

Conservation Action Plan

Smoky mouse (*Pseudomys fumeus*)

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

Site details

AIS site	AIS-E0-018, AIS-E0-156, AIS-E0-157, AIS-E0-158
Site location	An area of 6226 hectares in Kosciuszko National Park
NPWS contact	Team Leader - Conservation, Southern Ranges Branch

Environmental values

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

Identified value(s)	Value description
Important habitat for smoky mouse	The smoky mouse is a critically endangered mammal similar in size to a small rat, with a body measuring approximately 90 millimetres long and a tail measuring approximately 140 millimetres long. The smoky mouse has pale grey to blue grey fur, with a grey to white underbelly and dark rings around their eyes. They are found in pairs or small communal groups, although these communal groups appear to be very ephemeral, based on natural fluctuations in food availability and predation. The smoky mouse is found in open forest with a well-developed shrubby understory in the families Mimosaceae, Fabaceae and Ericaceae. Grasses, Lomandras and Xanthorrhoeas may also be present. They eat seeds, fruits, hypogean fungi and some invertebrates. Deep, friable soils suitable for digging burrows and large logs, in addition to rock piles, provide important predator refuges.

Key risks to environmental values

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

Key risk(s)	Description
Inappropriate fire regimes	Inappropriate fire frequency that alters vegetation composition and structure may lead to a reduction in food availability and affect the persistence of the smoky mouse at the sites. This risk is exacerbated by low recruitment and reproduction rates in smoky mouse populations.
Feral Predators	Predation of smoky mouse by feral cats and foxes.
Feral pigs	Direct predation, competition, habitat degradation and disease transmission by feral pigs may lead to a decline of smoky mouse at the sites.
Feral herbivores	Competition and habitat degradation of smoky mouse habitat by introduced herbivores, such as horses and deer, through grazing and trampling.
Pathogens, diseases and microorganisms	Occurrence of <i>Phytophthora cinnamomi</i> infection in smoky mouse habitat that changes the structure, composition and condition of vegetation communities may affect the persistence of the species at the sites.
Disturbance	Authorised infrastructure maintenance activities (e.g., road and powerline easement maintenance) that leads to degradation of habitat by slashing and herbicide use.

Conservation activities

This table sets out the conservation activities required to:

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

Key risk(s)	Impacted site(s)	Conservation activities
Inappropriate fire regimes	All sites	<ul style="list-style-type: none"> • Develop guidance on the appropriate fire management for the habitat of the smoky mouse within 12 months of the adoption of this plan and update as required. This guidance must provide for: <ul style="list-style-type: none"> - maintenance of an appropriate fire regime by developing and implementing a site-specific burn plan for the declared areas - implementation of any required fire protection and response measures in the declared areas - integration of site-specific requirements into NPWS and NSW Government bushfire planning, risk management and operational response arrangements. • Implement fire management consistent with the guidance.

Smoky mouse (*Pseudomys fumeus*)
Conservation Action Plan

Key risk(s)	Impacted site(s)	Conservation activities
Feral Predators	All sites	<ul style="list-style-type: none"> To the extent practicable, reduce the density of foxes as far as practicable and maintain to a level that is not having an ecologically significant impact on smoky mouse and maintain the density at or below that level by baiting, trapping and shooting. To the extent practicable, reduce the density of cats to a level that is not having an ecologically significant impact on smoky mouse, and maintain the density at or below that level by undertaking periodic feral cat control (e.g., shooting, trapping or other approved methods).
Feral herbivores	All sites	<ul style="list-style-type: none"> To the extent practicable, reduce density of feral deer to a level that is not having an ecologically significant impact on smoky mouse, and maintain the density at or below that level, by shooting and other approved integrated control measures. To the extent practicable, reduce density of feral horses to a level that is not having an ecologically significant impact on smoky mouse, by trapping, mustering and removal, and ground shooting in accordance with a wild horse plan of management approved by the Secretary.
Feral pigs	All sites	<ul style="list-style-type: none"> To the extent practicable, reduce the density of feral pigs to a level that is not having an ecologically significant impact on smoky mouse, and maintain densities at or below that level, by trapping, baiting and shooting.
Pathogens, diseases and microorganisms	All sites	<ul style="list-style-type: none"> Implement hygiene protocols as outlined in the DPE Hygiene Guidelines (as published in April 2020) or as varied by any written advice from the Secretary for the purposes of this declared area Develop a hygiene management plan, including emergency response procedures in the event of an outbreak or evidence of serious impact of pathogenic <i>phytophthora cinnamomi</i>, within 12 months of the adoption of this plan and update as required. Implement hygiene management plan.
Disturbance	All sites	<ul style="list-style-type: none"> Undertake periodic reviews to identify whether infrastructure maintenance is having an adverse impact on the smoky mouse. If adverse impacts are observed implement actions to mitigate the impacts. This may include: <ul style="list-style-type: none"> - maintaining habitat corridors and culvert crossings under roads through revegetation and other habitat maintenance activities. - narrowing roads and trails where possible when usage drops e.g., Snowy Hydro roads.

