Māori Cultural Principles

Biological Control Agent Releases

Introduction

This document summarises some key Māori cultural principles identified by a Māori reference group compiled to consider the suite of proposed biological control agent applications made on behalf of the National Biocontrol Collective by Manaaki Whenua Landcare Research Ltd (Manaaki Whenua). This is not an exhaustive set of principles, and may be developed further as a result of subsequent discussions or applications.

This document may therefore be a source of reference material for future biocontrol applications.

Background

The National Biocontrol Collective includes representatives from 12 regional councils and unitary authorities, and the Department of Conservation. Manaaki Whenua is the primary science provider to the Collective and coordinates many of its application proposals.

As the reference group is considering several potential applications, they will be providing principle level comment on the Māori interests potentially impacted by the release of the biological control agents. Therefore the reference group will not be providing substantive or detailed comment on the issues raised by each application, but rather identifies issues the applicants should aim to address in each application. In addition the reference group has provided some guidance or recommendations to the Collective on how to approach such applications in future in terms of their engagement with Māori and the way they address potential impacts on Māori interests.

Opening statements

The reference group notes that the overall aspiration of its members is to restore native ecosystems. Its members also recognise that only iwi can define what a restored native ecosystem looks like within their respective rohe or takiwa (tribal area), noting that some exotic species now provide considerable value to different communities.

Reference group members also note that exotic (including pest) species have and continue to arrive in New Zealand as a result of natural migration, accidental introduction and purposeful release. Some of the species that have become pests are the result of purposeful releases allowed either through the absence of regulation, or through inadequate regulation.

In addition, members acknowledge that historically Māori were alienated from significant tracts of land, which were subsequently cleared of native vegetation in favour of alternative land uses often involving exotic commercial and other species. A portion of those alienated lands has now been either returned to iwi or placed under joint management arrangements through Treaty of Waitangi Settlements. Reference group members noted from their own settlement experiences, that often lands are returned in a poor state placing significant burden (financial, cultural and spiritual) on Māori.

Members note that although as Treaty partners both the Crown and Māori have a responsibility to work together to address the impacts of pest species, it is the Crown as the partner responsible for setting regulatory policy, who is obliged to resource such measures.

Finally members acknowledge that established pests cause significant economic, environmental, cultural and social impacts to our unique environment and natural advantage. As one of the tools for pest management, biological control aims to reduce risk and reverse harm from damaging organisms. The reference group fully supports this aim and has provided its comments below in the hope of further advancing continuous improvement across the pest management regime.

Principles

Tiaki - Kaitiakitanga

The reference group acknowledged the well recognised kaitiakitanga responsibility of Māori to manage the natural resources within and beyond their hapū and iwi boundaries for the benefit of future generations.

Members also noted the reciprocal relationship of kaitiakitanga, highlighting the primary principle of 'tiaki'. This principle is expressed as the responsibility of the atua (spiritual guardians) for supporting their offspring or elements within the environment, including tangata whenua (literally meaning people of the land). Some noted the atua provide for their children (including people), rather than people taking from the atua. This reciprocal responsibility is an intergenerational one, that recognises the enduring and interdependant relationship between the environment and its component parts (including people). Unnatural changes (i.e. artificially dispersing species in new areas) disrupt this delicate relationship though if allowed the tiaki – kaitiaki relationship returns to balance where enabled.

Recognising this relationship requires Māori to take an extraordinarily long term view, including of making changes to the environment that may have unanticipated implications well beyond our current and foreseable needs. This long term view is difficult to reconcile in terms of individual biocontrol applications. However members consider the work of Manaaki Whenua as primary science provider to many of the introductions, important in terms of maintaining a repository of information and monitoring data in a form accessible by kaitiaki Māori. Such information can inform future introductions, and enable Māori to better understand potentially uncertain disruptions to the tiaki – kaitiaki relationship.

Manaakitanga

Tangata whenua continue to observe their cultural rights and ownership over taonga within the boundaries of each iwi or hapū. One of the key outcomes of kaitiakitanga (explained above) is to ensure the maintenance of balance in the environment to provide for everyone within their region. The ability of iwi, hapū or whanau to 'manaaki' (support and provide for) their people and manuhiri (visitors), is central to the maintenance and enhancement of 'mana'. Often noted as a key cultural principle and practice, manaakitanga extends to physical, spiritual and economic wellbeing.

Members noted that the actions of others (including Crown agencies – who are themselves considered manuhiri or visitors) impact on the ability of tangata whenua to manaaki by modifying and disturbing the balance within the environment. This includes impacting on the ability of Māori to continue to access taonga, or to manage their resources which in turn degrades their wellbeing and inhibits their physical ability to manaaki.

On considering the principle of manaakitanga, members agreed that biocontrol agents pose the potential to both positively impact by aiding in the restoration of balance, and negatively impact by disturbing it further. The recommendation noted above will aid in enabling tangata whenua to monitor this, but will have particular relevance at a regional level. The reference group agreed if appropriate for regional councils and the Department of Conservation to work with iwi and hapū in their areas on pest management strategies that include monitoring impacts in terms of manaakitanga.

Broad biophysical considerations

Kaitiakitanga exists within a mātauranga Māori framework, founded on whakapapa which is a system of ordering and outlining the relationships and interconnections between elements within the natural environment. In accordance with this framework Māori will be concerned to know the anticipated and unanticipated potential impact of the introduction of biocontrol agents across the breadth of trophic and ecosystem levels.

For example.....

The group will expect the applicants to consider these impacts at their broadest level, and to provide comment and/or data to inform that comment. In addition, members felt it important for the applicants to clearly outline the regional existence and extent of each pest weed species. This would more effectively enable hapū and iwi in those regions to consider the potential risks, costs and benefits of specific relevance to them. The absence of this information is likely to inhibit the ability of iwi to provide comment because of the local nature of their kaitiakitanga responsibilities.

