

APPENDIX 5 - QUALITATIVE THREAT ASSESSMENT METHODOLOGY

Part 1: Activity Identification and Context Analysis

Activity Name	Species Name	Outcome	
Type of activity	Policy	Division	<Select the Division the activity belongs to>
Date of analysis	<Write the date this assessment is being performed>	Duration of analysis	<Write the timeframe this analysis will cover>
		Decision Maker	<Write the name and title of the decision maker and approver>
		Signature	Make sure the Decision maker signs the risk assessment and treatment plan off
Activity Objective and main outcomes	To assess the risk of extinction to the species (in accordance with the prescribed criteria) based on the threats to the species and to provide action/recommendations to prevent the species from being threatened.		Key Stakeholders
	<List the internal and external stakeholders who could impact or be impacted by this activity and how>		
External Environment Context	The threat assessment and management template is for application to data deficient species and assists in the decision of whether to apply section 190.		

Part 2: Threat Assessment and Management Plan (Please refer to the Risk Assessment Matrix to complete this section)

IDENTIFICATION					ANALYSIS						TREATMENT					
1 #	2 Threats (Briefly describe the threat that could affect whether the objective is achieved)	3 Impact (Briefly describe the potential impacts if the threat happens: see consequence table)	4 Sources of the threat (Briefly describe the potential causes or sources of the threat happening)	5 Committee Assessment Notes	6 Inherent threat rating (What is the threat rating before any management strategies are in place?)			7 Existing conservation management strategies for each source of the threat		8 Residual threat rating (Assess the consequences and their likelihood taking into account the effectiveness of the existing controls)			9 Proposed threat treatments (Tasks are needed to mitigate the threat, i.e. conservation action)	12 Target threat rating (What is the expected threat rating after additional treatments are in place?)		
					6A Consequence	6B Likelihood	6C Rating	7A Management strategies in place (Briefly describe the existing strategies, i.e. what is in place NOW to minimise or soften the impact of each potential threat)	7B Select from the Control Rating	8A Consequence	8B Likelihood	8C Rating	9A Select from the Control Rating	12A Consequence	12B Likelihood	12C Rating
																#N/A
					OVERALL INHERENT RISK OF THE ACTIVITY			OVERALL RESIDUAL RISK OF THE ACTIVITY			OVERALL TARGET RISK OF THE ACTIVITY					

Categories

Stakeholder management and communication

Operational

Health and Safety

Financial

Workforce management and capability

Information management (including ICT)

Business planning and program /project management.

Legal / statutory compliance

Loss of assets (departmental / environment).

Likelihood

Rare

Unlikely

Possible

Likely

Almost Certain

Consequence

Insignificant
Minor
Moderate
Major
Critical

Controls

Weak
Incomplete
Adequate
Strong
Over-Controlled

Tolerance

Yes
No

Sources of Risk

		Insignificant	Minor	Moderate	Major	Critical
		1	2	3	7	15
Almost Certain	5	5	10	15	35	75
Likely	4	4	8	12	28	60
Possible	3	3	6	9	21	45
Unlikely	2	2	4	6	14	30
Rare	1	1	2	3	7	15

		Likelihood	Consequence	Rating
Almost Certain	5	Likely	Major	High
Likely	4			
Possible	3			
Unlikely	2			
Rare	1			

Insignificant	1
Minor	2
Moderate	3
Major	7
Critical	15

Score	Likelihood	Description
1	Rare	The outcome is not expected to occur; never heard of but not impossible; may occur in exceptional circumstances
2	Unlikely	The outcome will only occur in a few circumstances; uncommon but know to occur elsewhere
3	Possible	The outcome may occur; some evidence to support it will happen
4	Likely	The outcome will occur in most circumstances;
5	Almost certain	The outcome is expected to occur

