

Appendix F Assessments of Significance

Vulnerable Species: *Pteropus poliocephalus* (Grey-headed Flying-fox)

An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

Criterion	(i) Lead to a long-term decrease in the size of an important population of a species
Response	<p>The proposal would result in the removal of up to 65.57 hectares of open forest and dry rainforest that may be used by the Grey-headed Flying-fox as foraging habitat when suitable species are in flower.</p> <p>No Grey-headed Flying-fox camps are located in the study area. The closest camp is 13 kilometres from the study area.</p>
Conclusion	Although the proposal would require the removal of foraging habitat for the Grey-headed Flying-fox, this species is highly mobile and capable of travelling long distance to forage as resources are available. No roosting or breeding activity would be affected. Therefore, the proposal would not lead to a long-term decrease in the size of an important population of this species.
Criterion	(ii) Reduce the area of occupancy of an important population
Response	<p>Grey-headed Flying-foxes are a highly mobile species capable of travelling long distances to opportunistically forage on food resources as they are available.</p> <p>The proposal would require the removal of up to 65.57 hectares of vegetation from the Bodalla State Forest that may provide foraging habitat for the Grey-headed Flying-fox when suitable species are in flower. Additional suitable foraging habitat occurs in the remainder of the Bodalla State Forest</p>
Criterion	(iii) Fragment an existing important population into two or more populations
Response	The Grey-headed Flying-fox is a highly mobile species that can fly long distances to reach seasonal foraging resources. They are also semi-migratory and some individuals occupy different camps at different times of the year.
Conclusion	The proposal would not fragment an existing population into two or more populations or erect any barriers to the movement of the Grey-headed Flying-fox.
Criterion	(iv) Adversely affect habitat critical to the survival of a species
Response	No critical habitat has been declared for the Grey-headed Flying-fox.
Criterion	(v) Disrupt the breeding cycle of an important population
Response	<p>Mating occurs in early autumn in roosting camps and young are carried by mother for the first four-five weeks after giving birth. Subsequently young are left in maternal camps while females forage. Five camps have been identified within 50 kilometres of the study area; Narooma (13km south-east), Moruya Beashels Trig (18km north), Moruya Heads (27km north-east), Batemans Bay (50km north) and Bermagui (37km south).</p> <p>The proposal will not affect any breeding activities or camps of the Grey-headed Flying-fox. The nearest camp is located 13 kilometres from the study area.</p>
Conclusion	The proposal would not adversely affect the breeding cycle of an important population of the Grey-headed Flying-fox.

Criterion	(vi) Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline
Response	The Grey-headed Flying-fox is a highly mobile species that can fly long distances to reach seasonal foraging resources. The habitat to be removed is on the edge of the 17,000 hectare Bodalla State Forest.
Conclusion	Although there would be some removal of potential foraging habitat, is unlikely to be to the extent that this species is likely to decline.
Criterion	(vii) Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat
Response	Invasive species, such as the European Rabbit and European Red Fox are already present in the study area, but are not likely to affect the Grey-headed Flying-fox. The proposal would not cause the establishment of any new invasive species.
Conclusion	The proposed actions are unlikely to result in an invasive species that is harmful to the Grey-headed Flying-fox becoming established in its habitat.
Criterion	(viii) Introduce disease that may cause the species to decline
Response	The proposed actions do not involve procedures that are likely to increase the potential for introduction of diseases that may affect the Grey-headed Flying-fox.
Conclusion	The proposed activity is unlikely to introduce disease with potential to cause the Grey-headed Flying-fox to decline.
Criterion	(ix) Interfere substantially with the recovery of the species
Response	<p>A draft recovery plan has been prepared for the Grey-headed Flying-fox (DECCW, 2009). The main objectives of the recovery plan are:</p> <ul style="list-style-type: none"> • Reduce the impact of threatening processes • Conserve their functional role as seed dispersers and pollinators • Improve information available to guide recovery plan
Conclusion	The proposed activity is unlikely to interfere with the recovery of this species.
Overall Conclusion	The study area contains foraging habitat that may be utilised the Grey-headed Flying-fox when eucalypt species are in flower. No roosting or maternity camps occur within or nearby the study area. The proposal is not considered to have a significant impact on individuals or populations of the Grey-headed Flying-fox that may utilise the study area.

