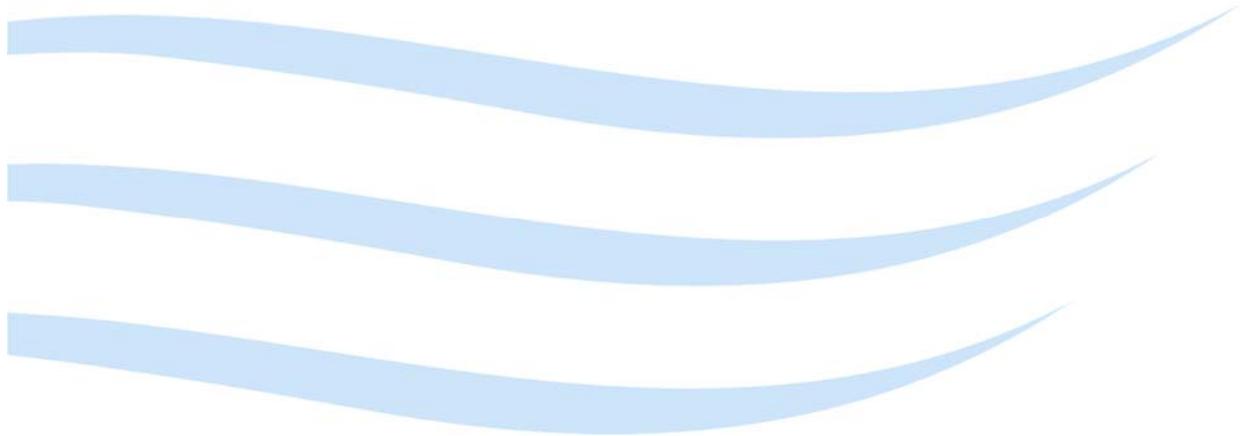


Guidelines for Establishing Offsets for Impacts on Natural Values within the Dam Assessment Framework



Approval guidelines issued pursuant to section 142 of the *Water Management Act 1999*

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Department of Primary Industries, Parks, Water
and Environment



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Department of Primary Industries, Parks, Water and Environment
GPO Box 44
Hobart TAS 7001

Phone: 03 6165 3222
Email: Water.Enquiries@dpiuwe.tas.gov.au
Home Page: <http://www.dpiuwe.tas.gov.au/water>

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I. INTRODUCTION

The *Water Management Act 1999* (the Act) provides for the sustainable management and allocation of Tasmania's water resources. Part 8 of the Act regulates dam works and provides for the issuing of dam works permits which authorise the undertaking of dam works. Part 8 of the Act provides two pathways to obtaining a dam works permit. The first pathway provides for a Division 3 permit, obtained through an application and assessment process. The second pathway provides for a Division 4 permit, with no application necessary. These Guidelines do not relate to Division 4 permits.

The Minister's consideration of a Division 3 permit application amongst other things, requires the mitigation or offsetting of any adverse impacts that may result from the dam works to be taken into account. This includes assessing the potential impact of a dam works proposal on natural values and the measures proposed to mitigate any such impact. The Minister may also determine that a Division 3 permit is subject to conditions regarding the conservation and protection of natural values and offset measures and the requirements associated with offset measures.

In determining a permit application, the Minister is to act consistently with any relevant approval guidelines. Accordingly, to support the consideration of applications for Division 3 permits, these *Guidelines for Establishing Offsets for Impacts on Natural Values within the Dam Assessment Framework* detailing how "offsets", being one such mitigation measure, are developed and assessed have been issued pursuant to section 142 of the *Water Management Act 1999*.

The purpose of these Guidelines is to:

- to guide the Minister in fulfilment of his or her statutory responsibilities; and
- to ensure consistency with other statutory processes of a similar nature; and
- to provide transparency for dam proponents and other interested parties in how these issues will be considered by the Minister.

Under section 10 of the Act, the Minister has delegated his powers and functions under the Act to various officers within the Department of Primary Industries, Parks, Water and Environment (DPIPWE), including powers relating to the consideration and granting of dam works permits under Part 8 of the Act. Reference in this Guideline to the 'Minister' is taken to include any officer within DPIPWE who has been delegated the relevant Ministerial powers.