Consequence	Insignificant 1	Minor 2	Moderate 3	Major 4	Critical 5
Impact on population³	Minimal impact on local population numbers; area affected negligible compared to total population; minimal or acceptable impact on population size	Minor impact on local population numbers. Population in other locations not impacted	Moderate impact on local population numbers. Some impacts on populations in other locations; moderate and/or short term effects	Major population reduction or loss of local population; recovery measure in years to decades; serious and significant impact on species	Population reduction which may results in species extinction; recovery period is greater than decades; very significant and serious impact on high value species
Fragmentation of habitat/loss of habitat connectivity/reduce the areas of occupancy⁴	Minimal losses of local habitat only, recovery likely in a relatively short period of time; threats are covered by current management or legislation	Minor losses of local habitat requiring recovery over short term	Moderate loss of local habitat requiring recovery over a short to medium term and resulting in loss of connectivity between habitats at a local scale	Loss of local habitat with no potential for recovery, or partial loss of habitat across large areas and/or with limited potential for recovery in the medium to long term. Results in a net reduction in connectivity over a large area	Complete loss of local habitat with no potential for recovery and loss of habitat in other locations with limited potential for recovery in the long term resulting in a significant impact on habitat connectivity over a large area
Impact on the habitat critical to the survival of the species⁵	Minimal modification, destruction, removal ore decrease of local habitat only, recovery likely in a relatively short period of time; insignificant impact to habitat or threat activity only occurs in a very small areas of habitat; limited damage to minimal area of low significance; minor effects on physical environment	Minor modification, destruction, removal ore decrease of local habitat requiring recovery over short term	Moderate modification, destruction, removal ore decrease of local habitat requiring recovery over a short to medium term and resulting in loss of connectivity between habitats at a local scale	Modification, destruction, removal or loss of local habitat with no potential for recovery, or partial loss of habitat across large areas and/or with limited potential for recovery in the medium to long term. Results in a net reduction in connectivity over a large area; habitat is affected which may endanger the species and habitat long term survival – 70-90% habitat affected or removed; 30% fragile habitat affected or removed; 10-20% critical habitat affected or removed;	Significant impact resulting in the removal, destruction, fragmentation and degradation of habitat; the entire habitat is in danger of being affected or removed, that >90% habitat, >50% fragile habitat , and >30% critical habitat

Disruption to breeding cycle⁶

Minimal impact on any aspect of the breeding cycle;

Minor disruption to the breeding cycle

Moderate disruption to breeding cycle resulting in modification of behaviour both within the direct impact zone and at nearby locations; long term recruitment and/or population dynamics are not adversely impacted

Direct impacts on breeding cycle resulting in a net decline in size of the population; the is limited information to judge the impact

Complete disruption of breeding cycles over several seasons with significant population decline and possible extinction

Impact of invasive species and/or disease⁷

Minimal impact on local population numbers or habitat quality

Minor impact on local population numbers or habitat quality. Population in other locations not impacted

Moderate impact on local population numbers or habitat quality. Some impacts on populations in other locations

Major population reduction or loss of local population or loss of habitat quality

Population reduction which may results in species extinction loss of critical habitat extent or quality

Interaction with species migration

Minimal impact on species migratory patterns

Results in minor behavioural modification on a local scale or impacts to physical conditions of animal interfering with migration for the short term only. Unlikely to negatively impact on the overall success of migration

Results in modification of behaviour or animal conditions such that there is potential for medium term impacts, with some possibility of individuals failing to complete migration

Results in modification of behaviour or animal condition such that there is potential for medium to long term impacts, both locally and in nearby locations, with some individuals failing to complete migration

Significant impact resulting in either complete failure, or failure of majority of individuals, to complete migration in that cycle

Insignificant Minor Moderate Major Critical

		1	2	3	7	15
Almost C	5	5	10	15	35	75
Likely	4	4	8	12	28	60
Possible	3	3	6	9	21	45
Unlikely	2	2	4	6	14	30
Rare	1	1	2	3	7	15

Threat Rating	Assessment Recommendation
Low	Provide advice to the minister that the species is data deficient against the EPBC listing criteria. Do not proceed to step 2.
Medium	Consider invoking s190 and provide the Minister with advice on threats (including prioritisation of threats), highlighting areas of data deficiencies and actions that are required to abate the identified threats. Proceed to step 2.
High	Consider invoking s190 and provide the Minister with advice on threats (including prioritisation of threats), highlighting areas of data deficiencies and actions that are required to abate the identified threats. Proceed to step 2.
Severe	Consider invoking s190 and provide the Minister with advice on threats (including prioritisation of threats), highlighting areas of data deficiencies and actions that are required to abate the identified threats. Proceed to step 2.