



NSW National Parks and Wildlife Service

Kosciuszko Offset Strategy – Attachment

Kosciuszko Offset Project



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Cover photo: Landers Falls lookout, Kosciuszko National Park. Elinor Sheargold/DPE

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ISBN 978-1-923076-19-8

NPWS 2023/0222

June 2023



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Versions and approvals

Version history

Version	Date	Description of change	Author
1.0	7 March 2023	Initial version	Stephen Higham

Approvals

Any significant changes to the Kosciuszko Offset Strategy require approval by the Southern Ranges Branch Director or Park Operations Projects Director. Two weeks prior to sending the amended document for approval, the Kosciuszko Offset Strategy will be sent to the Department of Climate Change, Energy, the Environment and Water for comment. This table provides a history of approvals.

Name	Title	Signature	Date
Atticus Fleming	Acting Coordinator General, Environment and Heritage Group		19 April 2023

Contents

Versions and approvals	iii
1. Background	1
Planning approvals	1
Species impacted	1
Determination of offsets	2
2. Offsets required for threatened species, TECs and ecosystems	4
Offset payments	4
Commonwealth species and ecological communities	4
3. Key threatening processes	6
4. Assessing Matters of National Environmental Significance	10
Commonwealth-listed threatened species and TEC	10
Key aims for Commonwealth-listed threatened species and TEC	10
Offset requirements	11
5. Ecological Health Performance Scorecards and Assets of Intergenerational Significance	13
Ecological Health Performance Scorecards	13
Assets of Intergenerational Significance	13
6. Approved and published Kosciuszko Offset Action Plans	14
Appendix 1 – Exploratory Works, Main Works and Transmission Connection biodiversity offset-related planning conditions	15
Exploratory Works – Schedule 3, condition 5	15
Main Works – Schedule 3, conditions 12 to 16	15
Transmission Connection – Schedule 2, Part B, condition B20	17

List of tables

Table 1	Ecosystems (vegetation formation classes) and associated plant community types	2
Table 2	Exploratory Works, Main Works and Transmission Connection offset payments (\$ millions)	4
Table 3	Summary of Commonwealth species and ecological community payments (\$ millions)	5
Table 4	Preliminary key threatening processes for threatened species and TECs within KNP	6
Table 5	Approved KOAPs	14

Acronyms and abbreviations

AIS	Asset of Intergenerational Significance
BAM	Biodiversity Assessment Method
BCD	Biodiversity Conservation Division, Department of Planning and Environment
BCS	Biodiversity, Conservation and Science, Department of Planning and Environment
BDAR	Biodiversity Development Assessment Report
BOPC	Biodiversity Offsets Payment Calculator
DAWE	Department of Agriculture, Water and the Environment
DCCEEW	Department of Climate Change, Energy, the Environment and Water
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EW	Exploratory Works
KNP	Kosciuszko National Park
KOAP	Kosciuszko Offset Action Plan
KOS	Kosciuszko Offset Strategy
MNES	Matters of National Environmental Significance
MW	Main Works
NPWS	National Parks and Wildlife Service
NSW	New South Wales
PCG	Project Control Group
PCT	plant community type
SHL	Snowy Hydro Limited
TC	Transmission Connection
TEC	threatened ecological community

1. Background

This attachment to the Kosciuszko Offset Strategy (KOS) provides background information on the Kosciuszko Offset Project, including planning approvals, offset payments, key threatening processes for biodiversity impacted by the Snowy 2.0 project, Commonwealth Matters of National Environmental Significance (MNES) and the NPWS projects of Ecological Health Performance Scorecards and Assets of Intergenerational Significance. It also provides a list of approved and published Kosciuszko Offset Action Plans (KOAPs). Appendix 1 of this attachment outlines the Exploratory Works, Main Works and Transmission Connection biodiversity offset-related planning conditions.

Planning approvals

Up to \$92.9 million in biodiversity offsets will be paid to NPWS as a result of Exploratory Works (EW), Main Works (MW) and Transmission Connection (TC). NSW Exploratory Works Infrastructure Approval CSSI 9208 resulted in an offset payment to NPWS of almost \$5.55 million (Table 2). Subsequent modifications to the Exploratory Works proposal required additional biodiversity offset payments to NPWS of just over \$2.64 million and \$0.305 million.

NSW Main Works Infrastructure Approval CSSI 9687 requires a biodiversity offset payment to NPWS of up to \$73.8 million. NSW Transmission Connection Infrastructure Approval CSSI 9717 requires a biodiversity payment to NPWS of almost \$10.59 million.

