1. **LEGISLATIVE BASIS FOR THESE GUIDELINES**

Section 260(1) of the *Biodiversity Conservation Act 2016* (the Act) provides, amongst other matters, for the Minister to issue *Ministerial Guidelines* establishing the criteria for, and setting out other matters relevant to, the listing of threatened species under Part 2 Division 1 Subdivision 2 and the listing of extinct species under Part 2 Division 1 Subdivision 3.

Section 20 of the Act provides for the *Ministerial Guidelines* to specify requirements for listing a species as a *critically endangered* species. Similarly, sections 21, 22, 24 and 25 provide for the *Ministerial Guidelines* to specify requirements for listing a species as an *endangered species*, a *vulnerable species*, an *extinct species*, and, an *extinct in the wild species*, respectively.

The categories of *critically endangered species*, *endangered species* and *vulnerable species*, fall within the grouping of “Threatened species” under Part 2 Division 1 Subdivision 2, while the categories of *extinct species* and *extinct in the wild species* fall within the grouping “Extinct species” under Part 2 Division 1 Subdivision 3.

Section 37 of the Act provides that the Minister must obtain and have regard to advice from one or more persons considered by the Minister to have scientific expertise before making a threatened or extinct species listing decision.

This *Ministerial Guideline* (Number 2) provides:

1) the specifications for what “species” may be considered for listing; and,

2) the detailed *criteria* to be used for listing species in the various categories *(critically endangered, endangered, vulnerable, extinct, extinct in the wild)*;

as well as the *procedures*:

3) to be followed by the Threatened Species Scientific Committee (TSSC) in assessing nominations and making recommendations to the Minister on species listings; and,

4) to be followed by the Minister in making species listing decisions.

Note: The detailed *criteria* and *procedures* for nominating and considering threatened ecological communities and key threatening processes are included in *Ministerial Guidelines Nos. 4 and 6*. The detailed *criteria* and *procedures* for considering specially protected species critical habitat are included in *Ministerial Guidelines Nos. 3 and 5*. 
2. SPECIES THAT MAY BE LISTED IN THE VARIOUS CATEGORIES.

2.1 Species and Native Species

The Act establishes (section 5) that the term “species” —

a) means a group of organisms that —
   (i) interbreed to produce fertile offspring; or
   (ii) possess common characteristics derived from a common gene pool,
   and

b) includes —
   (i) a taxonomically separate population of a species, being a population that is characterised by morphological or other biological differences from other populations of that species; and
   (ii) a distinct population of organisms that the Minister has determined by order under section 9(5) to be a species for the purposes of this Act.

A “species” listing for the purposes of the Act may refer to: a “species” at a scientifically established taxonomic level; or a “species” that is the subject of an order made by the Minister under section 9(5) of the Act; or a “species” at the population level, where the population can be described morphologically, or by identifiable biological characteristics, and usually with a geographical dissociation to other occurrences of the species.

Taxonomic levels that will be included in the meaning of “species” for the purposes of this ministerial guideline are: species, subspecies, and for flora, varieties. Species do not have to be formally named, but must be formally recognised by either the WA Herbarium or WA Museum. The term “species” as used in the Act is synonymous with the term “taxon” as used in some documents, including documents published by the International Union for Conservation of Nature (IUCN).

Section 8(2) provides that a “native species” is a subset of “species” that includes a species —

(a) that is indigenous to Australia or an external Territory; or
(b) that is indigenous to the sea-bed of the coastal sea of Australia or an external Territory; or
(c) that is indigenous to the continental shelf; or
(d) that is indigenous to the exclusive economic zone; or
(e) members of which periodically or occasionally visit —
   (i) Australia or an external Territory; or
   (ii) the exclusive economic zone;
   or
(f) that was present in Australia or an external Territory before 1400.

Section 5 provides that “flora” means a plant that belongs to a native species and is indigenous to the State (unless the plant is determined by order under section 9(4) not to be flora, or is determined by order under section 9(3) to be flora, for the purposes of the Act). Section 5 also provides that “fauna” means an animal that belongs to a native species (unless the animal is determined by order under section 9(2) not to be fauna, or is determined by order under section 9(1) to be fauna, for the purposes of the Act).