Migratory Species: *Hirundapus caudacutus* (White-throated Needletail)

An action is likely to have a significant impact on a migratory species if there is a real chance or possibility that it will:

Criterion	(i) Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species
Response	<p>The White-throated Needletail is widespread in eastern and south-eastern Australia and is almost exclusively aerial spending the non-breeding season mainly in Australia. The White-throated Needletail was observed during surveys foraging over the edge of the Bodalla State Forest near Bullockys Hut Road. The study area may occasionally provide foraging habitat. Roosting and landing sites occur in the vegetated areas of the study area.</p> <p>The proposed action would entail clearing of about 65.57 ha of vegetation. Given the extremely large area occupied by the White-throated Needletail, the proposal area is unlikely to be important habitat for this species as it is almost exclusively aerial, has a wide distribution and is highly mobile.</p>
Conclusion	The proposed actions are unlikely to substantially modify, destroy or isolate an area of important White-throated Needletail habitat.
Criterion	(ii) Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species
Response	The proposal has the potential to introduce weeds through the movement of machinery, however, this risk is not expected to be significant providing relevant mitigation measures are implemented.
Conclusion	The proposed actions are unlikely to result in an invasive species that is harmful to the White-throated Needletail becoming established in an area of important habitat.
Criterion	(iii) Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species
Response	These species have wide distributions and are highly mobile. Use of the study area by the White-throated Needletail would be rare and would not involve an ecologically significant proportion of their population. The species breeds in the northern hemisphere and is only likely to forage or roost in the study area on occasions.
Conclusion	The site is unsuitable to sustain populations of the White-throated Needletail and as such it is highly unlikely that the proposed actions will disrupt the lifecycle of an ecologically significant proportion of the population of this migratory species.
Overall Conclusion	As the study site provides only intermittent suitable habitat it is considered that the proposal will not have a significant impact on the White-throated Needletail.

Migratory Species: *Monarcha melanopsis* (Black-faced Monarch) and *Rhipidura rufifrons* (Rufous Fantail)

An action is likely to have a significant impact on a migratory species if there is a real chance or possibility that it will:

Criterion	(i) Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species
Response	<p>The Black-faced Monarch and Rufous Fantail occur throughout eastern and south-eastern Australia between spring and autumn. Both species were observed in the gully at the northern end of the study area.</p> <p>The proposed action would require clearing of up to 65.57 hectares of vegetation that may be used by these species for foraging, roosting and breeding. Other suitable habitat occurs throughout the neighbouring State Forests and National Parks.</p>
Conclusion	The proposed actions are unlikely to substantially modify, destroy or isolate an area of important habitat for the Black-faced Monarch or Rufous Fantail.
Criterion	(ii) Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species
Response	The proposal has the potential to introduce weeds through the movement of machinery, however, this risk is not expected to be significant providing relevant mitigation measures are implemented.
Conclusion	The proposed actions are unlikely to result in an invasive species that is harmful to the White-throated Needletail becoming established in an area of important habitat.
Criterion	(iii) Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species
Response	Use of the study area by the Black-faced Monarch and Rufous Fantail is likely to be between spring and autumn. The study area is likely to support a few individuals and would not involve an ecologically significant proportion of their populations.
Conclusion	The site is unsuitable to sustain populations of these migratory bird species and as such it is highly unlikely that the proposed actions will disrupt the lifecycle of an ecologically significant proportion of the population of Black-faced Monarch and Rufous Fantail.
Overall Conclusion	The study area provides suitable habitat for the Black-faced Monarch and Rufous Fantail occur between spring and autumn. It is likely to be only used by a small number of individuals and other suitable habitat is available in the locality. As the study site provides only a small area of suitable habitat, it is considered that the proposal will not have a significant impact on the Black-faced Monarch or Rufous Fantail.

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