The Exploratory Works approval (Schedule 3, condition 5), Main Works approval (Schedule 3, condition 12) and Transmission Connection approval (Schedule 2, Part B, condition B20) require NPWS to use the biodiversity offset funds and any interest generated to enhance the biodiversity values of KNP. In the limited circumstances where it is not possible to address the residual biodiversity impacts of the development within KNP, NPWS may use Main Works funds and Transmission Connection funds to ensure suitable conservation actions are undertaken outside the park.

The relevant conditions in the Snowy 2.0 approvals are included in Appendix 1.

Species impacted

Schedule 3, condition 17(d) of the NSW Main Works Infrastructure Approval (CSSI 9687) lists the threatened species and threatened ecological community (TEC) which the proponent must minimise impacts on. All of these species except 3 (hoary sunray, spotted-tailed quoll and *Thelymitra alpicola*) are also offset-generating species under the NSW MW approval, as they are likely to have residual impacts from Snowy 2.0 construction activities.

All threatened species other than the masked owl, identified under the Exploratory Works environmental impact assessment, and the yellow-bellied glider, identified under the Transmission Connection assessment as likely to be impacted, are also included in the Main Works species list. Note that under the Main Works Infrastructure Approval, within 6 months of the commencement of Main Works construction, the Exploratory Works Infrastructure Approval was to be surrendered, although Snowy Hydro Limited (SHL) has requested an extension to this condition of approval.

All threatened species, threatened ecological communities and threatened ecosystems which require actions to be applied are listed in Table 1 of the KOS. Ecosystems are synonymous with vegetation formation classes as per the NSW BioNet Vegetation Classification system. Table 1 below breaks down each ecosystem into the list of plant community types (PCTs) associated with each ecosystem.

Table 1 Ecosystems (vegetation formation classes) and associated plant community types

Ecosystem (Vegetation formation)	Plant community type (PCT)
Alpine bogs and fens	Usually defined by the presence of <i>Sphagnum</i> spp (usually <i>Sphagnum cristatum</i>)
Dry sclerophyll forest	285-Broad-leaved sally grass
	296-Brittle gum
	299-Riparian ribbon gum
	302-Riparian Blakely's red gum
	311-Red stringybark
	729-Broad-leaved peppermint
	953-Mountain gum - broad leaved
Wet sclerophyll forest	999-Norton's box
	300-Ribbon gum
	303-Black sally grass
Grassy woodlands	639-Alpine ash
	644-Alpine snow gum
	679-Black sallee
	952-Mountain gum – narrow leaved
Grasslands	1191-Snow gum – candle bark
	1196-Snow gum
	1224-Subalpine dry grasslands
	1225-Subalpine grasslands

Determination of offsets

Determination of the Exploratory Works biodiversity offset payment was undertaken as per the NSW Biodiversity Offsets Scheme using the Biodiversity Assessment Method (BAM) and the Biodiversity Offsets Payment Calculator (BOPC). This process was also undertaken for Exploratory Works Modification 1 and Modification 2 (refer to Table 2).

In determining the offset payment for Main Works, the then NSW Department of Planning, Industry and Environment – Planning and Assessment Group agreed that SHL could develop an indicative costing for actions that met the objective of the Biodiversity Offsets Scheme, the BAM and the BOPC – that is, that would fully offset any residual impact on biodiversity.

The department's Planning and Assessment Group engaged an independent expert ecologist to undertake a review of the Main Works Biodiversity Offsets Strategy prepared by EMM on behalf of SHL. Following the review, the Main Works biodiversity offset payment to NPWS as listed in the Infrastructure Approval (Schedule 3, condition 12) was agreed. A similar approach to Main Works was taken for Transmission Connection for determining offset payments – that is, TransGrid could develop indicative costings for actions that meet the objective of the Biodiversity Offsets Scheme, the BAM and the BOPC.

Species, TEC and ecosystem offset funding (see Table 2 below) will be spent as allocated to each stream – that is, non-MNES species (\$10.01 million), MNES species/TEC (\$20.05 million) and ecosystem management (\$48.07 million).

2. Offsets required for threatened species, TECs and ecosystems

Offset payments

Biodiversity offset payments to be made to NPWS under the Snowy 2.0 Exploratory Works, Main Works and Transmission Connection planning approvals are summarised in Table 2.

