

## Biodiversity Offsets – The Latest on the Law

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Our August 2010 Resource Management Journal article commented on developments in the area of biodiversity offsets and environmental compensation<sup>2</sup>. The 2010 update referred to the Environment Court decisions in *Royal Forest & Bird Protection Society Inc v Gisborne District Council* and *Lower Waitaki River Management Society v Canterbury Regional Council* in which the Environment Court further developed the principles that should inform a decision on biodiversity offsets<sup>3</sup>.

Since 2010, the application of biodiversity offsets has been considered by the Environment Court, High Court and Boards of Inquiry on a number of occasions. This note comments on these recent decisions in terms of the following issues:

- a. How is the principle of 'limits to biodiversity offsets' to be applied?
- b. Is application of the 'mitigation hierarchy' consistent with the Resource Management Act 1991 ("RMA")?
- c. When is it appropriate to move to the next stage of the 'mitigation hierarchy'?
- d. What level of 'residual effects' require a biodiversity offset to be considered?
- e. Are biodiversity offsets 'mitigation' or something else?
- f. What happens if a biodiversity offset is not or cannot be provided?
- g. Can pest control resulting in enhancement to existing biodiversity be a biodiversity offset?
- h. Can an 'averted risk offset' be taken into account?
- i. What is the role of stakeholder engagement?
- j. What is the role of modelling of biodiversity offsets?

We then consider the need for national guidance or direction on biodiversity offsets.

### HMR wind farm

In May 2011, a Board of Inquiry released its decision on Contact Energy's ("Contact") proposed Hauāuru mā Raki Wind Farm<sup>4</sup>. The wind farm proposal involved application for consent for up to 168 wind turbines to operate on farmland near the coast between Port Waikato and Raglan. Associated with the proposal were earthworks for roads, soil disposal, erosion and sediment control, and reticulation of power to three substations.

<sup>1</sup> We acknowledge the helpful comments on earlier drafts of this paper from Alex Roberts, Beth McAuley, Michael Crowe, Graham Ussher, Marie Brown and Andrew Hurley.

<sup>2</sup> [http://www.rmla.org.nz/upload/files/2010august\\_v5.pdf](http://www.rmla.org.nz/upload/files/2010august_v5.pdf), page 27.

<sup>3</sup> A 'biodiversity offset' is defined in the Proposed National Policy Statement. Biodiversity means measurable conservation outcomes resulting from actions which are designed to compensate for more than minor residual adverse effects on biodiversity, where those effects arise from an activity after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure and ecosystem function. This definition follows closely the definition in the Business and Biodiversity Offsets Programme (BBOP). See [www.bbop.org](http://www.bbop.org). For an excellent recent paper on biodiversity offsets as applied in a range of jurisdictions see: ICMM and IUCN (2012) 'Independent Report on Biodiversity Offsets' available at [www.icmm.com/biodiversity-offsets](http://www.icmm.com/biodiversity-offsets).

<sup>4</sup> Available at <http://www.mfe.govt.nz/rma/call-in-hmr/report-and-decision/final/volume-1/hmr-final-report-vol-1.pdf>

Contact acknowledged that not all the adverse effects of the project could be avoided, remedied or mitigated completely, and that the direct mitigation may not be sufficient to achieve no net loss<sup>5</sup>. Contact offered a comprehensive package of mitigation and offsets, which was intended to provide offset mitigation to a wide range of effects on indigenous vegetation, indigenous bush birds, shore birds, the New Zealand Falcon, lizards, and invertebrates. Contact's objective was to achieve an outcome where the environment is enhanced through the remediation, and the offset mitigation exceeds the scale of effect<sup>6</sup>. The mitigation/offset proposals included pest control measures at specified locations, annual funding for the life of the consent into specified bird conservation and breeding programs, covenanting and fencing of the Punga Punga wetland, riparian fencing of specified areas, the translocation of native bats, funding for beach accessways and cultural mitigation, including training local iwi in water quality monitoring<sup>7</sup>.

The Board concluded that with stringent review conditions requiring that specific turbines be shut if bird mortality was too high, they were satisfied that the adverse effects on migratory shore birds would be remedied or mitigated<sup>8</sup>. The Board went on to conclude that other ecosystems, such as indigenous vegetation, other birds, waterways and fisheries would be maintained or enhanced by the proposal, particularly in terms of the indigenous vegetation, due to the extensive pest control measures which formed part of the mitigation/offset package<sup>9</sup>.

### Transmission Gully Plan Change

In October 2011, a Board of Inquiry released its decision on a plan change request by the New Zealand Transport Agency ("NZTA") in relation to the proposed Transmission Gully motorway project<sup>10</sup>.

NZTA sought changes to policies in the Greater Wellington Regional Freshwater Plan which required adverse effects to be avoided. Certain aspects of the proposed motorway project for which consent was required were non-complying activities. Clearly, it was not possible to avoid effects completely, or to argue that the effects were no more than minor. Consequently, the project would not have passed the threshold tests for a non-complying activity. Therefore, a key aspect of the plan change request was to change the requirement in the plan for simple avoidance of adverse effects to provide for remedy, mitigation and offsetting of such effects where avoidance is impractical or where it would impose significant costs to the project<sup>11</sup>.

NZTA proposed a 'cascading regime' in the policies to allow for effects which were more than minor as follows<sup>12</sup>:

- Adverse effects are to be avoided to the extent practicable;
- Adverse effects which cannot be avoided are to be remedied to the extent practicable;
- Adverse effects which cannot be avoided or remedied are to be mitigated to the extent practicable;
- Adverse effects which cannot be practicably be avoided, remedied or mitigated are to be *offset*.

The Board of Inquiry's decision addressed both the proposed cascading management regime and the concept of offsetting. It concluded:

- a. The cascading concept was supported by the ecological evidence and should be reflected in the wording of the policy<sup>13</sup>;

<sup>5</sup> Final Report and Decision of the Board of Inquiry into the Hauāuru mā Raki Wind Farm and Infrastructure Connection to Grid, May 2011, paragraph 1038.

<sup>6</sup> Ibid, paragraph 493.

<sup>7</sup> Ibid, from paragraph 1038.

<sup>8</sup> Ibid, paragraph 1097.

<sup>9</sup> Ibid, paragraphs 1097 and 1106.

<sup>10</sup> Final Decision and Report of the Board of Inquiry into the New Zealand Transport Agency Transmission Gully Plan Change Request, October 2011.

Available at <http://www.epa.govt.nz/Publications/PCTG%20Final%20Decision%20Report.pdf>.

<sup>11</sup> Ibid, Para 29.

<sup>12</sup> Paragraph 29.

- b. That offsets are a subset of remedying or mitigating effects, and should be distinguished from environmental compensation<sup>14</sup>; and
- c. Because offsets are a type of mitigation, there was no need to specifically refer to offsetting in the policy hierarchy itself. The preferable approach was to refer to and define the place of biodiversity offsets in the explanation to the policy<sup>15</sup>.

The Board stated that the relevant policy should read:

Policy 4.2.33A:

To manage adverse effects of the development of the Transmission Gully Project, in accordance with the following management regime:

1. Adverse effects are avoided to the extent practicable;
2. Adverse effects which cannot be avoided are remedied or mitigated.

**Explanation:** ... Remedying or mitigating can include the concept of offsetting. "Offsetting" means provision of a positive effect in one location to offset adverse effects of the same or similar type caused by the Transmission Gully Project at another location with the result that the overall adverse effects on the values of the water bodies are remedied or mitigated.

When offsetting is to be applied, there should be a clear connection with the effect and the offsetting measure. Offsetting measures should preferably be applied as close as possible to the site incurring the effects. Hence, there should be a focus in offsetting occurring within the affected catchments along the Transmission Gully route and to specifically address the effects at issue.

Offsetting should, as far as can be achieved maintain and enhance the particular natural values affected by the Project when assessed overall.

The adequacy of a proposed offsetting measure should be transparent in that it is assessed against a recognised methodology.

In this policy "to the extent practicable" requires consideration of the nature of the activity, the sensitivity of the receiving environment to adverse effects, the financial implications and adverse effects of the measure considered compared with other alternative measures, the current state of technical knowledge and the likelihood that effects can be successfully avoided, remedied or mitigated<sup>16</sup>.

### Mt Cass wind farm

In December 2011 the Environment Court released its decision on the proposal by MainPower for a wind farm on the Mt Cass ridge in North Canterbury<sup>17</sup>.

The Mt Cass ridge was an operating farm, but had extensive limestone features and it was accepted by all parties that there were areas of significant indigenous vegetation and habitat of indigenous fauna on the ridge. The proposal involved the removal of 2.29ha of limestone features (of which 0.8ha is indigenous woody vegetation) and 3ha of silver tussock.

Ecologists providing evidence for opponents to the proposal argued that an offset would be inappropriate because it was inconsistent with the Business and Biodiversity Offsets Programme (BBOP) policy about limits to offsets<sup>18</sup>. They considered that because the karst limestone

<sup>13</sup> Ibid, Para 245.

<sup>14</sup> Ibid, Para 246. The definition is discussed below in the section headed 'Are biodiversity offsets mitigation or something else?' This section also discusses the differences between the NZ approach and BBOP in the use of the terms 'mitigation hierarchy'.

<sup>15</sup> Ibid, Para 248.

<sup>16</sup> It is presumed that this policy will need to be revisited in light of the High Court's decision in the Escarpment Mine project – see pages 13 and 14 below.

<sup>17</sup> *MainPower NZ Ltd v Hurunui District Council* [2011] NZEnvC 384.

<sup>18</sup> Since the Mt Cass Court hearing, BBOP has published the results of its work in the form of the 'BBOP Standard on Biodiversity Offsets' 2012, available on <http://bbop.forest-trends.org/pages/guidelines>.

ecosystem was both historically rare and much reduced from its original extent, and that certain 'at risk plants' were highly vulnerable to changes in grazing intensity, the proposal breached the 'limits to offsets' policy, and that, consequently, consent should be declined, irrespective of the offset or compensation proposed.

To address the residual effects of the proposal (after avoidance and mitigation) MainPower proposed a biodiversity offset in the form of a covenant to protect 127ha of land owned by MainPower and the following measures undertaken to enhance the area: the exclusion of cattle from the covenanted area, the management of sheep grazing, trapping and removal of pest animals, natural regeneration of indigenous species, restoration planting, weed control, the monitoring of threatened plant species and the monitoring of biodiversity condition<sup>19</sup>.

