragon) and *Suta flagellum* (little whip-snake)
 - Mammals: *Macropus giganteus* (eastern grey kangaroo), *Vombatus ursinus* (common wombat)
 - Birds: *Coturnix ypsilophora* (brown quail), *C. pectoralis* (stubble quail), *Turnix velox* (little button-quail), *Vanellus tricolor* (banded lapwing), *Mirafra javanica* (Australasian bushlark), *Gymnorhina tibicen* (Australian magpie), *Anthus novaeseelandiae* (Richard's pipit), *Aquila audax* (wedge-tailed eagle), *Stagonopleura guttata* (diamond firetail), *Cincloramphus cruralis* (brown songlark), *C. mathewsi* (rufous songlark), *Cisticola exilis* (golden-headed cisticola) and *Petroica phoenicius* (flame robin)
 - Insects: *Keyacris scurna* (Key's matchstick), *Cooraboorama canberrae* (Canberra raspy cricket), *Perunga ochracea* (Perunga grasshopper), *Synemon plana* (golden sun moth).



Top row, left to right: Common wombat *Vombatus ursinus* © Copyright Dave Watts. Sundew *Drosera* sp. © Copyright Department of the Environment and Energy; Bottom row, left to right: Garngeg, Nyamin, Murnong, yam daisy *Microseris lanceolata*. © Copyright Department of the Environment and Energy. Wedge-tailed eagle *Aquila audax* © Copyright Brian Furby. Native geranium *Geranium solanderi* © Copyright Matt White.

Why is the Natural Temperate Grassland of the South Eastern Highlands ecological community important?

The Natural Temperate Grassland of the South Eastern Highlands ecological community provides habitat for a range of native plants and animals that rely on grasslands for their homes and food. Remnant patches of the ecological community provide wildlife corridors and refuges in a fragmented landscape. These grassland patches also help improve air and water quality, and helps prevent or reduce soil erosion and weeds.

When native vegetation is cleared, habitat which was once continuous becomes divided into smaller separate fragments. This makes it harder for animals to roam or migrate and for plants to disperse. Many fragments of the ecological community are small islands—isolated from each other by grazing or agricultural land, or by roads, houses and other developments. Prior to the 20th century, when conditions were right the grassland and surrounding grassy woodlands would have on

occasions looked like a vast carpet of yellow, white, pink and purple wildflowers with emus and kangaroos grazing amongst them. The plains of Canberra, the Monaro and surrounding regions once contained some of the most extensive and diverse temperate grassland in Australia.

While most native grassland in the Canberra region has been lost or fragmented by improved pasture and then urban development, pockets of native grassland remain and provide crucial local biodiversity, natural beauty and amenity in parks, nature reserves and other land in and around the city. Some of these pockets occur at Canberra airport; St Mark's and York Park in Barton; Jerrabomberra Grasslands and around suburbs such as Crace, Dunlop, and Mitchell. Similar pockets occur around towns such as Cooma and Goulburn. Isolated populations of grassland animals and plants may be more vulnerable to local extinction. Therefore, connectivity between individual areas of grassland and with other areas of native vegetation, particularly grassy woodlands, is important. For example, connectivity increases plant pollination rates and the spread of plant propagules—the parts of a



Grassland conservation area in the ACT overlooking Lake Burley Griffin, St Mark's in Barton, not far from Parliament House
© Copyright Matt White.

plant that allow it to reproduce and spread. Therefore, even the smallest remnants within cities or on farms can be important “stepping-stones” or pollination/seed dispersal routes between larger grassland and grassy woodland remnants.

The ecological community provides vital habitat for many threatened and rare species of plants and animals. For example, patches of the ecological community in the Monaro region contain some of the best remaining habitat for the grassland earless dragon (*Tympanocryptis pinguicollis*). By listing the ecological community, additional protection is given to these species. These include four nationally-listed animal species: the golden sun moth (*Synemon plana*), grassland earless dragon, pink-tailed worm-lizard (*Aprasia parapulchella*), and the striped legless lizard (*Delma impar*).

At least fifteen nationally-threatened plant species are present, such as: golden moths orchid (*Diuris pedunculata*), basalt peppergrass (*Lepidium hyssopifolium*), hoary sunray daisy (*Leucochrysum albicans* var. *tricolor*), maroon leek-orchid (*Prasophyllum frenchi*), Tarengo leek orchid (*Prasophyllum petilum*), dwarf kerrawang (*Rulingia prostrata*), and button wrinklewort daisy (*Rutidosia leptorrhynchoides*).

The native grassland listing provides benefits for the broader environment and associated ecosystem services, and also provides benefits and opportunities for land managers and the general public. Native grasslands can provide a range of benefits to agriculture as they are drought and frost tolerant, provide year round forage (particularly green summer feed), and can form an important part of low input production systems. They are more resilient to extended periods of drought than many exotic pasture grasses. Native grasslands have been important in fine wool production in Australia, and also provide important ecosystem services such as carbon storage, improving water infiltration, reducing soil erosion and suppressing weeds.

It is important to help prevent further decline of the ecological community by promoting recovery through landholder and community efforts. This, alongside the protection afforded by listing, reduces the risk of this unique and important part of the landscape being lost to future generations.



Top row, left to right: Endangered – Grassland earless dragon *Tympanocryptis pinguicollis* © Copyright Emma Cook. Vulnerable – Pink-tailed worm-lizard *Aprasia parapulchella* © Copyright Steve Wilson; Bottom row, left to right: Grassland earless dragon burrow © Copyright Melinda Brouwer. Endangered – Button wrinklewort daisy *Rutidosia leptorrhynchoides* © Copyright Emma Cook. Vulnerable (NSW) – Diamond Firetail *Saemonpleura guttata* © Copyright Brian Furby. Critically Endangered – Golden sun moth *Synemon plana* © Copyright E D Edwards

Where does the Natural Temperate Grassland of the South Eastern Highlands ecological community occur?

The ecological community occurs in and adjacent to the South Eastern Highlands region, within New South Wales, the Australian Capital Territory and Victoria. Local Government Areas across its distribution include (although the ecological community may not be present in all these areas):

- The Australian Capital Territory.
- NSW: Bathurst, Bega Valley, Blayney, Cabonne, Cowra, Eurobodalla, Goulburn Mulwarree,

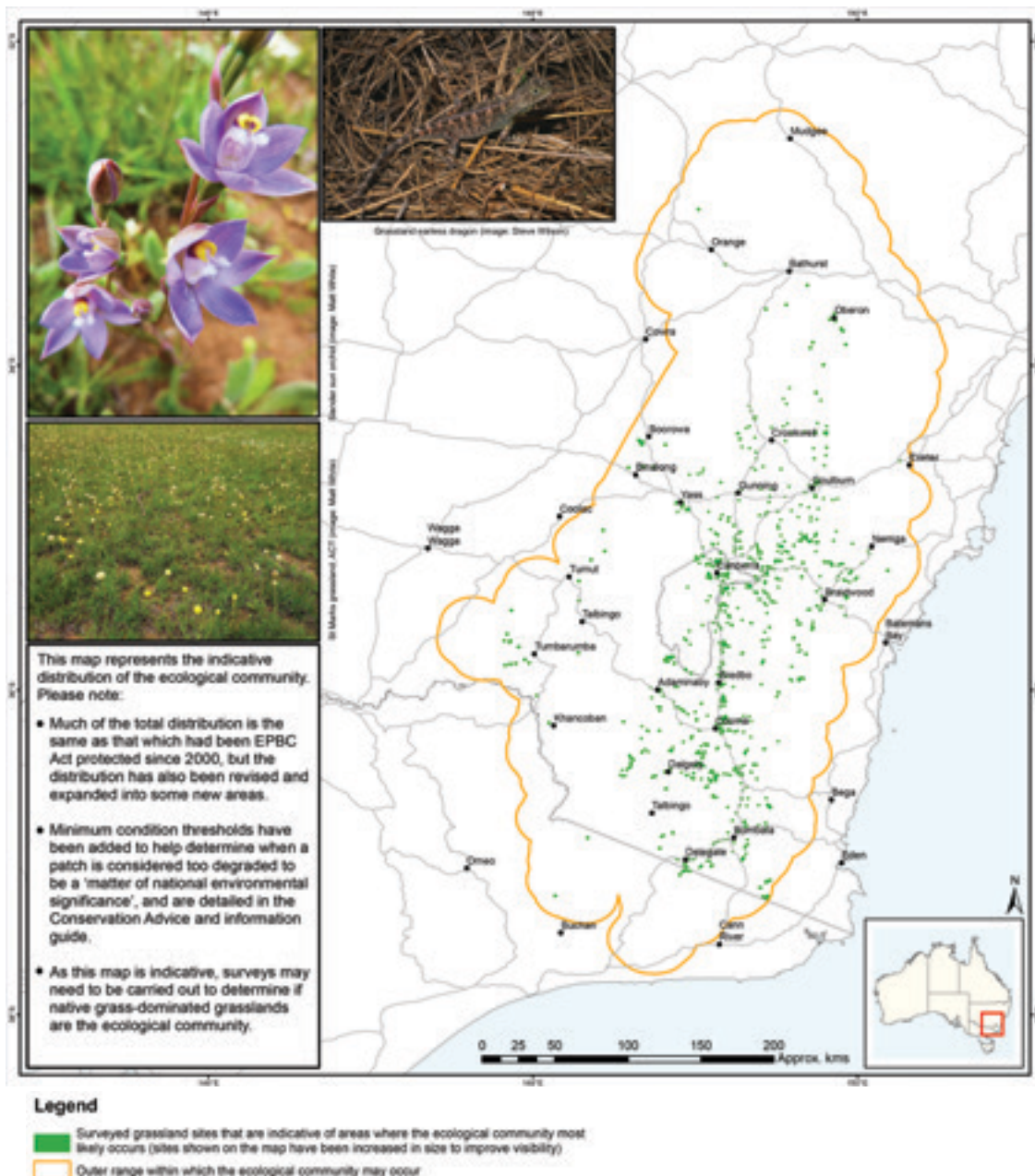
Gundagai, Hilltops, Lithgow, Oberon, Orange, Queanbeyan-Palerang, Shoalhaven, Snowy Monaro, Snowy Valleys, Upper Lachlan and Yass Valley.

- Victoria: East Gippsland and Towong.

(Local government area names and boundaries as at May 2016).

This map is available at: www.environment.gov.au/biodiversity/threatened/communities/maps/pubs/152-map.pdf

Note that property-specific maps available from state agencies do not always identify EPBC-listed ecological communities.



Why does the ecological community need national protection?