2. OFFSETS WITHIN THE DAM ASSESSMENT FRAMEWORK

The dam approval process established under the *Water Management Act 1999* is part of the Resource Management and Planning System for Tasmania (RMPS).

The objectives of the RMPS include promoting “sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity.”

The RMPS definition of sustainable development includes “avoiding, remedying or mitigating any adverse effects of activities on the environment.”

Offsets are one form of mitigation for the potential impacts of dam works proposals on natural values. They are actions that contribute to the conservation of natural values outside of the development footprint, and can include reservation, active management, and other actions that demonstrate a conservation benefit for a particular natural value.

Offsets operate within a “mitigation hierarchy”, where the first consideration of an environmental assessment is whether impacts can be avoided or minimised, followed by remedying of the impacts on site, followed by mitigation options within the footprint area of the dam works development, followed by offsetting some or all of the residual impacts, as appropriate.

Offsets should aim to address some or all of the residual impacts of a proposal, as appropriate. Offsets should be designed and approved in accordance with these Guidelines and the principles therein.

Where there would be substantial residual impacts on natural values from a dam works proposal that cannot be offset in accordance with these Guidelines, a dam works permit would not normally be granted.

There are several types of offsets that are suitable for the dam approvals process. The main types are:

- improved reservation of a site, such as through conservation covenants, transfer of land to the Crown for reservation, or formal management agreements;
- management actions that aim to benefit specific natural values at an existing site;
- restoration or revegetation of sites to provide a direct conservation benefit, such as the creation of foraging habitat for a threatened species or actions facilitating the recovery of areas with the potential to revegetate naturally; and
- where lack of knowledge is considered a threat to a specific natural value, or as part of an offset package, agreed actions to increase knowledge regarding that natural value may constitute an offset if the actions aim to increase protection or viability.

Details of these types of offsets are provided in section 3.2.3 below.

Offsets may endure beyond the undertaking of dam works. And where a Division 3 permit is granted with a condition that a certain type of offset be registered, the permit holder will be required to register that offset with the Secretary (depending on the individual circumstances either prior to the commencement or completion of the dam works). Under section 164P of the Act, the Secretary is to establish and maintain a register of offsets. Offsets may also be formalised under another legal agreement under another statutory mechanism.

3. OFFSET PRINCIPLES FOR DAM ASSESSMENTS

3.1 INTRODUCTION

These policy principles act as a clear guide for the Minister in determining appropriate offsets for dam works proposals. Any expert advice provided to the Minister in relation to offsets should be in accordance with these principles.

Proponents should propose offsets that aim to meet these general policy principles. In exceptional circumstances, where offset proposals that meet these principles have not been proposed, the Minister may also enter into negotiations regarding offsets, and accept alternative offsets that the Minister considers appropriate and that meet the offset principles.

3.2. PRINCIPLES

The following principles are described by category. Depending on the specific dam works proposal under consideration, a subset of the principles will be relevant to the decision.

3.2.1 General design of offsets

Mitigation hierarchy

- Offsets can act as a form of mitigation for the residual impacts of a dam proposal on natural values. Alternatives and options to avoid, minimise and remedy the impacts of the proposal must be adequately addressed prior to the consideration of offsets. It is recognised that opportunities for remediation may be less for dam works proposals than for many other types of development.

Staged Developments

- For staged developments, for example, the planned construction of a series of dams at one location or a dam development associated with clearing of land for irrigation development, proponents should provide details of the whole proposal early in the process to allow for a single assessment wherever possible. This will normally provide better conservation outcomes and greater certainty for the proponent. Any offsets that are required can be implemented either up-front, or in a staged manner in accordance with approvals for each stage of the development.

Conservation outcomes

- Proposed offsets should aim to maintain or improve conservation outcomes, and offsets should generally be for the same species, native vegetation community, or other natural value that is to be adversely impacted.
- A greater magnitude of offset is generally required for impacts on natural values on sites that are protected or managed for nature conservation, including formal reserves and public lands that are managed for natural values. Impacts on these sites cause a decrease in the protection or reservation status of those natural values. For impacts in public reserves, wherever possible the offset should provide outcomes within the reserve system.

