



Department of **Biodiversity,
Conservation and Attractions**

Guidance note – Modification of an occurrence of a threatened ecological community

Biodiversity Conservation Act 2016

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Introduction

The purpose of this guidance note is to assist any person who proposes to take an action affecting land that may impact an occurrence of a threatened ecological community to decide whether they should submit an application for an authorisation under the [Biodiversity Conservation Act 2016](#) (BC Act), and to provide information on the assessment and approval process.

The Minister for Environment may list an ecological community as threatened under section 27 of the BC Act. The effect of this listing is to provide special protection to the ecological community. Section 48 provides that a person must not modify an occurrence of a threatened ecological community unless the person is authorised under section 45. Significant penalties (up to \$500,000) are prescribed in section 48 where a threatened ecological community is modified without an authorisation.

An action will require authorisation from the Minister under section 45 of the BC Act if the action will, or is likely to, modify an occurrence of a threatened ecological community as defined at section 44¹. An application for authorisation to modify a threatened ecological community must be made on the form [Application to the Minister for authorisation under section 45 of the Biodiversity Conservation Act 2016](#). This guidance note outlines a 'self-assessment' process, including principles, to assist in deciding whether an authorisation to modify an occurrence of a threatened ecological community may be required. Appendix 1 provides further assistance for specific industry sectors.

What are threatened ecological communities?

Threatened ecological communities are ecological communities listed in the following categories under Part 2, Division 2 of the BC Act:

- critically endangered, or
- endangered, or
- vulnerable.


What is an action?

'Action' in relation to section 44 includes: a project, a development, an undertaking, an activity or a series of activities, or an alteration of any of these things.

Actions include, but are not limited to: clearing of vegetation as defined under the *Environmental Protection Act 1986*; earthworks; impoundment, extraction and diversion of water; land management activities; agricultural activities; aquaculture; research activities; construction, expansion, alteration or demolition of buildings, structures, infrastructure or facilities; industrial processes; mineral and petroleum resource exploration and extraction; storage or transport of hazardous materials; and waste disposal.

Actions encompass site preparation and construction, operation and maintenance, and closure and completion stages of a project, as well as alterations or modifications to existing infrastructure.

¹ 1 An action does not require approval under the BC Act if it has been made exempt under section 271 of the BC Act. See the *Biodiversity Conservation (Exemptions) Order* published in the *Government Gazette* on 21 December 2018.



An action may have both beneficial and adverse impacts on the environment. However, only adverse impacts on threatened ecological communities are relevant when determining whether an authorisation to modify a threatened ecological community is required under the BC Act.

What is an occurrence?

An occurrence of a threatened ecological community is a discrete example of an ecological community, separated from other examples of the same community by more than 20 metres with a different ecological community, an artificial surface, or a collapsed ecological community in the interlying space.

By ensuring that every discrete occurrence is recognised and recorded, future changes in status can be readily monitored.

An occurrence may extend over contiguous areas of different land tenure.

Non-biotic natural components of a threatened ecological community may include surface and subterranean water flows.

What is modification?

'Modify', in relation to an occurrence of a threatened ecological community under section 44 of the BC Act, means to take action that results in:


- (a) *the modification of the occurrence of the threatened ecological community to such an extent that the occurrence is unlikely to recover:*
 - (i) *its species composition or structure; or*
 - (ii) *its species composition and structure; or*
- (b) *the destruction of the occurrence of the threatened ecological community.*

Modification results from an impact on an occurrence of a threatened ecological community that will result in the permanent loss of species or structural value of that occurrence. Whether or not an action is likely to modify an occurrence of a threatened ecological community depends upon the sensitivity, value, and quality of the environment that is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. All of these factors should be considered when determining whether an action is likely to modify a threatened ecological community.

When is 'modification' likely?

For modification to be the likely consequence of an action, applicants should consider whether the proposal will directly or indirectly affect the composition and/or the structure of the threatened ecological community, or may result in its destruction. Actions that can directly affect composition or structure include: vegetation clearing, construction of infrastructure, road construction, stock grazing, and use of herbicides. Actions that can indirectly affect composition or structure include altered fire regimes and altered water flows.