In April 2016 the Australian Government Minister for the Environment and Energy listed the Natural Temperate Grassland of the South Eastern Highlands ecological community, after considering the advice of the Threatened Species Scientific Committee (the Committee). A rigorous assessment of the scientific evidence found that it met the eligibility criteria for listing as critically endangered under the EPBC Act, Australia's national environment law.

The Committee found that:

- the ecological community had undergone a decline of more than 90 per cent in extent
- the ecological community now occurs as highly fragmented patches, with most less than 10 ha in size

- it has experienced a very severe reduction in integrity due to the combined effects of: substantial clearing and fragmentation, nutrient enrichment (fertilisers and livestock waste), invasive flora and fauna, heavy grazing and changes to natural fire regimes.

The overall aim of nationally listing the ecological community is to prevent its decline and support on-ground efforts to ensure its long-term survival. The Conservation Advice for the ecological community outlines a range of priority research and management actions that provide guidance on how to manage, restore and protect it. This Conservation Advice can be found on the Department's website:

www.environment.gov.au/biodiversity/threatened/communities/pubs/152-conservation-advice.pdf



Top left: Slender Sun Orchid *Thelymitra pauciflora* © Copyright Matt White; Top right: Billy button *Craspedia variabilis* © Copyright Matt White; Bottom left: Blue devil *Eryngium ovinum* © Copyright Matt White; Bottom right: Early nancy *Wurmbea dioica* © Copyright Matt White.

Are all patches protected under the EPBC Act listing?

No, most national definitions of ecological communities specify condition thresholds which help to identify patches that are too small or degraded to be protected under the law. This allows national protection to focus on the best and most intact patches of the Natural Temperate Grassland of the South Eastern Highlands ecological community.

These condition thresholds mean that small and/or degraded patches or patches lacking high native diversity—such as remnants where native species have been largely replaced by weeds, or many native pastures—are excluded from listed ecological community and any actions that may impact them do not need to be considered under the EPBC Act.

Condition thresholds

The Natural Temperate Grassland of the South Eastern Highlands ecological community is only protected under national environment law when it is in relatively good condition. A patch should first be

identified as being the ecological community (using the features listed on page 5 and covered in detail in the Conservation Advice document). Then it may be identified as being in relatively good condition (Moderate quality) if it meets the condition thresholds illustrated in the flowchart in Figure 1.

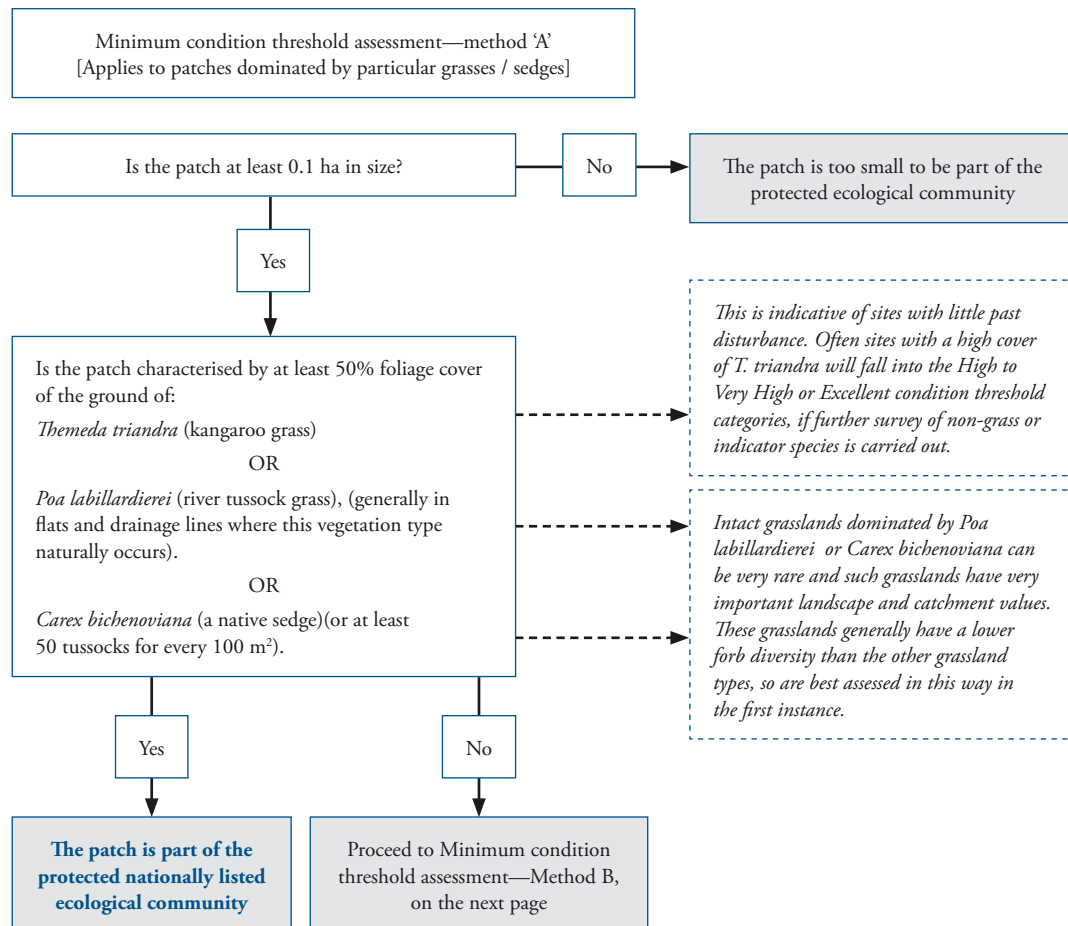
Although not part of the protected ecological community listed under the EPBC Act, it is recognised that patches which do not meet the minimum condition thresholds for Moderate quality, or higher, may still retain important natural values; particularly if they are near patches which do meet the minimum condition thresholds. As such, these patches should not be excluded from recovery and other management actions.

For further details of how to determine whether a patch of vegetation meets the definition and condition thresholds for the national ecological community see the Conservation Advice at: www.environment.gov.au/biodiversity/threatened/communities/pubs/152-conservation-advice.pdf



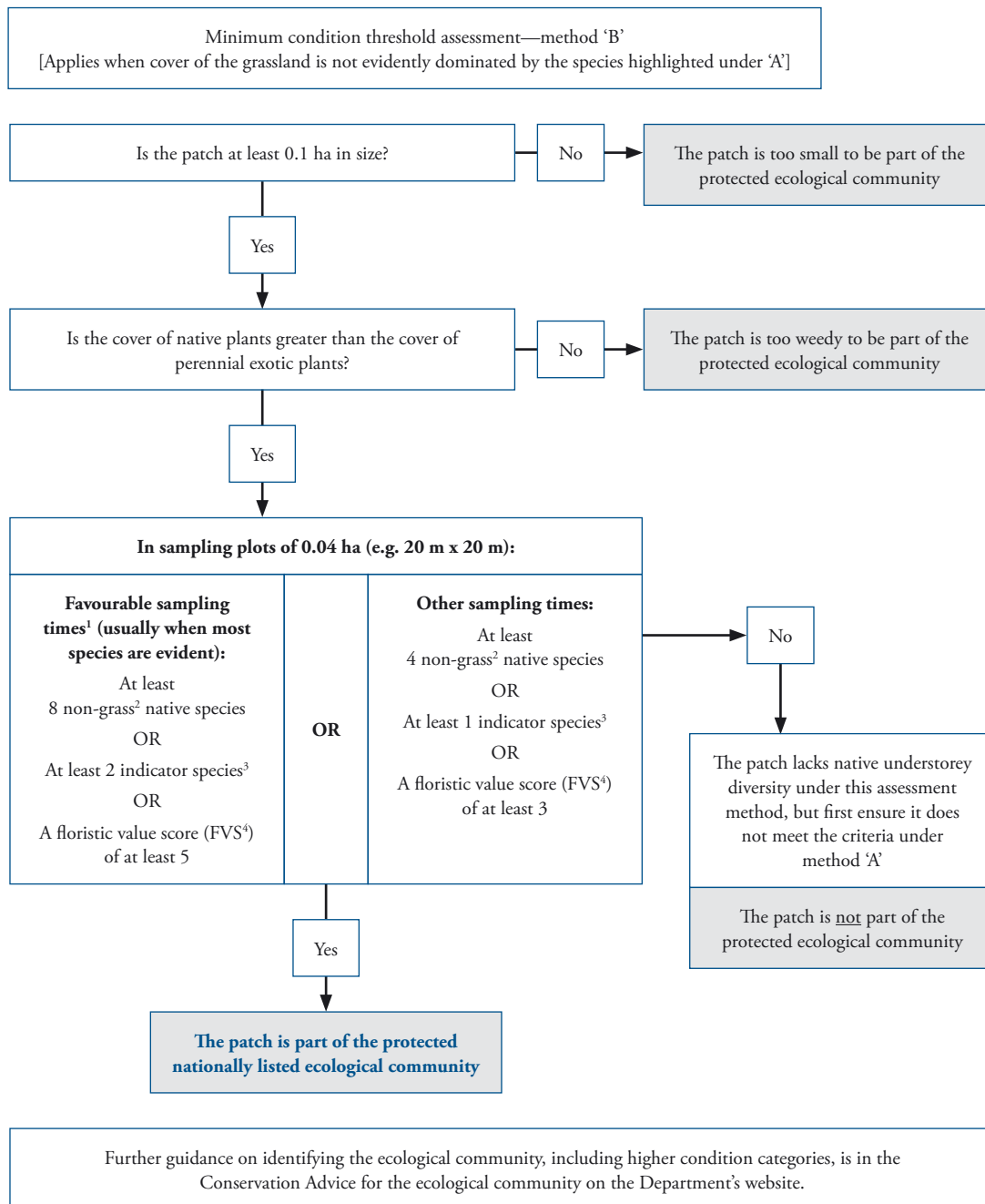
Wildflowers in the Natural Temperate Grassland of the South Eastern Highlands © Copyright Matt White.

Figure 1: Flowchart to help identify which areas (patches) of the Natural Temperate Grassland of the South Eastern Highlands ecological community meet the minimum condition thresholds (A and B) for national protection



Please note:

- Assessments of a patch should initially be centred on the area of highest native floristic diversity.
- Consideration must be given to the timing of surveys and recent disturbance.
- The minimum patch size for consideration as part of the listed ecological community is 0.1 ha (e.g. 50 m x 20 m), but other condition thresholds must also be met.
- The surrounding context of a patch must also be taken into account when considering factors that add to the importance of a patch that meets the condition thresholds.
- The list of Indicator species referred to in the Condition Thresholds, can be found on the Species Profiles and Threats (SPRAT) database, on the Department’s website³.
- A relevant expert (e.g. ecological consultant, local NRM or environment agency) may be useful to help identify the ecological community and its condition.



