



Australian Government

Department of Sustainability, Environment,  
Water, Population and Communities

# ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 (CTH)

## Policy Statement

### Translocation of Listed Threatened Species—Assessment under Chapter 4 of the EPBC Act

#### Overview

Translocation of threatened species is often proposed as mitigation, compensation or offset for impacts on a species or its habitat as a result of actions referred under the EPBC Act. Less commonly, translocation may be an action referred in its own right. This Policy Statement provides information relevant to considering such proposals in connection with a referral under the EPBC Act.

#### What is translocation?

Translocation is the human-mediated movement of living organisms from one area with release in another, either to sites where the particular species may already be present, to new sites, or to sites where the animal or plant has become locally extinct. Translocation requires a significant commitment of effort, time and finance. There are two types of translocation: *conservation translocation* and *salvage translocation*.

Conservation translocation is translocation that is necessary or convenient for the conservation of a species or community.

It is usually undertaken by qualified conservation organisations to re-establish an existing population of a threatened or significant species using captive-bred or propagated individuals, or individuals from relatively large and secure wild populations, but is occasionally used in other circumstances as well. Conservation translocation is usually guided by a formal recovery plan or equivalent. Conservation translocation is usually only attempted where there are no lower-risk alternatives for maintaining a species or community.

Salvage translocation involves the relocation of animals or plants from an area adversely affected by development to an area reserved or protected from ongoing impacts. Salvage translocation is usually not effective and in general terms, prospects of successful translocation of individual plants or animals are usually poor. Note that the success of salvage translocation relates solely to its effectiveness in contributing to the long-term conservation of the species or community (see discussion on success, below). The department's experience to date has demonstrated that the understanding

of relevant biological and other factors underlying translocation proposals may be limited, if not completely lacking from these proposals. When the loss of part or all of a population of a threatened species is approved, translocation of individuals may provide some ancillary benefits in terms of research findings. However, as noted below the impacts of the translocation are likely to outweigh any perceived benefits arising from these findings.

It is generally unlikely that a salvage translocation proposal will compensate, in its own right, for impacts of a proposed action. However, in rare circumstances, a carefully developed translocation proposal could contribute to the long-term conservation of the species or community.

## Translocation and the EPBC Act

### Referrals and approvals involving translocation

For actions referred under the EPBC Act, the low success of translocation proposals mean that, unless it can be shown that there is a high degree of certainty that a translocation will be successful in contributing to the long term conservation of the species or community, a proposal for translocation associated with an action will be unlikely to be approved. If an action is proposed that involves translocation proposed as either mitigation, compensation or offset for the impacts of an action, the department will have a comprehensive discussion with the proponent on the likelihood of the translocation succeeding, particularly the measures the proponent will take to be confident of long term success as defined below.

In relation to approvals (section 133) the high risks associated with translocation proposals generally means that, unless it can be shown that there is a high degree of certainty that a particular

translocation attempt will be successful, the proposed removal of individuals of a species from a site should usually be considered as equivalent to the complete loss of those individuals. It would not be expected that a proposed translocation would be successful, and translocation should not be contemplated unless there is clear evidence that demonstrates a high probability of long-term success. Without such corroborated evidence or justification it is unlikely that all the relevant impacts of the translocation will have been considered. It also should be noted that the level of risk or likelihood of success associated with a proposed translocation is not usually diminished by increasing the size and scale of a translocation activity. Increasing size or scale may actually increase the impacts of the activity.

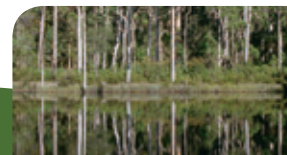
It must be noted that a proposed translocation may increase total impacts through additional impacts at the target site (see below, 'Potential additional impacts of translocation').

Translocation may interact with the EPBC Act referral and assessment process in a range of ways, including:

### 1. Where a translocation proposal is referred as an action in its own right

Cases in which translocation is referred as an action in its own right—without being part of a development proposal—will arise infrequently. In most circumstances this will arise only where there is a need for conservation translocation.