While actions that directly or indirectly affect the composition and/or structure are equally likely to modify a community, some changes can be permanent, while others are not (for example, communities may be able to recover their composition after a fire, while clearing and construction will result in permanent destruction). Some consideration of mitigating factors is therefore required.



However, if there is scientific uncertainty about the impacts of the proposed action and the potential impacts on the threatened ecological community are likely to be serious or irreversible, the precautionary principle applies. Accordingly, a lack of scientific certainty about whether the potential impacts of an action will result in modification of an occurrence of a threatened ecological community cannot be used to justify a decision that the action is not likely to modify an occurrence of a threatened ecological community.

In summary, if the likely outcome of the action is not known with certainty and potential impacts on the threatened ecological community are serious or irreversible, then an authorisation should be applied for. Lack of knowledge cannot be used as a reason not to seek an authorisation.

What is an authorisation?

An application for authorisation to modify a threatened ecological community requires submission of an [Application to the Minister for authorisation under section 45 of the Biodiversity Conservation Act 2016](#) to the Department of Biodiversity, Conservation and Attractions (the department). The Minister's delegate at the department will assess the application. The application must identify the person proposing to take the action and include a brief description of the proposal, the project location, the extent and condition of the occurrence of the threatened ecological community, the nature and extent of any potential impacts on the occurrence of the threatened ecological community, avoidance or impact reduction options investigated, and any proposed mitigation measures.

An authorisation to modify an occurrence of a threatened ecological community is granted by the Minister (or his delegate) under section 45 of the BC Act, and may include conditions under section 46(2) on how the action is to be undertaken, and conditions under section 46(3) to mitigate or offset any residual impact(s) the action may have on the total known occurrences of the relevant community (section 46(4)) and on relevant habitat.


The application, assessment and authorisation process are outlined in more detail at the end of this guidance note.

Determining whether an action is likely to modify an occurrence of a threatened ecological community

This guidance note is intended to assist you in undertaking a 'self-assessment' to decide whether your action is likely to modify an occurrence of a threatened ecological community. Your self-assessment should be as objective as possible and based on sufficient information to make an informed judgement.

If you complete a self-assessment and you are still unsure whether the action you propose to take is likely to result in modification of an occurrence of a threatened ecological community then you should refer the proposed action to the department for advice on whether an application, assessment and authorisation are required under the BC Act. This may be done by referring an application to the department for preliminary assessment.

For advice on actions that may modify a threatened ecological community, you may contact the department's threatened ecological communities section in Species and Communities Program by emailing communities.data@dbca.wa.gov.au.



To decide whether or not an authorisation to modify an occurrence of a threatened ecological community is required, you should consider the following:

1. Are there any occurrences of threatened ecological communities located in the area of the proposed action? Note that 'the area of the proposed action' is broader than the immediate location where the action is to be undertaken. Whether there are any occurrences of threatened ecological communities adjacent to, nearby, downgradient, or downstream from the immediate location that may potentially be impacted should also be considered.
2. Considering the proposed action at its broadest scope (that is, considering all stages and components of the action, and all related activities and infrastructure), is there potential for substantial impacts, including indirect impacts, which may result in a permanent loss of species or change to the structure of the whole or part of an occurrence, or destruction of the whole or part of an occurrence of a threatened ecological community?
3. Are there any proposed measures to avoid or reduce the impacts of the action on an occurrence of a threatened ecological community (and if so, is it known with certainty that these measures will be effective in reducing the level of impact below the threshold of 'modification')?
4. Is the proposed action likely to modify an occurrence of a threatened ecological community?

The following provides guidance to address the above matters.

1. Are there any threatened ecological communities located in the area of the proposed action?

The [current list of threatened ecological communities](#) is available on the department's website.


It is the applicant's responsibility to determine whether there are any threatened ecological communities, or other significant environmental values, present at the site where an action is proposed.

The department's Species and Communities Program provides a service that allows applicants to undertake searches to ascertain whether there are any threatened ecological communities (or threatened species) known at a particular location.

Information about [searches of data](#) held in the threatened ecological community database, including the information that should be supplied in an email request, is available on the department's website.