1. To be assessed in spring to early summer, and/or other time when native plant species are most evident (e.g. significant recent rainfall that has stimulated flowering of native plants). Or if these conditions not present, counts may be estimated from multiple surveys of the same site in different seasons or years.
2. Non-grass species include forbs/herbs (wildflowers), lilies, orchids, rushes and low shrubs. It does not include trees and, for the purposes of these thresholds, sedges.
3. Indicator species are native plant species that are useful surrogates for conservation value of a patch, and are typically disturbance sensitive species. The list is found on the ecological community profile on the Species Profiles and Threats Database (SPRAT), on the Department's website.
4. Floristic Value Score is a method of measuring the quality of a grassland site, based on Rehwinkel (2015) (see the Conservation Advice for the full reference).

What are the benefits of listing the grassland ecological community as nationally threatened?

This updated listing complements other grassland ecological community listings across south-eastern Australia, which are amongst the most threatened vegetation types in Australia.

There are a number of benefits to listing ecological communities under Australia's national environment law. In the case of the Natural Temperate Grassland of the South Eastern Highlands ecological community, the listing will continue to:

- help protect the landscapes that provide the connectivity of wildlife corridors and refuges essential to the long-term productivity, health and biodiversity of the region
- protect habitat critical to recruit threatened (and other native) species at risk in the region—in turn, this helps sustain ecosystem services associated with the ecological community

- complement existing national and state protection for threatened species and ecological communities in the region and help defend the ecological community from future significant human impacts that may cause further decline
- raise awareness of the ecological community and its threats and encourage agencies and community groups to undertake conservation and recovery works and apply for environmental funding—the Australian Government has a variety of funding programmes to encourage land managers to conserve biodiversity and ecosystem services.

The Conservation Advice, published at the time of listing, provides guidance and options for environmental decision-making, including priority research, conservation and rehabilitation initiatives.

The aim of the EPBC Act is to ensure that matters of national environmental significance are given due consideration, along with broader economic, social and other issues in the planning of any large projects; where possible, potentially significant, adverse impacts to the environment should be avoided. However, if impacts are unavoidable, then they need to be reduced, mitigated, or offset.



Left to right: Perunga grasshopper *Perunga ochracea* © Copyright Emma Cook. Kangaroo grass wet tussock grassland (foreground) © Copyright ACT Government.

What does the listing mean for landholders?

Business as usual for most routine activities

As has been the case since the original listing in 2000, it is important to note that the EPBC Act is only triggered if a particular activity has, or will have, a significant impact on a Matter of National Environmental Significance—a threatened ecological community, in this instance.

The normal activities of individual landholders, residents and councils will typically not be affected by a listing. Routine property maintenance, land management and other established practices—such as ongoing road maintenance works—are unlikely to have a significant impact and so do not typically require referral or other consideration under national environment law, particularly if carried out in line with other national and state laws covering native vegetation.

For instance, the following actions are unlikely to trigger national environment law:

- ongoing grazing, horticultural or cropping activities
- maintaining existing fences, access tracks and firebreaks
- maintaining existing farm gardens and orchards
- maintaining existing farm dams or water storages
- maintaining existing pumps and clearing drainage lines
- replacing and maintaining sheds, yards and other buildings
- targeted control of weeds and spraying for pests on individual properties or roadside verges
- road maintenance, including grading on the road edges.

Although the above actions are unlikely to trigger the EPBC Act, any impacts on patches of the ecological community should still be avoided where possible. For example, landholders should try to avoid native vegetation clearance in the ecological community and leave a minimum 30 m buffer zone to help protect the ecological community from spray drift (fertiliser, pesticide or herbicide sprayed in adjacent land) and other damage.

It is also important to note that human settlements and infrastructures, where an ecological community formerly occurred, do not form part of the natural environment and so are not considered to be part of the protected ecological community. This also applies to sites that have been replaced by crops and exotic pastures, or where the ecological community exists in a highly-degraded or unnatural state.

Whether or not an action is likely to have a significant impact depends on the sensitivity, value and quality of the environment which is impacted, and on the intensity, duration, magnitude and geographic extent of the impacts.



Echidna *Tachyglossus aculeatus* © Copyright Andy Heaney

Actions likely to have a significant impact may trigger national environment law

The EPBC Act is triggered if an action is likely to have a significant impact on the ecological community. If you consider that a proposed action is likely to have such an impact, or you are unsure, you should contact the Department to help you determine whether or not a proposed action will need formal assessment and approval under the EPBC Act. For further information on referral, assessment and approval processes, refer to the following website:

www.environment.gov.au/protection/environment-assessments/assessment-and-approval-process

Social and economic matters may also be taken into account for individual projects that may have a significant impact on the ecological community, through the EPBC Act approvals process. Strict timeframes apply to assessments to ensure decisions are made as quickly as possible.

The key diagnostics and condition thresholds outlined above for the ecological community exclude many patches on properties or along roadside verges that are considered too degraded for protection. In addition, the EPBC Act provides exemptions for continuing (routine) use or where legal permission has previously been given; see previous section on 'Business as usual for most routine activities'.

The major activity that is likely to have a significant impact on the ecological community is permanently clearing large or otherwise important areas of intact or high-quality native vegetation. Examples include:

- major mining, residential, commercial or other industrial development
- building new roads or widening existing roads
- converting large areas of native grassland into improved pastures or cropping fields.

To help reduce the significance of actions, the EPBC Act promotes the avoidance and mitigation of impacts from the early planning stage, wherever that is possible.

What can I do to look after the ecological community?

You can protect and promote the recovery of grassland remnants in your area. You can:

- avoid further clearance and fragmentation of the ecological community and surrounding native vegetation, with high-quality and relatively unmodified areas being particularly important
- minimise unavoidable impacts from any developments or other activities adjacent to the ecological community that might result in further degradation—for example, by applying a minimum 30 m buffer zone around the ecological community and avoiding hydrological and nutrient enrichment impacts
- plant local native grassland species, including native species from local threatened ecological communities
- remove non-native species from your property and don't plant or spread potential environmental weeds (e.g. avoid non-native grasses and daisies; check with your local authority); avoid fertilisers
- strategically manage grazing (e.g. through fencing, stocking density, seasonality, weed prevention) and avoid mowing or slashing the grasslands (unless for ecological reasons)
- practice environmentally safe bushwalking—keep to paths, don't remove or trample on plants, keep pets on a leash and take your rubbish home with you
- where possible and where trees occur within or at the edge of grasslands, allow dead and fallen trees and timber to remain where it is, to provide fauna habitat—avoid unnecessary 'tidying up', or collecting firewood
- report illegal or damaging behaviour (e.g. unauthorised fires or dumping) to appropriate authorities
- support local native vegetation and wildlife conservation (e.g. join a local Landcare or catchment group, natural history or a 'friends of' group, or Conservation Volunteers)
- participate in special events, information nights, and weed eradication programs in your local area.

The Conservation Advice gives further details of priority conservation actions for the ecological community. This can be found on the Department's website: www.environment.gov.au/cgi-bin/sprat/public/publicshowcommunity.pl?id=152&&status=Critically+Endangered

Are there other nationally protected ecological communities within this area?

Within the South Eastern Highlands there are other ecological communities protected under national environmental law including:

- Upland Wetlands of the New England Tablelands and the Monaro Plateau
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.

For more information regarding these ecological communities, visit: www.environment.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl

Do state or local environment laws also apply?

Yes. However, such state and local laws complement, rather than replace or override national environment law. Information about state-listed ecological communities and vegetation management laws are available from the following New South Wales agencies:

- ACT – Environment and Planning Directorate www.environment.act.gov.au/cpr/review_of_the_nature_conservation_act
- NSW – Office of Environment and Heritage www.environment.nsw.gov.au/threatenedspecies/ www.environment.nsw.gov.au/vegetation/
- NSW – Riverina Local Land Services riverina.lls.nsw.gov.au/
- NSW – South East Local Land Services: southeast.lls.nsw.gov.au/
- Victoria – Department of Environment and Primary Industries www.depi.vic.gov.au/environment-and-wildlife/biodiversity/native-vegetation
- Victoria – East Gippsland Catchment Management Authority www.egcma.com.au/

Where can I get further information?

The Conservation Advice for the Natural Temperate Grassland of the South Eastern Highlands ecological community is the definitive source of information on the listing of this ecological community. This can be found on the Department's website, along with the additional information about the ecological community and the EPBC Act, as listed below:

- A comprehensive Conservation Advice for the ecological community is on the Department's species profile and threats (SPRAT) database, at: www.environment.gov.au/cgi-bin/sprat/public/publicshowcommunity.pl?id=152&status=Critically+Endangered
- The former National Recovery Plan for Natural Temperate Grassland of the Southern Tablelands (NSW and ACT), at www.environment.gov.au/resource/natural-temperate-grassland-southern-tablelands-nsw-and-act
- Details of the EPBC listing process at: www.environment.gov.au/topics/threatened-species-ecological-communities
- Details of the EPBC referral, assessment and approval process at: www.environment.gov.au/topics/environment-protection
- Details of Australian Government National Landcare Programme and Natural Resource Management organisations and initiatives are at: www.nrm.gov.au
- A separate factsheet on farming and national environmental law at: www.environment.gov.au/epbc/publications/factsheet-farming-and-national-environment-law-epbc-act
- Enquiries can also be made through the Department's Community Information Unit, by phone on 1800 803 772 (freecall), or email to ciu@environment.gov.au



Button wrinklewort *Rutidosia leptorhynchoides* and chamomile sunray *Rhodanthe anthemoides* in flower © Copyright David Eddy.

If you need help to identify if Matters of National Environmental Significance may be present in your area of interest:

- Check the protected matters search tool at: www.environment.gov.au/epbc/pmst/
- Check the species profile and threats (SPRAT) database at : www.environment.gov.au/cgi-bin/sprat/public/sprat.pl
- Consult with relevant expert, such as an ecological consultant, local NRM agency (e.g. Local Land Services or Catchment Management Authority). They may be useful to help identify the ecological community and its condition, or
- Contact the Department's Community Information Unit, by phone on 1800 803 772 (freecall), or email to ciu@environment.gov.au



Natural Temperate Grassland with showy copper wire daisy *Podolepis jaceoides* in flower, Round Plain Cemetery © Copyright David Eddy.



The appearance of the grasslands may differ from year to year, due to factors such as rainfall and management history. Top Hut Travelling Stock Reserve at Dry Plains, near Adaminaby, in 1997 (left) and 1999 (right) © Copyright David Eddy.

environment.gov.au



Offsets Assessment Guide
For use in determining offsets under the *Environment Protection and Biodiversity Conservation Act 1999*
2 October 2012
This guide relies on Macros being enabled in your browser.