For the purposes of deciding whether a proposed action is a controlled action (section 75) the decision-maker is not able to consider any beneficial impacts of the translocation (subsection 75(2)). The central question in relation to a controlled action decision on a stand-alone conservation translocation proposal is therefore: '**Will the translocation have a significant adverse**



**impact on a protected matter?** Please note that, although 'significant impact' is not defined in the EPBC Act, the Federal Court confirmed in 2001 that a significant impact is an impact that is important, notable, or of consequence having regard to its context or intensity—Booth v. Bosworth [2001] FCA 1453 (17 October 2001), Branson J, (paragraphs 96–99). (See also the department's Significant Impact Guidelines 1.1: Matters of National Environmental Significance, which are available at [www.environment.gov.au/epbc/publications/nes-guidelines.html](http://www.environment.gov.au/epbc/publications/nes-guidelines.html))

For the purposes of deciding whether to approve a stand-alone translocation proposal (section 133), the central question is: **'Are the impacts of the translocation proposal acceptable?'** For example, the potential loss of some individuals as a result of the translocation might be outweighed by the potential conservation benefits of securing an important genetic unit that was at risk of loss. Among the factors to be considered are the proportion of reproductively mature individuals proposed to be removed, the species' reproductive cycle and rate, the security of new and existing populations and the potential impacts of the translocation. (See definition of success, below, noting that these factors are by no means exhaustive.)

(For a discussion of the potential impacts of translocation see below, 'Potential impacts of translocation'.)

## 2. Where translocation is proposed as mitigation

Salvage translocation may be proposed as offering the potential to mitigate (rather than compensate for) the impacts of a proposed action. However, the generally poor outcomes achieved for target species to date means that translocation proposals must be assessed very thoroughly in terms of its effectiveness at making a contribution to the long-term conservation

of the species or community. This consideration must take into account the substantial risk of potentially significant impacts on habitat, resident target species, and other plant or animal species, at the site to which the target species is being moved. As noted previously, this can increase the number of potentially adverse impacts arising from a proposed action.

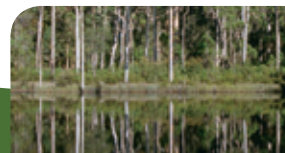
## 3. Where translocation is proposed as compensation for the impacts of a proposed action (including as an offset)

Translocation is sometimes proposed as compensation for the impacts of or to offset the residual impacts of an action on a matter protected under the EPBC Act.

The EPBC Act environmental offsets policy outlines the use of offsets to compensate for an action's residual significant impact that remain after avoidance and mitigation measures have been considered. This policy includes the principle that suitable offsets must effectively account for and manage the risks of the offset not succeeding.

This principle is particularly relevant for compensation involving translocation, given the high levels of risk associated with the majority of translocation proposals. However, where translocation is proposed to compensate or offset an impact on a protected matter the net effects (incorporating the impacts and benefits of the translocation) of this translocation should be added to or weighed against the impact of the action.

The usually low prospects of achieving an ecologically beneficial salvage translocation mean that it usually represents poor compensation for the potential impacts of a proposed action. Additionally, a translocation proposal can increase the impacts of an action. Accordingly, the total impacts of the action, including those of any proposed translocation should be considered together as one action for the purposes of assessment and approval under the EPBC Act.





This approach best allows for the impacts of both the proposed development and the translocation to be assessed in a comprehensive and holistic way, and for all impacts of the proposal to be weighed against social and economic considerations in making a decision on whether to approve the taking of the action. As noted above, salvage translocation proposed as mitigation or that intended to compensate for or offset for the residual impacts of a proposed action may actually increase the impacts of that action, not reduce them.

Again, for the purposes of a controlled action decision at the referral stage (section 75), any benefits of translocation as compensation or as an offset cannot be considered. The central question in relation to a controlled action decision for a proposal that includes translocation is therefore: **'Will the proposed action have a significant adverse impact on a protected matter?'** (Please also note the reference above to the Federal Court's confirmation of the meaning of 'significant impact'.)

For the purposes of an approval decision (section 133), the decision-maker must consider any matters relevant to a protected matter as well as social and economic considerations. The central question in relation to an approval decision on an action that includes translocation is: **'Considering all relevant factors, are the impacts on protected matters of the whole proposal acceptable?'**

#### 4. Where translocation is made a condition of an approval

In rare cases where there is a high likelihood of success, translocation may be required as an offset and included as a condition in the approval instrument (section 134), for the taking of an action. Such a condition should be contemplated only where the translocation constitutes conservation translocation (as described earlier), a high likelihood

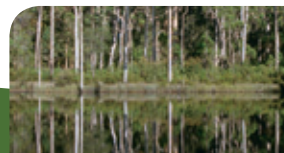
of long-term success has been demonstrated, and where the translocation has been shown to meet the requirements of state or territory legislation and policies on the collection, movement and handling of relevant flora and fauna. Where it has been determined that translocation is necessary and/or convenient for the conservation of a species (i.e. the proposal constitutes conservation translocation as described earlier), the main focus of an approval condition should be to ensure that the translocation accords with any plans for the conservation of the species, meets the requirements of state or territory and national guidelines for translocation, and takes account of the requirements of any applicable state or territory legislation.

(For general information on factors that are critical to the success of translocation, see below, 'Factors critical to translocation'.)