Section 5 provides that a “threatened species” —

Means a native species that —

(a) is listed as a threatened species under section 19(1); or
(b) is to be regarded as a threatened species under section 26(2).
Only species that are known to occur, or have occurred, in Western Australia will be considered for listing as threatened under these **Ministerial Guidelines**. However, in considering a species for listing as threatened, the status of a Western Australian species will be considered throughout its total natural range in Australia, and only where appropriate (e.g. for species for which the Australian breeding subpopulation is not significant to the status of the species as a whole), their range and status outside Australia.

### 3. CRITERIA FOR LISTING

#### 3.1 Introduction

The Act (Part 2 Division 1 Subdivision 2, sections 19, 20, 21 and 22) provides the first level of criteria for listing threatened species in the categories of:

a) **critically endangered** (facing an *extremely high risk of extinction* in the wild in the *immediate future*); or,

b) **endangered** (facing a *very high risk of extinction* in the wild in the *near future*); or,

c) **vulnerable** (facing a *high risk of extinction* in the wild in the *medium-term future*).

In addition, the Act (Part 2 Division 1 Subdivision 3, sections 24 and 25) provides the first level of criteria for listing in the categories of:

d) **extinct** (there is *no reasonable doubt* that the last member of the species has died); or,

e) **extinct in the wild** (known *only to survive in cultivation, in captivity or as a naturalised population* well outside its past range and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form).

A species may be listed in only **one** of the above categories.

The Act provides that listing in each of these categories be otherwise in accordance with ministerial guidelines. These guidelines provide further requirements as detailed in the following section.

#### 3.2 IUCN Red List Criteria

The International Union for Conservation of Nature (IUCN) Red List criteria are internationally recognised as providing best practice for assigning the conservation status of species and have been adopted for use in Western Australia in these **Ministerial Guidelines**. The IUCN Red List criteria are updated from time to time. As they are updated and assessed for Western Australia, these **Ministerial Guidelines** will be amended to account for the relevant updates as endorsed by the Minister. Full details of the listing criteria in each listing category are provided in Appendix 1.

If the IUCN Red List criteria change, any species listed under the changed criteria will be assessed when the status of the species falls due for review (i.e. every 10 years) unless the change in criteria is such that a species is likely to be eligible for listing in a different category. A review may also occur if new information becomes available that is likely to affect the assessed listing category, or the Minister requests that the species be reviewed earlier.
The criteria for listing a species as:

3.2.1 Critically Endangered Species (CR);
3.2.2 Endangered Species (EN);
3.2.3 Vulnerable Species (VU);
3.2.4 Extinct Species (EX); or,
3.2.5 Extinct in the Wild Species (EW),

are based on the IUCN Red List criteria as accepted nationally and updated from time to time.

3.3 IUCN Red List Source documents

The IUCN criteria are published in the following reference:

IUCN Red List Categories and Criteria.
This document can be downloaded from: http://www.iucnredlist.org/technical-documents/red-list-documents

When using these criteria, the TSSC will also consult the following document:

Guidelines for Using the IUCN Red List Categories and Criteria. This document can be downloaded from: http://www.iucnredlist.org/technical-documents/red-list-documents

The latter document is updated regularly, and this Ministerial Guidelines requires that before the Minister makes any decision to list a species, the information provided to the Minister must conform with the current version of the IUCN Guidelines.

3.4 Other advice

The primary source of advice for threatened and extinct species assessments will be the Threatened Species Scientific Committee (TSSC) – refer to Ministerial Guideline 1.

The Minister and/or the TSSC may seek advice from external persons (including government employees, scientists or consultants) with specific expertise in taxonomy or other fields relevant to the assessment or conservation of the species as necessary.

The states, territories and commonwealth have also worked cooperatively to develop a common assessment method for the assessment and listing of threatened species in Australia. The Western Australian Minister for Environment has signed a Memorandum of Understanding with the Commonwealth Minister for the Environment to implement the common assessment method and seek national uniformity in threatened species listings (additional background is included at Appendix 4).

Through this process, guidance on the use of the IUCN Red List criteria in Australia have been produced, and will be referenced where interpretation of the IUCN criteria has been employed for the Australian context. Information on the common assessment method is available at:
3.5 Further requirements for establishing species’ identity and adequacy of survey

Before a species of plant or animal can be assessed for listing, it must be established that the species can be uniquely identified and that there have been adequate surveys to establish its range and population status. Criteria and guidelines applicable to these requirements are included at Appendix 2 and Appendix 3.