Matter of National Environmental Significance	
Name	
EPBC Act status	Critically Endangered
Annual probability of extinction Based on IUCN category definitions	6.8%

Key to Cell Colours
User input required
Drop-down list
Calculated output
Not applicable to attribute

Impact calculator						
Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
<i>Ecological communities</i>						
Area of community	Yes		Area	28.5	Hectares	
			Quality	8	Scale 0-10	
			Total quantum of impact	22.80	Adjusted hectares	
<i>Threatened species habitat</i>						
Area of habitat	No		Area			
			Quality			
			Total quantum of impact	0.00		
<i>Threatened species</i>						
<i>Threatened species</i>						
Birth rate e.g. Change in nest success	No					
Mortality rate e.g. Change in number of road kills per year	No					
Number of individuals e.g. Individual plants/animals	No					

Offset calculator																			
Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)	Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost (\$ total)	Information source
<i>Ecological Communities</i>																			
Area of community	Yes	22.80	Adjusted hectares		20	Start area (hectares)	43	Risk of loss (%) without offset	5%	Risk of loss (%) with offset	5%	0.00	100%	0.00	0.00	4.41	19.34%	No	
								Future area without offset (adjusted hectares)	40.9	Future area with offset (adjusted hectares)	40.9								
								Time until ecological benefit	5	Start quality (scale of 0-10)	8								
<i>Threatened species habitat</i>																			
Area of habitat	No					Start area (hectares)		Risk of loss (%) without offset		Risk of loss (%) with offset									
								Future area without offset (adjusted hectares)	0.0	Future area with offset (adjusted hectares)	0.0								
								Time until ecological benefit		Start quality (scale of 0-10)									
<i>Threatened species</i>																			
<i>Threatened species</i>																			
Birth rate e.g. Change in nest success	No																		
Mortality rate e.g. Change in number of road kills per year	No																		
Number of individuals e.g. Individual plants/animals	No																		

Summary							
Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost (\$)		
					Direct offset (\$)	Other compensatory measures (\$)	Total (\$)
Birth rate	0				\$0.00		\$0.00
Mortality rate	0				\$0.00		\$0.00
Number of individuals	0				\$0.00		\$0.00
Number of features	0				\$0.00		\$0.00
Condition of habitat	0				\$0.00		\$0.00
Area of habitat	0				\$0.00		\$0.00
Area of community	22.8	4.41	19.34%	No	\$0.00	#DIV/0!	#DIV/0!
					\$0.00	#DIV/0!	#DIV/0!

From: s22
To: s22
Cc: s22 [Geoff Richardson](#)
Subject: RE: Urgent request for talking points - NTGSEH listing [SEC=UNCLASSIFIED]
Date: Thursday, 16 February 2017 2:51:43 PM
Attachments: [Letter submission - NSW OEH - 150724.pdf](#)
[Public consultation material - consultation guide.docx](#)

Hi s22

See below for background and talking points. There's probably a bit more detail in here than required, but I've put it all together for a complete picture.

s37(1)(a)

Regards,

s22

s22

Ecological Communities Section | Protected Species and
Communities Branch
Department of the Environment and Energy
GPO Box 787 Canberra ACT 2601 | s22

(For more about threatened ecological communities and our latest newsletter, see:
<http://www.environment.gov.au/biodiversity/threatened/communities.html>)

Previous listing and the revised listing

- The native grasslands in the Southern Tablelands region of NSW and the ACT have been listed as a threatened ecological community since the start of the EPBC Act (16 July 2000), and before that under the Commonwealth *Endangered Species Protection Act 1992*.
- The *Natural Temperate Grassland of the South Eastern Highlands* ecological community was listed on 6 April 2016 as a result of a review of the original listing, which was known as *Natural temperate grassland of the Southern Tablelands of NSW and the Australian Capital Territory*. This review was conducted to take account of new information, in line with the 2006 National Recovery Plan for this ecological community.
- The revised listing added a 'minimum condition threshold', which identifies which areas of grassland are protected by the EPBC Act. Low quality grasslands that do not meet this threshold are not protected, whereas some of these areas would have been included in the previous listing.

s37(1)(a)

s37(1)(a)

Consultation

- The original listing, recovery plan and revised listing all went through statutory consultation processes.

Notification of public consultation on the review of the ecological community listing

- Notification emails were sent to a wide range of stakeholders, including all councils, Local Land Services, and state agencies where the ecological community occurs, and the National Farmers' Federation and NSW Farmers' Association (s47F [REDACTED]). These Farmers' groups were contacted by the Department's Environment Liaison Officer, out posted to the NFF, and the Department met with the NFF to discuss the listing on more than one occasion.
- Reminder emails were also sent to the same groups as the end of the public consultation period approached.
- A farmer specific consultation guide (attached) was available as part of the consultation package, explaining the listing review process and what this meant for farming activities.

Notification of the listing event (6 April 2016)

- Following listing, email notifications were also sent.

Information guide on the ecological community for landholders

- An information guide was finalised and released in 2016. This was developed with the assistance of the NFF.
- The information guide is designed to assist land managers, owners and occupiers as well as environmental assessment officers and consultants to identify, assess and manage the Natural Temperate Grassland of the South Eastern Highlands ecological community. This guide also explains why the listing was revised and relationships between the previous and updated listing.
- Hardcopies of the information guide (including a link to the electronic version on the website) were sent to all councils and South East Local Land Service offices where the ecological community occurs. For the Corrowong/Delegate region, this included the Snowy-Monaro Regional Council office in Cooma, and the South East LLS office in Bombala. The letter that accompanied these guides invited the offices to "Please pass this letter and the enclosed brochures on to relevant environment or biodiversity officers, and/or your organisation's reception/visitors area".
- The information guide explains that, "Only activities that are likely to have a significant impact on the ecological community need to be considered under national environment law —activities such as large new developments, works or infrastructure. For example, permanently clearing areas of high-quality native vegetation for mining and energy infrastructure, changed agricultural production (e.g. cropping), telecommunication cabling, roadworks or residential/industrial subdivision."

Awareness of Natural Temperate Grassland listing

- The national Recovery Plan included work to increase awareness of the ecological community, including the establishment of the Southern Tablelands Conservation Management Network and work in the early-mid 2000s by WWF.
- The attached letter from NSW OEH also summarises work they have done to increase community engagement with the listed ecological community (see pages 4-5) and working collaboratively with partners (page 7).
- South East Local Land Services acknowledge the National Landcare Programme and EPBC Act in their 2016-21 strategic plan.
- South East Local Land Services has received money through the National Landcare Programme to administer grants to restore the NTG EC, among other projects.

From: s22

Sent: Thursday, 16 February 2017 9:35 AM

To: s22

s22

Cc: s22

Subject: Urgent request for talking points - NTGSEH listing [SEC=UNCLASSIFIED]

Hi s22

As discussed, it appears that a NTGSEH case was discussed in parliament yesterday, and we have been asked to urgently draft some dot points about the listing. Can you please provide a point about the amount of engagement, consultation and education (particularly with the farming community) that was undertaken in the listing process.

This is a handwritten note we got from a phone call with the Minister's office:

'Possible compliance action

South East Highland Grassland

- *Hunt made a change (listing status priority)*
- *What was change, when, why, implications*

ACT/NSW Border'

Draft dot points:

- The *Natural Temperate Grassland of the South Eastern Highlands* ecological community was listed in the Critically Endangered category on 6 April 2016.
- Between 16 July 2000 and 5 April 2016, the extent of this ecological community was included with the listed endangered *Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory* ecological community.
- The *Natural Temperate Grassland of the South Eastern Highlands* ecological community came about as a result of a review of the *Natural temperate grassland of the Southern*

Tablelands of NSW and the Australian Capital Territory (listed as endangered in 2000).
This review was conducted to take account of new information, and to recognise a
broader distribution than was acknowledged in the original listing.

- Dot point about consultation, engagement and education

Happy to discuss,

s22

Environment Standards Division
Department of the Environment and Energy
GPO Box 787 CANBERRA, ACT 2601

s22



Office of
Environment
& Heritage

s22

s22 Ecological Communities Section
Protected Species and Communities Branch
Wildlife, Heritage and Marine Division
Department of Environment
33 Allara St Canberra City

Your reference:
Our reference:
Contact:

s47F

RE: OEH Queanbeyan staff contributions to the conservation of the EPBC-listed Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory

Dear s22

Thank you for your request for information about the contributions made by the NSW Office of Environment and Heritage (OEH) towards the conservation of the Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory endangered ecological community (NTG EEC), as listed under the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act). The NTG EEC, and its component flora and fauna species listed under the EPBC Act and the NSW Threatened Species Conservation Act (TSC Act) have been a major focus of the OEH Queanbeyan office's work over the last 20 years. A detailed catalogue of activities is provided in Attachment 1.

OEH is pleased that a new listing of NTG EEC under the EPBC Act will include areas that were previously not included under the listing (i.e., areas across the entire NSW South Eastern Highlands Bioregion). The expanded area covered by the new listing will include areas identified as containing NTG EEC by OEH staff through their surveys in the Bathurst, Orange, Tumbarumba and Tumut regions (see below for details of the surveys). The inclusion of the extended range of NTG EEC under the new listing, and updated information on threats, will assist OEH, Local Land Services and Local Government to manage NTG EEC with a more strategic approach across its range.

OEH also values the improved clarity of the new definition of the NTG EEC and its condition states that the new listing provides. A major failing of the previous listing of the NTG EEC was the lack of clarity in its definition and condition states. In fact, that lack of clarity was the major reason that NSW OEH staff developed a Floristic Value Score (FVS) Method for use in grassland assessment. As you would be aware, OEH staff have been instrumental in assisting the Department of Environment in the development of the new listing via extensive review of information and assistance in developing the condition states and FVS methodology. We are confident that the FVS method will facilitate robust assessment of grassland sites to enable each site's placement into its appropriate condition state, as described in the draft material produced for the NTG EEC listing process. As OEH also considers EPBC Act-listed entities under its legislative and regulatory processes, such clarity is imperative.

You may be aware that OEH has been working on a nomination to list NTG EEC under NSW legislation. That process has been placed on hold, as we consider it appropriate for the EPBC Act listing to be finalised before proceeding with the NSW nomination for the same community. We feel that it would be a sensible approach for the NSW listing to be identical, or at least very similar in substance to the EPBC Act listing.