Table 2 Exploratory Works, Main Works and Transmission Connection offset payments (\$ millions)

Species/ community	EW offsets	EW offsets Mod 1	EW offsets Mod 2	80% of MW offsets	TC offsets	Total
Threatened species (non-MNES species)	\$1.08	\$0.54	\$0.053	\$5.44	\$2.90	\$10.01
MNES threatened species and TEC	\$0.00	\$0.00	\$0.00	\$16.97	\$3.08	\$20.05
Ecosystem management*	\$4.47	\$2.1	\$0.252	\$36.64	\$4.61	\$48.07*
Total	\$5.55	\$2.64	\$0.305	\$59.05	\$10.59	\$78.13

* Ecosystems – 19 plant community types grouped into 4 ecosystems (vegetation formations)

The planning approval allows the Main Works biodiversity offset payment (\$73.8 million) to be released in stages, with 80% of the total payment (\$59.04 million) paid over the first 3 years. The payment of the remaining 20% (\$14.76 million) is conditional on the final disturbance area. The intent of this condition is to create an incentive for SHL to reduce the disturbance area and biodiversity impacts of Snowy 2.0 on KNP.

A conservative approach has been taken by NPWS assuming that SHL will reduce the final disturbance area by the full amount and that only 80% of the Main Works total offset payment will be received. The total offset payment available for conservation actions under the Biodiversity Action Plans will be increased accordingly if SHL does not achieve the anticipated full reduction in the disturbance area. If no reduction in disturbance area is achieved, then the total biodiversity offset payment to NPWS for Exploratory Works, Main Works and Transmission Connection will be \$92.9 million.

Commonwealth species and ecological communities

A breakdown of MNES payments by threatened species and TEC is provided at Table 3. Note that no MNES species or ecological communities were identified for offsetting under the biodiversity assessment for Exploratory Works.

Table 3 Summary of Commonwealth species and ecological community payments (\$ millions)

Species/community	80% of Main Works offset payment	Transmission Connection offset payment	Total
Alpine bogs and fens	\$1.12	\$0.00	\$1.12
Broad-toothed rat	\$1.03	\$0.00	\$1.03
Smoky mouse	\$9.22	\$0.00	\$9.22
Alpine tree frog	\$3.52	\$0.00	\$3.52
Alpine she-oak skink	\$2.08	\$0.00	\$2.08
Booroolong frog	\$0.00	\$3.08	\$3.08
Total	\$16.97	\$3.08	\$20.05

3. Key threatening processes

Preliminary key threatening processes for each species and TEC have been identified in Table 4. KOAPs and their management actions will address, as appropriate, these threats. Key threats to ecosystems will be identified under the ecosystem KOAPs. Australian Government Threat Abatement Plans will also be referenced when considering threatening processes on native species in KNP.

Table 4 Preliminary key threatening processes for threatened species and TECs within KNP

Species/ecosystem	Key threats
Alpine bogs and fens	<ul style="list-style-type: none"> Hydrological change (including erosion and sedimentation) from roadworks, drainage works and aqueducts Weed invasion (including scotch broom, grey willow, blackberry, orange hawkweed, exotic perennial grasses and emerging weeds) Too frequent fire Grazing and trampling by feral animals (deer, pigs, horses) Pollution (including herbicide) and sedimentation from run-off Recreational activities (including vehicle use, commercial horse riding, mountain bikes, bushwalking) Habitat degradation from past mining operations (historic peat mining, ruby mining) Periodic or long-term drying of peatlands leading to habitat degradation and vulnerability to fire Plant and animal pathogens leading to local extinction of susceptible species Lack of knowledge of ecology, particularly in relation to groundwater-dependent species Construction of infrastructure in alpine areas such as roads, tracks, buildings and ski trails resulting in loss and fragmentation of subalpine and alpine habitat
Alpine she-oak skink	<ul style="list-style-type: none"> Change in vegetation structure within preferred habitat brought about by wildfire, weed invasion and climate change Grazing, trampling and ground disturbance by feral horses, deer, pigs and rabbits Construction of infrastructure in alpine areas such as roads, tracks, buildings and ski runs resulting in loss and fragmentation of subalpine and alpine habitat Predation by foxes and cats
Alpine tree frog	<ul style="list-style-type: none"> Loss or modification of habitat caused by weeds and feral animals, including damage by feral horses Disease such as chytrid fungus Climate change causing severe drought
Booroolong frog	<ul style="list-style-type: none"> Modification of stream channels and loss of cobble banks Loss of native streamside vegetation Damage to stream margins by feral animals, including horses, pigs and deer Predation of eggs and tadpoles by introduced fish