Where a species is determined by the TSSC to have inadequate information to assess its conservation status, the species nomination may be rejected or deferred. This may be either due to uncertainty over its identification, or an inadequacy of survey (including the use of appropriate techniques, over sufficient area of potential habitat, and over a suitable time period appropriate to the species). Such species may be listed on the department’s priority species lists which identify species in need of further survey or ongoing monitoring.

4. DESCRIBING A SPECIES

When describing a species that is to be included in the Threatened Species List, it must be identified with reference to the listing category and the criterion/criteria it satisfies for that listing as follows:

- Unique name [category code criteria; criteria], e.g. Genus species [CR B2ab(iii); D].

Note  the unique name will normally be the name that the species is accepted in either the Australian Plant Census, or the Australian Faunal Directory. This may be a genus and species name, or may include a subspecies or variety name. Where a species is not formally named, the name will be that under which specimens of the species are curated in the WA Herbarium, WA Museum, or another recognised national institution.
CRITERIA FOR ASSESSING SPECIES TO BE LISTED AS CRITICALLY ENDANGERED, ENDANGERED, VULNERABLE, EXTINCT AND EXTINCT IN THE WILD

The threat category of a species is determined by applying the criteria included in the IUCN Red List Categories and Criteria and following the Guidelines for Using the IUCN Red List Categories and Criteria. It should be noted that some differences may exist in the wording of the criteria between these two documents as the application of the criteria is refined over time. For these Ministerial Guidelines, the wording of the criteria from the IUCN Red List Categories and Criteria Version 3.1 Second edition (2012) have been amended to be consistent with the wording used in the Guidelines for Using the IUCN Red List Categories and Criteria Version 13 (March 2017), with those addenda shown in square brackets.

Note: the IUCN uses the term “taxon”. This term has been replaced with the term “species” as defined in the Biodiversity Conservation Act 2016.

1 Critically Endangered Species (CR)

A native species is Critically Endangered when the best available evidence indicates that it meets any of the Criteria A to E (below), and it is therefore considered to be facing an extremely high risk of extinction in the wild [in the immediate future].

Criterion A (CR).  Reduction in population size based on any of the following:

A1. An observed, estimated, inferred or suspected population size reduction of ≥90% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND [have] ceased, based on (and specifying) any of the following:

(a) direct observation
(b) an index of abundance appropriate to the species
(c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
(d) actual or potential levels of exploitation
(e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

A2. An observed, estimated, inferred or suspected population size reduction of ≥80% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

A3. A population size reduction of ≥80%, projected, [inferred] or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.

A4. An observed, estimated, inferred, projected or suspected population size reduction of ≥80% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, and where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.
Criterion B (CR). Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:

B1. Extent of occurrence estimated to be less than 100 km², and estimates indicating at least two of a-c:
   a) Severely fragmented OR known to exist at only a single location.
   b) Continuing decline, observed, [estimated,] inferred or projected, in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) area, extent and/or quality of habitat
      (iv) number of locations or subpopulations
      (v) number of mature individuals.
   c) Extreme fluctuations in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) number of locations or subpopulations
      (iv) number of mature individuals.

B2. Area of occupancy estimated to be less than 10 km², and estimate indicating at least two of a-c:
   a) Severely fragmented OR known to exist at only a single location.
   b) Continuing decline, observed, [estimated,] inferred or projected, in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) area, extent and/or quality of habitat
      (iv) number of locations or subpopulations
      (v) number of mature individuals.
   c) Extreme fluctuations in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) number of locations or subpopulations
      (iv) number of mature individuals.

Criterion C (CR). Population size estimated to number fewer than 250 mature individuals and either:

C1. An [observed,] estimated [or projected] continuing decline of at least 25% within three years or one generation, whichever is longer, (up to a maximum of 100 years in the future) OR

C2. A continuing decline, observed, [estimated,] projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
   a) Population structure in the form of one of the following:
      (i) no subpopulation estimated to contain more than 50 mature individuals, OR
      (ii) at least 90% of mature individuals in one subpopulation.
   b) Extreme fluctuations in [the] number of mature individuals.

Criterion D (CR). Population size estimated to number fewer than 50 mature individuals.
Criterion E (CR). Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or three generations, whichever is the longer (up to a maximum of 100 years).

2 Endangered Species (EN)

A native species is Endangered when the best available evidence indicates that it meets any of the Criteria A to E (below), and it is therefore considered to be facing a very high risk of extinction in the wild (in the near future).