After considering lengthy and detailed ecological and planning evidence, the Court concluded:

- [273] The wind farm has a limited footprint of 24ha and is largely located within exotic pasture. The layout has been modified to reduce fragmentation and disruption of particularly important ecotones. In return for the removal of 3ha of tussock grassland and less than 1ha of woody vegetation, conservation management, characterised as a biodiversity offset, is proposed to extend across 127ha at the site. We acknowledge that this is not simply a question of scale and there are important considerations relating to edge effects, the indirect effects of altering the grazing regime and the outcomes for open habitat species. All of these have been evaluated and appropriate conditions of consent imposed.
- [274] In the end we consider the proposed offset programme and modelling to have demonstrated that the management actions both remedy and mitigate many of the adverse effects on biodiversity such that there will be net gain in the medium to long term...
- [464] We acknowledge the uncertainties inherent in predicting effects within any ecosystem and the possibility for markedly different outcomes for some species. In this context, we have found that MainPower's biodiversity offset model including its sensitivity analysis and time preference discount provides us with confidence that there should be substantial gains for the biodiversity at the Mt Cass site in the medium to longer term.

### **Transmission Gully resource consent**

In light of its earlier decision on the plan change request, the Board of Inquiry released its draft decision in May 2012 for the designation and resource consents for the Transmission Gully motorway project<sup>20</sup>.

The project would result in the permanent or temporary loss of approximately 120ha of indigenous vegetation (wetlands, shrublands and scrub, seral forest and mature or maturing forest). Other than route realignment, the principal terrestrial mitigation measure proposed by NZTA was a systematic process of re-vegetation, involving four broad restoration treatments<sup>21</sup>. These were intended to be like for like, generally in the catchments where the most vegetation clearance would occur.

It was proposed that there would be a total of 627ha of mitigation planting across the project to offset the 120ha of vegetation affected, although not all of this was for terrestrial ecology purposes

<sup>19</sup> Ibid, paragraph 137.

<sup>20</sup> Final Report and Decision of the Board of Inquiry, 12 June 2012, available at : <http://www.epa.govt.nz/Publications/TGP%20Final%20Decision%20-%20Vol%201%20Report%20and%20Decision%20-%2012%20June%202012.pdf>.

<sup>21</sup> Paragraph 429.

The Board stated that:

- [452] Much of the debate between the witnesses revolved around the issue of whether or not the mitigation proposal achieved a *no net loss* outcome in terms of ecology or biodiversity values and we will address that directly. The differences between the terms *ecology* and *biodiversity* was also debated by NZTA and the Director-General's witnesses in particular, although the debate was of little assistance to the Board. It was generally agreed that both re-vegetation efforts and ongoing pest management would be required, at least for a certain period post re-vegetation.

It was agreed by the ecology witnesses that in designing an ecological mitigation package, the aim should be no-net-loss of biodiversity, and preferably a net gain<sup>22</sup>. In considering the issue of no net loss, the Board stated:

- [459] We appreciate that a key element of the concept of no net loss is a detailed assessment of the ecological environment and the effects which a project might have on it, accompanied by a principled assessment quantifying the value of biodiversity offsets and the extent of gains which are required to offset losses in biodiversity. Much of the debate between the witnesses and the parties revolved around these matters and the issue of calculation of an [Environmental Compensation Ratio].

The Board did not see any need to make decisions on the finer technical aspects of the modelling exercise. It stated:

- [460] It was not apparent to us why these particular compensation ratios were promoted and it appeared that there may have been a certain *rule of thumb* element to their selection. Ultimately we do not consider that is of any great moment in our decision, even appreciating the need for there to be a principled approach to the quantification of biodiversity offsets. It is not necessary for us to specify appropriate offset mitigation ratios in reaching our decision. There are three reasons for that:
- [461] Firstly, none of the witnesses identified any universally accepted ratio for the calculation of mitigation for vegetation loss. It seems to us that such a matter will always be open for debate and that ultimately the adequacy of mitigation proposed (whether biodiversity mitigation or otherwise) is always a matter which is subject to debate and determination by a consent authority.
- [462] Secondly, while we recognise the desirability of achieving a situation of no net loss of biodiversity from a project, we do not believe that it is a requirement of RMA that no net loss be achieved in any given case. The principle of sustainable management requires a broad consideration of a range of sometimes competing factors. A consent authority is entitled to conclude that consent ought to be granted to the proposal notwithstanding that all adverse effects of the proposal have not been avoided, remedied or mitigated. In other words there may be a net loss of some values or aspects of the environment. The significance of that loss and its *weighting* against the benefits of any given proposal is a matter to be determined by a consent authority applying section 5(2) RMA.

The Board concluded:

- [475] Having regard to all of the above, we are of the view that the effects of TGP on terrestrial ecology can and will be adequately avoided, remedied or mitigated by the Applicants' proposals. We have included reference to avoidance of adverse effects because that has been achieved by the change of route for the previously designated eastern route to the now proposed western alignment. Otherwise the mitigation package proposed by the Applicants achieves a substantial degree of remedy and mitigation of the acknowledged adverse effects of works on terrestrial ecology.

The Court ultimately held that the TGP was in accordance with the revised Policy 4.2.33A<sup>23</sup>.

<sup>22</sup> Ibid, paragraph 454.

<sup>23</sup> Ibid, paragraph 1172.

## Horizons Manawatu Regional Plan

In August 2012, the Environment Court released an interim decision on the Horizons Regional Council One Plan. Part of the decision related to the provisions on indigenous biological diversity in both the regional policy statement and regional plan components of the Proposed One Plan. They included a consideration of what the policy framework should be for considering resource consents for activities in 'rare, threatened and at-risk habitats'<sup>24</sup>.

In considering the relevant objectives and policies, the Court endorsed the approach of a hierarchy which reflect the BBOP principles<sup>25</sup>. It concluded that in terms of the way the particular policy was constructed, offsetting is better not to be subsumed within the term 'remediation or mitigation', but should be referred to separately and should come last in the hierarchy<sup>26</sup>.

The Court concluded that the relevant policy should be worded as follows:

**Policy 12-5 Consent decision-making for activities in rare habitats, threatened habitats and at-risk habitats**

- a) For activities regulated under Rule 12-6 and Rule 12-7, the Regional Council must make decisions on consent applications and set consent conditions on a case-by-case basis,
  - 1) For all activities, having regard to:
    - i) the Regional Policy Statement, particularly Objective 7-1 and Policy 7-2A.
    - ii) a rare habitat or threatened habitat is an area of significant indigenous vegetation or a significant habitat of indigenous fauna.
    - iii) the significance of the area of habitat in terms of its representativeness, rarity and distinctiveness, and ecological context, as assessed under Policy 12-6.
    - iv) the potential adverse effects of the proposed activity on significance.
    - v) for activities regulated under ss13, 14 and 15 RMA, the matters set out in Policy 12-1(h) and relevant objectives and policies in Chapters 6, 13, 15 and 16.
  - 2) For electricity transmission and renewable energy generation activities, providing for any national, regional or local benefits arising from the proposed activity.
- b) Consent must generally not be granted for resource use activities in a rare habitat, threatened habitat, or at-risk habitat assessed to be an area of significant indigenous vegetation or a significant habitat of indigenous fauna under Policy 12-6, unless:
  - i) Any more than minor adverse effects on that habitat's representativeness, rarity and distinctiveness, or ecological context assessed under Policy 12-6 are avoided.
  - ii) Where any more than minor adverse effects cannot reasonably be avoided, they are remedied or mitigated at the point where the adverse effect occurs.
  - iii) Where any more than minor adverse effects cannot be reasonably avoided, remedied or mitigated in accordance with (b)(i) and (ii), they are offset to result in a net indigenous biological diversity gain.
- c) Consent may be granted for resource use activities in an at-risk habitat assessed not to be an area of significant indigenous vegetation or a significant habitat of indigenous fauna under Policy 12-6 when:
  - i) There will be no significant adverse effects on that habitat's representativeness, rarity and distinctiveness, or ecological context as assessed in accordance with Policy 12-6.
  - ii) Any significant adverse effects are avoided.

<sup>24</sup> Paragraphs 3-47.

<sup>25</sup> Decision Part 3 para 3-92.

<sup>26</sup> Paragraphs [3-63] to [3-64].

- iii) Where any significant adverse effects cannot reasonably be avoided, they are remedied or mitigated at the point where the adverse effect occurs.
  - iv) Where significant adverse effects cannot reasonably be avoided, remedied or mitigated in accordance with (c)(ii) and (iii), they are offset, to result in a net indigenous biological diversity gain.
- d) An offset assessed in accordance with (b)(iii) or (c)(iv), must:
- i) Provide for a net indigenous biological diversity gain within the same habitat type, or where that habitat is not an area of significant indigenous vegetation or a significant habitat of indigenous fauna provide for that gain in a rare habitat or threatened habitat type.
  - ii) reasonably demonstrate that a net indigenous biological diversity gain has been achieved using methodology that is appropriate and commensurate to the scale and intensity of the residual adverse effect.
  - iii) generally be in the same ecologically relevant locality as the affected habitat.
  - v) not be allowed where inappropriate for the ecosystem or habitat type by reason of its rarity, vulnerability or irreplaceability.
  - vi) have a significant likelihood of being achieved and maintained in the long term and preferably in perpetuity.
  - vii) achieve conservation outcomes above and beyond that which would have been achieved if the offset had not taken place.

### Escarpment Coal mine – Denniston Plateau

This series of decisions relate to an application for resource consents for the proposed Escarpment Mine Project on the Denniston Plateau by Buller Coal Limited. The proposed open-cast mine would result in a disturbance area of approximately 186ha on the Plateau.

BCL proposed an offset mitigation and compensation package which included a predator and pest control area on the Plateau and its surrounds of approximately 4,500ha in total, and a further area of approximately 10,000ha on the Heaphy River within the Kahurangi National Park, which is 100km from the site and separated by two ecological districts. In addition, Buller Coal proposed that 745ha of Department of Conservation administered land on the Plateau be gazetted under the Fourth schedule of the Crown Minerals Act for permanent legal protection.

West Coast Environmental Network Inc and Royal Forest & Bird appealed the Councils' grant of the resource consents.

In its interim decision (in March 2013)<sup>27</sup> the Environment Court referred to the law on biodiversity offsets as stated in *JF Investments Ltd v Queenstown Lakes District Council*<sup>28</sup>, which was applied and developed in *Director General of Conservation v Wairoa District Council*<sup>29</sup> and *Royal Forest and Bird Protection Society Inc v The Gisborne District Council*<sup>30</sup>. The Court also cited with approval the Board of Inquiry into the Proposed Transmission Gully Plan Change's phrasing of the distinction between offset mitigation and compensation<sup>31</sup>.

The interim decision stated that while the Court was minded to grant consent, much would ultimately turn on whether appropriate conditions could be worked out and whether some others could be offered on an *Augier* basis. The Court indicated that with such conditions appropriately framed, consent would be likely. However, the conditions as offered by the applicant were not considered enough to satisfactorily underpin consent to the application. The Court then went on to outline its concerns about the adequacy of the conditions, largely around the certainty of outcome.