On behalf of OEH, I would like to thank you for working with OEH staff on this important EPBC review of an EEC listing that has had major consequences for our threatened species conservation work. Should you

require further information, please don't hesitate to contact me on s47F or email me on
s47F Please note that s47F
so after that date please refer correspondence to my manager, s47F at
s47F

Yours sincerely

s47F

**Ecosystems and Threatened Species,
South East Regional Operations**

ATTACHMENT 1 – OEH activities on the conservation of the EPBC-listed Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory

1. Survey of NTG and its component species. Survey work has included a comprehensive coverage of the South Eastern Highlands Bioregion, identifying sites with NTG and those containing the grassland plants, reptiles, birds and invertebrates that this endangered ecological community supports. Over the last 20 years, our team, and people associated with it in some way (e.g., environmental consultants and project officers engaged by the Natural Temperate Grassland National Recovery Team), have identified in excess of 900 sites containing NTG across the South Eastern Highland IBRA Bioregion, with sites being defined as discrete areas of NTG not connected to another, or if adjacent, then containing either a different vegetation type, or a different condition state. Sites range in size from small roadside reserves to large paddocks on freeholdings. Early work on survey of NTG sites was carried out with Australian Government funding.

NTG sites have been identified from the following land tenure types:

- Private land holdings, including hobby farms and production landscapes;
- Crown land and council reserves including cemeteries;
- Roadside and rail easement reserves;
- Travelling stock reserves and routes;
- Sites identified through development assessment processes; and
- Sites identified for offsets through the environmental planning processes of development projects, including BioBanking sites (see below).

Threatened plant species that have specifically been surveyed for, or that have had locations identified incidentally, mostly by OEH staff and consultants either under contract to NSW OEH or independents, include:

- Mauve Burr-daisy (*Calotis glandulosa*);
- Creeping Hopbush (*Dodonaea procumbens*);
- Omeo Stork's-bill (*Pelargonium* sp. (G.W. Carr 10345);
- Tarengo Leek orchid (*Prasophyllum petilum*);
- Summer Leek Orchid (*Prasophyllum canaliculatum*);
- Button Wrinklewort (*Rutidosis leptorrhynchoides*);
- Monaro Golden Daisy (*Rutidosis leiolepis*);
- Austral Toadflax (*Thesium australe*);
- Basalt Peppergrass (*Lepidium hyssopifolium*); and
- Small Purple-pea (*Swainsona recta*).

Threatened reptile species that have specifically been surveyed for or that have had locations identified incidentally by OEH staff, consultants either under contract to OEH or independents, and university researchers, include:

- Grassland Earless Dragon (*Tympanocryptus pinguicollis*);
- Striped Legless Lizard (*Delma impar*);
- Little Whip Snake (*Suta flagellum*); and
- Pink-tailed Worm-lizard (*Aprasia parapulchella*).

In addition, OEH has supported work that has uncovered additional locations for Golden Sun Moth (*Synemon plana*).

2. Databasing, mapping, modelling and community classification of NTG. OEH, often in collaboration with other groups, has developed products, including a grassy ecosystems database, remote-sensing modelling, connectivity modelling and community classification, as follows:
 - a. The Grassy Ecosystems Database contains data from over 9000 grassland and grassy woodland site datapoints (plots, regional surveys, site visits, site assessments, monitoring sites, including baseline and follow-ups, recap visits, etc), from not only the South Eastern Highlands Bioregion, but from across eastern NSW, as well as a number of NTG sites in

Victoria. This dataset comprises location and attribute data, including vegetation classification and condition information, and full flora species lists for most sites. The database is currently being transferred to the NSW Vegetation Information System at: <http://www.environment.nsw.gov.au/research/VISplot.htm>;

- b. Preparation of a pre-European natural grassland boundary map. This was created and first published in Rehwinkel, R. (1997) *Joint Regional Biodiversity Survey of Grassy Ecosystems Project - Stage 1*. New South Wales National Parks and Wildlife Report, and subsequently in *Planning Framework for Natural Ecosystems of the ACT and NSW Southern Tablelands* (Fallding, 2002) (at: <http://www.environment.nsw.gov.au/resources/biodiversity/FrameworkForEcosystems.pdf>) and in the NTG National Recovery Plan (at: <http://www.environment.gov.au/system/files/resources/7c8a51fb-0436-450e-b895-fb46bc1f7b39/files/temperate-grasslands.pdf>);
 - c. Preparation of a multi-image, remotely-sensed spectral analysis model of grassy ecosystems for the ACT and sub-region (ERIC (2001) *Remote Sensing Detection of Native Grasslands using Multi-Image Spectral Analysis in the South Eastern Highlands of NSW*. Report prepared for the New South Wales National Parks and Wildlife Service). This was commissioned by R. Rehwinkel (OEH). This work was undertaken with funding from the Australian Government;
 - d. Preparation of a multi-image, remotely-sensed spectral analysis model of grassy ecosystems for the Monaro region (Walter, K., & Schelling, K. (2004) *Remote Sensing Mapping of Grassy Ecosystems in the Monaro*. Report to the New South Wales Department of Environment and Conservation). This was funded by South East Local Land Services (SE LLS) and commissioned by R. Rehwinkel (OEH);
 - e. Preparation of a multi-image, remotely-sensed spectral analysis model of grassy ecosystems for the Upper Shoalhaven region (Walter, K., & Schelling, K. (2005) *Remote sensing mapping of grassy ecosystems in the upper catchment of the Shoalhaven River (Southern Tablelands Region)*. Report to the New South Wales Department of Environment and Conservation). This was funded by SE LLS and commissioned by R. Rehwinkel (OEH);
 - f. Preparation of a revision of the Monaro grassland model (Rehwinkel, R. (2005) *Revision of Monaro Grassland Mapping*, NSW Dept. Environment and Conservation report prepared for the Southern River Catchment Management Authority);
 - g. Data collection for, and analysis and publication of a grassland community classification (Armstrong, R.C., Turner, K.D., McDougall, K.L., Rehwinkel, R., & Crooks, J.I. (2013) *Plant communities of the upper Murrumbidgee catchment in New South Wales and the Australian Capital Territory*, *Cunninghamia* 13(1): 125-265; see: http://www.rbg Syd.nsw.gov.au/data/assets/pdf_file/0019/128521/Cun131arm125.pdf); and
 - h. Preparation of parameters, data inputs and provision of technical assistance for connectivity modelling for grassy ecosystems species (Love, J., Rehwinkel, R. and Moyle, K. (in prep) *Southern Rivers NRM Stream 1 Habitat and Connectivity Modelling Project - The mapping of fauna habitat and connectivity values in the South East Local Land Services area*).
3. Community engagement with a wide range of stakeholders. OEH has engaged with many different types of stakeholders to engage the community about the conservation and management of NTG EEC and its component threatened fauna and flora. This has included the following:
- a. Development of the *Southern Tablelands Grassy Ecosystems Conservation Management Network* (STGE CMN). A CMN is the network of remnants of native vegetation, their owners or managers and other interested individuals, focussing on a single ecological community because the management needs of each community are relatively uniform. An important purpose of a CMN is to assist landholders and land managers in the management of remnant native vegetation. The STGE CMN was established under Australian Government funding, but is now in abeyance, though the website that was produced as part of this project is still operational; see: <http://www.gbwcmm.net.au/node/10>. This work was undertaken with funding from the Australian Government;

- b. Preparation and delivery of field days, courses, workshops, forums, conference presentations, university lectures and tutorials, to communicate the values of NTG to participants. Stakeholders that have participated have included
- Local Government agency staff;
 - Local Land Service staff
 - members of the Grassy Ecosystems CMN;
 - Friends of Grasslands, Australian Network for Plant Conservation and other non-government groups;
 - NSW NPWS staff and their community network contacts;
 - Landcare groups;
 - K2C members and K2C partners;
 - other community groups; and
 - individuals, especially landholders with NTG on their properties.

The above events have covered topics, including

- field recognition of the vegetation communities comprising NTG;
- training in the use of the Floristic Value Score method (see below);
- grassland plant identification;
- discussion of values, threats, conservation management and planning matters;
- connectivity modelling;
- remote-sensing modelling;
- plant classification; and
- fauna values.

4. Creation of reserves and the application of other conservation mechanisms. A number of NTG sites have been identified and subsequently have had conservation mechanisms applied.

Sites with the highest level of formal protection include the following nature reserves, managed by NSW National Parks and Wildlife Service, in order of acquisition:

- a. Turallo Nature Reserve near Bungendore, which has 25 ha of highly diverse NTG and one threatened reptile species; see: <http://www.environment.nsw.gov.au/resources/planmanagement/final/TuralloNR.pdf>;
- b. Kuma Nature Reserve near Cooma, which has 120 ha of NTG and several threatened reptile species; see: <http://www.environment.nsw.gov.au/resources/parks/pomKumaNR.pdf>;
- c. An addition of a 60 ha area of NTG to Queanbeyan Nature Reserve (Queanbeyan), that includes populations of several threatened grassland flora and fauna species; see <http://www.nationalparks.nsw.gov.au/visit-a-park/parks/Queanbeyan-Nature-Reserve>;
- d. An addition of a highly significant area of NTG to the South East Forests National Park near Nimmitabel; see: <http://www.nationalparks.nsw.gov.au/visit-a-park/parks/South-East-Forests-National-Park>; and
- e. Mcleods Creek Nature Reserve near Gundaroo, which contains about 5 ha of NTG; see <http://www.environment.nsw.gov.au/resources/planmanagement/draft/110751GunningReservesDraftPOM.pdf>.

In addition provision of advice to the Victorian Government from OEH contributed to the creation of Bendoc Nature Conservation Reserve at Bendoc, Victoria, which contains a small sample of NTG; see http://parkweb.vic.gov.au/data/assets/pdf_file/0018/312192/21_1449.pdf.