Species/ecosystem	Key threats
	<ul style="list-style-type: none"> • Weed invasion of streamside habitats, particularly by willows and blackberries • Disease such as chytrid fungus • Changes to water quality through sedimentation and use of herbicides near streams • Stream drying caused by severe drought or water extraction or impoundment • Large amounts of sedimentation due to wild horse activity in the national park, causing filling of breeding crevices • Damage and erosion to stream margins
Broad-toothed rat	<ul style="list-style-type: none"> • Predation by feral cats, especially around ski resorts where cat densities are high • Habitat loss, fragmentation and degradation from roads, ski runs and buildings • Catastrophic fire events, hazard reduction burning can cause localised extinction • Grazing by rabbits and hares may eliminate grass cover. Rabbits attract predators to areas of habitat • Invasion of habitat by exotic weeds • Global warming causing loss of snow cover will result in increased exposure to foxes and cats in alpine areas. Competition with other rodent species may also increase. Populations at lower altitudes have already suffered local extinction • Wild horses degrade habitat/cover and disturb suitable habitat • Predation by foxes causes high mortality and restricts population growth • Invasion of habitat by weeds
<i>Caladenia montana</i>	<ul style="list-style-type: none"> • Insufficient understanding of distribution and/or abundance • Insufficient information on the species threats
Clover glycine	<ul style="list-style-type: none"> • Feral horses disperse weeds, including ox-eye daisy, leave manure piles, and browse plants • Ox-eye daisy competes with the species and dominates the habitat, including through allelopathic (i.e. biochemical) exclusion • Small population size (estimated at about 1,000 plants within a few hectares) increasing vulnerability to local extinction in NSW • Feral pigs trampling and rooting at the site • Poor recruitment limiting the viability of the population
Eastern pygmy-possum	<ul style="list-style-type: none"> • Loss and fragmentation of habitat through infrastructure development • Changed fire regimes that affect the abundance of food resources • Declining shrub diversity in forests and woodlands due to overgrazing by feral herbivores • Predation from cats and foxes • Mortality on roads through habitat and movement areas

Species/ecosystem	Key threats
Gang-gang cockatoo	<ul style="list-style-type: none"> • Loss of key breeding and foraging habitat from intensive wildfire events and inappropriate hazard reduction burns • Climate change impacts to habitat suitability and distribution • Psittacine circovirus disease (PCD) • Lack of knowledge of locations of key breeding habitat and breeding ecology and success
Kiandra leek orchid	<ul style="list-style-type: none"> • Pigs rooting for food cause direct damage to the species and to the surrounding habitat • Competition from the weed ox-eye daisy • Horses browse the species and promote the spread of ox-eye daisy, as well as trampling causing direct damage and disturbance • Grazing and substrate disturbance from rabbits causes adult mortality and changes the habitat – shifts to more shrubby conditions
Leafy anchor plant	<ul style="list-style-type: none"> • Fire is a threat to the species as plants are generally killed by even low intensity fires, and post-fire recruitment has been observed to be very low • Major flooding events since 2010 have caused significant stream bank erosion and the consequent loss of numerous plants at some sites • Competition from weeds (especially woody weeds such as blackberry, briar rose and willows) • Feral horses have recently been observed at sites supporting leafy anchor plant (<i>Discaria nitida</i>). At these sites browsing damage, including breakage of major stems of plants, has been observed • Feral deer have recently been observed at sites supporting <i>Discaria nitida</i>. At these sites browsing damage, including breakage of major stems of plants, has been observed • Loss of local populations
Mauve burr-daisy	<ul style="list-style-type: none"> • Loss and degradation of habitat and/or populations from road works (particularly widening or rerouting) • Loss and degradation of habitat and/or populations by invasion of weeds • Loss and degradation of local habitat and/or populations by horses • Pigs digging up individuals
Max Mueller's burr-daisy	<ul style="list-style-type: none"> • Feral animals such as pigs dig in the grassland community where the species occurs • Ox-eye daisy is highly competitive in the core habitat of the species as well as competing perennial grasses • Feral horses browse the species and promote the spread of ox-eye daisy, as well as trampling causing direct damage and disturbance • Feral animals such as rabbits expose bare ground and will facilitate establishment of ox-eye daisy • Deer are an emerging problem in the vicinity of populations and may browse this species