<sup>27</sup> *West Coast Environmental Network Inc v West Coast Regional Council and Buller District Council* [2013] NZEnvC 47.

<sup>28</sup> C48/2006.

<sup>29</sup> W81/2007.

<sup>30</sup> W26/2009.

<sup>31</sup> *West Coast Environmental Network Inc v West Coast Regional Council and Buller District Council* [2013] NZEnvC 47, para [210]-[211].

Royal Forest and Bird appealed the interim decision of the Environment Court in *West Coast Environmental Network Inc* to the High Court<sup>32</sup>.

Royal Forest and Bird argued there were errors of law when the Environment Court examined and weighed the compensation and mitigation offers proposed; and that the Court confused “mitigation” of adverse effects with “offset” benefits. Forest and Bird submitted that as a matter of law offsets are a materially lesser value under the RMA than mitigation, and that confusion between mitigation and offsets is a legal error and can lead to error in weighing the pros and cons of a proposal.

In its June 2013 decision, the Court agreed with Forest and Bird that offsets do not directly mitigate any adverse effects of the activities coming with the resource consents on the environment<sup>33</sup>. However, the Court did not accept that 'mitigation' should get a greater weighting than 'offset' considerations.

The High Court referred the application back to the Environment Court, who, was required to keep mitigation considerations separate from offset considerations in its final decision<sup>34</sup>.

The Environment Court issued a second interim decision on 7 August 2013 which confirmed its first interim decision that consent could be granted on appropriate conditions<sup>35</sup>. Final consent, including an extensive suite of conditions, was issued on 24 October 2013<sup>36</sup>.

### Issues about biodiversity offsets considered by the Court and Boards of Inquiry

As part of their deliberations in the cases described above, the following issues were the subject of legal submissions and contested evidence and of consequent consideration and decision by the Environment Court and Boards of Inquiry.

#### How is the principle of 'limits to offsets' to be applied?

Sometimes, a biodiversity offset will not be appropriate or possible because of the importance of the biodiversity values present at the site, and the risk that the offset cannot be achieved. Emerging international best practice supports a framework for determining when offsetting is not appropriate, based on the use of limits around the vulnerability and irreplaceability of the biodiversity that may be affected. This is known as the 'Limits to Offsets' policy and is expressed in BBOP as:

Limits to what can be offset: There are situations where residual impacts cannot be fully compensated for by a biodiversity offset because of the irreplaceability or vulnerability of the biodiversity affected.

The primary policy debate in this context has been whether the decision that an offset is possible or not should be made solely with respect to how important the biodiversity in question is seen to be, rather than having regard both to the importance of the biodiversity and the manner in which the effects of a particular activity are to be addressed. The so-called 'go, no-go' decision.

At Mt Cass the application site included areas of limestone pavement and boulder fields, which have been identified as 'historically rare ecosystems'<sup>37</sup>. It was argued by some ecologists providing evidence for opponents to the wind farm that where there is a combination of vulnerability and irreplaceability of biodiversity identified as a historically rare ecosystem, **any** effects would result in

<sup>32</sup> *Royal Forest and Bird Protection Society of New Zealand v Buller District Council and West Coast Regional Council and others*, [2013] NZHC 1346, Fogarty J.

<sup>33</sup> *Ibid*, paragraph 72.

<sup>34</sup> *Royal Forest and Bird Protection Society of New Zealand Inc v Buller District Council* [2013] NZRMA 293.

<sup>35</sup> *West Coast Environmental Network Inc v West Coast Regional Council and Buller District Council* [2013] NZEnvC 178.

<sup>36</sup> *West Coast Environmental Network Inc v West Coast Regional Council and Buller District Council* [2013] NZEnvC 253.

<sup>37</sup> Williams PA, Wiser S, Clarkson B, Stanley MC 2007. New Zealand's historically rare terrestrial ecosystems set in a physical and physiognomic framework. *New Zealand Journal of Ecology* 31. Note that the validity of this classification does not appear to have been considered in the context of the RMA.



an unacceptable risk of permanent loss, and consequently biodiversity offsetting would not be appropriate.

The argument was that the project should avoid **all** impacts on such biodiversity, and that consent should be declined unless the project was redesigned to avoid **all** such impacts. It was asserted that it is best practice to **avoid** impacts on threatened and at risk species and on historically rare ecosystems.

That approach was rejected by the Court. The Court stated:

[230] There is no doubt that the ecosystem at Mt Cass is rare and components of it are vulnerable. We agree with Mr Davis and Dr Lloyd that it meets some of the criteria to be considered with respect to limits to offsetting and considerable care needs to be taken at such a site. However, we agree with Dr Ussher that the extent and nature of the disturbance must also be taken into account when considering whether or not an offset is appropriate.

[232] Given the small scale of the disturbance of the karst ecosystem, the limited disruption to ecotones across the ridge and minimal effects on the scarp face we do not consider that "highly vulnerable and irreplaceable components of biodiversity" are affected to such an extent the offsetting is out of the question. We note that the site is not at present securely protected and while the vegetation is in relatively good condition there are continuing pressures from domestic stock, pests and weeds. Given the nature and scale of the effects and the availability of limestone pavement for delivering the offset we find that biodiversity offsetting is both viable and appropriate on this site<sup>38</sup>.

As one commentator has put it:

... it is not a prima-facie assumption that because an area is rare or vulnerable that an offset is impossible. In New Zealand, the courts have been clear, that although they were dealing with a very vulnerable or rare ecosystems (karst limestone and associated indigenous vegetation, of which less than 5% of its original extent remains), the question is not how rare it is, but how much the project will impact it. If the impact is minor, and the potential exists for some like-for-like offsets (and associated conservation benefits), then the proposal may be acceptable<sup>39</sup>.

The Board of Inquiry's decision on the TGP plan change is also consistent with this approach. The Board had specifically been asked by certain submitters to amend the relevant policy to require 'avoidance' for vulnerable or irreplaceable biodiversity. In rejecting that 'no go up front' approach the Board stated:

We have not included in the Policy a requirement for avoidance of adverse effects on vulnerable or irreplaceable indigenous biodiversity as sought by the Director General. Mr Bennion also requested a reference to threatened indigenous species or rare or threatened ecosystems. We agree with counsel for NZTA that there is no need to do so. If in any instance, avoidance of adverse effects on particular values is required to achieve sustainable management, that response is available to a consent authority under the Policy as we have drafted it<sup>40</sup>.

The outcome of these decisions is that one has to consider the merits of a proposed offset before it is possible to decide whether an offset is available or not. It is not a 'go/no-go' decision based on the biodiversity values themselves.

The potential to offset effects on 'irreplaceable' and 'vulnerable' biodiversity features can be represented diagrammatically in the following figure<sup>41</sup>. What this figure shows is that as the ecological implications of the risk that an offset will not be able to address the effects of a proposal increase, then the standard that a proposed offset is required to meet in terms of certainty of delivery

<sup>38</sup> *MainPower NZ Ltd v Hurunui District Council* [2011] NZEnvC 384, paragraph 232.

<sup>39</sup> Footnote 182, "A Missing Piece of the Conservation Puzzle: Biodiversity Offsets" by Alexander Gillespie, prepared for the Department of Conservation 29 March 2012. Available at <http://www.doc.govt.nz/documents/conservation/missing-piece-of-the-conservation-puzzle.pdf>.

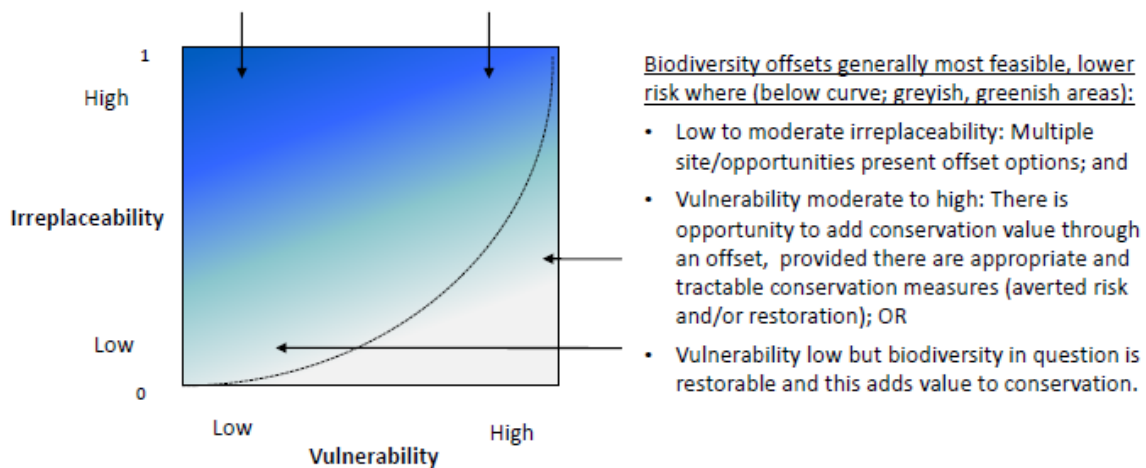
<sup>40</sup> Paragraph 251, page 63.

<sup>41</sup> Reproduced from BBOP (2012) 'Limits to what can be offset' BBOP Washington DC Forest Trends 2012. [www.forest-trends.org](http://www.forest-trends.org).

and outcome will also need to increase. There may be situations where the consequences of a proposed offset not delivering are so great that the only way to obtain the requisite certainty of outcome is to require the offset to be provided in advance of the effect being incurred<sup>42</sup>.

Biodiversity offsets are more difficult to achieve and there is a higher risk that offset not feasible where (above curve; darker blue area):

- High irreplaceability: There is a scarcity of sites/opportunities presenting offset options for affected biodiversity components; and/or
- Low vulnerability: There may be little conservation value to add through an offset; OR
- High vulnerability, yet insufficient knowledge or no tractable means to counter decline.



### Are biodiversity offsets 'mitigation' or something else?

What constitutes 'offsetting' or 'environmental compensation' is not defined in the RMA and the terms have previously been used interchangeably. This has led to confusion by the Courts, experts and applicants. The concepts of environmental compensation and offset have "largely been developed as a matter of practice through applications for resource consents offering various remedial, mitigatory or compensatory works to counterbalance adverse effects caused by development proposals, and have been the subject of a number of decisions of the Environment Court"<sup>43</sup>.

The High Court decision on the Escarpment Mine project held that offsets are not to be considered as mitigation of adverse effects, but rather they are to be considered as positive effects offered by an applicant. In making that finding, the High Court reversed the approach that the Environment Court and Boards of Inquiry had generally come to adopt. This previous approach still bears consideration, particularly in distinguishing between offsets and environmental compensation.