Sites with the various lower levels of protection include the following sites, managed by various agencies, in order of establishment:

- f. Gundaroo Common, a crown reserve with large areas of NTG and several threatened species that has a management trust that has received OEH assistance with development of a conservation management plan;
- g. Old Cooma Common, a council reserve with a large area of NTG and threatened flora that was identified by OEH and has subsequently received assistance with NSW Environmental

Trust funding and volunteers help from Friends of Grasslands to fence and remove weeds from this site;

- h. Days Hill, Bungendore, a council reserve with areas of NTG; NSW OEH and Australian Government Department of Environment assisted Palerang Council in the development of this council reserve;
- i. 'Parlour', Braidwood area, a private landholding with large areas of highly intact NTG that was identified by OEH staff, subsequently purchased by the NSW Nature Conservation Trust and ultimately on-sold with an in-perpetuity conservation covenant to private landholders as an offset under EPBC processes as an offset for development on NTG on a site near Canberra;
- j. 'Bunhybee', Braidwood area, a private landholding with large areas of highly intact NTG that was identified by OEH staff, subsequently purchased by the NSW Nature Conservation Trust and ultimately on-sold with an in-perpetuity conservation covenant to private landholders; see: <http://www.rogerclarke.com/Bunhybee/PropBrochure.html>
- k. 'Weeroona' and 'Lochlea', Monaro region, are two large freehold properties that have been set aside as NSW BioBanking offset sites following the development of the Boco Rock Windfarm; NSW BioBanking sites have formal protection under in-perpetuity covenants; see: <http://www.environment.nsw.gov.au/biobanking/>;
- l. 'Llanelly', Michelago, a private landholding with large areas of NTG with threatened flora that was identified by OEH staff, subsequently purchased by the NSW Nature Conservation Trust and will ultimately be on-sold with an in-perpetuity conservation covenant to private landholders;
- m. 'Garruwanga', near Nimmitabel, a private landholding with areas of NTG that was identified by OEH staff, subsequently purchased by the NSW Nature Conservation Trust and will ultimately be on-sold with an in-perpetuity conservation covenant to private landholders; and
- n. Yass Gorge, Yass, a council reserve with outstanding scenic qualities and a rare sample of a NTG grassland type that is confined to steep rocky sites. The site was identified by OEH staff and is currently a subject of a Green Army team that is removing weeds. In a separate project, collaboration between Yass Landcare, Yass Valley Council and K2C is developing a community engagement project and developing a management plan, with NSW Environmental Trust funding.

5. Working on the conservation management of NTG and its component species. OEH has collaborated with its many partners to raise awareness of NTG and its component threatened species. OEH has also collaborated to undertake on-ground works, as follows:
 - a. Undertaking long-term research and conservation management of populations of Small Purple-pea (*Swainsona recta*) at a railway easement near Williamsdale;
 - b. Undertaking conservation management and assisting CSIRO with long-term research on populations of Button Wrinklewort (*Rutidosia leptorrhynchoides*) throughout the region;
 - c. Assisting the funding of fencing for protection of NTG and populations of Button Wrinklewort (*Rutidosia leptorrhynchoides*) at Gundry TSR (Goulburn);
 - d. Undertaking long-term monitoring of NTG condition and monitoring and surveys for threatened flora and/or reptiles at the following sites:
 - Kuma Nature Reserve;
 - Queanbeyan Nature Reserve; and
 - Turallo Nature Reserve.
 - e. Undertaking translocation experiments with Aromatic Peppergrass (*Lepidium hyssopifolium*), trialling translocation to new localities from an existing population (in collaboration with Friends of Grasslands and NSW NPWS);
 - f. Collecting bulk seeds of Aromatic Peppergrass (*Lepidium hyssopifolium*) for lodgement in seedbanks at Mt Annan Botanic Gardens and Australian National Botanic Gardens;
 - g. Contracting surveys and monitoring for Summer Leek Orchid (*Prasophyllum canaliculatum*), at Packers Swamp near Nimmitabel, with funding from the NSW Saving Our Species program;

- h. Contracting fencing and weed spraying at sites with populations of Omeo Stork's-bill (*Pelargonium* sp. (G.W. Carr 10345) at Lake Bathurst and Maffra Lake TSR near Nimmitabel, with funding from the NSW Saving Our Species program;
- i. Working with NSW NPWS rangers and field staff on the conservation management of NTG at Kuma Nature Reserve, Queanbeyan Nature Reserve, Mcleods Creek Nature Reserve, Turallo Nature Reserve and South Eastern Forests National Park, where we have undertaken, or assisted with various trials, including weed control trials and biomass removal trials (burning, slashing and grazing), all with associated monitoring.

6. Working collaboratively with partners. OEH has a track record of working in partnership with other agencies in its efforts in the conservation of NTG. Partnerships have been developed with many government and non-government agencies, including:
- a. ACT Government staff, working particularly with its researchers and ranger staff on many cross-border issues;
 - b. the Natural Temperate Grassland National recovery Team, alongside the ACT Government and other government and NGO groups to develop the NTG National Recovery Plan and cooperatively carry out its actions;
 - c. partners in the community, in particularly with private landholders, including farmers, who have NTG on their properties;
 - d. South East Local Land Services (SE LLS and its predecessors, the Murrumbidgee and Southern Rivers Catchment Management Authorities), particularly in strategic management of NTG and assistance in developing planning documents and policy documents;
 - e. Kosciuszko to Coast (K2C). OEH has been a strong supporter of this landscape partnership since its inception in 2007. K2C has included grasslands amongst its six landscape targets. K2C has recently completed a three-year grassland project funded by the Myer Foundation. The Myer Foundation project has:
 - developed a new *Building Understory Diversity* website, in collaboration with Greening Australia (yet to be formally launched);
 - worked with many stakeholders in the region (including landholders, researchers, Government staff and NGOs);
 - commissioned the analysis of grassland management plot data (Josh Dorrough, in prep), in collaboration with SE LLS;
 - held a number of Grassland Symposia, both in Canberra and Melbourne, to foster cross agency – cross border collaboration; and
 - facilitated collaboration in the publication of a new publication on grassland management: Williams, N. and Marshall. A. (eds) (2015) *Land of Sweeping Plains - Managing and Restoring the Native Grasslands of South-eastern Australia* CSIRO Publishing (see: <http://www.publish.csiro.au/pid/7219.htm>);
 - f. Local government agencies, many of which have developed positive outcomes for NTG sites as a result of advice from OEH. Outstanding examples have been the collaboration with Yass Valley LGA in its work at Yass Gorge and Palerang Council in its work on Days Hill Reserve (see above);
 - g. Department of Primary Industries (Lands), particularly in our role of providing advice on the management of NTG on Crown Land reserves including two large and important reserves containing natural grassland:
 - Lake Bathurst; and
 - Rows Lagoon;
 - h. Crown land trusts, particularly in our role of providing advice on the management of NTG on Crown Land reserves, and in particular at Gundaroo Common (see above);
 - i. Managers of travelling stock reserves (currently LLS), particularly in our role of providing advice on the management of NTG on travelling stock reserves, and particularly as a result of work with the NTG National Recovery Team, the identification of sites that have subsequently received Australian Government funding for management; and
 - j. NSW National Parks and Wildlife Service, particularly in our role of providing advice on the management of NTG on their reserves (see above).

7. Producing and collaborating on strategic documents. NSW OEH has developed, mostly in consultation with other agencies or groups, a range of strategic documents that deal with the conservation and management of NTG, including:
- a. Preparation, in collaboration with the ACT Government, of the initial nomination that resulted in the listing of NTG as an EEC under the EPBC Act;
 - b. Collaboration with the ACT Government and Australian Government Department of Environment staff on the recent update of the listing of NTG EEC (see more details, below);
 - c. Collaboration in the preparation of the NTG National Recovery Plan; see: <http://www.environment.gov.au/system/files/resources/7c8a51fb-0436-450e-b895-fb46bc1f7b39/files/temperate-grasslands.pdf>;
 - d. Preparation of, or collaboration with others in the National Recovery Plans for a range of NTG flora and fauna species, including:
 - Creeping Hopbush (*Dodonaea procumbens*);
 - Omeo Stork's-bill (*Pelargonium* sp. (G.W. Carr 10345));
 - Tarengo Leek orchid (*Prasophyllum petilum*);
 - Button Wrinklewort (*Rutidosia leptorrhynchoides*);
 - Monaro Golden Daisy (*Rutidosia leiolepis*)
 - Small Purple-pea (*Swainsona recta*);
 - Aromatic Peppergrass (*Lepidium hyssopifolium*);
 - Grassland Earless Dragon (*Tympanocryptis pinguicollis*);
 - Striped Legless Lizard (*Delma impar*);
 - Little Whip Snake (*Suta flagellum*);
 - Pink-tailed Worm-lizard (*Aprasia parapulchella*); and
 - Golden Sun Moth (*Synemon plana*).
 - e. Preparation of an information gap analysis to identify survey needs (Rehwinkel, R. (1997) *Joint Regional Biodiversity Survey of Grassy Ecosystems Project - Stage 1*. New South Wales National Parks and Wildlife Report);
 - f. Collaboration with a team that included ACT and NSW government and NGOs, including the Housing Industry Association, which resulted in the preparation of *The Planning Framework for Natural Ecosystems of the ACT and NSW Southern Tablelands* (Fallding, 2002); see: <http://www.environment.nsw.gov.au/resources/biodiversity/FrameworkForEcosystems.pdf>. This work was undertaken with major funding from the Australian Government and included development of remote-sensing modelling and regional threatened grassland reptile surveys (see above);
 - g. Assistance with the preparation of a planning framework for Cooma-Monaro Shire;
 - h. Assistance with, and provision of data for, a range of local government strategic plans and local environment plans; including for:
 - Yass Valley LGA;
 - Upper Lachlan LGA;
 - Goulburn-Mulwaree LGA;
 - Palerang LGA;
 - Queanbeyan City LGA;
 - Cooma-Monaro LGA;
 - Snowy River LGA; and
 - Bombala LGA.
 - i. Routine checking by our planning team of environmental assessments undertaken by consultants for developers and local government agencies (LGAs), where impacts have affected NTG and its component species. These have resulted in correspondence with proponents and LGA staff, and in many cases have involved field work with the above;
 - j. South East Local Land Services (SE LLS and its predecessors, the Murrumbidgee and Southern Rivers Catchment Management Authorities), with OEH staff assisting in development of their Catchment Action Plans and their reviews; SE LLS has the NTG EEC amongst its landscape targets;

- k. Assistance in the preparation of the Kosciuszko to Coast (K2C) Conservation Action Plan, and in particular, identifying NTG as one of the core targets for K2C to work on; see: <http://k2c.org.au/>;
- l. Development of a robust, reliable and repeatable assessment methodology for the identification of NTG values (Rehwinkel, 2007; Rehwinkel, in prep.) see: <http://www.gbwcmmn.net.au/sites/default/files/GrasslandAssessmentMethod.pdf>. This method, known as the Floristic Value Score (FVS) Method, has been produced in collaboration with many OEH staff, Australian Government Department of Environment staff and external partners, including consultants and LLS staff. As the method is required both for NSW processes and under the proposed Australian Government's EPBC Act NTG EEC re-listing, strenuous efforts have been made to ensure that the FVS scores will be uniform for use in both jurisdictions.