The results of the database search are a guide only to whether occurrences of threatened ecological communities may occur at a site, as the data are dependent on whether there have been prior surveys of the location. The database results should therefore not be regarded as definitive. Surveys in the area where an action is proposed can assist in verifying the results of the database search.

When planning a survey, it should be noted that some key species in a threatened ecological community may only be detectable at certain times of the year. Surveys should therefore be timed appropriately and undertaken by suitably qualified persons. Refer to [Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment](#) and [Technical Guidance -](#)



[Sampling of short range endemic invertebrate fauna](#) by the Environmental Protection Authority, for guidance regarding appropriate levels of expertise for surveys.

2. Considering the broadest scope of the proposed action, is there potential for it to have an impact on an occurrence of a threatened ecological community?

If there are occurrences of threatened ecological communities in the vicinity of your proposed action, you need to consider whether your proposed action might modify all or part of an occurrence of a threatened ecological community.

The proposed action should be considered at its broadest possible scope. This includes all stages and components of the action, all related activities, and all related infrastructure such as roads and powerlines, if applicable.

If the action consists of a series of activities or a number of related activities, you should consider the impacts of each activity, and then consider the combined impacts of those activities.

It is also necessary and important to consider off-site and indirect impacts of your proposed action on occurrences of threatened ecological communities.

3. Are there any proposed measures to avoid or reduce impacts on the occurrence of the threatened ecological community?

It is important to consider the potential environmental impacts of the proposed action early in the planning stage. Careful planning of the action can avoid, or reduce, the likelihood that an occurrence of a threatened ecological community will be modified. Where possible and practicable it is best to avoid impacts. If impacts cannot be avoided, then they should be minimised or mitigated as much as possible.

You should consider impacts on occurrences of a threatened ecological community in relation to the following:


- site selection and the location of structures or activities on the selected site
- the design of any structures or infrastructure
- the timing of the action or its component activities.

However, you should not conclude that modification is unlikely to occur because of management or mitigation measures, unless the effectiveness of those measures is well-established (for example through demonstrated application, studies or surveys) and there is a high degree of certainty about how the impacts will be avoided or the extent to which impacts will be reduced.

4. Are any impacts of the proposed action likely to modify an occurrence of a threatened ecological community?

In order to decide whether an action is likely to modify an occurrence of a threatened ecological community, it is necessary to take into account the nature and magnitude of potential impacts. In determining the nature and magnitude of an action's impacts, it is important to consider matters such as:

- the sensitivity of the environment that will be impacted
- the timing, duration and frequency of the action and its impacts
- all on-site and off-site impacts
- all direct and indirect impacts
- the total impact that can be attributed to the action over the entire geographic area affected, and over time

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- the extent of the impact relative to the area of the occurrence, and the total known occurrences of the relevant community
 - existing levels of impact from other sources
 - the degree of confidence with which the impacts of the action are known and understood.

Indirect and offsite impacts

When considering whether or not an action is likely to modify an occurrence of a threatened ecological community it is relevant to consider all the adverse impacts that will or might result from the action, including indirect and offsite impacts.

Indirect and offsite impacts include:

- 'Downstream' or 'downwind' impacts. For example, impacts on wetlands that are threatened ecological communities from water extraction, altered surface drainage or diversion, sediment, fertilisers or chemicals that are washed or discharged into drainage lines.
- 'Upstream impacts' such as impacts associated with the extraction of water, raw materials and other inputs that are used to undertake the action.
- 'Facilitated impacts' which result from further actions (including actions by third parties) which are made possible or facilitated by the action. For example, the construction of a dam for irrigation water facilitates the use of that water by irrigators, with associated impacts from engineering works (for example culverts). Likewise, the construction of basic infrastructure in a previously undeveloped area may, in certain circumstances, facilitate the urban or commercial development of that area. Other facilitated impacts may include increased predation due to the clearing of access routes through bushland, introduction of plant disease, increased weed incursions due to increased boundary to area ratio of an occurrence, and increased fire frequency in urbanised areas.


Consideration should be given to all the adverse impacts that could reasonably be predicted to follow from the action, whether these impacts are within the control of the person proposing to take the action or not. Indirect impacts will be relevant where they are sufficiently close to the proposed action to be considered a consequence of the action, and they could reasonably be considered by the person proposing to take the action.