Criterion A (EN). Reduction in population size based on any of the following:

A1. An observed, estimated, inferred or suspected population size reduction of ≥70% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND [have] ceased, based on (and specifying) any of the following:
   a) direct observation
   b) an index of abundance appropriate to the species
   c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
   d) actual or potential levels of exploitation
   e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

A2. An observed, estimated, inferred or suspected population size reduction of ≥50% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

A3. A population size reduction of ≥50%, projected, [inferred] or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.

A4. An observed, estimated, inferred, projected or suspected population size reduction of ≥50% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

Criterion B (EN). Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:

B1. Extent of occurrence estimated to be less than 5,000 km², and estimates indicating at least two of a-c:
   a) Severely fragmented OR known to exist at no more than five locations.
   b) Continuing decline, observed, [estimated,] inferred or projected, in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) area, extent and/or quality of habitat
      (iv) number of locations or subpopulations
      (v) number of mature individuals.
   c) Extreme fluctuations in any of the following:
(i) extent of occurrence
(ii) area of occupancy
(iii) number of locations or subpopulations
(iv) number of mature individuals.

B2. Area of occupancy estimated to be less than 500 km², and estimates indicating at least two of a-c:
   a) Severely fragmented or known to exist at no more than five locations.
   b) Continuing decline, observed, [estimated,] inferred or projected, in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) area, extent and/or quality of habitat
      (iv) number of locations or subpopulations
      (v) number of mature individuals.
   c) Extreme fluctuations in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) number of locations or subpopulations
      (iv) number of mature individuals

Criterion C (EN). Population size estimated to number fewer than 2,500 mature individuals and either:

C1. An [observed,] estimated [or projected] continuing decline of at least 20% within five years or two generations, whichever is longer, (up to a maximum of 100 years in the future) OR

C2. A continuing decline, observed, [estimated,] projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
   a) Population structure in the form of one of the following:
      (i) no subpopulation estimated to contain more than 250 mature individuals, OR
      (ii) at least 95% of mature individuals in one subpopulation.
   b) Extreme fluctuations in [the] number of mature individuals.

Criterion D (EN). Population size estimated to number fewer than 250 mature individuals.

Criterion E (EN). Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or five generations, whichever is the longer (up to a maximum of 100 years).
3 Vulnerable Species (VU)

A native species is Vulnerable when the best available evidence indicates that it meets any of the Criteria A to E (below), and it is therefore considered to be facing a high risk of extinction in the wild.

Criterion A (VU). Reduction in population size based on any of the following:

A1. An observed, estimated, inferred or suspected population size reduction of ≥50% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND [have] ceased, based on (and specifying) any of the following:
   a) direct observation
   b) a decline in area of occupancy, extent of occurrence and/or quality of habitat
   c) actual or potential levels of exploitation
   d) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

A2. An observed, estimated, inferred or suspected population size reduction of ≥30% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

A3. A population size reduction of ≥30% projected, [inferred] or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.

A4. An observed, estimated, inferred, projected or suspected population size reduction of ≥30% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

Criterion B (VU). Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:

B1. Extent of occurrence estimated to be less than 20,000 km², and estimates indicating at least two of a-c:
   a) Severely fragmented OR known to exist at no more than 10 locations.
   b) Continuing decline, observed, [estimated,,] inferred or projected, in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) area, extent and/or quality of habitat
      (iv) number of locations or subpopulations
      (v) number of mature individuals.
   c) Extreme fluctuations in any of the following:
      (i) extent of occurrence
      (ii) area of occupancy
      (iii) number of locations or subpopulations
      (iv) number of mature individuals.

B2. Area of occupancy estimated to be less than 2,000 km², and estimates indicating at least two of a-c:
Ministerial Guideline No. 2 – Threatened and Extinct Species Listing Procedures and Criteria
Biodiversity Conservation Act 2016

a) Severely fragmented or known to exist at no more than 10 locations.
b) Continuing decline, observed, [estimated,] inferred or projected, in any of the following:
   (i) extent of occurrence
   (ii) area of occupancy
   (iii) area, extent and/or quality of habitat
   (iv) number of locations or subpopulations
   (v) number of mature individuals.
c) Extreme fluctuations in any of the following:
   (i) extent of occurrence
   (ii) area of occupancy
   (iii) number of locations or subpopulations
   (iv) number of mature individuals.

