



SCIENCE AND CONSERVATION DIVISION

TERMS OF REFERENCE WESTERN AUSTRALIAN THREATENED ECOLOGICAL COMMUNITIES SCIENTIFIC COMMITTEE

Western Australia legislation does not currently provide for statutory listing of ecological communities that are threatened. However, the Minister for Environment may, as a non-statutory process, list such communities. The Environmental Protection (Clearing of Native Vegetation) Regulations 2004 provides for protection of threatened ecological communities that have been listed by the Minister. It is intended that the new Biodiversity Conservation Act will provide a statutory basis for listing threatened ecological communities.

The Western Australian Threatened Ecological Communities Scientific Committee (WATECSC) is appointed by the Minister to provide advice on listings. It is supported by the Department of Parks and Wildlife, through Species and Communities Branch in Science and Conservation Division.

An ecological community is defined as a naturally occurring biological assemblage that occurs in a particular type of habitat. The scale at which ecological communities are defined will often depend on the level of detail available, therefore no particular scale is specified, but a community should be definable in time and space.

A threatened ecological community (TEC) is defined as an ecological community that is found to fit into one of the categories outlined in Appendix 1. Criteria are provided for the allocation of ecological communities to these categories; however, criteria being developed by the International Union for Conservation of Nature (IUCN) for a Red List of Ecosystems may be subsequently endorsed by the department.

Ecological communities may also be listed as threatened under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

Terms of reference

- 1. The WATECSC will be appointed by the Minister for Environment.
- 2. It will consist of six to 12 persons, from the department or elsewhere as appropriate, selected on the basis of their expert knowledge of the definition, conservation status and conservation management of Western Australian ecological communities.
- 3. The Committee Chair will be appointed by the Minister from the membership.
- 4. WATECSC will:
 - using approved criteria in Appendix 1, make recommendations at least annually to the Minister, via the Director General of the Department of Parks and Wildlife, on listing or de-listing of threatened ecological communities;
 - b) allocate threatened ecological communities to threat categories annually and make recommendations to the Minister;

- c) provide advice and recommendations to the Director General in respect of research and management needs arising from its reviews of the threatened ecological community list, threat categories and the priority list;
- d) using approved criteria in Appendix 1, recommend to the Director General ecological communities for addition to or deletion from the priority ecological community list; and
- e) review biannually the processes for identifying, and setting priorities for the conservation of threatened communities in Western Australia and recommend any necessary changes to the Director General.
- 5. In carrying out 4a) to 4c) above, WATECSC will only consider matters that relate to the continued existence or condition of the ecological community and will consider the status of ecological communities throughout their total natural range in Australia.
- 6. WATECSC will advise the Minister via the Director General whether any listed threatened ecological community should have a higher or lower priority for conservation action than indicated by its threat category. This advice will be based on biological or ecological attributes and will only consider matters that relate to the continued existence or condition of the ecological community.
- 7. WATECSC may appoint subcommittees (subject to the endorsement of subcommittee membership by the Minister), e.g. to consider and review lists and categories of threat annually for particular types of ecological communities.
- 8. Any subcommittees formed must be chaired by a member of the WATECSC and will consist of up to 10 persons appointed on the basis of their expert knowledge of the conservation status of the relevant type of ecological community. The membership of any subcommittee will include at least one member of WATECSC in addition to the Chair.
- 9. Subcommittees shall make their recommendations only to WATECSC. WATECSC will review subcommittee recommendations and submit them to the Minister, via the Director General. WATECSC will oversee the work of any subcommittees and ensure that standards are met and there is consistency between the subcommittees. WATECSC will provide feedback to subcommittees on its consideration of their recommendations and obtain additional information as required.

Approved by

Margaret Byrne

Margaret Byre

DIRECTOR SCIENCE AND CONSERVATION

Effective date. 12/9/16

APPENDIX 1: CRITERIA FOR LISTING ECOLOGICAL COMMUNITIES

1. Criteria for listing threatened ecological communities

Presumed Collapsed (PC)

An ecological community which has been adequately searched for but for which no representative occurrences have been located. The community has been found to be collapsed or so extensively modified throughout its range that no occurrence of it is likely to recover its species composition and/or structure in the foreseeable future.

Note: the structure and/or composition of an ecological community may vary temporally and/or spatially. An occurrence will cease to be regarded as a particular ecological community when expert opinion indicates that the level of modification is such that it is no longer representative of that ecological community or it has lost elements that are essential to the function of the ecological community. In making such an assessment, temporal variation in the ecological community, and the capacity for it to recover its structure and/or composition in the foreseeable future, will be taken into account.