In the TGP plan change decision, the Board of Inquiry considered previous Court decisions which differentiate between the terms "offset" and "environmental compensation". The Board referred to the Environment Court decision of *JF Investments Ltd*<sup>44</sup> ("JFI"), where the Court recognised that there was a continuum of remedial or mitigating actions which could be offered by an applicant when seeking resource consent. In considering the question of how to assess the value of those actions, the Court found:

The practical answer is usually that if the proposed remedial or mitigatory action is the repair of damage of the same kind as the adverse effects of the activity, it is easier to accept as not only

<sup>42</sup> "A Process for Assessing Offsetability of Biodiversity Impacts" by Pilgrim, Brownlie, Ekstrom, Gardner, von Hase, ten Kate, Savy, Stephens, Temple, Treweek, Ussher and Ward. Conservation Letters, 10 January 2013.

<sup>43</sup> Paragraph 200. TGP plan change decision.

<sup>44</sup> *JF Investments v Queenstown Lakes District Council* EnvC C48/2006.

relevant, but reasonably necessary as well. Similarly, if the proposed remedy is also in the same area, landscape, or environment then its benefits, compared with the costs of the proposed activity, are more easily seen. Conversely, if the offered environmental compensation is too far in distance, kind or quality from the adverse effects caused by the proposed activity then it may be no longer reasonably necessary, but merely expedient for the developer to offer<sup>45</sup>.

The Board found that the Court in *JFI* appeared to use the terms set-off (offsetting) and environmental compensation interchangeably, but identified the significance of proximity (in terms of distance, kind or quality) of the counterbalancing action in assessing the value of that action. The Board observed that there comes a point at which the action being offered ceases to remedy or mitigate the adverse effect which has been created and is rather offered as an indirect but compensatory benefit for allowing that adverse effect. An example of the latter type of action would be the offering of public walking tracks on adjacent land in response to a large residential development and golf course in an outstanding natural landscape or an offer to make a cash payment to an environmental cause as a response to damaging a waterbody<sup>46</sup>.

In differentiating "offsetting" and "environmental compensation" the Board of Inquiry in TGP found:

... the term offsetting encompasses a range of measures which might be proposed to counter balance adverse effects of an activity, but generally fell into two broad categories. Offsetting which related directly to the values affected by an activity was in fact a form of remedy or mitigation of adverse effects and should be regarded as such. Offsetting which did not directly relate to the values affected by an activity could more properly be described as environmental compensation<sup>47</sup>.

The Environment Court in the *Mt Cass Wind Farm* decision adopted the approach from the Board of Inquiry in TGP. The Court then found that the offsetting for Mt Cass clearly related to the values being affected, and would be undertaken on the same site. Therefore, the Court found it to be a "form of remedy or mitigation of adverse effects" rather than environmental compensation<sup>48</sup>.

In the Horizons One Plan case, an argument was made, on the basis of the TGP plan change decision, that because a biodiversity offset is a subset of remediation or mitigation an offset should therefore not be specifically referred to or required. The Court stated in response<sup>49</sup>:

[3-63] With respect to the Board of Inquiry, we do not consider that offsetting is a response that should be subsumed under the terms *remediation* or *mitigation* in the POP in such a way. We agree with the Minister that in developing a planning framework, there is the opportunity to clarify that offsetting is a possible response following minimisation – or mitigation – at the point of impact.

[3-64] A related argument was that the law does not allow the policy approach of a hierarchy, but requires that any proposal should be treated in the round under the *avoid, remedy or mitigate* mantra. We have already dealt with that argument in Part 2 of the decision dealing with Landscape. We find it acceptable and appropriate for the regional plan to state a preference for the way effects on biodiversity should be dealt with, including by instituting a hierarchy.

We consider that this decision is consistent with the Board of Inquiry's comments in the TGP plan change. It clarifies that a Council is entitled to make clear its preference in a plan for offsets being the final step in the mitigation hierarchy.

The Environment Court's decision on the Escarpment Mine is also consistent with this approach. The applicant submitted that the proposed Heaphy Biodiversity Enhancement Area is, in the terms of the distinction drawn by the Transmission Gully Board of Inquiry, a hybrid. Where it aims to enrich species diminished on the Denniston Plateau, it might be considered mitigation of the effects of the mine on that species, but where it creates benefits for some species other than those diminished on

<sup>45</sup> Paragraph 37.

<sup>46</sup> Paragraph 203.

<sup>47</sup> TGP at paragraph 210.

<sup>48</sup> Paragraph 463.

<sup>49</sup> Ibid para 3-64.

Denniston Plateau, it is to be regarded as compensation for those elements of biodiversity which are lost, and for which no mitigation is possible. Forest and Bird submitted that the Heaphy was too distant to meet the desiderata in *JFI Limited*<sup>50</sup>. However, the Court held that the benefits being conferred on the same at risk or endangered species that would be affected by the Denniston proposal allowed them to have regard to the compensation being offered in the Heaphy, although the distance separating both environments would have some influence over the weight given to it<sup>51</sup>.

The Environment Court went on to elaborate on this point, before concluding that the Court had scope to accept as offset mitigation, benefits to those same species that are adversely affected by the proposal:

[237] On the surface, the "desiderata" in *JFI Limited* would suggest that we give limited significance to the compensation package in the Heaphy. To the extent that species are benefitted which would suffer adverse effects on Denniston, we consider that to be compensation in kind, and necessary, since there is uncertainty about the extent to which the Denniston populations will be benefitted by the predator control there. But in terms of the Denniston flora, the compensation would be what Dr Ussher acknowledged to be "unlike for like". That could be given weight only on the basis of the much broader approach to the management of eco-systems to which Dr Ussher referred in his initial evidence. We consider the different types of effects at issue in *JFI Limited* and this case give us scope to accept as offset mitigation benefits to those same species that are adversely affected by the EMP proposal.

However, as noted, this approach has now been found to be incorrect by the High Court on appeal from the Environment Court. In its decision the High Court referred to *Transmission Gully* and *Mainpower* (which applied the *Transmission Gully* approach to offsetting), but found that "mitigation" by definition must be to address the effects at the point of impact. It stated that the RMA distinguishes between mitigation of adverse effects caused by the activity for which resource consent is being sought, and positive effects offered by the applicant as an offset to adverse effects caused by the proposed activity<sup>52</sup>.

The High Court held that the proposed "mitigation and compensation" package did not "mitigate" any actual or potential effects on the environment of allowing the Buller Coal Escarpment proposal.

The Court provided an example that if open cast mining will destroy the habitat of an important species of snails, an adverse effect, it cannot be said logically that enhancing the habitat of snails elsewhere in the environment mitigates that adverse effect, unless possibly the population that was on the environment that is being destroyed was lifted and placed in the new environment<sup>53</sup>. The Court considered that merely to say that the positive benefit offered relates to the values affected by an adverse effect is applying mitigating outside the normal usage of that term. The usual meaning of "mitigate" is to alleviate, or to abate, or to moderate the severity of something. The Court was of the view that offsets do not do that. The Court stated that offsets are better viewed as a positive environmental effect to be taken into account pursuant to section 104(1)(a) and (c), and s 5(2).

In summary, the High Court decision means that offsets address the residual effects of a proposal, and are to be treated as a positive environmental effect offered by an applicant to be taken into account as offsets to adverse effects of the proposal. Offsets can be considered when assessing an application for resource consent under the RMA pursuant to:

- a. Section 104(1)(a) which allows the taking into account of positive effects on the environment proffered by the applicant in consideration for allowing the activity; and
- b. Section 104(1)(c) which allows consideration of any other matter the consent authority thinks is relevant and necessary to determine the application; and

<sup>50</sup> *JF Investments Limited v Queenstown Lakes District Council* C48/2006, at para [42].

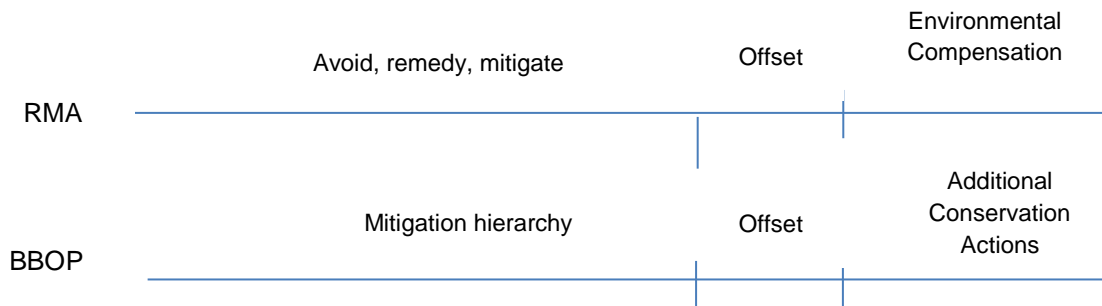
<sup>51</sup> *West Coast Environmental Network Inc v West Coast Regional Council and Buller District Council* [2013] NZEnvC 47, para [213].

<sup>52</sup> Paragraph 72.

<sup>53</sup> Paragraph 72.

- c. Section 5(2) which is the section which provides for the sustainable management purpose of the RMA. Section 104(1) is expressed as being subject to this Part 2 purpose.

The High Court decision now makes the New Zealand legal position similar to the way in which offsets are seen by the BBOP. Formerly, much of the confusion that arose over the use of the terms resulted from the fact that New Zealand uses terminology under the RMA which is similar to BBOP but has traditionally been used in a slightly different way. Under BBOP, an offset is also not seen as a form of mitigation, but rather a method that can be used separately (and subsequently) to mitigation. This is shown in the following diagram.



In terms of the change to the way offsets are considered, the essential question is whether calling an offset a positive effect as opposed to a type of mitigation will make a real practical difference when deciding on the merits of a particular proposal. As the Environment Court said in one case:

It does not matter whether one regards the offset as a remedy, or mitigation, or either. What it will produce is a better outcome in that the life-supporting capacity, including the ecological integrity of the land will be enhanced and ensured<sup>54</sup>.

In the Escarpment Mine proposal case the change brought about by the High Court's decision did not make a practical difference. The second interim decision stated:

[19] On careful reflection, applying strictly the distinction in terminology set out by the High Court, we find, as the High Court envisaged possible, that our interim judgment that with appropriate conditions consent can be achieved, is not materially affected.

However, the impacts of this change in how an offset is considered are:

- a. The consent authority assessing whether an application requires public notification can only consider adverse effects, and will not be able to consider any positive effects of an offset.
- b. If the activity concerned is a non-complying activity, an offset may not be able to be considered in the 'no more than minor' threshold test in section 104D.
- c. A Court will not be able to impose a condition in relation to an offset (as a positive offering) unless that condition is offered by an applicant.

Other than these situations, it is likely that future applications will still advance various remedial, mitigatory, offsetting or compensatory works to counterbalance adverse effects caused by development proposals; and that these will be weighed by the decision maker under section 104 and Part 2 of the RMA – as they have in the past.

<sup>54</sup> Director-General of Conservation v Wairoa District Council W081/07, paragraph 58.