Other land management activities

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

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

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

Measuring and reporting

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

Attribute	Metric	Method
Health and condition of the smoky mouse population	Population estimate	Design and implement every 4 years, monitoring to generate an estimate of the number of individuals in the population, with the first estimate to be generated by 31 December 2025.
	Area of occupancy	Design and implement an assessment every 4 years to calculate the area of occupancy and determine distribution of the smoky mouse at the sites

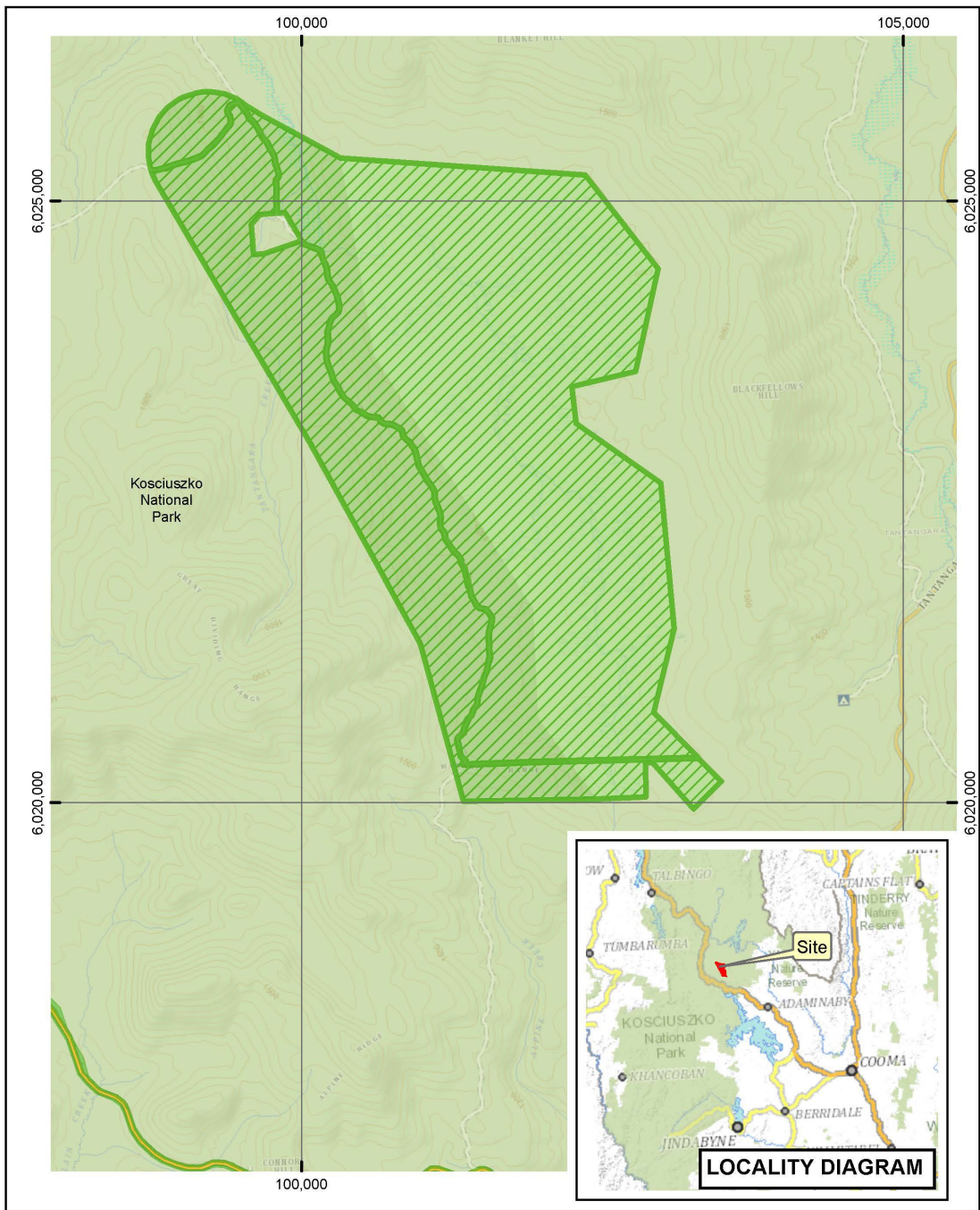
A report on the health and condition of the value for which this AIS was declared will be prepared and published on the Department of Planning and Environment website: www.environment.nsw.gov.au. The report will summarise the baseline and current health and condition of the values of the declared land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

