

NSW National Parks and Wildlife Service

Conservation Action Plan

Guthega skink (Liopholis guthega)

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-E0-075, AIS-E0-142, AIS-E0-143, AIS-E0-144, AIS-E0-145
Site location	An area of 2965 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 guthega skink	The endangered Guthega skink is a medium sized blackish brown lizard with a snout to vent length of up to 11 centimetres. The species occurs between an elevation of 1600 metres and 2170 metres and prefers rocky habitats including areas with sub-surface boulders hidden beneath soil or thick vegetation.

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 and intensity that alters vegetation composition and structure may lead to a reduction in suitable habitat and affect the persistence of Guthega skink at the sites.
	This risk is exacerbated by the unknown extent and lack of knowledge of the species distribution and habitat requirement for the Guthega skink.

Conservation Action Plan Guthega skink (*Liopholis guthega*)

Key risk(s)	Description	
Feral predators	Predation of Guthega skink by foxes and feral cats. This risk is exacerbated by the unknown extent of the species distribution and habitat requirement for the Guthega skink.	
Weeds	Habitat degradation and competition through invasion, establishment, intensification and spread of weeds to the extent that the area of suitable habitat is reduced.	
Feral herbivores	Damage to individuals and degradation of Guthega skink habitat by introduced herbivores, such as deer and horses, through grazing and trampling.	
Feral pigs	Damage to individuals and degradation of Guthega skink habitat by feral pigs, through grazing, trampling, wallowing and rooting may lead to a decline of Guthega skink at the sites.	
Pathogens, diseases and microorganisms	Occurrence of <i>Phytophthora cinnamomi</i> infection in Guthega skink habitat that changes the structure, composition and condition of vegetation communities may affect the persistence of the species at the sites.	
Anthropogenic climate change	Changes to weather patterns and climatic conditions as a result of anthropogenic climate change that alters habitat structure, composition and resource availability may exceed the adaptive capacity and reduce survivorship of Guthega skink at the sites. This risk is exacerbated by the unknown extent of the species distribution and habitat requirement for the Guthega skink.	
Disturbance	Authorised infrastructure maintenance activities (e.g., construction and maintenance of roads, trails, buildings and ski runs) and visitor use that leads to degradation, modification and fragmentation of habitat and damage to individuals by slashing and herbicide use, individual capture or harm. This risk is exacerbated by the unknown extent and lack of knowledge of the species distribution and habitat requirement for the Guthega skink.	

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 Al regimes	All sites	 Develop guidance on the appropriate fire management for the habitat of the Guthega skink within 12 months of the adoption of this plan and update as required. This guidance must provide for:
		 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.

Conservation Action Plan Guthega skink (*Liopholis guthega*)

Key risk(s)	Impacted site(s)	Conservation activities
Feral predators	All sites	 To the extent practicable, reduce the density of foxes to a level that is not having an ecologically significant impact on Guthega skink, 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 the Guthega skink, and maintain the density at or below that level by undertaking periodic feral cat control (e.g., shooting, trapping or other approved methods).
Weeds	All sites	 Remove weed species to the extent required to ensure weeds do not have a negative impact on the Guthega skink, by targeted application of physical, biological and chemical weed control.
Feral herbivores	All sites	 To the extent practicable, reduce the density of feral deer to a level that is not having an ecologically significant impact on the Guthega skink, and maintain the density at or below that level, by shooting and other approved integrated control measures. To the extent practicable, reduce the density of feral horses to a level that is not having an ecologically significant impact on the Guthega skink, 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	 To the extent practicable, reduce the density of feral pigs to a level that is not having an ecologically significant impact on the Guthega skink, and maintain the density at or below that level, by trapping, baiting and shooting.
Pathogens, diseases and microorganisms	All sites	 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.
Disturbance	All sites	 Undertake periodic reviews to identify whether infrastructure maintenance and construction works are having an adverse impact on Guthega skink. If adverse impacts are observed implement actions to mitigate the impacts. This may include: upgrade/realignment of trails to avoid known plants/habitat installation of signage or more discrete marking systems to delineate exclusion areas to prevent slashing or herbicide use near sites. installation of barriers or other suitable protective structures to minimise impacts from construction and maintenance works If required, develop and implement appropriate guidance for staff, utility manager, councils and contractors about appropriate maintenance and construction practices that minimise impacts to the Guthega skink population and habitat.
All risks	All sites	If required, establish a captive bred population for reintroduction or translocation into suitable habitat at the sites.

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 Guthega skink population	Population estimate	Design and implement annual monitoring to generate an estimate of the number of individuals of Guthega skink, in the population.

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)).

Conservation Action Plan Guthega skink (Liopholis guthega)

Date prepared	March 2023
Date approved	June 2023
Approved by	Atticus Fleming, Acting Coordinator General, Environment and Heritage Group
Due for review	June 2028

Department of Planning and Environment, Environment and Heritage.

Locked Bag 5022, Parramatta NSW 2124; Phone: 1300 361 967 Email: <u>info@environment.nsw.gov.au</u>; <u>www.environment.nsw.gov.au</u> ISBN 978-1-923132-03-0; EHG 2023/0318; October 2023