An ecological community will be listed as presumed collapsed if there are no recent records of the community being extant and either of the following applies:

- A) records within the last 50 years have not been confirmed despite thorough searches of known or likely habitats; or
- B) all occurrences recorded within the last 50 years have since been destroyed.

Critically Endangered (CR)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated.

An ecological community will be listed as Critically Endangered when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future. This will be determined on the basis of the best available information, by it meeting any one or more of the following criteria:

- A) The estimated geographic range, and/or total area occupied, and/or number of discrete occurrences since European settlement have been reduced by at least 90% and either or both of the following apply:
 - i) geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is imminent (within approximately 10 years); and/or
 - ii) modification throughout its range is continuing such that in the immediate future (within approximately 10 years) the community is unlikely to be capable of being substantially rehabilitated.
- B) Current distribution is limited, and one or more of the following apply:
 - geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the immediate future (within approximately 10 years);
 - ii) there are very few occurrences, each of which is small and/or isolated and extremely vulnerable to known threatening processes; and/or

- iii) there may be many occurrences but total area is very small and each occurrence is small and/or isolated and extremely vulnerable to known threatening processes.
- C) The ecological community exists only as highly modified occurrences that may be capable of being rehabilitated if such work begins in the immediate future (within approximately 10 years).

Endangered (EN)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.

An ecological community will be listed as Endangered when it has been adequately surveyed and is not Critically Endangered but is facing a very high risk of total destruction in the near future. This will be determined on the basis of the best available information by it meeting any one or more of the following criteria:

- A) The geographic range, and/or total area occupied, and/or number of discrete occurrences have been reduced by at least 70% since European settlement and either or both of the following apply:
 - the estimated geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is likely in the short term future (within approximately 20 years); and/or
 - ii) modification throughout its range is continuing such that in the short term future (within approximately 20 years) the community is unlikely to be capable of being substantially restored or rehabilitated.
- B) Current distribution is limited, and one or more of the following apply:
 - geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the short term future (within approximately 20 years);
 - ii) there are few occurrences, each of which is small and/or isolated and all or most occurrences are very vulnerable to known threatening processes; and/or
 - iii) there may be many occurrences but total area is small and all or most occurrences are small and/or isolated and very vulnerable to known threatening processes.
- C) The ecological community exists only as very modified occurrences that may be capable of being substantially restored or rehabilitated if such work begins in the shortterm future (within approximately 20 years).

Vulnerable (VU)

An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range.

An ecological community will be listed as Vulnerable when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing a high risk of total destruction or significant modification in the medium to long term future. This will be determined on the basis of the best available information by it meeting any one or more of the following criteria:

A) The ecological community exists largely as modified occurrences that are likely to be capable of being substantially restored or rehabilitated.

- B) The ecological community can be modified or destroyed and would be vulnerable to threatening processes, is restricted in area and/or range and/or is only found at a few locations.
- C) The ecological community may be still widespread but is believed likely to move into a category of higher threat in the medium to long term future because of existing or impending threatening processes.

2. Criteria for listing priority ecological communities

Possible threatened ecological communities that do not meet survey criteria or that are not adequately defined are added to the Priority Ecological Community Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and/or definition of the community, and evaluation of conservation status, so that consideration can be given to their declaration as threatened ecological communities.

Quantitative criteria for priority ecological community categories may be developed by the WATECSC as appropriate to better define the category descriptors below.

Priority 1: Poorly-known ecological communities

Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤100ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.

Priority 2: Poorly-known ecological communities

Communities that are known from few occurrences with a restricted distribution (generally \leq 10 occurrences or a total area of \leq 200ha). At least some occurrences are actively managed for conservation (e.g. within national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation) or otherwise not under imminent threat (within approximately 10 years) of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.

Priority 3: Poorly known ecological communities

Ecological communities that are:

- (i) known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation; or
- (ii) known from a few widespread occurrences, which are either large or significant remaining areas of habitat exist in which other occurrences may occur, much of it not under imminent threat: or
- (iii) made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes.

Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.

Ecological communities that are adequately known, and are rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring.

Priority 4: Ecological communities that are adequately known, rare but not threatened, or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring.

- (a) Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change, including changes to current conservation programs. These communities are usually represented on conservation lands.
- (b) Near Threatened. Ecological communities that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, including ecological communities being maintained as non-threatened as a consequence of a current conservation program.
- (c) Ecological communities that have been removed from the list of threatened communities during the past five years.