**Offsets distinguished from compensation**

The High Court in the Escarpment Mine project observed, but without making a formal decision on it, that the parties to the proceeding used the term "compensation" as a synonym for offset, and that so does the Environment Court in a number of decisions. It expressed a view that compensation should be distinguished from offsets<sup>55</sup>;

However, the Court was careful to say that it was making no finding on this because that had not been specifically argued before it<sup>56</sup>.

Consistent with this statement, we remain of the view that the distinction between an 'offset' and 'compensation' identified in the various decisions is important and is consistent with the international approach in BBOP.

Under BBOP, the key distinction between an offset and compensation is that an offset achieves **no net loss** in the loss/gain calculation using an appropriate metric. If the gain is less than the loss, then this should be referred to as compensation. This is illustrated in the diagram below<sup>57</sup>. Note that the distinction between offset and compensation is at the point of no net loss.

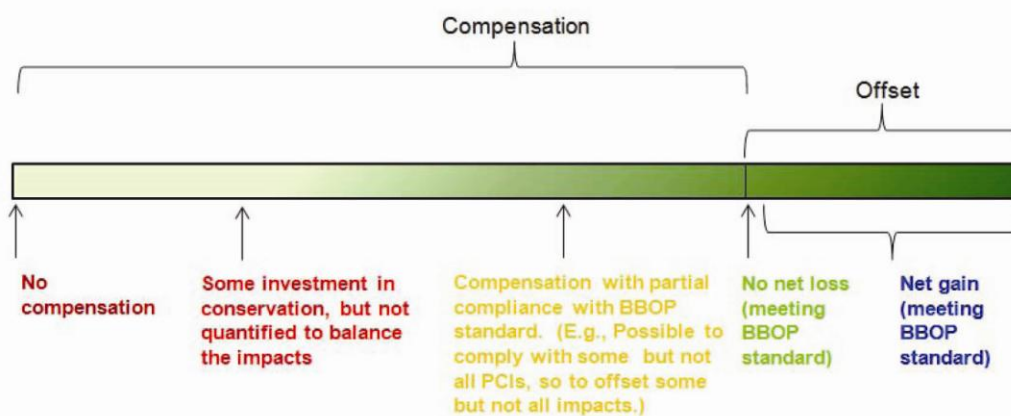


Diagram Source: BBOP Standard on Biodiversity Offsets 2012.

Importantly, while BBOP requires no net loss, it also considers that an offset includes what is known as 'trading up' even where the offset is not of the same type as the effect. In its discussion about the principle of 'no net loss' the BBOP Guidance document states<sup>58</sup>

Ecological equivalence, also termed 'Like-for-like', means that the biodiversity gains due to conservation actions are comparable in ecological terms (in type, amount, and condition over space and time) and in terms of conservation status or priority, to the biodiversity lost through impacts. Equivalence, or 'like for like', is sometimes referred to as 'in-kind'. 'Like-for-like or better' is a variation under which the offset may target biodiversity of higher priority for conservation than the biodiversity impacted. (For example, in some situations, the biodiversity to be impacted by the project may be neither a national nor a local conservation priority. There may be other areas of biodiversity that are a higher priority for conservation and sustainable use and under imminent threat or need of protection or effective management. In these situations, it may be appropriate to consider an 'out-of-kind' offset that

<sup>55</sup> Paragraph 124.

<sup>56</sup> Paragraph 57.

<sup>57</sup> Diagram adapted from BBOP; amended to include findings in recent High Court case Royal Forest and Bird v Buller District Council and others.

<sup>58</sup> Guidance Notes to the Standard on Biodiversity Offsets, BBOP 2012, page 47. Available at [http://bbop.forest-trends.org/guidelines/standard\\_guidance\\_notes.pdf](http://bbop.forest-trends.org/guidelines/standard_guidance_notes.pdf)

involves 'trading up'; i.e., where the offset targets biodiversity of higher priority than that affected by the development project.)

By contrast, as the High Court notes, the use of the terms in New Zealand has not been as clear and often the terms have been used interchangeably. There has been a suggestion by some commentators in New Zealand that it is possible to distinguish between a 'gold standard' offset as if the word is used with a capital 'O' (Offset), and an offset which does not, at least in respect of all elements, result in no net loss. To this extent, it has been suggested that there should not be a clear distinction between the two. So, where a proposed remedial action is the repair of damage of the same kind as the adverse effects of the activity ('in-kind') it is more likely to be an offset rather than compensation. Equally if the proposed mitigation is in the same area, landscape or environment ('on site') then it is also more likely to be an offset because it is more likely that the remedial activity is similar to the effect. It has also been said by some commentators in New Zealand that there can be a 'mixed offset/compensation package' which involves no net loss (or net gain) of some aspects, and compensation of other aspects. Under BBOP, however, this 'mixed package' would be classified as compensation.

We are of the view that the term 'biodiversity offset' should be restricted to where at least no net loss of the identified values is achieved, and that where this is not the case (even where the exchange is like for like or on-site) then it should be termed 'compensation'. If a project has positive actions which result in at least no net loss for some identified values, but not for other values, that should be termed either a 'mixed offset and compensation' package or simply 'compensation'.

### **Is application of a 'mitigation hierarchy' consistent with the RMA?**

There has been some debate about whether the RMA requires the adoption of a mitigation hierarchy in the sense used by BBOP, or whether requiring the adoption of the hierarchy in a plan would be inconsistent with the RMA.

One of the BBOP principles for designing and implementing biodiversity offsets is:

Adherence to the mitigation hierarchy: A biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken according to the mitigation hierarchy<sup>59</sup>.

BBOP literature defines the 'mitigation hierarchy' to be<sup>60</sup>:

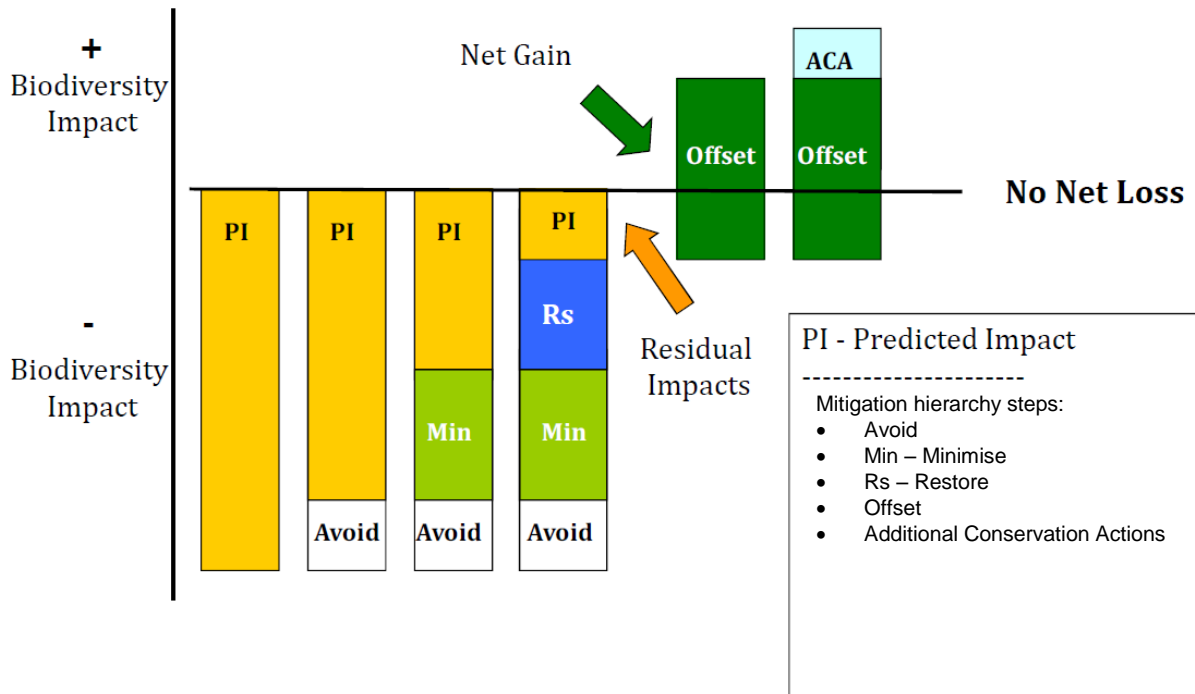
- a. Avoidance: measures taken to avoid creating impacts from the outset, such as careful spatial or temporal placement of elements of infrastructure, in order to completely avoid impacts on certain components of biodiversity. (An example of this would be to avoid areas of significance by careful placement of infrastructure or location of facilities).
- b. Minimisation: measures taken to reduce the duration, intensity and / or extent of impacts (including direct, indirect and cumulative impacts, as appropriate) that cannot be completely avoided, as far as is practically feasible. (An example of this would be minimising the footprint of an activity).
- c. Rehabilitation / restoration: measures taken to rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and / or minimised. (An example would be the revegetation of areas disturbed by construction activities).
- d. Offset: measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimised and / or rehabilitated or restored, in order to achieve no net

<sup>59</sup> Principle 1, BBOP Standard on Biodiversity Offsets, available at [http://www.forest-trends.org/documents/files/doc\\_3078.pdf](http://www.forest-trends.org/documents/files/doc_3078.pdf).

<sup>60</sup> BBOP Glossary, 2012. Washington, D.C. 2nd updated edition. Available at [http://www.forest-trends.org/documents/files/doc\\_3100.pdf](http://www.forest-trends.org/documents/files/doc_3100.pdf).

loss or a net gain of biodiversity. Offsets can take the form of positive management interventions such as restoration of degraded habitat, arrested degradation or averted risk, protecting areas where there is imminent or projected loss of biodiversity.

This is shown in the following diagram.



In addressing the question of the applicability of a 'mitigation hierarchy' in the context of what the appropriate policy should be in the TGP plan change decision, the Board found:

- a. The cascading concept promoted by NZTA in the Request was supported by ecological evidence that in a practical sense avoidance of adverse effects was the natural and preferred outcome in any situation, followed by remediation/mitigation, without any preference between those two methods. The lack of preference between remediation and mitigation reflected the desire to have all options available (following avoidance) to achieve the best environmental outcomes; and
- b. Although the Act does not provide a preference between avoidance, remedy or mitigation, the Freshwater Plan seeks to preserve, safeguard and protect natural values. Although those concepts do not require absolute avoidance of adverse effects, we consider that they support a preference for avoidance as a starting point before consideration of the other alternatives (including offsetting). This view was supported by the ecologists' evidence that avoidance of adverse effects was a natural first step and preferred as an outcome<sup>61</sup>.

<sup>61</sup> Paragraph 245.



The Board concluded:

... we considered that maintaining provision for avoidance to the extent practicable as a preferred first category, indicates that in all cases the initial objective should be to avoid effects on the natural character of the water bodies affected by TGP. If adverse effects cannot practicably be avoided then the ability to remedy and mitigate (including by offsetting) would provide any future consent authority with the ability to consider all possible methods of management of adverse effects in order to achieve the best overall environmental outcome<sup>62</sup>.