Criterion C (VU). Population size estimated to number fewer than 10,000 mature individuals and either:

C1. An [observed,] estimated [or projected] continuing decline of at least 10% within 10 years or three generations, whichever is longer, (up to a maximum of 100 years in the future) OR

C2. A continuing decline, observed, [estimated,] projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
   a) Population structure in the form of one of the following:
      (i) no subpopulation estimated to contain more than 1,000 mature individuals, OR
      (ii) all mature individuals in one subpopulation.
   b) Extreme fluctuations in [the] number of mature individuals.

Criterion D (VU). Population very small or restricted in the form of either of the following:

D1. Population size estimated to number fewer than 1,000 mature individuals.

D2. Population with a very restricted area of occupancy (typically less than 20 km2) or number of locations (typically five or fewer) [with a plausible future threat that could drive the species to] Critically Endangered or even Extinct in a very short time period.

Criterion E (VU). Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.

4 Extinct Species (EX)
Criterion (EX). A species is Extinct when:
EX. there is no reasonable doubt that the last individual has died. A species is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the species’ life cycle and life form.

5 Extinct in the Wild Species (EW)
Criterion (EW). A species is extinct in the wild when:
EW. it is known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range. A species is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the species’ life cycle and life form.
ADDITIONAL GUIDANCE

Rediscovered species:

Section 26 provides that when a species that is listed in either the category of Extinct or Extinct in the Wild is found to be extant, that it is to be regarded as a threatened species until it is listed as a threatened or specially protected species or until the Minister declares that it is not be listed in either of those categories by publishing a notice in the Gazette.

The Department of Biodiversity, Conservation and Attractions will provide the information necessary as a priority. This information may be considered first by the TSSC or may be provided directly to the Minister. On noting the information by the Minister, the species will be deemed to be a threatened species. Assessment of the category and criteria that the species should be listed under, or if it should not be listed, should be undertaken at the soonest possible time once sufficient information is available to undertake such an assessment.
1.1 Further criteria for plants

A species of plant may be nominated for listing if it meets the following criteria:

i) The species (i.e. species, subspecies, variety) is well-defined, readily identified and represented by a voucher specimen in a State or National Herbarium. It need not necessarily be formally described under conventions in the International Code of Botanical Nomenclature for plants, algae and fungi, but such a description is preferred and should be undertaken as soon as possible after the species is listed.

ii) The species has been searched for thoroughly in the wild by competent qualified persons during the past five years in most likely habitats, according to guidelines included at Appendix 3.

iv) In the case of hybrids, or suspected hybrids, the following criteria must also be satisfied:
   a) they must be a distinct entity, that is, the progeny are consistent within the agreed taxonomic limits for that species group;
   b) they must be capable of being self-perpetuating, that is, not reliant on the parent stock for replacement; and
   c) they are the product of a natural event, that is, both parents are naturally occurring and cross fertilisation was by natural means.

That status of a threatened plant in cultivation is not relevant to whether the species should be considered for listing. However, any populations of plants established in the wild as part of an approved recovery (translocation) program will be considered during the assessment process if they meet the criteria included in the Guidelines for Using the IUCN Red List Categories and Criteria.

1.2 Further criteria for animals

A species of animal may be nominated for listing if:

i) The species occurs naturally in Western Australia, is part of the indigenous fauna of Australia or its external Territories, and is well-defined in the taxonomic literature or, in the case of an undescribed or poorly defined species, it is represented by a voucher specimen in a State or National Museum or some other collection recognised by the Western Australian Museum as a proper repository for taxonomic material. While it need not necessarily be formally described under conventions in the International Code of Zoological Nomenclature, such a description is preferred and should be undertaken as soon as possible after the species is listed.

ii) The species has been searched for thoroughly in the wild by competent qualified persons during the past five years in most likely habitats, according to guidelines included at Appendix 3.

The status of a threatened animal species in captivity is not relevant to whether the species should be considered for listing. The status of any translocated populations will be considered if they meet the criteria included in the Guidelines for Using the IUCN Red List Categories and Criteria, which includes a minimum time frame of five years after establishment.
APPENDIX 3

GUIDELINES FOR ASSESSING ADEQUACY OF SURVEY FOR NOMINATING SPECIES FOR INCLUSION IN THE THREATENED SPECIES LIST

Flora

The intensity of survey necessary to understand the conservation status of a plant varies according to a number of factors. Important considerations are:

**Geographical range** – a species extending over 10km of terrain will take less time to survey than one that occurs over 100km.