Evaluation of conservation action plans

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

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

Smoky mouse (*Pseudomys fumeus*)
Conservation Action Plan



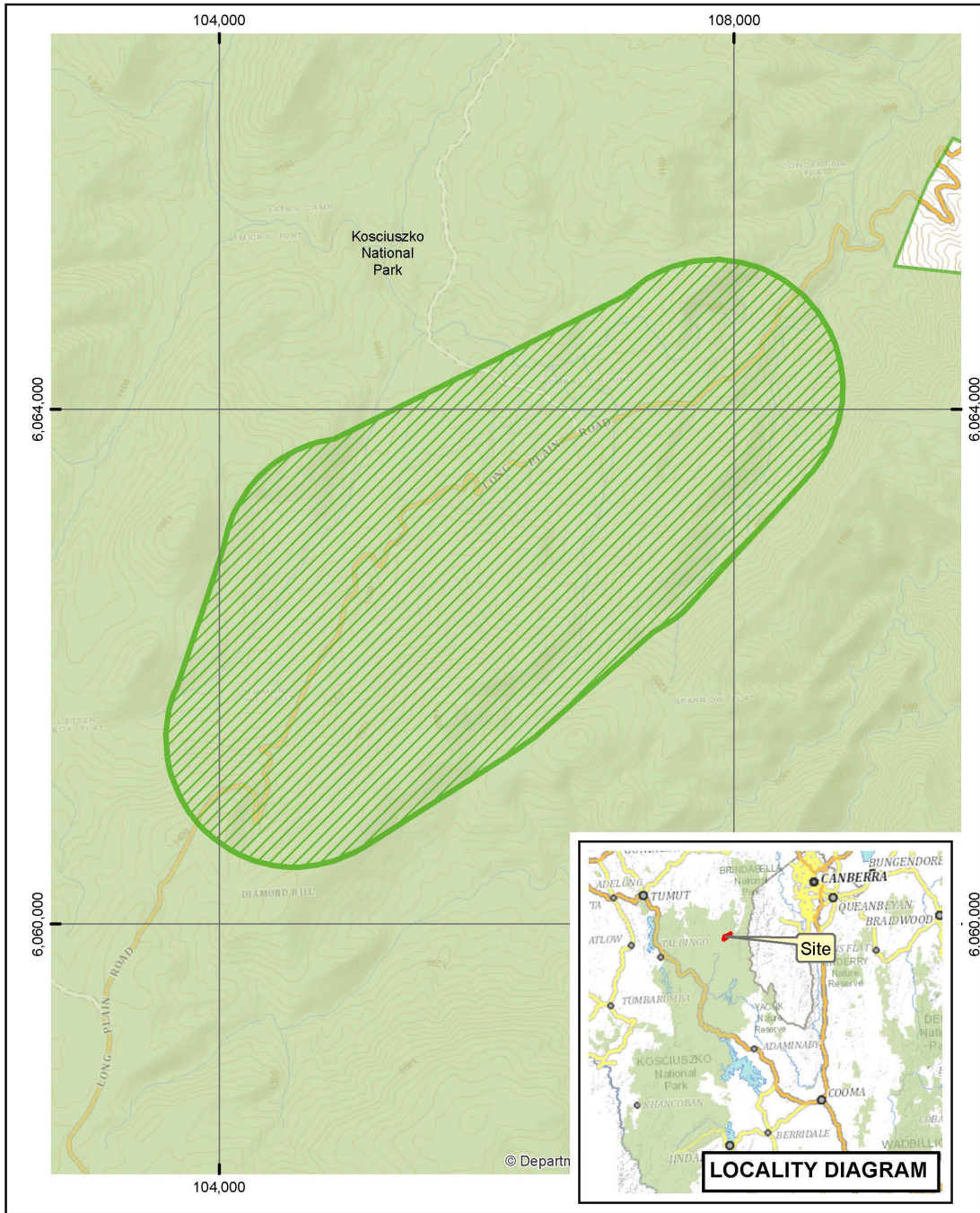
Legend	
	Declared Land
	Raleigh sedge (<i>Carex raleighii</i>)
	Smoky mouse (<i>Pseudomys fumeus</i>)
	NPWS Estate