It may be helpful to consider the following:

- 'If the proposed action was not going to take place, would the indirect impacts occur?
- Is the proposed action a 'material and substantial' cause of the indirect impacts?
- Are the potential impacts of any subsequent or third-party actions known, or would they be expected to be known, by the person proposing to take the action (particularly where the subsequent or third-party actions are an intended outcome of the proposed action)?

If the answer to these questions is 'yes', then it is necessary to consider whether these impacts are likely to occur, and whether they are likely to modify an occurrence of a threatened ecological community. If so, as much information as possible should be provided to assist the department in determining whether the impacts are relevant, and whether authorisation to modify an occurrence of a threatened ecological community is required.

When deciding whether a proposed action is likely to modify an occurrence of a threatened ecological community, the precautionary principle is relevant. Accordingly, where there is a risk of **serious** or **irreversible** damage, a lack of scientific certainty about the potential impacts of an action cannot be used to justify a decision that the action is not likely to modify an occurrence of a threatened ecological community.



When deciding whether a proposed action is likely to modify an occurrence of a threatened ecological community, you should consider only the adverse impacts that the action is likely to have. Beneficial impacts cannot be offset against adverse impacts. For example, a new residential area may have both beneficial and adverse impacts on the environment; however, only the adverse impacts are relevant when determining whether authorisation is required to modify a threatened ecological community. If a project does require authorisation to modify an occurrence of a threatened ecological community, beneficial impacts are considered during the assessment of the process.

Defining ‘modification’

An action will require authorisation if the action modifies, will modify, or is likely to modify an occurrence of an ecological community listed under the BC Act in any of the following categories:

- critically endangered
- endangered, or
- vulnerable.


Species and ecological communities listed under the BC Act may differ from those listed in other states or territories, or under Commonwealth legislation. This is due to the different status of ecological communities in the different States and Territories and nationally.

The criteria for what constitutes ‘modification’ that are set out in the following pages are intended to assist you in determining whether the impacts of your proposed action are likely to result in ‘modification’ of an occurrence of a threatened ecological community.

The descriptions are intended to provide general guidance on the types of actions that will require authorisation and the types of actions that will not require authorisation. They are not intended to be exhaustive or definitive. If you are still unsure whether the action you propose to take is likely to modify an occurrence of a threatened ecological community, you should refer the action to the department for a decision on whether authorisation is required.

The particular facts and circumstances of a proposed action will need to be taken into account in determining whether the proposed action is likely to modify an occurrence of a threatened ecological community. The general test for ‘modification’ is whether an impact is likely to destroy, or to permanently alter the species composition and/or the structure of the occurrence of the threatened ecological community.

To reduce the risk that an occurrence of a threatened ecological community may be modified as the result of an action, or to mitigate the impacts of an action, the habitat surrounding the community may require protection. This could be achieved by designating a buffer to protect an occurrence of a threatened ecological community from deleterious impacts by facilitating the maintenance of ecological processes and functions within these habitats. Buffers should ideally be determined on a case by case basis as they are related to the characteristics of the threatened ecological communities being protected, and the surrounding land uses. For example, occurrences of a threatened ecological community that rely on a supply of surface water will require a suitable buffer to ensure that water levels and quality in the catchment for that surface water are maintained.




Examples of 'modifications'

Modification of an occurrence of a threatened ecological community is likely to occur by:

- clearing of a substantive portion of an area of native vegetation in which an occurrence of a threatened ecological community is present
- clearing of native vegetation that is habitat necessary for the maintenance of an occurrence of a threatened ecological community
- diversion or extraction of a substantial proportion of the source of the surface or groundwater required to maintain an occurrence of a wetland threatened ecological community
- severe pollution of the groundwater or surface water required to maintain an occurrence of a wetland threatened ecological community.

