

Conservation Action Plan

Fleay's barred frog (*Mixophyes fleayi*)

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-ES-099, AIS-ES-114, AIS-ES-167, AIS-ES-171, AIS-ES-176
Site location	An area of 2804 hectares in Border Ranges National Park An area of 461 hectares in Nightcap National Park and Whian Whian State Conservation Area An area of 144 hectares in Tooloom National Park An area of 114 hectares in Yabbra National Park
NPWS contact	Project Officer, Threatened Species, North Coast 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 Fleay's barred frog	Fleay's barred frog is an endangered moderate to large frog up to 90 millimetres long. They are medium to pale brown above, with obscure darker brown blotches. This frog is distinguishable from other barred frog species by the narrow barring across the limbs, blotches on the upper lip and flank, and distinctive eye colour. The iris is silver blue in the upper half and brown in the lower half. Frogs occur along gravelly streams in rainforest and wet eucalypt forest of the escarpment and foothills.

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	Fire may degrade the habitat of Fleay's barred frog by removing understorey vegetation and groundcover, and through the reduction of moisture levels and water quality.
Weeds	Habitat degradation and competition through invasion, establishment, intensification and/or spread of weeds (e.g., mistflower) to the extent that the area of suitable breeding habitat is reduced.
Feral pigs	Direct predation, competition and habitat degradation and/or disease transmission by feral pigs that leads to mortality of individuals and a reduction in the area suitable habitat may lead to a decline in Fleay's barred frog at the sites.
Cane toads	Direct predation, competition, habitat degradation and/or disease transmission by cane toads may lead to a decline in Fleay's barred frog at the sites.
Pathogens, diseases and microorganisms	Infection by amphibian chytrid fungus causing the disease chytridiomycosis leading to the mortality of individuals.
Disturbance	Authorised infrastructure maintenance activities (e.g. road and trail maintenance, and upstream activities) that leads to degradation of habitat.

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 Fleay's barred frog, within 12 months of 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.
Weeds	All sites	<ul style="list-style-type: none"> • Remove weed species to the extent required to ensure weeds do not have a negative impact on Fleay's barred frog, by targeted application of physical weed control or other approved control methods

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Key risk(s)	Impacted site(s)	Conservation activities
Feral pigs	All sites	<ul style="list-style-type: none"> To the extent practicable, reduce feral pig densities to a level that is not having an ecologically significant impact on Fleay's barred frog, and maintain densities at or below this level, by trapping and shooting.
Cane toads	AIS-ES-099 AIS-ES-114	<ul style="list-style-type: none"> Design and implement cane toad management plan.
Pathogens, diseases and microorganisms	AIS-ES-099 AIS-ES-114	<ul style="list-style-type: none"> Install signage where appropriate to educate and raise awareness about impacts of chytridiomycosis and minimise site visits to reduce the spread of disease and pathogens at the sites.
	All sites	<ul style="list-style-type: none"> Implement hygiene protocols as outlined in the DPE Hygiene Guidelines (as published in April 2020), as varied by any written advice from the Secretary from for the purposes of this declared area.
Disturbance	AIS-ES-099	<ul style="list-style-type: none"> Undertake periodic reviews to identify whether infrastructure maintenance or upstream activities are having an adverse impact on Fleay's barred frog habitat. If adverse impacts are observed implement actions to mitigate the impacts. This may include: <ul style="list-style-type: none"> implementing sediment and erosion control measures and establishing buffer zones around habitat during the breeding season relocating mitre drains, or redirecting run-off to avoid known habitat installation of signage or more discrete marking systems to delineate exclusion areas to prevent slashing or herbicide use near sites. Implement guidance for staff, utility managers, council and contractors as required, about appropriate maintenance practices that minimise impacts to Fleay's barred frog population and habitat.

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 Fleay's barred frog population	Population estimate	Design, and implement every five years, monitoring to generate an estimate of the number of mature individuals 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)).

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Date prepared	August 2022
Date approved	
Approved by	Atticus Fleming, Acting Co-ordinator General, Environment and Heritage
Due for review	August 2027

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