#### 5. Relationship between EPBC Act and state or territory approval processes

In most cases, even if Commonwealth approval under the EPBC Act is given to a proposal that includes translocation, a proponent would also have to obtain authorisation for the translocation attempt under state/territory environmental regimes. Conversely, an authorisation by a state or territory agency to undertake translocation does not indicate that a similar condition of approval should be applied for the purposes of the EPBC Act, in part because of the different objectives of the Act and state or territory legislation.

A translocation proposal would not usually be made a condition of approval, or form any part of a mitigation or compensation (offset) arrangement until it can be confirmed that the translocation is consistent with State and Territory law, and is generally supported by the relevant state or territory conservation agency.



## Section 517A exemption under the EPBC Act

Where translocation is undertaken, section 517A of the EPBC Act provides for an exemption from offence provisions of the EPBC Act for causing a significant impact on translocated individuals. Such an exemption would normally only be considered for conservation translocation and in limited circumstances. For example, where the only site for translocation of a species has continuing activities that may cause a significant impact on the translocated species, an exemption is likely to be required.

This allows the decision-maker to give a written exemption for activities that might impact on a protected species that has been translocated into an area. This avoids the offence provisions applying to situations where a translocated protected species might subsequently be harmed by an activity in that area. This avoids a person inadvertently breaching the EPBC Act when their intention is to promote the survival of a species.

The decision-maker must be satisfied of a number of matters before granting any exemption under section 517A. These include:

- that members of a species have been translocated for the purpose of contributing to the conservation of that species;
- that an activity carried out in the translocation area will or might have an incidental impact on individuals or the habitat of the translocated species; and
- that the person conducting the activity in question has agreed to the introduction of the members of the species into the area (where this is a different person to the one who conducted the translocation).

## Potential impacts of translocation

### Impacts on translocated animals/plants

As noted above, unless the translocation proposal constitutes conservation translocation, the removal of individuals of a species from a site would usually be treated as the complete loss of the individuals. That is, the likely level of impact should be treated as the same as if the individuals had been destroyed, or in some circumstances possibly greater where there is no chance of re-colonisation of the habitat in future.

Generally speaking, impacts will be relatively greater or more significant in cases where the animal or plant being translocated belongs to a species with a very small population or is of critically endangered or endangered status. In such cases, the translocation of perhaps even a single individual could result in a significant impact on the species.

The chance of significant adverse impacts on an individual and its species is also increased where the prospects of a successful translocation for a particular species are known to be poor, or are uncertain.

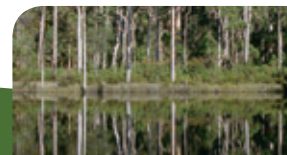
### Impacts at the translocation site

Translocation can impact not just on the individuals being translocated but also on the habitat and individuals of existing populations and other species at the translocation area. The ecosystem of the translocation area can also be generally affected.

Potential impacts at the translocation site include:

#### Competition with other individuals

Introducing new individuals of a species into a habitat or population is likely to result in negative interactions. In most cases, habitats are fully occupied, and are at carrying capacity. The



introduction of new individuals is likely to result in the reduction in health of the existing population, or simply the death of individuals proportionate to the number of individuals being introduced.

#### Effects on other species, communities and ecological processes

The introduction of new species into an environment results in a series of cascading interactions. Some are direct, like the effect of an introduced predator on resident prey species. Indirect impacts can be extremely varied. For example, a plant species can introduce chemical inhibitors into the soil, changing the occupation of naturally-occurring plant species. Indirect impacts are extremely varied and very difficult to predict. If all potential interactions and their impacts are not fully known or the recipient site has any values that need to be retained, then caution should be exercised. Therefore, a comprehensive assessment of these interactions and impacts is clearly required to enable the informed consideration of a translocation proposal under the EPBC Act.

#### Establishment of pest populations

Pest populations can occur as a result of a population being too successful in establishing itself at a translocation site, following the release or escape of non-endemic or exotic organisms. In most cases this could occur by:

- (a) a population of the organism being translocated (if it did not originally occur on the site); or
- (b) a population of a second organism that was inadvertently translocated with the primary organism—for example, a parasite attached to the translocated species or contained in the transport medium.

Pest populations can have a range of adverse effects on native animal communities, including competition, predation and environmental modification. An assessment of the ability of a translocated species to establish pest populations is an essential component of the informed consideration of a translocation proposal referred under the EPBC Act.