The FVS method was originally developed for the Australian Government as an action identified in the NTG National Recovery Plan (see: <http://www.environment.gov.au/system/files/resources/7c8a51fb-0436-450e-b895-fb46bc1f7b39/files/temperate-grasslands.pdf>), and has now been widely accepted by various groups; including:

- ACT Government staff, who use the method to assess grassland values and for monitoring grassland sites;
- community groups, who have been using the method for monitoring; and
- consultants, who have been employing the method for use in development applications for NSW processes;
- Greening Australia, who have used the method for assessment of grassland values prior to grassland restoration works being carried out at the Canberra Airport, and for subsequent monitoring.

The FVS method was formally presented at a workshop at an Australian Network for Plant Conservation conference in Canberra in 2012, and following that, extensively reviewed by NSW, ACT and Victorian grassland specialists. It has recently been proposed for adoption under formal NSW policy processes in a review of environmental acts, and has recently been subject to more extensive review by OEH and LLS staff. During these processes, the method has been developed for use in other grassland regions throughout NSW, with tools for the FVS method having been completed for two other NSW regions (Riverina and Brigalow Belt South), and work commencing for an additional three regions (Cumberland Plain, NSW South Western Slopes and Darling Riverine Plain).

- m. Assistance in the development of OEH policies dealing with NTG, and provision of relevant data for these processes; including:
 - NSW BioMetric; see: <http://www.environment.nsw.gov.au/projects/BiometricTool.htm>; and
 - NSW BioBanking; see: <http://www.environment.nsw.gov.au/biobanking/>;
- n. Development of profiles for the NTG EEC and its associated threatened species: see: <http://www.environment.nsw.gov.au/threatenedspecies/>; and
- o. Development of Saving Our Species project plans for a select group of NTG-associated threatened species: see <http://www.environment.nsw.gov.au/threatenedspecies/>.

8. Developing publications or collaborating in their development. OEH has collaborated on a number of publications related to the identification, management and conservation of NTG, including books, field guides, handbooks and brochures, the most important of which are listed below:
 - a. *Grassland Flora – a field guide for the Southern Tablelands (NSW & ACT)* (Eddy, D., Mallinson, D., Rehwinkel, R. and Sharp, S., 1998); see: http://www.fog.org.au/grassland_flora.htm;
 - b. *Managing native grassland: a guide to management for conservation production and landscape protection* (Eddy, 2002); see:

- http://www.wwf.org.au/news_resources/resource_library/?1484/Managing-native-grassland-a-guide-to-management-for-conservation-production-and-landscape-protection
- c. *Managing Native Pastures for Agriculture and Conservation* (Langford, C.M., Simpson, P.C., Garden, D.L., Eddy, D.A., Keys, M.J., Rehwinkel, R., and Johnston, W.H., 2004); see: <http://www.dpi.nsw.gov.au/agriculture/pastures/pastures-and-rangelands/native-pastures/managing-native-pastures>
 - d. *Grassy Ecosystems Management Kit* (Sharp, S., Dorrough, J., Rehwinkel, R., Eddy, D. & Breckwoldt, A., 2005); see: <http://www.gbwcmm.net.au/node/3532>;
 - e. *Understanding our Native Grasslands* (Natural Resources Advisory Council, 2010); see: http://www.landcareonline.com.au/?page_id=4104; and
 - f. *Land of Sweeping Plains - Managing and Restoring the Native Grasslands of South-eastern Australia* Williams, N. and Marshall. A. (eds) 2015, CSIRO Publishing); see: <http://www.publish.csiro.au/pid/7219.htm>.

Listing update for Natural Temperate Grasslands of the Southern Tablelands ecological community: consultation guide

April 2014

This information guide is intended to help the public understand why the listing of the Natural Temperate Grasslands of the Southern Tablelands ecological community is being reviewed, and what the updated listing would achieve and mean for people in the region.

In summary:

- The Natural Temperate Grassland of the Southern Tablelands was listed as an endangered ecological community in 2000, under Australia's national environment law, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- The original southern tablelands listing does not cover the full distribution of these types of grasslands.
- This review is updating the listing to include the broader extent of these grasslands across the South Eastern Highlands, and immediately adjacent areas.
- A scientific assessment has been undertaken to re-define the ecological community and gather evidence on its current threat status.
- Public consultation and input from land managers is an important and valuable part of the assessment process. Consultation is open until 30 May 2014.
- The Minister for the Environment will make the decision on whether to update the listing by the end of 2014.
- The grasslands listing has benefits for the environment and associated ecosystem services, and benefits and opportunities for land managers.
- The updated listing would continue to help promote a co-ordinated, ecosystem-scale approach to threat abatement in the region and for many threatened species that are found within the ecological community.
- Listing under the EPBC Act means that an activity that is likely to have a significant impact on the ecological community needs to be referred to the Commonwealth environment minister for assessment and approval.
- The updated listing will introduce minimum condition thresholds, to help identify patches where a referral may be necessary.
- Routine property maintenance and land management practices carried out in line with other laws and guidelines covering native vegetation typically do not require referral under national environment law.
- The national environment law only considers activities that are likely to have a significant adverse impact on a listed ecological community; activities such as large new developments, works or infrastructures. For example, activities that involve permanently clearing large areas of intact and high-quality native vegetation for new residential and industrial areas or energy infrastructure.

What is an ecological community under national environmental law?

Australia's national environmental law, the EPBC Act, protects what are known as Matters of National Environmental Significance. The Act is only triggered if there is likely to be a significant impact to any of these matters.

Threatened species and ecological communities are Matters of National Environmental Significance. The EPBC Act defines an ecological community as an assemblage of native species that inhabits a particular area in nature. They often relate to types of native vegetation, such as a certain kind of grassland, woodland or forest.

The native plants and animals within an ecological community have different roles and relationships that, together, contribute to the healthy functioning of the environment. Protecting native communities also protects ecosystem services such as good quality air and water; healthy soils; natural prevention or control of erosion and salinity; shelter and feed for stock; and the storage of carbon. These all contribute to better productivity of our land and water, which benefits people and society.

Human settlements and infrastructures where an ecological community formerly occurred do not form part of the natural environment and are therefore not part of the ecological community—e.g. sites where an ecological community has been cleared or replaced by crops, exotic pastures or developments. This also applies to sites where the ecological community exists in a highly-degraded or unnatural state. For instance, cropping lands and exotic pastures or areas where much of the native vegetation has been replaced by exotic species, and are no longer part of a natural ecological community.

What is the listing assessment process?

The assessment by the independent Threatened Species Scientific Committee (the Committee) involves clarifying the definition of the ecological community, determining where it occurs, and rigorously assessing its eligibility for listing as nationally threatened. An ecological community must be demonstrated to be significantly impacted by identified threats. It should also be shown that if these threats are not managed, there is a risk that the ecological community may be changed irreversibly and its natural composition and/or function could be lost forever. Three categories exist for listing ecological communities, depending on the level of extinction risk: vulnerable, endangered or critically endangered.

The Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory ecological community was listed as endangered in 2000. However, it has since been recognised that these grasslands occur more broadly across the south eastern highlands and adjacent areas. Therefore this listing review is being conducted to assess the broader distribution and take account of new information. The updated listing will also introduce a minimum condition threshold, to help determine when patches should be considered a matter of national environmental significance.

Public consultation and input from land managers is an important and valuable part of the assessment process. This **public consultation period is open until 30 May 2014**. Comments will be considered by the Committee. Following this, the Committee will finalise their listing assessment and give their advice to the Minister for the Environment, the Hon. Greg Hunt.

Comments received during consultation are also forwarded to the Minister for consideration when making the listing decision, which is due by the end of 2014. Under the EPBC Act, the minister's listing decision is made on whether the ecological community meets the listing criteria, which conservation category applies and whether listing will benefit its survival.

What is the Natural Temperate Grasslands of the South Eastern Highlands ecological community?

As described above, the South Eastern Highlands grassland ecological community is an extension of the existing listing of the grasslands on the Southern Tablelands of NSW and the Australian Capital Territory.

- The ecological community is mainly found within the South Eastern Highlands bioregion with some patches occurring in the areas immediately adjacent (**see accompanying indicative distribution map on website**). Local Government Areas across this region include Bathurst, Bega Valley, Blayney, Bombala, Boorowa, Cabonne, Cooma-Monaro, Cowra, Eurobodalla, Goulburn Mulwarree, Gundagai, Harden, Lithgow, Oberon, Orange, Palerang, Queanbeyan, Shoalhaven, Snowy River, Tumbarumba, Tumut, Upper Lachlan and Yass Valley (although the ecological community may not be present in all these areas).
- It occurs at altitudes up to 1200 m, and as low as 250 m in some parts of its distribution.
- The ecological community occurs on a wide range of topographic positions and on soils derived from a variety of substrates, including granites, basalts, sediments, colluvium and alluvium.
- It is a naturally treeless or sparsely treed community characterised by a dominance of native perennial tussock grasses, the tallest stratum of which is typically up to 1.0 m in height, when present.
- There is usually a second, lower stratum of shorter perennial and annual grasses and forbs growing between the taller tussocks, and there may be a third discontinuous stratum of even smaller forbs and grasses. Sedges and rushes may also occur, particularly in seasonally wet areas.
- The major dominant or co-dominant grass species are: *Themeda triandra* syn. *T. australis* (kangaroo grass), *Poa sieberiana* (snowgrass), *Poa labillardierei* var. *labillardierei* (river tussock grass), *Austrostipa bigeniculata* (kneed speargrass), *Austrostipa scabra* var. *falcata* (slender speargrass), *Bothriochloa macra* (red grass), various *Rytidosperma* species syn. *Austrodanthonia* species (wallaby grasses) and *Lachnagrostis filiformis* (blowngrass).
- The dominant or co-dominant grasses occur in association with a range of other native herbaceous species, including many forb and grass-like species.
- Forb species that are more frequently dominant or co-dominant with the grasses include *Acaena ovina* (sheep's burr), *Asperula* spp (woodruffs), *Chrysocephalum apiculatum* (common everlasting, yellow buttons), *Convolvulus angustissima* (bindweed), *Euchiton* spp, *Leptorhynchos squamatus* (scaly buttons), *Lomandra* spp, *Plantago varia* (variable plantain) and *Vittadinia muelleri* (narrow-leaf New Holland daisy).

What are the benefits of listing an ecological community as nationally threatened?

There are a number of benefits to listing ecological communities under Australia's national environment law:

- Listing an ecological community can help to protect the landscapes that provide connectivity, corridors and refuge essential to protect and improve the ecological function, health and biodiversity of the region. It can protect habitat critical for refuge and recruitment of threatened species and for other species that are under pressure in the region. In turn, this helps foster the ecosystem services associated with an ecological community.
- Listing threatened ecological communities helps protect them from future significant human impacts that may cause further decline. The aim of the national environment law is to ensure the matters of national environmental significance are given due consideration, along with broader economic, social and other issues in the planning of any large projects. Where possible, significant adverse impacts to the environment should be avoided, or the impacts mitigated, reduced or offset, when unavoidable.