3.2.2 Location of offsets

On-property offsets

- Where offsets will occur on the same property as the proposed dam works, the overall conservation outcomes for natural values on the property may be considered in determining appropriate offsets, including existing reservation and formal management arrangements.
- Offsets should contribute to well-designed proposals and property management planning that takes account of impacts on natural values and the potential for achieving genuine conservation gains at a property or landscape level. This includes providing for the recognition of land management practices which provide positive environmental outcomes.
- In general terms, conservation actions (such as a covenant) that have received substantial funding from other sources will not be considered as an offset for a development proposal.

Off-site offsets

- Where it is not practical for offsets to be provided on the site or property where the impact will occur, consideration may be given to other proposed locations for offsets. Preference should be given to locating the offset where the greatest conservation gains can be made at a bioregional or State level.
- In such cases where the proposed offset was not on land currently owned by the dam proponent, the proposal would need to demonstrate how the dam proponent was intending to ensure that the offset could be effectively implemented and maintained.
- Offsets can be used to reserve and manage sites of high conservation value, and provide opportunities to achieve genuine conservation gains in areas that are more viable than the impacted site or are identified as strategic priorities.
- For reservation of sites that are identified as a priority in a planning tool such as a recovery plan, the whole site should be reserved wherever possible. This is because assessments of viability and management are implicit in identifying these sites, and a smaller area is less likely to be viable in the long-term.

3.2.3 Offset Mechanism

General mechanisms

- Offsets must be designed to meet conservation priorities or to address known threats for specific natural values. Flexibility will be incorporated into the appropriate offset mechanism/s to the extent that the offset principles are met.
- A package of individual offsets may be approved where this will achieve conservation outcomes that are consistent with this principle.
- In general terms, offsets can include:

- improved reservation of a site, such as through conservation covenants, transfer of land to the Crown for reservation, or formal management agreements;
- management actions that aim to benefit specific natural values at an existing site;
- restoration or revegetation of sites to provide a direct conservation benefit, such as the creation of foraging habitat for a threatened species or actions facilitating the recovery of areas with the potential to revegetate naturally; and
- where lack of knowledge is considered a threat to a specific natural value, or as part of an offset package, agreed actions to increase knowledge regarding that natural value may constitute an offset if the actions aim to increase protection or viability.

Reservation

- For offsets involving reservation, the size, condition, context and viability of the impacted site and the offset site should be compared. The assessment should consider the management requirements of the natural values involved and the expected outcomes of any management actions that form part of the offset.
- For threatened species and threatened native vegetation communities, the 'size' is the number of individuals in the population to be lost (or protected through an offset), or the area of habitat or native vegetation community that will be lost (or protected through an offset).
- Where reservation forms the major part of the offset, the offset site should protect natural values of a magnitude at least as large as that lost and maintain or improve the condition and/or context of the site.
- In general terms, offsets should last for the duration of the impact. Where reservation is required as part of an offset, and the proposal results in the loss of the natural values in perpetuity, which is usually the case for dam works, the offset must protect the site in perpetuity.

Restoration and revegetation

- Restoration and revegetation of complex ecosystems or threatened species populations through planting or translocation will generally need to be done in advance of the development to ensure success of these actions. There may be exceptions where a genuine conservation gain can be demonstrated and the level of risk is considered to be acceptable.
- Restoration or revegetation should include a performance-based measure.
- Where restoration or revegetation is used as an offset and there will be a significant time lag between the impacts of the proposal and the creation or improvement in condition of the site, the offsets should wherever possible include some actions with short-term results.

Management actions

- Where specific management actions are likely to be required to ensure the viability of an offset site in the long-term, the offset should include the necessary management actions.

- Where appropriate, adaptive management can be agreed, with monitoring used to review the required management actions at appropriate intervals.
- Management actions that form part of a dam works approval should require reporting at appropriate intervals. The nature, frequency and responsibility for management actions and reporting should be clearly specified in the dam works permit or other legal mechanism established as a condition of a dam works permit.
- Where a third party will be carrying out management actions as part of an offset, any required funding for management should be provided by the proponent up-front or at intervals by agreement, as part of the offset.

Knowledge-based actions

- Knowledge-based actions are appropriate for some threatened species, geodiversity and other natural values, where knowledge gaps are recognised as a conservation priority for those values.
- Knowledge-based actions should only be used in conjunction with other actions as offsets for vegetation communities.
- Actions for the purposes of increasing knowledge may include research that addresses conservation priorities for the natural values. Examples may include research that is identified as a priority in a recovery plan, or surveys to determine the likely extent of a value where there are significant knowledge gaps that lead to difficulties for the protection and management of that value.