An action is likely to modify an occurrence of a threatened ecological community if there is a high probability it will have one or more of the following direct or indirect consequences including:

- a major reduction in the extent of an occurrence of a threatened ecological community, such as through vegetation clearing, as measured by:
 - the area of the occurrence destroyed is considered to be significant compared to the size of other occurrences of the threatened ecological community, or
 - the proportion of the occurrence of the threatened ecological community to be destroyed is significant, for example more than 10 percent of the occurrence, or
 - the remaining area of the occurrence of the threatened ecological community will not retain the structure and composition that it had prior to the action
- significant impact to substantial areas of habitat important to the survival of an occurrence of an ecological community that will lead to substantial loss of species or structure of the occurrence of the ecological community
- disruption to the biological, physical or chemical processes that support an occurrence of a threatened ecological community that result in substantial changes to species composition or structure of the occurrence of the ecological community, for example by:
 - major fragmentation or greatly increased fragmentation of an occurrence of a threatened ecological community, for example by clearing vegetation for roads, infrastructure or transmission lines, that can be demonstrated will result in substantial changes to species composition or structure, or
 - major modification or destruction of abiotic (non-living) factors (such as water, nutrients, or substrate) necessary for the survival of an occurrence of a threatened ecological community, such as significant reduction of groundwater levels, or substantial alteration of surface water drainage patterns, or removal of peat substrate in a peat-based wetland system, or
 - disruption of gene flow to, or within, an occurrence of a threatened ecological community causing a decline in, or loss of, functionally important species
- substantial changes in the structure, for example through regular burning or flora or fauna harvesting
- substantial reduction in the quality or integrity of an occurrence of a threatened ecological community that can be demonstrated will result in substantial changes to species composition or structure, including, but not limited to:
 - facilitating a major incursion or increase of invasive species that compete with or otherwise impact key species in the occurrence of the ecological community, or
 - cause major regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which will kill or inhibit the growth of important species in an occurrence of the ecological community, or
 - introduction or significant amplification of dieback disease caused by *Phytophthora* species, or other disease species, in an occurrence of a sensitive threatened ecological community, or

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- interference with the recovery of an occurrence of a threatened ecological community.

Further information on listed threatened ecological communities

Find out more about listed threatened ecological communities, biodiversity management programmes, recovery plans and interim recovery plans on the [threatened ecological communities](#) page of the department's website.

The application, assessment and authorisation process

Application process

If after undertaking a self-assessment you conclude that your action is likely to modify an occurrence of a threatened ecological community, or if you are unsure, you should complete and submit an [Application to the Minister for authorisation under section 45 of the Biodiversity Conservation Act 2016](#) to the department. Substantial penalties apply for taking an action that modifies an occurrence of a threatened ecological community without authorisation.

After the department receives an application, the Minister's delegate will decide whether the action is likely to modify an occurrence of a threatened ecological community:

- If it is determined that the action is likely to modify an occurrence of a threatened ecological community, then the action requires authorisation under the BC Act.
- If it is determined that the action is not likely to modify a threatened ecological community, the applicant will be advised that the action does not require authorisation under the BC Act². Where this is the case, the Minister's delegate will advise the applicant that the action will not modify the occurrence of the threatened ecological community, provided the action is undertaken in the way described in the application. If the action is not subsequently carried out in the manner specified in the application and an occurrence of a threatened ecological community is modified, then it will be an offence under the BC Act.


Applicants will generally be provided with a decision on whether an action requires authorisation within 28 business days of the department receiving all the relevant information.

Assessment and authorisation process

An application for authorisation to modify a threatened ecological community must be submitted on the form [Application to the Minister for authorisation under section 45 of the Biodiversity Conservation Act 2016](#). The application must contain all relevant details necessary to enable an assessment of the likely impact of an action on the occurrence of a threatened ecological community. It should identify whether the impact of the action will result in the destruction of part or all of the occurrence, or permanent change to the species composition or structure over all or part of the occurrence.

An application to modify a threatened ecological community should include a summary of the measures taken to avoid and minimise impacts. The application should also include any proposed measures that may be implemented to reduce the net impact of the proposed action on the threatened ecological community.

² Regardless of whether approval is required under the BC Act, separate environmental assessment and approval may also be required under Commonwealth and/or other Western Australian legislation e.g. Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, *Environmental Protection Act 1986*, *Planning and Development Act 2005*.