Specific impacts to culturally valued species

The reference group recognises that standard host range testing and taxanomical analysis has been conducted, or is in progress, for each of the proposed agents. To date this data provides some assurance that any direct adverse effect from the non-target feeding and hybridisation of native species is likely to be minimal.

In addition, the results indicate there is likely to be significant direct beneficial effect to culturally valued species arising from the reduced health of the weed species. For example in some cases the feeding of biocontrol agents on canopy smothering weed species (e.g. Privet) will lead to significant damage and defoliation opening up the canopy for native regeration beneath. This also has indirect beneficial effects to the wider native ecosystem.

However the research methodology and results do little to address indirect impacts to culturally valued species. In particular the group noted examples of pest weed species now filling potentially beneficial niches for native species arising from the decline or absence of native habitats.

Relevant to the current proposals, reference group members noted that Tradescantia had in some regions replaced native habitats for inanga spawning. Members also noted that at a local level (e.g. Waikato region) that mullet were observed to have been feeding on *hydrellia lagarosiphon*. Reference was also made to the biocontrol agent application previously lodged to manage broom where Te Rūnanga o Ngāi Tahu noted in their submission that broom had become an important food source for Kereru. In other instances at the bush margins, weed species were providing valuable nurseries for regenerating native species.

Members were concerned that these indirect effects required closer scrutiny to identify whether pest weed species had replaced native habitats in supporting native species. However members also noted a clear preference for native habitats rather than relying on exotic replacements, particularly recognising that the exotics posed the risk of complete displacement over time. With this in mind members noted that without committment to targetted native restoration plans, the viability of local populations of culturally valuable species such as inanga and mullet could be placed at risk.

Recommendations:

- 1. That Manaaki Whenua, as primary research provider, maintain information and monitoring data in an accessible form for kaitiaki Māori.
- 2. That regional councils and the Department of Conservation work with iwi and hapū in their areas in the development and implementation of pest management strategies that include the identification and monitoring of impacts to manaakitanga.
- 3. That the applicants map the existence and extent of each pest weed species in each of the applications so Māori are able to consider impacts at their specific rohe level.
- 4. Section 36 of the HSNO Act requires decision makers to consider a set of minimum standards which includes consideration of any displacement of native species from their natural habitat, or cause any significant deterioration of natural habitats. In accordance with this requirement, the reference group considered the need for applicants to provide comment on, or model the potential broader trophic impacts of introducing each biological control agent. This is consistent with a kaitiakitanga framework and would better enable Māori to provide comment from that perspective.
- 5. That applicants provide information in each of the applications about the potential beneficial role each pest weed species may have for local populations of native species.
- 6. That applicants provide comment on any native habitat restoration plans of relevance that would manage the depletion or removal of weed species providing beneficial effects to native species.

Regional / rohe based priorities informing national decision making

Reference group members were clear from the outset of this process that they are not participating in the group as 'representatives' of their individual hapū or iwi. Instead they were appointed because of the skills and experience they bring to the discussion. However, as locally and regionally based

kaitiaki it became apparent through the course of discussion that bringing local and regional issues and priorities to a national forum could be both beneficial and challenging.

Benefits arise from the provision of information based on the intergenerational observation of the natural environment at a local level. These observations are valuable to decision makers to ensure they have the best available information, and are fully informed of the potential impacts to Māori interests. Challenges arise when you bring that locally based information together and then assess and weigh it through a national lens.

This is problematic because iwi and hapū provide their experience and knowledge in good faith on the assumption that it will be assessed and weighed in a manner consistent with their tikanga and their locally based priorities. For example Waikato iwi may give greater weight to indirect adverse effects to Tradescantia which provide inanga spawning grounds than other iwi or Councils who give greater weight to the adverse effects posed by Tradescantia.

The reference group acknowledged that most of the Regional Councils would have specific relationships with hapū and iwi in their regions (some required by settlement statute). The Councils should also have some understanding of the interests and concerns of those iwi of relevance to the weed species and biocontrol agents subject to the proposed applications. Members requested that the applicants include available information of this nature in the applications, in order that at a local level hapū and iwi can more readily comment through submissions. The reference group also noted that the Council and Department members of the Biocontrol Collective recognise the value of their individual relationships with iwi and more proactively work with them to prioritise its work programme moving forward.

Recommendations

- 7. That the applicants consider including information about hapū and iwi interests and priorities relating to the proposals at a regional level to provide context for decision makers so appropriate weight can be attributed to risks, costs and benefits. The reference group is aware that some iwi have planning and pest management priority agreements or relationships with Councils that could provide a useful source of this information.
- 8. That the Biocontrol Collective, through their Regional Council members, work more proactively with hapū and iwi in their regions to better understand their interests and priorities so they can be effectively incorporated in future work programmes and applications.

Treaty Issues & Settlement Principles

Reference group members noted frustration at the use of Court defined Treaty principles in risk assessments, rather than mutually agreed principles between the Crown and iwi in Settlement negotiations. Given the increasing number of Treaty settlements it is difficult to assess each application at a national level against regionally defined and agreed Treaty principles so members accepted the need to use well defined and nationally referenced principles in national decision making.

However members also noted that many Treaty settlements include or result in agreements with local

pest management agencies including councils and Department of Conservation. Members were keen that when engaging with Māori on future applications, the members of the biocontrol collective work with the iwi and hapū in their area to ensure recognition and assessment of impacts against appropriate Treaty principles and provisions.

Recommendation:

9. That biocontrol collective members work with the iwi and hapū in their respective areas on the development of future biocontrol applications to ensure recognition and assessment of impacts (both positive and negative) against appropriate Treaty principles and provisions.