Species/ecosystem	Key threats
Raleigh sedge	<ul style="list-style-type: none"> • The habitat of this species is at risk from feral pigs and horses • Water release from Tantangara Dam causing destruction of <i>Carex raleighii</i> habitat • Invasion and encroachment into suitable habitat by ox-eye daisy and other weeds • Lack of distributional information • Full extent of threats unknown
Slender greenhood	<ul style="list-style-type: none"> • Feral herbivore grazing from horses • Other feral animals such as pigs causing severe local impacts • Invasive weeds such as blackberry and invasive grasses such as sweet vernal grass, especially after disturbance from fire
Smoky mouse	<ul style="list-style-type: none"> • Loss of habitat, primarily through clearing for road construction • Too frequent burning may impact on suitable habitat and food resources • Predation from feral cats and foxes • Uncertainty about the species' density and distribution throughout the area • Feral herbivore grazing resulting in the reduction of food resources and the depletion of shrub cover • Loss of site occupancy or low recruitment leading to metapopulation collapse • Senescing of understorey vegetation on long unburnt sites
Southern myotis	<ul style="list-style-type: none"> • Loss or disturbance of roosting sites • Clearing adjacent to foraging areas • Reduction in stream water quality affecting food resources
White-bellied sea eagle	<ul style="list-style-type: none"> • A transient species in KNP • Loss of habitat and nesting trees from tree removal and wildfire • Increased mortality or reduced breeding success due to non-target poisoning during vertebrate feral animal control
Yellow-bellied glider	<ul style="list-style-type: none"> • Loss and fragmentation of habitat • Loss of hollow-bearing trees • Loss of feed trees

Source: Saving our Species program and personal communication, Department of Planning and Environment, Biodiversity Conservation Division

4. Assessing Matters of National Environmental Significance

In assessing the Main Works and Transmission Connection proposals, the Australian and NSW Governments agreed to undertake an accredited assessment under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The accredited assessment provided information to the Australian Minister for the Environment in deciding whether or not to approve the proposal under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Australian Government did not deem the Exploratory Works to be a controlled action; therefore, it was not assessed under the EPBC Act.

Commonwealth-listed threatened species and TEC

Five Commonwealth-listed threatened species and one TEC were identified under the Main Works and Transmission Connection assessments that are likely to be significantly impacted by Snowy 2.0 works. These are:

- alpine she-oak skink
- alpine sphagnum bogs and associated fens (alpine bogs and fens)
- alpine tree frog
- Booroolong frog
- broad-toothed rat
- smoky mouse.

The Booroolong frog was included in the Transmission Connection infrastructure approval as a Commonwealth-listed species (Schedule 2, Part B, condition B20). The remaining 4 species and TEC were included in the NSW Main Works Infrastructure Approval (Schedule 3, condition 12). The planning approvals require NPWS to develop and implement specific programs in consultation with the Australian Department of Climate Change, Energy, the Environment and Water (DCCEEW) to address the residual biodiversity impacts on these species and TEC.

It has been agreed that NPWS will consult with DCCEEW in the development of all KOAPs; however, the Deputy Secretary, NPWS, and the Deputy Secretary, Environment Group, DCCEEW, will jointly agree on the KOAPs for the Commonwealth-listed threatened species and TEC.

Key aims for Commonwealth-listed threatened species and TEC

The EPBC Act Environmental Offsets Policy 2012 has the following 5 key aims for Commonwealth-listed threatened species and ecological communities:

1. to ensure the efficient, effective, timely, transparent, proportionate, scientifically robust and reasonable use of offsets
2. to provide proponents, the community and other stakeholders with greater certainty and guidance on how offsets are determined and when they may be considered
3. to deliver improved environmental outcomes
4. to outline the appropriate nature and scale of offsets and how they are determined
5. to provide guidance on acceptable delivery mechanisms for offsets.

Offset requirements

The EPBC Act Environmental Offsets Policy 2012 (section 7) has 8 offset requirements to determine suitable offsets under the EPBC Act. The KOS meets each of these requirements as follows.

Suitable offsets must deliver an overall conservation outcome that improves or maintains the viability of the protected matter

The KOS will deliver an overall conservation outcome for the species and communities identified in Table 1 through a clear objective to deliver a biodiversity gain in KNP equivalent to 120% of the biodiversity loss. Step 1 of the metrics-based approach includes quantifying the impacts and the benefit that must be delivered. Part of this process will include ensuring that the biodiversity gain will improve or maintain the viability of the protected matter, which will be reported against in the Kosciuszko Offset Project annual report.