The assessment will consider the types of potential impacts discussed above, but it is recognised that each threatened ecological community will have different biotic and abiotic characteristics and risks profiles, and each action will have different impact profiles. Consequently, each assessment will be specific to the situation. An assessment report will be prepared outlining the risks and likely outcomes arising from the implementation of the action.

After considering the assessment report, the Minister or his delegate decides whether to authorise the action, and what conditions (if any) to impose.

Under section 46(2) of the BC Act, the Minister can impose a condition or conditions on the authorisation. These can regulate the manner in which the action is to be undertaken and any further actions that must be implemented during the action to reduce the level of impact on the threatened ecological community.

Sections 46(3) and (4) of the BC Act also provide for the imposition of conditions to mitigate or offset the impact an action is likely to have on the total known occurrences of the threatened ecological community, that is, to reduce the net impact on the conservation of the threatened ecological community due to the action. Conditions for this purpose may require the applicant to do one or more of the following:

- make a monetary contribution towards the purchase of land of conservation value
- transfer, lease or otherwise dispose of land of conservation value to a specified person (including the CEO of the department)
- exchange land of conservation value for other land
- enter into an agreement in respect of land of conservation value for the purpose of conserving and protecting the relevant community or relevant habitat
- take specified measures on land of conservation value for the purpose of conserving and protecting the relevant community or relevant habitat
- provide equipment, facilities, resources or services to assist in the conservation and protection of the relevant community or relevant habitat
- conduct or fund surveys, studies or research in relation to the relevant community or relevant habitat
- prepare and implement, or fund the preparation and implementation of, plans or schemes for the conservation or protection of the relevant community or relevant habitat
- do anything else that is prescribed (noting that the *Biodiversity Conservation Regulations 2018* have not prescribed any additional requirements).

General information

The department does not hold all of the information that may be required to assess an application to modify an occurrence of a threatened ecological community. Local government and other Western Australian government agencies also have a range of information that may be useful, including geographic information.

The sectoral information contained in Appendix 1 is intended to illustrate the application of the definition for modifying a threatened ecological community in relation to specific industry sectors, and should be read in the context of, and in conjunction with, other information in this guidance note.



Appendix 1 – Information for industry sectors

The information below provides more detailed assistance in relation to whether, and in what circumstances, some selected sectoral activity is likely to modify an occurrence of a threatened ecological community.

The examples in this appendix should be read in conjunction with other information in this guidance note and should not be taken to be conclusive.

This information applies to the following sectoral activities:

- urban development
- local government
- mineral exploration, and
- marine activities.

Urban development

Repairing, maintaining, or making alterations to **commercial and domestic buildings and properties** would not be expected to modify an occurrence of a threatened ecological community.

Repairing and maintaining existing distribution infrastructure for **utilities for power, water and sewage** would not normally be expected to modify an occurrence of a threatened ecological community, unless there is a substantial expansion or modification of these utilities.

Establishing a **new subdivision** in an existing suburb, with established infrastructure designed to manage environmental impacts near a threatened ecological community would not be expected to modify an occurrence of a threatened ecological community.

By contrast, establishing a **new subdivision** in the vicinity a wetland threatened ecological community is likely to modify an occurrence of a threatened ecological community if it involves extensive vegetation clearing, clearing riparian vegetation, modifying the flow of water to or within the wetland, or if it will result in significant discharges of pollutants into the wetland.


Building a house on land in an existing subdivision in the vicinity a threatened ecological community would not normally be expected to modify an occurrence of a threatened ecological community.

Proposed urban development for a **housing subdivision or an industrial estate** on an area which contains a threatened ecological community, is likely to result in the modification of an occurrence of a threatened ecological community and authorisation should be sought from the Minister.

Local government

Maintaining existing facilities such as visitor centres and roadside facilities would not be expected to modify an occurrence of a threatened ecological community.

Routine vegetation management to maintain existing roads in or adjacent to a threatened ecological community, would not normally be expected to modify an occurrence of a threatened ecological community.



A proposed **new road** that would require extensive clearing of native vegetation that contains a threatened ecological community is likely to modify an occurrence of a threatened ecological community and authorisation should be sought.

Where **road verge maintenance** is carried out regularly (for example, every one or two years) it would not be expected to modify an occurrence of a threatened ecological community.