Threatened species

- Where loss of threatened species populations is likely to be unavoidable and there are substantial residual impacts identified, the offset should, where possible, include outcomes for threatened species populations, rather than for potential habitat only.

Threatened communities

- Offsets for threatened native vegetation communities should be based on reservation and management of threatened native vegetation communities elsewhere. The offset may include some regeneration of adjacent areas to be protected within the reserved area where it is likely that a viable extension to the native vegetation community will result (e.g. fencing to exclude grazing). This aims to account for the loss of extent of the native vegetation community due to the proposal.

3.2.4 Relationship to other approvals and legal mechanisms

Legal mechanisms

- Offsets must be legally enforceable as a registered offset (in accordance with Division 8 of Part 8 of the Act) or another legal mechanism established as a condition of a dam works permit and should have outcomes that are certain.
- Offsets that form part of a dam works approval should be linked to a legally enforceable mechanism prior to the impacts on natural values commencing, such as through tenure,

management agreement or consent conditions. The approval should include a time frame for implementing the offset/s.

Previous approvals

- Where offset-like actions have been required under a regulatory process, these will not be considered as an offset for any future dam works proposal. However, additional offset actions may occur on the same site if it can be demonstrated that an environmental benefit would occur, such as active management of the area.
- If a subsequent dam development proposal will impact on an existing offset, the values that were protected under the offset may not be further impacted upon without additional offsetting. Additional offsets will need to adequately address the impacts of the current proposal and the impacts on the offset provided under the original proposal.

3.2.5 Information Requirements for Assessment of Dam Works Permit Applications

- The best available information shall be used in the assessment of the impacts of a proposal on natural values and the determination of appropriate offsets.
- Proposals should include adequate information on the natural values at the impacted site and at any proposed offset site.
- Proposals must clearly define the impacts that are being offset. Where the impacts on natural values cannot be fully described or quantified, a risk assessment should be undertaken.
- Proposals should specify the conservation requirements of the natural values (e.g. breeding and foraging habitat or management requirements for threatened species), to aid in determining appropriate offsets.
- Information derived through the application and assessment process that adds to the records of natural values on a site will form part of the assessment of the proposal. Provision of this new information is not considered to be an offset. However, other research may be used as an offset in some cases.
- If a proposal is modified and additional impacts will occur, the proposal should be reassessed.
- Relevant information may be provided as part of the application for a dam works permit or in response to a Notice issued by the Minister under section 149 of the *Water Management Act 1999*.

4. OFFSETS GUIDANCE FOR THE DAM ASSESSMENT PROCESS

4.1 REQUIREMENT FOR AN OFFSET

The following thresholds provide guidance on situations where offsets would normally be required for a particular dam works proposal that impacts on threatened native vegetation communities and/or threatened species. Each proposal will vary in terms of the type and scale of impacts, and the following thresholds are not intended to be an exhaustive list of all situations where an offset may be required.

Any proposal that would result in one or more of the following thresholds being triggered would normally require an offset that contributes to the conservation of the same threatened native vegetation community or a threatened species.

Offsets must be designed to address conservation priorities for the specific threatened species and/or communities involved.

The thresholds in bold text would normally require *formal reservation* as part of an offset package, unless it can be demonstrated that other types of offsets (such as active management or research) would deliver a better conservation outcome for that particular value. For the thresholds in normal text, other actions such as a management agreement for the offset area may be sufficient rather than formal reservation. This determination would be based on expert assessment and informed by tools such as Recovery Plans. The requirement for additional reservation as an offset is generally based on the type and scale of impact involved.

For threatened species, there are three categories of threat status – from highest to lowest these are *endangered*, *vulnerable* and *rare* species. Due to their higher threat status, certain impacts on *endangered* species will trigger the requirement for an offset where there is no corresponding requirement for an offset for *vulnerable* and *rare* species.