Likewise, the Court in the Manawatu-Wanganui One Plan decision agreed that a policy requiring a 'mitigation hierarchy' approach was appropriate<sup>63</sup>.

The High Court in its decision on the Escarpment Mine Project declined to make the finding sought by Forest and Bird that 'mitigation' should get a greater weighting than 'offset' considerations. The Court noted that the relevance and importance of various actions depends on the context, including the degree of mitigation and the scale and qualities of the offset<sup>64</sup>.

While the High Court's decision means that an offset is not to be given greater legal weight than environmental compensation, there is obviously an attraction to give greater evidential weight to offsetting, where the offsetting relates to the values adversely affected by an activity for which resource consent is being granted.

In our view, it is generally accepted that best practice with mitigation/offsets/compensation involves the following sequential approach.

- a. Application of the 'mitigation hierarchy'.
- b. Consideration of whether or not a 'true' offset (as defined by BBOP to mean at least no net loss) is possible – in the form of 'like for like' positive actions or an 'averted risk' offset. This consideration requires an assessment of the various attributes, components and values of the ecosystems which are likely to be affected. Here, it is important to 'identify and measure what we value'. One of the advantages of a true offset is that it is (at least theoretically) possible through the use of an offset model to provide a transparent process for determining the extent of an offset that is required to achieve at least a no net loss of the attributes which are of value.
- c. Even if a 'true' offset is possible, the next question is whether there is some other option available that produces a better conservation outcome – known as 'trading up' – which would be more appropriate to implement.
- d. If a 'true' offset is not possible, then what options are available for environmental compensation? Environmental compensation does not offset or reduce an adverse effect with a positive effect of the same kind. It is where a positive benefit is provided in respect of a different resource or value from that adversely affected.

In terms of environmental compensation, it becomes difficult to determine what an appropriate response should be given that there is currently no robust way to measure 'like' with 'unlike'. Despite this lack of currency it is conceptually easier to provide compensation in a form which is similar to the biodiversity affected, rather than something which is completely different (eg an effect on a particular type of vegetation being compensated for by enhancement of a similar vegetation ecosystem with a similar threat status, rather than enhancement of a terrestrial bird population).

There is little guidance on how to assess the appropriateness of 'out of kind' environmental compensation. One approach is to assess an area affected and the area to be enhanced against

<sup>62</sup> Paragraph 251 page 83.

<sup>63</sup> Paragraphs [3-75] to [3-79].

<sup>64</sup> Paragraph 123.

the Threatened Environments Classification<sup>65</sup> to ensure that the environment enhanced has at least a similar threat status – which is one measure of importance. So, for example the Council decision on the Mt William North coal mine application<sup>66</sup> includes the following conditions:

- 23.5 The Consent Holder shall undertake a programme of predator and pest control, the purpose of which is to assist in achieving the objectives of the Biodiversity Management and Habitat Enhancement Programme required by Condition 23.1. Predator Control shall be carried out:
- (1) On the Mt William North mining area; and
  - (2) In accordance with the objectives set out on Condition 23.1 to achieve The Offset.
- 23.6 In determining the appropriate predator control measures and the appropriate location in terms of Condition 23.1b, the Consent Holder shall apply the biodiversity offset model and the use of Habitat Hectares set out in the evidence of Dr. G Bramley dated May 2012 to achieve an overall offset and compensation of at least 264 Habitat Hectares, or such lesser amount of Habitat Hectares certified by the Consent Authority as properly calculated with reference to the total footprint identified in Figure 3.4(a) attached to the supplementary evidence of Mr I Harvey dated May 2012.
- 23.7 The Consent Holder shall, as far as practicable, endeavour to apply the Offset to the Mt William North mining area and/or to coal measures vegetation habitat before it undertakes conservation measures in any of the other biodiversity management areas listed in Condition 23.1.
- 23.8 In the event that compensation for loss of coal measures vegetation is required in terms of Condition 23.1c, the Consent Holder shall apply the threat status classification in Holdaway 2012 or the Threatened Environments Classification<sup>[1]</sup> with respect to the biodiversity management area, and the following multipliers shall be applied (based on coal measures ecosystem being classified as 'endangered'):
- |    |  |    |
|----|--|----|
| a. | For a more threatened ecosystem(s):        | 1  |
| b. | For an equivalent threatened ecosystem(s): | 2  |
| c. | For a less threatened ecosystem(s):        | 4  |
| d. | Non-threatened ecosystem(s):               | 10 |

**When is it appropriate to move to the next stage in the 'mitigation hierarchy'?**

This issue was discussed by both the Board in the TGP plan change and by the Court in the Manawatu-Wanganui decision.

As we have noted, in the TGP plan change, the Board accepted that complete avoidance of effects was unnecessary to meet the requirements of sustainable management<sup>67</sup>. However, the Board found that the policy should state that the first step in the application of the hierarchy was that

<sup>65</sup> Threatened Environments Classification 2007 Holdaway et al 2012, 'Status assessment of New Zealand's naturally uncommon ecosystems'. Conservation Biology 26(4): 619-629.

<sup>66</sup> This condition was appealed by the consent holder, but has not yet been considered by the Environment Court.

<sup>[1]</sup> Threatened Environments Classification, Landcare Research 2007.

<sup>67</sup> Paragraphs 213, 219.

'adverse effects are to be avoided to the extent practicable'. This term is then defined in the Explanation to the Policy as<sup>68</sup>:

In this policy "to the extent practicable" requires consideration of the nature of the activity, the sensitivity of the receiving environment to adverse effects, the financial implications and adverse effects of the measure considered compared with other alternative measures, the current state of technical knowledge and the likelihood that effects can be successfully avoided, remedied or mitigated.

In the Horizons decision the Court noted that the BBOP principles use the term 'as far as is practically feasible' as the criterion or point for when decision making should cascade down to another level on the hierarchy. There was discussion as to what the appropriate wording should be in the Manawatu-Wanganui context. The Court concluded that the word *reasonably* should be used throughout the policy which is preferable to *reasonably practicable* or *practically feasible*. "Reasonably is an objective test, capable of being applied by decision makers"<sup>69</sup>.

### What level of 'residual effects' require a biodiversity offset to be considered?

Do **all** effects have to be addressed by way of an offset?

An offset is defined by BBOP as an action taken to address 'significant' residual effects.

In the Manawatu-Wanganui One Plan case the Minister for Conservation argued that offsetting principles should be applied to **all** adverse effects left over after mitigating at the point of impact. The Minister considered that for the residual adverse effects, a net biodiversity gain is to be achieved, and that this principle should be applied to **all** exchanges of biodiversity values<sup>70</sup>.

That approach was rejected by the Court. Instead, the Court decided that for 'rare habitat', 'threatened habitat', and 'at-risk habitat' the threshold relates to effects which are 'more than minor'. For other habitats, the threshold for when an offset is required is for 'significant adverse effects'.

This is consistent with the Mt Cass decision where the Court noted that while the opinion of two ecologists that 'any effect on a significant ecosystem is significant' it concluded:

[189] The question of the significance of the adverse effects of vegetation disturbance and loss of habitat is difficult to answer. While we accept that the importance of the ecosystem is a key factor in the evaluation we do not consider that to automatically confer significance on any adverse effect. The magnitude and scale of the effects must also be considered...

### What happens if a biodiversity offset is not or cannot be provided?

Various submitters and ecologists have argued that if a 'true' offset (in the BBOP sense of all elements achieving no net loss) is unavailable, consent should be declined. The suggestion is that if any non-offsettable effects include high value biodiversity components or biodiversity types (such as at risk or threatened plants or historically rare ecosystems), then the development itself is inappropriate.

However, such an approach is inconsistent with the RMA and would elevate a 'no net loss, like-for-like' test above the sustainable management test of the RMA. As the Board of Inquiry in the TGP final decision stated<sup>71</sup>:

Secondly, while we recognise the desirability of achieving a situation of no net loss of biodiversity from a project, we do not believe that it is a requirement of RMA that no net loss be achieved in any given case. The principle of sustainable management requires a broad consideration of a range of sometimes competing factors. A consent authority is entitled to conclude that consent ought to be

<sup>68</sup> Page 251, page 63.

<sup>69</sup> Paragraph [3-91].

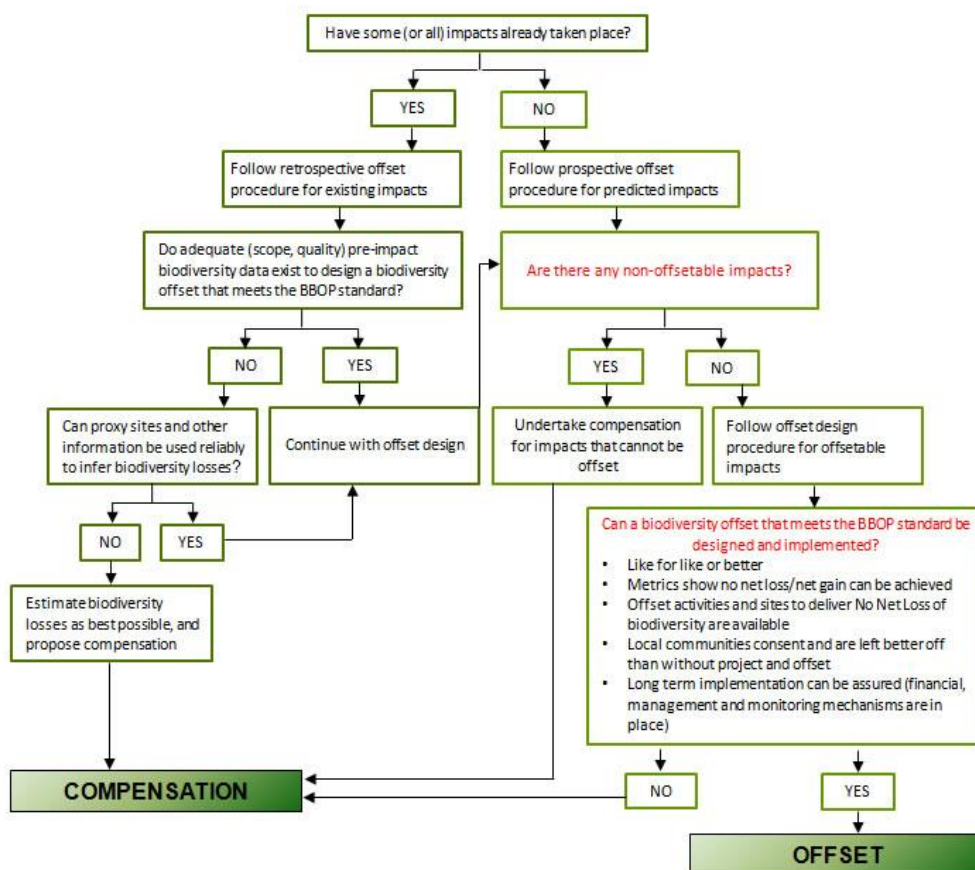
<sup>70</sup> Paragraph 3-71.

