

# Guideline for Feasibility Study

PII Resource Kit for Invasive Plant Management



## **GUIDELINE FOR FEASIBILITY STUDY**

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## 1. PURPOSE

- These Guidelines are to be used by Project Staff conducting invasive species management projects based on the PII Project Process.
- The Guidelines provide help and advice on undertaking a Feasibility Study.

## 2. THE FEASIBILITY CRITERIA

- The options for invasive species management are: Prevention, Eradication, Control (containment, control to a defined level (often zero density), biocontrol).
- Prevention is addressed within the Guideline for Biosecurity.
- To be successful, an invasive species management project must fulfil 7 criteria:

Criteria	Explanation
Technically feasible	<p>Always use the least harmful treatment method.</p> <p>Can the method(s) to be used at the project site:</p> <ol style="list-style-type: none"> <li>1) Permanently remove all individuals (eradication)               <ol style="list-style-type: none"> <li>i) Reach every individual of the target species (i.e. no survivors)</li> <li>ii) Kill or remove the target species faster than its ability to reproduce even if its rate of reproduction increases to a maximum for the species.</li> </ol> </li> <li>2) Keep target populations to a specified density (control) forever?</li> </ol> <p>Any logistical challenges due to location, terrain or vegetation must be solvable.</p> <p>If there are multiple target species, these conditions must be met for all species.</p>
Sustainable	<p>For Eradication - Can you prevent re-invasion?</p> <p>For Control – Can you keep the population at specified-density forever?</p> <p>It is necessary to ensure that a population does not re-establish itself, and no new invasive species invade the site, once the operation has removed the target species.</p>
Socially acceptable	<p>Does the project have full support from the community and site users?</p> <p>Community support is vital if the project is to succeed.</p>
Politically and Legally acceptable	<p>Will you be able to secure all required permits and consents?</p> <p>Any invasive species management technique needs to be acceptable under the laws of the country. Have all products been approved for use in the country? Sometimes getting these approvals and law changes can become part of the eradication project.</p>
Environmentally acceptable	<p>Can you ensure a manageable impact to the environment?</p> <p>Undertaking invasive species management projects can affect the wider environment at the project site. For example, herbicides may affect non-target species. This is not ideal, but if the effects are only for a short period and do not significantly threaten non-target species, you may conclude that the short-term impact is a price worth paying to deliver the long-term benefits of the operation.</p> <p>Any impacts must be outweighed by the benefits of a successful operation</p>

Capacity	<p>Can you find and acquire all the required skilled people, resources and equipment?</p> <p>Invasive species management projects are long, time-consuming projects requiring a mix of specialized skills. The implementing agency needs to have sufficient skilled people and equipment, or source them from external organizations and contractors, or upskill existing people.</p> <p>The materials and equipment required to undertake the work must be readily obtainable and legal to use within the country involved.</p>
Affordability	<p>Can you demonstrate to funders that the benefits of the project outweigh the costs?</p> <p>Invasive species management projects need adequate finances available to cover all aspects of the project for the length of time necessary. For example you cannot “buy” 90% of an eradication – these are called failures – successful eradication projects only come in whole, fully-funded units. Doing it “on-the-cheap” is false economy because it leads to a high risk of failure.</p> <p>For control projects you are looking at funding that will span many years.</p>

- The technically feasible and sustainable criteria must always be achievable if the site is to remain invasive-free.
- A final decision on the feasibility of a project is based on 3 questions:

**1) Can it be done?**

An assessment of the 7 feasibility criteria.

**2) What will it take?**

An assessment of the issues that have been raised in the Feasibility Study and how they will be resolved.

**3) Does the benefit outweigh the cost?**

Considering all aspects of costs and benefits (e.g. environmental, financial, social), does the benefit of the project justify the costs?

### 3. WHAT WILL IT TAKE?

- As you assess the feasibility criteria you will identify issues that, while not making the project unfeasible, will need to be addressed before the operation. For example, given the different terrain of the project site it may not be clear to the feasibility team what or how much product to apply. As part of the Operational Planning, trials or further research will need to be undertaken to decide an acceptable application rate.
- It is important that these issues, and any further work that will be required to solve the problem, are clearly identified in the Feasibility Study Report. Failure to clearly record the issues can lead to them getting lost, not being resolved early enough and endangering the success of the operation.

### 4. ENVIRONMENTAL EFFECTS AND RISKS TO NON-TARGET SPECIES

- Always use the least harmful treatment method.
- Unfortunately, short-term loss may be unavoidable during a project, but the project must protect the long-term viability of a non-target species. The focus for managing risks to non-target species may differ. For animals, the focus is on safeguarding the population rather than individuals. For plants, it may be very important to protect individuals.

- Emphasis is on managing the risk to endemic species and threatened/vulnerable species.
- Risks to the environment or to non-target species that are identified in the Feasibility Study may be best managed by incorporating them into the project objectives and outcomes. For example, the Feasibility Study identifies that a native butterfly is at risk from the proposed project. A significant decrease in the butterfly population would not be acceptable. For the project team to manage this risk, a further objective: 'The long term viability of the native butterfly population will be safeguarded' can be added to the project objectives. An associated outcome, for example, 'The post-eradication native butterfly population is no less than 90% of the pre-eradication population' would also be required.

## 5. THE SITE VISIT

- All visits to the site should undertake the biosecurity actions necessary to ensure no invasive species are taken to or from the site – See Guideline for Biosecurity for further information.
- All visits to the site need to be respectful of the local community and land owners – See Guideline for Stakeholder Engagement for further information.
- Plan the visit well. Understand what you need to do during the visit and how the information gathered will be recorded.
- Keep a diary of what you did during the site visit. In the diary, record when, where and what you did to remind yourself later of what happened.
- Ensure you have people sufficiently experienced in each of the 7 feasibility criteria to gather the required information and make an assessment of each criterion.
- But keep the site visit team as small as possible (the more people, the harder the organization and higher the cost).

## 6. STAKEHOLDER ENGAGEMENT

- The site visit needs to be planned in close consultation with the relevant stakeholders, e.g. local community, landowners, local authority – See Site Visit Section.
- Consider whether it would be useful to provide some stakeholders the opportunity to read and comment on draft versions of the Feasibility Study before it is completed. This may help provide further information for the team and ensure the stakeholders are not surprised by the final version of the report. It also allows the project team to start discussions on any contentious issues with relevant stakeholders.