Suitable offsets must be built around direct offsets but may include other compensatory measures

Direct offsets are those actions that provide a measurable conservation gain for an impacted protected matter. Direct offsets include improving existing habitat, creating new habitat, and reducing threats (EPBC Act Offset Policy 2012, page 8). Direct offsets should form 90% of the total offset requirement and should address key priority actions outlined in conservation action plans for the species and communities identified in Table 1 of the KOS.

Offset actions developed under KOAPs for Commonwealth-listed species and TEC will meet or exceed the 90% minimum direct offset requirement. Offset actions will largely address the threats to each of the species listed in Table 4 of this attachment and will focus on removing threats to the species habitat and restoring habitat. Conservation actions which are not direct offsets (for example, other compensatory measures such as research or education campaigns) will be kept to a minimum for each species and TEC and will be less than 10% of the total funding allocated to each species under each KOAP (and will meet the criteria for research and education programs under Appendix A of the EPBC Act Offset Policy 2012).

Suitable offsets must be in proportion to the level of statutory protection that applies to the protected matter

The conservation status for 4 Commonwealth-listed species and one TEC is listed as endangered (alpine she-oak skink, smoky mouse, Booroolong frog and alpine bogs and fens), with 2 species listed as vulnerable (alpine tree frog and broad-toothed rat). Endangered species are more likely to become extinct than vulnerable species. KOAP offset actions will take into account the conservation status of each species or TEC and will be proportional to its level of statutory protection (including funding allocated to each species).

Suitable offsets must be of a size and scale proportionate to the residual impacts on the protected matter

Step 1 of the metrics-based approach for offset delivery under the KOS quantifies the residual impacts on the relevant species, TEC and ecosystems. Offsets actions applied under the KOAPs will therefore be of a size and scale that will not only offset the residual impacts but will exceed this by 20% (that is, the KOS has a clear objective to deliver a biodiversity gain equivalent to 120% of the impact or biodiversity loss).

Suitable offsets must effectively account for and manage the risks of the offset not succeeding

Adaptive management is a key focus of the approach taken under the KOS (section 5). This section includes an outline of the approach taken to adaptive management, including a summary of contingency measures that will be enacted – that is, what the course of action will be if, over time, it is decided through monitoring, assessment and reporting that the offset is not succeeding.

Suitable offsets must be additional to what is already required, determined by law or planning regulations, or agreed to under other schemes or programs

As outlined in the KOS (section 1: Introduction), the offset actions implemented under the KOS and KOAPs will be integrated with, but additional to, actions which are part of core management for KNP. Offsets will also be additional to the actions required to be undertaken by the proponent (SHL) under the EW, MW and TC planning approvals such as ecological rehabilitation of sites within KNP disturbed during construction that are no longer needed for operational purposes.

Suitable offsets must be efficient, effective, timely, transparent, scientifically robust and reasonable

Actions to be implemented under each KOAP were determined in consultation and partnership with species accountable officers, including scientific officers working under the Saving our Species program and species officers working in the Biodiversity, Conservation and Science directorate of the NSW Department of Planning and Environment. As stated above, actions under KOAPs will be additional to actions that are part of the core management of KNP but will align to these scientifically robust and established programs to ensure they are streamlined and efficient (non-duplicating) such as Saving our Species and the KNP Wild Horse Heritage Management Plan.

Suitable offsets must have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced

Governance arrangements for the Kosciuszko Offset Project are described in section 4 of the KOS. Governance arrangements under this program include:

- an internal NSW Environment and Heritage Project Control Group (PCG). The purpose of the PCG is to provide comment and input on KOAPs and the Annual Offsets Works Program (that is, the implementation of management actions listed in the KOAPs)
- approvals – the KOS, KOAPs and Annual Offsets Work Program will be approved by the Deputy Secretary NPWS. KOAPs for the 5 Commonwealth-listed species and one TEC will also be approved by the Deputy Secretary DCCEEW
- the establishment of a NPWS–DCCEEW Audit Committee. The purpose of the Audit Committee is to monitor and evaluate the implementation of the KOS and KOAPs as they apply to Commonwealth-listed species and TEC.

5. Ecological Health Performance Scorecards and Assets of Intergenerational Significance

Ecological Health Performance Scorecards

Ecological Health Performance Scorecards is an ecological health monitoring program that aims to significantly enhance the health of NSW national parks by tracking key ecological indicators and using that data to refine management actions.