1. Clearance and conversion of an area greater than '1 hectare' of a threatened native vegetation community.
2. **Clearance and conversion of an area greater than '5 hectares' of a threatened native vegetation community.***
3. Clearance and conversion of a wetland that is listed in the CFEV database as of high or very high conservation management priority.
4. **Clearance and conversion of a wetland listed on the Directory of Important Wetlands in Australia.***
5. **Adversely impacts a geographically or otherwise distinct group for an endangered species.***
6. **Adversely impacts a location known to be important to the survival of an endangered species, including known nesting, breeding and foraging sites.***

7. Adversely impacts a geographically or otherwise distinct group of a rare or vulnerable species that is considered 'viable' at the site, and contributes to the viability for that species at a local, regional or State level.
8. **Adversely impacts more than '5 %' of the known State population (total number of individuals of the species capable of reproducing offspring) for a threatened species.***
9. Adversely impacts a known location for a threatened species that has '50 or fewer' known locations in the State.
10. **Adversely impacts more than '5 hectares' of known habitat for a threatened species where that habitat is not common or widespread.***
11. **Adversely impacts individuals of a threatened species within a reserved area on either public or private land. Note – management actions within the reserve system may be a more appropriate offset than additional reservation in some cases, such as where a small area or small number of individuals is affected.***
12. Adversely impacts an area that is declared as 'critical habitat' under Section 23 of the *Threatened Species Protection Act 1995*.
13. Adversely impacts a site that has been identified as important for a threatened species (e.g. in a planning tool such as a recovery plan).
14. Adversely impacts a site that is listed in a commitment that is binding on the Government, such as a bilateral, national or international agreement or planning tool arising from such an agreement (e.g. a Ramsar Wetland site).
15. Adversely impacts a site, which on the basis of the best available information, has been identified as important for a threatened species or native vegetation community (e.g. the largest known population of that species in the State).
16. Substantially reduces the ability of a threatened species to survive at a site after physical changes to the site characteristics or changes to management regimes (e.g. the creation of barriers to dispersal or alteration of drainage regimes), where the species would otherwise be considered viable at that site.

*Thresholds for which formal reservation of an offset would normally be required.

4.2 LIMITS TO USE OF OFFSETS

The following thresholds provide guidance on situations where, in the absence of a significant socioeconomic benefit at the regional or broad community scale, the impact of a proposal on natural values would normally be unacceptable, and the application for a dam works permit may be refused. Where the triggering of one or more of the following thresholds is determined from survey work at the proposed dam site, the dam proponent should contact the Department prior to undertaking further investigative work on the proposal.

Each proposal will vary in terms of the type and scale of impacts, and the following thresholds are not intended to be an exhaustive list of all such situations.

1. Clearance and conversion of more than '5 %' of the Statewide distribution of a threatened native vegetation community.
2. Clearance and conversion of an area equal to, or greater than, '15 hectares' of a threatened native vegetation community. Note - For vegetation communities that typically occur in much smaller or larger patch sizes than 15 hectares, a different area may be a more appropriate threshold.
3. Clearance and conversion of a native vegetation community that would cause it to qualify for a threatened status.
4. Adversely impacts more than '5 %' of the State population (total number of individuals of the species capable of reproducing offspring) or predicted population inferred from the number of locations, for an endangered species or more than '10 %' of the State population or predicted population inferred from the number of locations, for a rare or vulnerable species .
5. Adversely impacts more than '5 %' of the area of known habitat for an endangered species.
6. Adversely impacts more than '10 %' of the area of known habitat for a rare or vulnerable species.
7. Adversely impacts a reserved location of a species, where that species would otherwise be considered viable at that site, and that species has '5 or fewer' reserved locations within Tasmania's CAR reserve system, on public and/or private land.
8. Adversely impacts the majority or the entirety of an area that is declared as 'critical habitat' under Section 23 of the *Threatened Species Protection Act 1995*.
9. Adversely impacts a species in such a manner to qualify it for listing as a threatened species or a change in its conservation status to a more threatened status.
10. The loss of the majority or the entirety of an area, or the significant fragmentation of an area, which has been identified as important through a recognised Government process for a threatened species or vegetation community, for example by a planning tool such as a recovery plan).

11. The loss of the majority or the entirety of an area, or the significant fragmentation of an area, which has been identified as an important population or site in a commitment that is binding on the Government, such as a bilateral, national or international agreement, a Ramsar wetland or planning tool arising from such an agreement.