- National listing encourages agencies and community/Landcare groups to apply for environmental funding opportunities for conservation and recovery works. The Australian Government has a variety of funding programmes to encourage land managers to continue to conserve biodiversity and ecosystem services on their properties.
- A **conservation advice**, published at the time of listing, provides guidance and options for environmental decision-making, including rehabilitation and conservation initiatives in the region.
- In the case of the Natural Temperate Grasslands ecological community, the listing:
 - provides landscape-scale protection that complements existing national protection of many threatened plants and animals that are found within the ecological community; and,
 - protects the environmental values, including all the ecosystem functions and services associated with the ecological community, which contributes to the long-term productivity of the landscape.

What does a listing mean for landholders?

The national environment law is triggered if an action is likely to have a significant impact on the Natural Temperate Grasslands ecological community. If a proposed action is likely to have such an impact, it requires:

- referral (determining if the action may have a significant impact on the ecological community)
- assessment (the scope of the assessment depends on the complexity of the proposed action and impacts)
- a decision on approval from the minister (who considers the environmental, social and economic factors involved).

Social and economic matters may be taken into account for individual projects that may have a significant impact on the ecological community, through the EPBC Act approvals process. Strict timeframes apply to assessments to ensure decisions are made as quickly as possible.

The normal activities of individual landholders and residents are typically not affected by a listing. Routine property maintenance, land management and other established practices are unlikely to have a significant impact and so do not require referral under national environment law, particularly if carried out in line with other national and state laws covering native vegetation.

For instance, the following actions are unlikely to trigger national environment law:

- ongoing grazing, horticultural or cropping activities
- maintaining existing fences, roads, internal access tracks and firebreaks
- maintaining farm gardens and orchards
- maintaining existing farm dams or water storages
- maintaining existing pumps and clearing drainage lines
- replacing and maintaining sheds, yards and other farm buildings
- controlling weeds and spraying for pests on individual properties.

In all these cases impacts on important patches of the ecological community (e.g. high quality, important corridor for wildlife) should be avoided.

Whether or not an action is likely to have a significant impact depends upon the sensitivity, value and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. The major activity that is likely to have a significant impact on the ecological community is permanently clearing large or otherwise important areas of intact or high-quality native vegetation. This might include, for example, major mining, residential, commercial or other industrial development, developing wind farms, building new roads or widening existing roads or tracks (e.g. for electricity transmission lines), or converting large areas into new pastures or cropping fields. To help reduce significance of actions, the EPBC Act promotes the avoidance and mitigation of impacts, wherever that is possible.

Where can I get further information?

- Information on the existing listing of Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory: <http://www.environment.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl>
- The listing process: www.environment.gov.au/biodiversity/threatened/index.html
- The EPBC referral and approval process: www.environment.gov.au/epbc/
- Australian Government natural resource management initiatives: www.nrm.gov.au/
- The department's Community Information Unit: by phone on **1800 803 772** (freecall), or email at ciu@environment.gov.au
- The EPBC liaison officer with the National Farmers Federation: by email at environment@nff.org.au

From: s22
To:
Subject: FW: Monaro grasslands [SEC=UNCLASSIFIED]
Date: Monday, 6 March 2017 8:50:09 AM
Attachments: [RE Urgent request for talking points - NTGSEH listing SECUNCLASSIFIED.msg](#)

FYI – response sent last week to compliance re questions about the Monaro grasslands uplisting.
s22

From: Richardson, Geoff
Sent: Thursday, 2 March 2017 4:22 PM
To: s22
s22
s22
Subject: RE: Monaro grasslands [SEC=UNCLASSIFIED]

Hi s22

Please find below dot points prepared by s22 and cleared by me relating to the questions from the Minister's office on the SEH grassland uplisting. I note we previously provided some points about our consultation process – see attached email. I've drawn on these for some points below, but you might find other info in the email useful.

Who made the decision to uplist the EC – Hunt, Frydenberg or Delegate?

- The uplisting decision was made by Greg Hunt, as Minister for Environment at the time.

We have received comments that implementation of the revised listing has been problematic. In particular, it can lead to a mosaic of protected and non-protected areas inside existing paddocks and regarding the exclusion of clover from the 50% threshold. Can you provide any comments around practicality of implementation?

- Listed ecological communities occur wherever a patch of native vegetation in the landscape meets the diagnostic features, plus the condition thresholds for that community. This is similar to identifying habitat requirements for particular listed threatened species except that it applies to a described assemblage of species, usually a certain vegetation type.
- A mosaic distribution is typical for many ecological communities because of: 1) variability in landscape features – for instance grasslands often form in frost hollows and sites of cold air drainage; and 2) variability in past management history – for instance the degree of grazing, ploughing and fertiliser addition affects the composition and diversity of grassland species among and within sites.
- Both the original and revised listings constituted a 'mosaic' as the community was always naturally restricted in where it can occur. However, the revised listing introduced a 'minimum condition threshold', that clarifies which areas of grassland should be protected by the EPBC Act. Low quality grasslands that do not meet this threshold are not protected, whereas some of these areas would have been included in the original listing.
- Large areas that have more than 50% vegetation cover of clover (*Trifolium* spp.), which is not a native plant, are not part of the grassland ecological community.

- To be considered part of the listed ecological community, grassland patches must be at least 0.1 Hectare in size, must have a greater percentage cover of native plants (including annual and perennial species) than the percentage cover of perennial exotic species (i.e. >50% native cover), and must meet additional condition thresholds (e.g. relating to the diversity of non-grass native species, or the presence of particular 'indicator species').
- Detailed information about how to recognise a patch of the grassland and what condition it might be in are given in the approved [conservation advice](#) and the [information guide](#) for the uplisted community. The information guide provides a flowchart to help landholders determine the condition of the grassland.

Can you please provide overview of consultation and feedback from farmer groups regarding the uplisting?

- The original listing, recovery plan and revised listing all went through statutory consultation processes.
- Notification emails about the uplisting were sent to a wide range of stakeholders, including all councils, Local Land Services, and state agencies where the ecological community occurs, and the National Farmers' Federation and NSW Farmers' Association. These Farmers' groups also were contacted by the Department's Environment Liaison Officer, out posted to the NFF, and the Department met with the NFF to discuss the listing on more than one occasion. A farmer specific consultation guide was made available as part of the consultation package, explaining the listing review process and what this meant for farming activities.
- The NSW Farmers Association did not provide any comment on the proposed uplisting. The NFF provided a submission noting concerns that further information would be required to complete the assessment and that landholders may have difficulty identifying the grassland. The Department replied to the NFF about their issues.
- A public information guide aimed at helping farmers and other landholders understand the uplisted grassland was prepared and released after the listing. This guide was developed with the assistance of the NFF.

Let me know if you need anything further

Regards Geoff

Geoff Richardson

Assistant Secretary | Protected Species and Communities Branch
Department of the Environment and Energy

s22

The Department acknowledges the traditional owners of country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders both past and present.

From: s22

Sent: Thursday, 2 March 2017 10:26 AM

s22

Subject: FW: Monaro grasslands [SEC=UNCLASSIFIED]

s22

As discussed , the Ministers office is seeking some quick turnaround on the questions below regarding the *Natural Temperate Grassland of the South Eastern Highlands* ecological community.

Questions are:

Who made the decision to uplist the EC – Hunt, Frydenberg or Delegate?

We have received comments that implementation of the revised listing has been problematic. In particular, it can lead to a mosaic of protected and non-protected areas inside existing paddocks and regarding the exclusion of clover from the 50% threshold. Can you provide any comments around practicality of implementation?

Can you please provide overview of consultation and feedback from farmer groups regarding the uplisting?

Please send to me as soon as you are able.

All the best

s22

Compliance

Environment Standards Division |

Department of Environment and Energy
GPO Box 787 Canberra ACT 2601

s22

From: s22

Sent: Thursday, 2 March 2017 9:54 AM

To: Collins, Monica <Monica.Collins@environment.gov.au>; s22

s22

Cc: s22 Knudson, Dean

s22

s22

Subject: RE: Monaro grasslands [SEC=UNCLASSIFIED]

Hi Monica

Can you please clarify the following:

Who made the decision to uplist the EC – Hunt, Frydenberg or Delegate?

We have received comments that implementation of the revised listing has been problematic. In particular, it can lead to a mosaic of protected and non-protected areas inside existing paddocks and regarding the exclusion of clover from the 50% threshold. Can you provide any comments around practicality of implementation?

Can you please provide overview of consultation and feedback from farmer groups regarding the uplisting?

Can you please let me know by end of Monday.

Thanks

s22

From: Collins, Monica

Sent: Tuesday, 28 February 2017 5:14 PM

s22

s22

Knudson, Dean

s22

s22

Subject: Monaro grasslands [SEC=UNCLASSIFIED]

Hi s22,

Please see information below as requested.

Monica

General Information on Grasslands

- In the Monaro region of NSW, matters of national environmental significance protected by the *Environment Protection and Biodiversity Conservation Act 1999* include the critically endangered *Natural Temperate Grassland of the South Eastern Highlands* ecological community.
- This grassland ecological community has been protected in the Monaro region as endangered under the Act since the Act was introduced in 2000, and was up listed to critically endangered in 2016.
- The revision of the listing of the endangered *Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory* to the critically endangered *Natural Temperate Grassland of the South Eastern Highlands* resulted in protection of grasslands in a broader geographic area, but limits the protection to areas of the highest quality grasslands.

- Within the extent of the previous listing (Southern Tablelands of NSW and the ACT), the area protected by the listing (and subsequently the number of landholders affected) is considered to be reduced. However, the geographic extent of the new listing is larger than it was for the previous listing (for example, it now includes parts of Victoria).
- The minimum condition thresholds (see below) contained in the Conservation Advice for the revised listing allow greater certainty for landholders in determining whether the Act applies to their proposed actions.
- To be considered the listed ecological community, grassland patches must be at least 0.1 Hectare in size, must have a greater percentage cover of native vascular plants (including annual and perennial species) than the percentage cover of perennial exotic species (i.e. >50% native cover), and must meet additional condition thresholds (eg relating to the diversity of non-grass native species, the presence of particular 'indicator species' or the floristic value score).
Note - this is a simplified overview of the minimum condition thresholds.
- Natural Temperate Grassland of the South Eastern Highlands is listed as critically endangered under the EPBC Act. The threshold of significance for proposed activities is dependent on the quality and context of the impacted ecological community, but is likely to be in the region of 1-10 ha.

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