**Area of available habitat** – species confined to specific localised habitats (e.g. granite outcrops) will require less time to survey than those more generalised in habitat preference.

**Plant size** – large conspicuous perennial plants (e.g. eucalypts) can be identified and counted more quickly than small inconspicuous herbs.

**Seasonality and identification** – some plants are identifiable and conspicuous on vegetative features at any time of year. Others only stand out during flowering or fruiting, which may be confined to just a few weeks in the year, and may also be dependent on good seasonal conditions.

**Disturbance opportunism** – some plants only germinate and/or flower following disturbance events such as fire or soil disturbance, and hence can only be surveyed after such events.

The following matrix has been developed using the accumulated survey experience of many botanists and other Officers of the Department of Biodiversity, Conservation and Attractions. It provides indicative guidelines as to the duration of search necessary for plants to be considered in the categories of threatened flora. It should be noted that the survey effort is for potential habitat for new populations, not for the re-surveying of known occurrences of the species.

<table>
<thead>
<tr>
<th>Geographical Range</th>
<th>Area of available habitat</th>
<th>Recommended period of full time field survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>*Species easily identified any time</td>
</tr>
<tr>
<td>&lt;50km</td>
<td>small</td>
<td>0.5-1 month</td>
</tr>
<tr>
<td></td>
<td>large</td>
<td>1-2 months</td>
</tr>
<tr>
<td>&gt;50km</td>
<td>small</td>
<td>3-6 months</td>
</tr>
<tr>
<td></td>
<td>large</td>
<td>6-12 months</td>
</tr>
</tbody>
</table>

* e.g. large perennial plants identifiable any time on vegetative characteristics e.g. *Eucalyptus crucis*, *Banksia tricuspis*.

# e.g. short-lived small annuals with inconspicuous flowers e.g. *Hydrocotyle* spp., annual sedges.
Fauna

1. Surveys should encompass the range of suitable techniques for the target species, and sampling should be conducted throughout the possible (as distinct from the known) geographic range of the species.

2. Surveys should be conducted in a range of seasonal and environmental conditions consistent with the biology of the species.

3. Species confined to geographically restricted or specialised habitats may require less time or effort to survey than those occurring in more widespread habitat.

4. In the case of species known from very few specimens, the person nominating the species for listing should demonstrate that all available collections have been examined to determine likely survey scope.
INTERGOVERNMENTAL MEMORANDUM OF UNDERSTANDING - AGREEMENT ON A COMMON ASSESSMENT METHOD FOR LISTING OF THREATENED SPECIES AND THREATENED ECOLOGICAL COMMUNITIES

The common assessment method is a consistent approach to the assessment and listing of nationally threatened species across the Australian jurisdictions. The primary aim of the common assessment method is to develop a consistent list of nationally threatened species in all Australian jurisdictions, and in doing so, reduce confusion and duplication of effort in the assessment and listing of nationally threatened species across Australia.

It is based on the best practice standard developed by the International Union for Conservation of Nature (IUCN), as used to create the Red List of Threatened Species, with some interpretations of the guidelines to suit the Australian context.

The common assessment method will be applied by Australian jurisdictions that choose to sign onto the intergovernmental memorandum of understanding. The Western Australian Minister for Environment has signed the memorandum of understanding.

Using the common assessment method, species are assessed using the IUCN criteria, categories and thresholds. They can be listed, if eligible, as Vulnerable, Endangered, Critically Endangered, Extinct in the Wild, or Extinct. Species of fish may also be assessed and listed as Conservation Dependent, according to the use and definition of this category under the EPBC Act. Such species may be listed as specially protected under the Biodiversity Conservation Act.

When an Australian jurisdiction undertakes an assessment using the common assessment method, the outcome of that assessment may be adopted by other states and territories where the species occurs, as well as the Australian Government (under the Environment Protection and Biodiversity Conservation Act 1999). This means that a species is only assessed once and is listed in the same ‘nationally threatened’ category across all relevant jurisdictions.

Using the common assessment method, participating jurisdictions will work together to ensure that species are assessed and, where warranted, listed in only one ‘nationally threatened’ category, which is reflected on each of the relevant jurisdictional lists. The outcome is a ‘Single Operational List’ of nationally threatened species.

The Biodiversity Conservation Act 2016 and this Ministerial Guideline are consistent with the common assessment method.