Scorecards will enable the NPWS to systematically collect and apply the critical information required to design and deliver effective park management. Scorecards will be developed across 8 sites that represent the varied ecosystems right across New South Wales. This includes Kosciuszko National Park, being one of the first national parks where a scorecard will be developed.

On-ground monitoring data and park management actions will be fed into Scorecards, providing ongoing snapshots of what is happening with native plants and animals, important ecological processes, and threats to ecological health such as feral animals and weeds. Data will be published enabling people to track KNP's health online.

Scorecards are designed to deliver a reduction in the impacts from feral animals, weed, fire and other threats, as well as increases in the populations of threatened and declining species and improvements in the functioning of ecological processes.

Assets of Intergenerational Significance

The 2020 NSW Bushfire Inquiry recognised the need to identify the most important natural and cultural assets in the national park estate so that special provision can be made for their conservation. The *National Parks and Wildlife Act 1974* was amended in 2021 to allow the Minister for the Environment to declare an area to be an Asset of Intergenerational Significance (AIS).

An AIS can be any area of exceptional value – natural or cultural – that warrants special protection, including dedicated management measures.

Several AIS have been declared in KNP – for details, see [Assets of Intergenerational Significance](#).

For each AIS, NPWS is under a statutory obligation to prepare and implement a concise conservation action plan which sets out:

- key risks to the declared area of habitat for the threatened species
- priority actions to reduce risks to this important habitat – such as dedicated feral animal control or fire management, or the establishment of insurance populations
- actions to measure and report on the health or population of the threatened species (metrics).

Further information on both of these programs can be found on the [Environment and Heritage website](#).

6. Approved and published Kosciuszko Offset Action Plans

KOAPs for the threatened species, TEC and threatened ecological communities listed in Table 1 of the KOS will be approved by the Deputy Secretary, NPWS. KOAPs for all threatened species and TEC will be sent to the Deputy Secretary, DCCEE, for input, with the 5 Commonwealth-listed species and TEC also being approved by the Deputy Secretary, DCCEE. Approved KOAPs are listed in Table 5 below. Table 5 will be updated as KOAPs are approved by the relevant authority or authorities.

KOAPs provide the detail regarding objectives and targets, specific actions, threats being addressed, locations within KNP where actions will take place, when these actions will occur, and costs associated with each action.

KOAPs also detail how biodiversity benefits will be measured – that is, the attribute to be measured, the metric used, methodology and monitoring design, timing and frequency of measurement, and associated costs.

Table 5 **Approved KOAPs**

Approved KOAP	Link (NPWS website)

Appendix 1 – Exploratory Works, Main Works and Transmission Connection biodiversity offset-related planning conditions

Exploratory Works – Schedule 3, condition 5

Biodiversity – Terrestrial

Biodiversity Offset

5. Prior to carrying out any development under this approval, unless the Planning Secretary agrees otherwise, the Proponent must pay the NPWS \$5,548,222.
- 5A. Within 2 months of the approval of Modification 1, unless the Planning Secretary agrees otherwise, the Proponent must pay the NPWS an additional \$2,639,697.
- 5B. Within 2 months of the approval of Modification 2, unless the Planning Secretary agrees otherwise, the Proponent must pay the NPWS an additional \$304,990.

Note: The NPWS will use these funds and any interest generated by these funds to offset the biodiversity impacts of the development. These funds will be spent on activities to enhance the biodiversity values of the Kosciuszko National Park. The NPWS will:

- *develop a detailed program for the allocation of these funds to specific projects;*
- *monitor, evaluate and publicly report on the spending of these funds and the effectiveness of these projects.*

Main Works – Schedule 3, conditions 12 to 16

Flora and Fauna

Biodiversity Offset Payments

12. The Proponent must make the following payments to the NPWS to offset the residual biodiversity impacts of the Main Works:

- a. \$14.76 million prior to the commencement of construction;
- b. \$14.76 million within 1 year of the commencement of construction;
- c. \$14.76 million within 2 years of the commencement of construction; and
- d. \$14.76 million within 3 years of the commencement of construction.

