

## **DRAFT RISK ASSESSMENT FRAMEWORK THREATENED/PROTECTED SPECIES**

### **PURPOSE**

The purpose of the Risk Assessment Framework is to assist the issuing authorities in decision-making relating to potentially harmful activities involving threatened or protected species. The following potential threats to threatened or protected species may trigger the risk assessment provision in Section 89 of the Act (including, but not limited to):

- Hybridisation
- Over-exploitation
- Severity of the potential impacts on:
  - species fitness
  - species survival
  - species dynamics and behaviour
- Potential impact of restricted activity on natural selection.

Relevant policies and applicable legislation associated with the restricted activity or threatened or protected species could also trigger a risk assessment in terms of Section 89.

### **PROPOSED FRAMEWORK**

#### **GENERAL INFORMATION**

- Taxonomy of the Threatened or Protected Species (as reflected in NEMBA lists)
  - Class
  - Order
  - Family
  - Species (Scientific name)
  - Scientific synonyms
  - Common names
- Project information and outline
  - Which restricted activity/-ies will be carried out with the listed species
  - Objective/-s and Intended Use/-s
  - Site/-s where restricted activity will be carried out
  - Description of site/-s
  - Specimen<sup>1</sup> type/-s, number of specimens, development stage/-s & gender/sex involved in restricted activity

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<sup>1</sup> Specimen as defined in National Environmental Management: Biodiversity Act (Act 10 of 2004):

- (a) any living or dead animal, plant or other organism;
- (b) a seed, egg, gamete or propagule or part of an animal, plant or other organism capable of propagation or reproduction or in any way transferring genetic traits;
- (c) any derivatives of any animal, plant or other organism; or
- (d) any goods which (i) contain a derivative of an animal, plant or other organism; or (ii) from an accompanying document, from the packaging or mark or label, or from any other indications, appear to be or to contain a derivative of an animal, plant or other organism

- Intended destination of specimen(s) if conveyed, moved or otherwise translocated
- Species Status
  - Legal status – National, Provincial and International status
  - IUCN Red Data Status – Regional and National Red Data Status
  - Provide information on the importance of the species, e.g. keystone species / Indicator species / Charismatic species.
- Population numbers and trends in South Africa (Provide references / data sources)
  - Population numbers nationally
  - Number of specimens in target population affected by restricted activity
  - Recent trends in national population
  - Current trends in target population
- Geographic distribution and trends in South Africa (Provide References / Data sources)
  - Current geographic distribution
  - Extra-limital population distribution
  - Geographic distribution trends in national distribution range, if any.
- Habitat type and niche of the listed species
- Threats
  - Known threats affecting the species nationally
  - Known threats affecting the target population

#### **RISK IDENTIFICATION**

- Define scope and objectives of the risk assessment.
  - Identify potential risks associated with the restricted activity involving the specific threatened or protected species. The following are indicative potential risks to be considered (including, but not limited to):
    - Over-exploitation
    - Hybridisation
    - Impact on species fitness e.g. removal of number of species on target population / national population
    - Survival of the species
      - Parasites and Disease
      - Predation
      - Habitat
      - Food requirements
    - Species dynamics and behaviour
    - Potential impact of restricted activity on patterns of natural selection

#### **RISK ESTIMATION**

*Risk estimation involves the estimation of the likelihood of the risks identified above being realised and the consequences if it is realised. This is the actual assessment process and quantitative and qualitative information should be used in the assessment to substantiate the results.*

- Estimate the risks identified above in terms of the likelihood/probability of the risk being realised.

- Estimate the consequences if the risk is realised.

**RISK EVALUATION**

*Risk evaluation involves the evaluation of the consequences of the various risks and the ranking/rating of these according to the severity and importance for decision-making. The potential mitigation measures/management options to minimise the consequences should also be provided.*

- Rank or rate potential risks according to severity.
- Propose options for minimising potential risks.