<sup>71</sup> Ibid, paragraph 462.

granted to a proposal notwithstanding that all adverse effects of the proposal have not been avoided, remedied or mitigated. In other words, there may be a net loss of some values or aspects of the environment. The significance of that loss and its *weighting* against the benefits of any given proposal is a matter to be determined by a consent authority applying section 5(2) of the RMA.

To the extent that a 'true' offset defined cannot be provided, it is then open to an applicant to propose environmental compensation or additional measures which are to be taken into account in the overall decision making process.

The process of determining whether an offset or compensation is more appropriate is spelt out by BBOP (2012)<sup>72</sup> and reproduced below as Diagram 3. The decision tree shown in Diagram 3 implies a binary ('yes/no') answer at various steps, although in reality there can often be a continuum of responses. For instance, for a single project the answer may be 'yes' for some impacts, and 'no' for others. However, even in situations where compensation rather than an offset is undertaken, developers are encouraged to consider whether it is possible, and desirable, to get as close as possible to a no net loss outcome as a first step in managing their biodiversity risks.



The RMA does not require a *no-net-loss*, *like-for-like* or *net-benefit* approach. Whether the residual effects have to be compensated/offset is part of the decision making discretion, and must be undertaken on a case by case basis.

Mitigation contemplates that some form of adverse effects may be acceptable, but the extent to which those effects are acceptable is one of fact and degree<sup>73</sup>. Thus, a consent authority is required

<sup>72</sup> BBOP Standard on Biodiversity Offsets 2012.

<sup>73</sup> *Trio Holdings v Marlborough DC*, W103A/93.

to look at the proposal in the round to determine whether or not the adverse effects of the proposal are acceptable.

The High Court in the Escarpment Mine case confirmed that not all effects need to be addressed by way of mitigation, offset, or compensation. It stated<sup>74</sup>:

It is clear that Parliament did not intend the RMA to be a zero sum game, in the sense that all adverse effects which were unavoidable had to be mitigated or compensated.

### **Can an 'averted risk offset' be considered?**

Averted risk offsets are defined by BBOP as 'biodiversity offset interventions which prevent future risks of harm to biodiversity from occurring'. An 'averted risk' is defined as 'the removal of a threat to biodiversity for which there is reasonable and credible evidence'.

The BBOP Guidance Notes states:

That development projects by third parties in the vicinity of a project or its offset activity can compromise the feasibility of delivering successful long-term conservation outcomes for the offset. This risk is perhaps clearest where an offset is proposed on or near a site already earmarked for development which is not compatible with conservation as a land use. Where a third party development is highly likely to go ahead (for instance, is already authorised) this constitutes a constraint for conservation. However, there can be situations where a proposed development presents the opportunity for an averted risk offset (for instance, if a logging or palm oil concession can be bought out prior to the land being cleared, and the land used instead for conservation purposes)<sup>75</sup>.

In terms of averted risk, the Guidance Note also states:

Averted risk offsets deliver biodiversity gains through actions that prevent further harm by removing existing sources of biodiversity loss or that guard against future threats by averting known future risk. As with positive management offsets, the biodiversity gains due to the offset activities need to be assessed or quantified relative to the biodiversity condition that exists in the area before the offset activities took place. For averted risk offsets, an additional requirement is that the baseline condition be assessed with a particular focus on the threats or future risks being averted – i.e. assessment of the likelihood, the timing, and the severity of risk posed by existing sources of loss or future threats. This requires careful protection of the pre-offset condition under both "with-offset" and "without-offset" scenario to determine whether, and to what extent, offset activities designed to avert risk will result in real conservation gains<sup>76</sup>.

For an averted risk offset to demonstrate biodiversity gains, it must be shown that the pre-offset biodiversity condition would decline significantly, that is, that there is likely to be on-going loss at a rapid rate, unless the offset activities are implemented:

When underlying causes of biodiversity loss in the offset area are due to immediate threats (for instance, increasing and high rates of deforestation), such trends are an important part of the baseline condition, and can be factored into calculations about the loss of biodiversity in the absence of the averted risk offset, and thus the relative gains of biodiversity that can be brought about by the offset. This baseline is the basis against which offset planners can: (1) evaluate the gains that can be achieved with the planned offset activities; and (2) once the offset is designed, quantify the anticipated biodiversity gains to demonstrate that the offset can achieve no net loss or a net gain<sup>77</sup>.

<sup>74</sup> *Royal Forest and Bird Protection Society of New Zealand v Buller District Council and West Coast Regional Council and others*, [2013] NZHC 1346, paragraph 52.

<sup>75</sup> Guidance Notes to the Standard on Biodiversity Offsets; Business and Biodiversity Offsets Programme (BBOP) 20 March 2012, page 23.

<sup>76</sup> *Ibid*, page 35.

<sup>77</sup> *Ibid*, page 36.

For averted risk offsets, the likelihood, severity, and timing of averted risks should be evaluated and used in the baseline characterisation.

As part of the 'offset package' for the proposed Escarpment Mine, the appellant suggested that an area of 745ha be set aside on the Denniston Plateau for 'permanent legal protection from open cast mining' (referred to as the Denniston Permanent Protected Area or DPPA). That was to be enforced by a condition which provided:

The Consent Holder shall ensure a form of permanent legal protection from land disturbance of any type within the DPPA.

In its interim decision the Court noted that this proposed condition creates problems. The most significant problem with the condition is that the land is not in the applicants' ownership but is administered by the Department of Conservation.

Forest and Bird had also submitted that the condition is uncertain. The land is already protected to the extent that activities on the land, and access to carry them out, require the approval of the Minister of Conservation. The Court noted that if 'further protection', means the addition of the land to Schedule 4 of the Crown Minerals Act, that would require the consent of both the Department of Conservation and the Ministry of Economic Development, neither of whom were parties to the appeal. The Court accepted that without their consent it cannot bind them.

On appeal the High Court confirmed that the proposed 'averted risk offset' was a matter that can be taken into account as part of the Environment Court's discretionary judgment.

In its second interim decision the Court stated:

We currently do not know the extent of the area to be set aside for protection that the Ministers have in mind, nor what eco-systems it would contain ... Nor do we know the form of protection to be afforded. We have identified specific and serious adverse effects which require to be offset if consent is to be appropriate. The Court is being asked to accept unspecified benefits, or at least benefits unable to be guaranteed, as "offsets". BCL is effectively saying *"trust us and those we are negotiating with to do the right thing"*. We have no reason to doubt the goodwill of any party to the negotiations. Equally we have at the moment no way of foreseeing the outcome.

The Court indicated that in these circumstances its preferred option is to:

... strengthen conditions to ensure that best endeavours would have been genuinely exhausted prior to the consent commencing, by requiring that fact to be certified by a party other than the consent holder. The most logical certifiers would be the two councils whose consents are in issue. If the latter course were to be pursued, one way in which certainty and finality could be achieved, might be to allow recourse to this Court, perhaps by way of the mechanism of an application for declaratory judgment, if the councils and BCL found themselves unable to agree<sup>78</sup>.

In its final decision<sup>79</sup> the Court confirmed its 'best endeavours' approach to the DPPA by imposing the following conditions:

#### **Specific objectives and goal of the DPPA**

147. The goal of the Denniston Biodiversity Enhancement Programme shall be to achieve and sustain improvements in key biodiversity attributes within the DPPA.
148. The objectives of the Denniston Biodiversity Enhancement Programme in the DPPA are to:

<sup>78</sup> Paragraph 36.

<sup>79</sup> [2013] NZEnvC 253.

- a) Offset the residual adverse effects on biodiversity values from the EMP;
- b) To achieve statistically significant improvements in abundance and to ensure that those improvements are sustained for each of the following key measurable and representative biodiversity attributes;
  - i) Great Spotted Kiwi;
  - ii) *P. patrickensis*;
  - iii) South Island fernbird;
  - iv) Rifleman;
  - v) Forest gecko; and
  - vi) West Coast green gecko.

**Legal protection of the DPPA and future applications**

149. Prior to undertaking any Mining Operations under this consent, the Consent Holder shall:

- a) In consultation with the Ministry of Business, Innovation and Employment – NZ Petroleum & Minerals and the Department of Conservation, use best endeavours to establish a legal mechanism to protect the SPPA from future Open Cast Mining; and
- b) Upon either:
  - i) the legal mechanism being established; or
  - ii) best endeavours discussions being exhausted,

The Consent Holder shall provide evidence to the Buller District Council and West Coast Regional Council, for the purposes of certification, of a satisfactory legal mechanism being established or best endeavours discussions being exhausted.

For the purposes of this condition, "Open Cast Mining" shall mean the removal or placement of overburden including soil and/or subsoil layers for the purpose, of gaining access to minerals below the removed overburden for the extraction of those minerals and, without limiting the exception described in condition 146, the infrastructure or associated land disturbance activities that support it.

150. From the commencement date of these consents, the Consent holder shall:

- a) ...
- (b) make no application for Open Cast Mining (as that term is defined in condition 149) within the area covered by the DPPA.

**What is the role of stakeholder engagement?**

One of the BBOP principles is:

Stakeholder participation: in areas affected by the development project and by a biodiversity offset, the effective participation of stakeholders should be ensured in decision-making about biodiversity offsets, and documented in the Biodiversity Offset Management Plan.

It was argued by submitters and ecologists opposed to the Mt Cass wind farm that this principle required something additional to the normal requirements under the RMA for notified consent processes. Some argued that best practice requires agreement of all interested parties and that if agreement is not reached on both the parameters of an offset model and on monitoring requirements, then any proposed offset cannot be called best practice.

Such an approach fails to recognise that the BBOP principles have been developed in an international context, for the purposes of providing guidance to business often in situations where there is no applicable environmental legislation – certainly nothing like the sophisticated and

extensive legislation that is the RMA. This particular BBOP principle therefore has no additional application in New Zealand beyond what is fully addressed by the existing legislative framework<sup>80</sup>.

Clearly, it is good practice to engage stakeholders, but the RMA does not give a veto to any actual or potential submitter by requiring their agreement to a proposed offset.

### How should a biodiversity offset be modelled?

There has been considerable debate about what type of modelling should be used for determining an offset. Offsetting relies upon good quality information about the biodiversity values at a site and upon a means to convert that information into a 'currency' that can be 'traded' to ensure equivalence between sites.

Biodiversity is complex. Therefore, currencies require a degree of simplification. It is generally recognised, however, that the currency needs to be:

- a. Comprehensive: it needs to include 'what we care about'.
- b. Practical: It needs to be possible and cost effective to collect the necessary data.
- c. Appropriate: given the scale and type of effects. Is it too simple, or unnecessarily complicated given the likely effects.