Widening an existing road would not normally be expected to modify an occurrence of a threatened ecological community where the road verge has previously been cleared or the vegetation beside the road has been heavily modified. However, if road widening would require removing substantial areas of native vegetation that contain an occurrence of a threatened ecological community, it is likely to modify an occurrence of a threatened ecological community and authorisation should be sought.

Mineral exploration and mining activity

Terrestrial exploration

Surface geological mapping that involves examining rock outcrops and exposures, and which may involve the taking of small samples, would not normally be expected to modify an occurrence of a threatened ecological community.

Surface geochemical sampling, using both regular grid pattern (but not cleared grid lines) and irregular pattern methods to collect small samples, would not normally be expected to modify an occurrence of a threatened ecological community.


Surface geophysical surveys including airborne surveys, gravity, magnetic and electromagnetic surveys, would not normally be expected to modify an occurrence of a threatened ecological community.

Other geophysical surveys that include seismic surveys would not normally be expected to modify an occurrence of a threatened ecological community. However, an action involving seismic surveys (shot hole method or vibroseis) may modify an occurrence of a threatened ecological community if, for example, it is likely to damage habitat important to the survival of a cave-dwelling threatened ecological community.

All exploratory drilling (including new field, wildcat, and appraisal drilling, auger, rotary air blast (RAB), open hole percussion, reverse circulation (RC), diamond drilling and wide diameter drilling), including the construction of drill pads, would not be expected to modify an occurrence of a threatened ecological community where the discharges, emissions and waste from the drilling are contained and managed in an environmentally sensitive manner. Such an action may modify an occurrence of a threatened ecological community where, for example, it adversely impacts on habitat, including where the spacing of cleared grid lines is going to result in the clearing of a significant proportion of an occurrence of a threatened ecological community.

Costeaming and trenching (small scale) would not be expected to modify an occurrence of a threatened ecological community where small trenches are excavated using hand tools. However, an action involving costeaming and trenching (small scale) may modify an occurrence of a threatened ecological community where, for example, it has significant adverse impacts on habitat.

Costeaming and trenching (large scale), surface bulk sampling (such as establishing a trial pit, sinking shafts or driving decline tunnels deep into the target) and underground exploration and development (such as underground sampling, drilling and mine construction): whether or not



these exploration activities are likely to modify an occurrence of a threatened ecological community will depend upon the particular facts and circumstances of the proposed activity. It is necessary to refer to other information in this guidance note to assist in determining when an action is likely to modify an occurrence of a threatened ecological community. For example, if surface bulk sampling occurs in an area that is not in or near an occurrence of a threatened ecological community, and if it is not damaging the habitat of an occurrence of a threatened ecological community, then the proposed exploration activity is not likely to modify an occurrence of a threatened ecological community. However, if the proposed activity will result in major pollution of an occurrence of a threatened ecological community, or clear a large area or proportion of the occurrence, then it is likely to modify an occurrence of a threatened ecological community.

Offshore exploration

Aerial surveys and diving for samples would not normally be expected to modify an occurrence of a threatened ecological community.

Marine activities

Small scale infrastructure projects such as new jetties within an existing port would not normally be expected to modify an occurrence of a threatened ecological community.

Large scale infrastructure projects such as a large pontoon, new aquaculture proposals, construction of a jetty, or a tourist facility (for example, a marina) in or near a threatened ecological community may modify an occurrence of a threatened ecological community.

Expansion of an existing port which requires land reclamation or spoil disposal in or near an occurrence of a threatened ecological community, or which involves modifying an area of important habitat for a threatened ecological community, is likely to modify an occurrence of a threatened ecological community.

Construction of a new port in a threatened ecological community is likely to modify an occurrence of a threatened ecological community.

Dredging of a new shipping channel through a threatened ecological community, or which involves clearing an area of important habitat for an occurrence of a threatened ecological community, is likely to modify an occurrence of a threatened ecological community.

Dredging to maintain existing navigational channels would not normally be expected to have a significant impact on an occurrence of a threatened ecological community where the activity is undertaken as part of normal operations and the disposal of spoil is not in an area of an occurrence of a threatened ecological community.