#### Introduction of pathogens

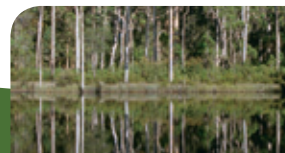
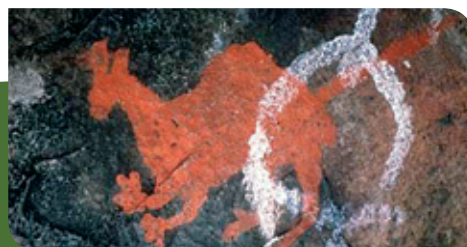
Translocation presents a risk of introducing exotic pathogens (such as fungi, bacteria, viruses and internal and external parasites) into the translocation site and the subsequent infection of existing species. The translocation of endemic pathogens to new areas is also a concern. For example, translocation of plants and soils from a known *Phytophthora* (an introduced fungus causing root rot and dieback) area to an area free of *Phytophthora* would require careful risk management such as the application of strict hygiene measures.

A population that is exposed to a new pathogen may be particularly susceptible, and it is common for this to result in mass mortalities. The effects may be increased if the population is already stressed through, for example, habitat degradation.

#### Potential impacts on genetic diversity

The mixing of individuals from different populations can lead to out-breeding depression, which is a reduction in fitness caused by mating among individuals adapted to different environmental conditions. Conversely, in species with small or isolated genetic units, genetic exchange may have a higher chance of increasing genetic fitness regardless of outbreeding depression or other risks.

This risk can be minimised by ensuring that the translocated is guided by the input of an experienced population geneticist.



## Factors critical to successful translocation

Although many translocation activities have claimed short-term success, as noted above, published analyses of translocation outcomes have shown low rates of long term success, and generally low rates of short term success.

Long term success for translocation means that the action has resulted in a net improvement of the conservation outlook for the species (or ecological community) as a whole. Translocation success can be characterised by:

- the individuals involved are of measurable value to the long term conservation of the listed entity (sometimes including their genetic value—see Weeks et al 2011); and/or
- the post-translocation outcome is of measurable value to the long term conservation of the listed entity; and
- this value is likely to be retained for 50 or 100 years without management input (i.e the risk that this value will diminish without active management is very low)

Key considerations in evaluating the long term success are: the genetic, demographic, and size parameters of populations; the security and relative contribution to the conservation of the entity as a whole, and the nature and sustainability of the population's long-term interaction with the receiving environment.

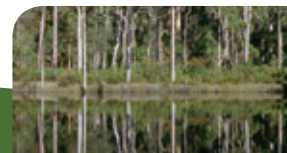
Note that the fate or welfare of individual organisms is not relevant to the evaluation of success, except for their contribution to the long-term conservation of the listed entity.

The IUCN (International Union for Conservation of Nature) guidelines for re-introduction, or translocation, programs point out that such programs are always 'lengthy, complex and expensive' processes. Some translocation attempts associated with development proposals have been poorly planned implemented and monitored. They are often limited by inadequate resources and restricted timeframes, and the results of monitoring rarely feed back into the decision making process.

The following considerations for helping ensure a higher likelihood of successful translocation are informed by the 'IUCN Guidelines for Re-introductions', (IUCN/SSC Re-introduction Specialist Group, IUCN, Gland, Switzerland and UK, 1998) and are intended as a guide only. These guidelines were developed for people undertaking re-introduction or translocation efforts, such as scientists. As such, the activities listed below are practical and general considerations only; they do not directly take into account legal or policy factors specific to the EPBC Act and other Australian considerations discussed above.

Translocation efforts should be guided by:

- (a) A clear aim and objective to directly support the conservation of the target species or community and to establish or maintain one or more self-sustaining populations and requiring minimum long-term management.
- (b) A multidisciplinary approach that draws on expertise relevant to the species' or community's conservation needs, and specialist technical input relevant to the factors affecting success..
- (c) Pre-project activities including feasibility study and background research, research of previous introductions, appropriate choice of release site, evaluation of release site, availability of suitable release stock.





- (d) Consideration of socio-economic and legal requirements. Translocation attempts are usually long-term commitments that require long-term financial, community and proponent support, in addition to governmental approval. This could require, for example, assessment of the attitudes of local people to the proposal, as well as applicable legal regimes. This would also include an evaluation of the legal status of the land and associated habitats as well as the identification of a party responsible for the implementation of long-term land and biodiversity management actions. For example, the selection of an appropriate release site will include considering factors such as whether the site is likely to be subject to sale, increased activity or development over the longer-term.
- (e) Planning, preparation and introduction stages. Distinct and well-planned phases should ensure, for example, that all relevant approvals from governments and land-owners are obtained; that a multidisciplinary team is assembled with all required skills; that short- and long-term indicators of success have been identified; that long-term funding is secured; and that appropriate monitoring programs are in place.
- (f) Post-release activities. Post-release monitoring is a vital element of any translocation effort. This can include ecological and behavioural studies of the release stock; interventions (such as supplemental feeding), where necessary; habitat protection; and decisions on revision or discontinuation of the program.