AIS-E0-018
Asset of
Intergenerational Significance
Raleigh sedge (*Carex raleighii*) and
Smoky mouse (*Pseudomys fumeus*)
Kosciuszko National Park



Copyright of Department of Planning Industry and Environment.
 This map is not guaranteed to be free from error or omission. The Department and its employees disclaim liability for any act done on the information in the map and any consequences of such acts or omissions.

N 0 0.3 0.6 0.9 1.2 km

Smoky mouse (*Pseudomys fumeus*)
Conservation Action Plan





Legend

-  Declared Land
-  NPWS Estate

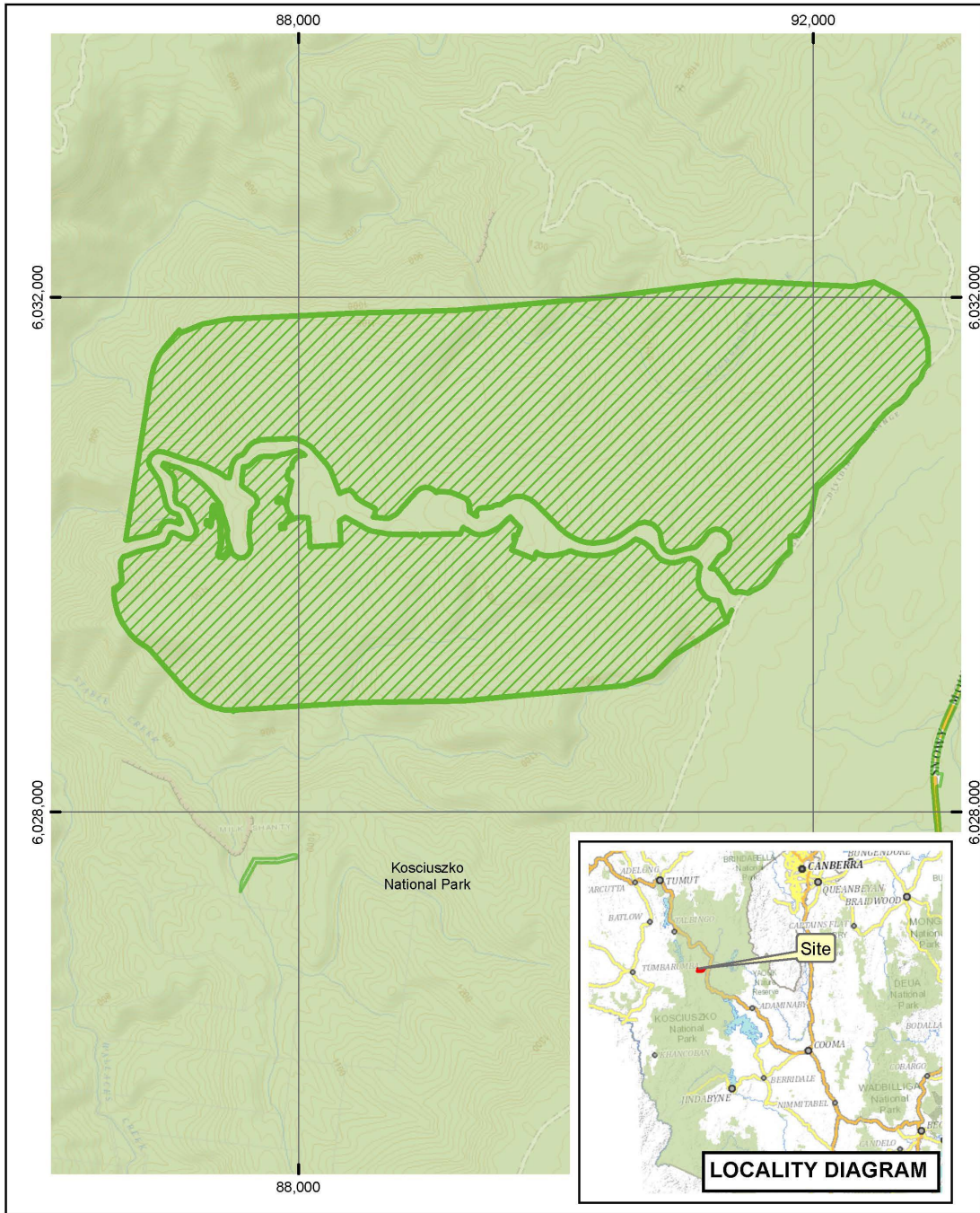
AIS-E0-156
Asset of
Intergenerational Significance
Smoky mouse
(Pseudomys fumeus)
Kosciuszko National Park

Copyright of Department of Planning Industry and Environment.
 This map is not guaranteed to be free from error or omission. The Department and its employees disclaim liability for any act done on the information in the map and any consequences of such acts or omissions.