Notes:

- *This payment represents 80% of the Proponent's liability to offset the residual biodiversity impacts of the Main Works. These funds will augment the \$8,492,909 already paid to the NPWS to offset the residual biodiversity impacts of the Exploratory Works.*

- *The NPWS will use these funds and any interest generated by these funds to enhance the biodiversity values of the Kosciuszko National Park. However, in the limited circumstances where it is not possible to address all of the residual biodiversity impacts of the development within the Kosciuszko National Park, the NPWS may use some of these funds to ensure suitable conservation actions are carried out outside the park.*
- *To ensure accountability, the NPWS will:*
 - develop and implement a detailed program for the allocation of these funds to specific projects, focusing on the ecosystems and species affected by the development; and
 - monitor, evaluate and publicly report on the progress of the implementation of the detailed program and the effectiveness of the specific projects;
- *The NPWS will develop and implement a specific program in consultation with DAWE to carry out conservation actions to address the residual biodiversity impacts of the development on the following Commonwealth-listed species and communities:*
 - Alpine Sphagnum Bogs and Associated Fens;
 - Broad-toothed Rat;
 - Smoky Mouse;
 - Alpine Tree Frog; and
 - Alpine She-oak Skink.

Additional Biodiversity Offset Payment

13. Within 3 years of the commencement of construction, the Proponent must submit a report via the Major Projects Portal that:

- a. identifies the final disturbance area of the Main Works;
- b. calculates the difference between the maximum disturbance area and the final disturbance area of the Main Works; and
- c. calculates the value of the outstanding biodiversity offset payment on a proportionate basis.

14. Within 6 months of the Planning Secretary setting the value of the outstanding biodiversity offset payment, the Proponent must pay the funds to the NPWS.

Notes:

- *These conditions relate to the remaining 20% of the Proponent's liability to offset the residual biodiversity impacts of the development.*
- *They are intended to create an incentive for the Proponent to reduce the biodiversity impacts of the development by reducing the final disturbance area of the development during the final design of the project.*
- *For instance, if the final disturbance area of the Main Works is only 87% of the maximum disturbance area of the Main Works then the Proponent will only have to pay 35% of the outstanding liability of \$14.76 million.*
- *These funds will be added to the funds paid under condition 12 and managed in accordance with the notes under that condition.*

Potential Additional Offsets – Alpine Sphagnum Bogs and Associated Fens

15. The Proponent must ensure that the development does not cause any exceedances of the following performance measures in the Alpine Sphagnum Bogs and Associated Fens above the Gooandra Volcanics and Kellys Plains Volcanics (see the figures in Appendix 2 of the approval):

- a. negligible change to the shallow groundwater regime supporting the bogs and associated fens when compared to a suitable control site; and
- b. negligible change in the ecosystem functionality of the bogs and associated fens.

16. If the Planning Secretary determines that the development has caused exceedances of the performance measures in condition 15 above, the Proponent must pay additional funds to the NPWS within 3 months of the determination to offset the groundwater-related impacts of the development on these Alpine Sphagnum Bogs and Associated Fens. The Planning Secretary will determine the amount of funds the Proponent must pay following consultation with the NPWS, DAWE and the Proponent; and having regard to:

- a. the significance of the impacts on the bogs and associated fens;
- b. the relevant values from the Biodiversity Offsets Payment Calculator; and
- c. the likely cost of carrying out the conservation actions required to offset these impacts on the bogs and associated fens.

Note: These funds will be added to the funds paid under condition 12 and managed in accordance with the notes under that condition.

Transmission Connection – Schedule 2, Part B, condition B20

Biodiversity

Biodiversity Offset Package (Kosciuszko National Park) B20

Prior to carrying out any development that could impact the biodiversity values inside Kosciuszko National Park, the Proponent or its nominee must pay \$10,586,027 to the NPWS to offset the residual biodiversity impacts.

Notes:

- *The NPWS will use these funds and any interest generated by these funds to enhance the biodiversity values of the Kosciuszko National Park. However, in limited circumstances where it is not possible to address all of the residual impacts of the development within Kosciuszko National Park, the NPWS may use some of these funds to ensure suitable conservation actions are carried outside the park.*
- *To ensure accountability, the NPWS will:*
 - develop and implement a detailed program for the allocation of these funds to specific projects, focusing on the ecosystems and species affected by the development; and
 - monitor, evaluate and publicly report on the progress of the implementation of the detailed program and the effectiveness of the specific projects.

- *The NPWS will develop and implement a specific program in consultation with DCCEE and BCS to carry out conservation actions to address the residual biodiversity impacts of the development on the following Commonwealth listed species and communities:*
 - Booroolong Frog.