N
 0 0.3 0.6 0.9 1.2
 km

Smoky mouse (*Pseudomys fumeus*)
Conservation Action Plan






Legend

-  Declared Land
-  NPWS Estate

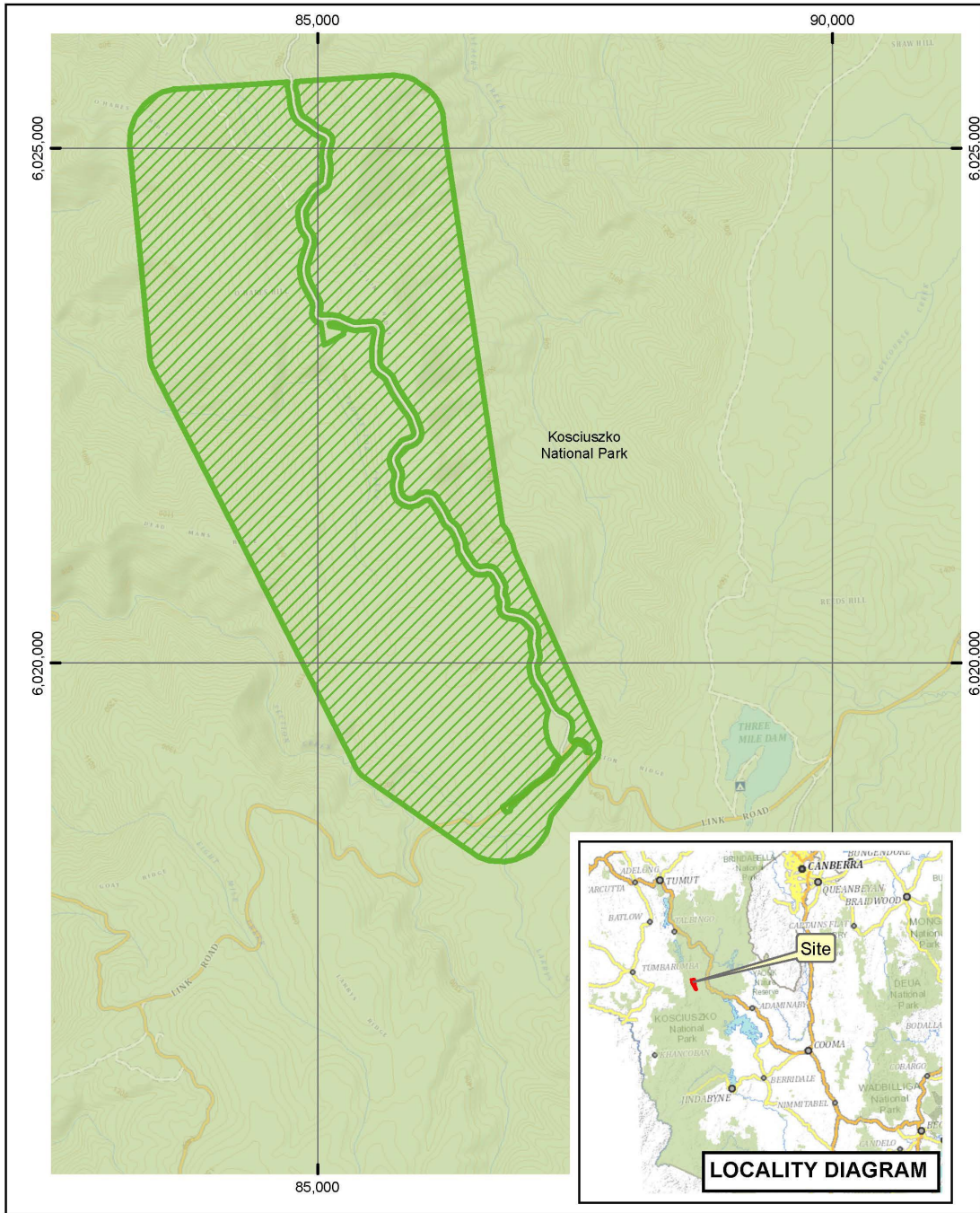
AIS-E0-157
Asset of
Intergenerational Significance
Smoky mouse
(*Pseudomys fumeus*)
Kosciuszko National Park

Copyright of Department of Planning Industry and Environment.
This map is not guaranteed to be free from error or omission. The Department and its employees disclaim liability for any act done on the information in the map and any consequences of such acts or omissions.



N 0 0.3 0.6 0.9 1.2 km

Smoky mouse (*Pseudomys fumeus*)
Conservation Action Plan





Legend

-  Declared Land
-  NPWS Estate

AIS-E0-158
Asset of Intergenerational Significance
Smoky mouse
(Pseudomys fumeus)
Kosciuszko National Park

Copyright of Department of Planning Industry and Environment.
 This map is not guaranteed to be free from error or omission. The Department and its employees disclaim liability for any act done on the information in the map and any consequences of such acts or omissions.

N
 0 0.4 0.8 1.2 1.6 km

Smoky mouse (*Pseudomys fumeus*)
Conservation Action Plan

Date prepared March 2023

Date approved June 2023

Approved by Atticus Fleming, Acting Coordinator General, Environment and Heritage Group

Due for review June 2028

Smoky mouse (*Pseudomys fumeus*)
Conservation Action Plan

Locked Bag 5022, Parramatta NSW 2124

Phone: 1300 361 967; email: info@environment.nsw.gov.au; www.environment.nsw.gov.au

ISBN 978-1-923018-39-6; EHG2023/0151; July 2023.