BBOP does not specify particular methods or models that should be used<sup>81</sup>.

In Mt Cass the type of model and its attributes were the subject of extensive evidence and debate. The offset model proposed by the applicant was a 'modified habitat hectares' approach which is taken from an approach used in the State of Victoria in Australia and used in a number of the BBOP pilot projects<sup>82</sup>. This approach is used to account for biodiversity losses and gains for each of the attributes chosen. The habitat score indicates the quality relative to the benchmark conditions and when multiplied by the area of the site, the score produces a measure of quality and quantity and habitat hectares.

An alternative approach urged on the Court by ecologists opposing the wind farm was a type of 'condition area' approach. As the Court described it:

[205] The ecologists were agreed that the purpose of the biodiversity offset model is to determine the 'quanta' (type and amount) of mitigation actions/initiatives required to offset adverse effects on biodiversity values. However, they were not agreed that the "habitat hectares" model developed for the site is sufficient to assess the proposed biodiversity offset. Dr Lloyd and Mr Davis challenged the choice of attributes, assumptions of net gain, and the adequacy of information for invertebrates, lower plants and ecological relationships. They also considered the rarity of the ecosystem and the importance of the biodiversity on site to preclude an offset approach to adverse effects.

[206] Dr Norton considered the biodiversity offset model to be robust and to demonstrate that the significant biodiversity values of Mt Cass would be in better condition in the medium to long term than would be the case under the current farm management. He considered the removal of cattle, control of pests, restoration plantings, and active management of threatened species would result in considerable improvements in biodiversity that would not occur without the wind farm. Dr Ussher had reviewed the model and concluded that it provided a robust and transparent measure of the biodiversity. He was confident that the net gain predicted by the model was real and achievable.

<sup>80</sup> This is true of some other BBOP principles, such as Principle 10 "Science and traditional knowledge: The design and implementation of a biodiversity offset shall be a documented process informed by sound science, including an appropriate consideration of traditional knowledge".

<sup>81</sup> See BBOP (2012) 'No Net Loss and Loss-Gain Calculations in Biodiversity Offsets' Forest Trends 2012. Available on [www.bbop.org.nz](http://www.bbop.org.nz).

<sup>82</sup> [www.forest-trends.org/pages/pilot-projects](http://www.forest-trends.org/pages/pilot-projects).



The Court then went on to consider the disputed choice of attributes and the model:

- [215] Dr Lloyd was concerned that key biodiversity components were missing from the model – different forest types, vegetation composition, other measures of vegetation structure, at risk and locally important plant species, and *Wainuia edwardi* (a potentially affected snail). He thought the choice of attributes fell well short of a fair representation of the biodiversity at Mt Cass and recommended additional species and measures of forest structure to enable objective assessment of milestones. Dr Lloyd considered a species-by-species condition-area model (Condition-Hectares) to be considerably more transparent and appropriate. He regarded the Habitat Hectares model as being well suited to ecosystems services provided by woody vegetation but not to the wider range of biodiversity values at Mt Cass.
- [216] Dr Norton maintained that a mix of surrogate and species attributes was more appropriate than a species only approach. During cross-examination Dr Norton explained that the species selected in the model focused on species affected by the wind farm, particular threatened species, and therefore did not include other species such as the *Heliohebe*, scrambling broom or holy grass. Invertebrates were not included as they are difficult to study and little is known about the population abundance or the way they use habitat. In his opinion a high quality habitat would provide for the conservation of groups such as invertebrates, microorganism and fungi.
- [217] Dr Ussher added that one of the constraints in modelling was the ability to obtain information and track attributes over time. Thus the Canterbury gecko, which is easier to monitor than the skinks, is to some degree used as a surrogate for other lizards on site. He agreed that more attributes could be added to the model but he did not think it would be necessary and nor would it give a clearer answer. Dr Ussher said that both the Habitat Hectares model, as used for Mt Cass, to both reasonable and appropriate and to provide a robust outcome.

The Court concluded:

- [218] The inclusion of a greater number of species and additional parameters in the attributes to be modelled would increase the level of detail and provide more information on the response of the ecosystem and its component parts. However, having more information is not necessarily going to lead to better outcomes for biodiversity at the site. We are satisfied that the model and the attributes chosen are adequate to assess the overall trends in biodiversity at the site. We return to the issue of monitoring of At Risk, Threatened and locally uncommon species when we consider the conditions of consent.

The proposed offset was then assessed against the principles of BBOP and Schedule 2 of the Proposed National Policy Statement of Indigenous Biodiversity. There was consensus between the various experts that these principles provided a useful framework<sup>83</sup>.

The Court summarised its consideration of the offset model by concluding that the biodiversity offset would both remedy and mitigate adverse effects from the construction and operation of the wind farm and provide benefits for biodiversity across the area<sup>84</sup>. In coming to this conclusion, the Court endorsed the BBOP approach and the use of the modified habitat hectares model.

The interim Environment Court decision in the Escarpment Mine project also expressed concerns with the heavy emphasis placed on the computer model put forward by BCL, which was ultimately abandoned. Instead of using the model, the Court stated that the task for the Court is to consider<sup>85</sup>:

- a. What would be the various adverse effects likely to result from the mine;
- b. To what extent they are proposed to be mitigated; and
- c. Where no mitigation is possible, how relevant and how significant would be the compensation offered.

<sup>83</sup> Paragraph 207.

<sup>84</sup> Paragraph 278.

<sup>85</sup> Paragraph 219.

The Court would then be in a position to evaluate those matters in the light of relevant statutory instruments and the RMA. This approach was described as 'sticking to the knitting'. The Court went on to elaborate on this point, stating that while the model remained in evidence; it had become apparent that the Court was being used as a forum to settle vigorous technical scientific debates between two groups of ecologists as to appropriate modelling methodology. It was reiterated that the Court is neither a peer review panel nor an arbitrator between factions disputing scientific or computer modelling methodology; it is a consent authority whose duties are set by the RMA, which in this case include<sup>86</sup>:

- a. Assessing the strength or otherwise of the evidence about various species, ecosystems, and biodiversity;
- b. To weigh the individual factors;
- c. Assess whether adverse effects must be avoided, remedied or mitigated; and
- d. Arrive at an overall broad judgement that serves the purpose of the Act as stated in section 5.

There was also considerable debate and cross examination of witnesses as to methods for calculating and assessing biodiversity offsets in the Board of Inquiry Draft Decision on the MacKays to Peka Peka Expressway Project. Ultimately, the expert witness for the Kapiti Coast District Council accepted that there were no standards or mandatory accepted tools in New Zealand to calculate and assess biodiversity offsets. However, she considered that the approach of the NZTA experts in the technical report in applying the Institute of Ecology and Environmental Management (IEEM) guidelines was simplistic, but accepted that there was no specific model or science behind that statement.

Both these recent cases highlight the need for a standard New Zealand approach to the development of offsets, as the Environment Court in the Bathurst decision emphasised, the Court is not the forum to determine technical ecological debates about the merits of different approaches.

### **Can pest control resulting in enhancement to existing biodiversity be a biodiversity offset?**

There has been some concern expressed that enhancement of an existing habitat to improve its condition is not an appropriate offset for effects on a similar habitat. The argument here is that while such an approach may lead to no net loss in biodiversity, the area or total habitat will be reduced because the activity at the impact site will destroy an area of habitat, and the conservation actions (usually in the form of weed and pest control or fencing out stock or other pests) will not create new habitat.

This argument was put to the Court in the Mt Cass case, but not accepted. The Court required the Environmental Management Plan to include a detailed pest animal control programme<sup>87</sup>. Likewise, pest control leading to improvement in condition has been accepted as appropriate in the TGP resource consent decision<sup>88</sup>, the Escarpment Mine<sup>89</sup>, and has been generally recognised in New Zealand for many decades as providing positive conservation outcomes.

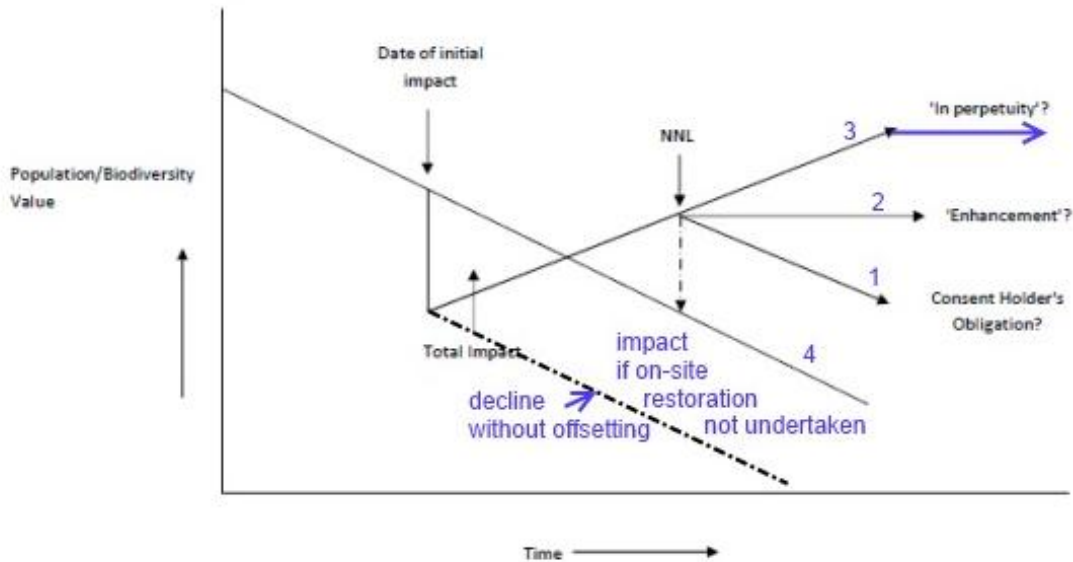
<sup>86</sup> Paragraph 220.

<sup>87</sup> See paragraph 252. Condition 86 provides for pest control to ensure for the operation of the wind farm.

<sup>88</sup> The Environmental Management Plan requires control of deer, goats, pigs and weeds during construction and for 3 years following planting.

<sup>89</sup> Condition 144 requires part of the area of pest control to be maintained in perpetuity.

One question which is often raised is whether or not pest control as part of an offset is required in perpetuity in order to be consistent with one of the BBOP principles<sup>90</sup>. There has also been some discussion about whether or not it is a consent holder's responsibility to continue with pest control after no net loss has been achieved. The issue can be illustrated by the following figure.



BBOP's 2012 Guidance notes provide the context for Principle 8. The Guidance notes do not say that an offset must last in perpetuity. Rather, Criterion 8.1 requires the offset to outlast the impact. If the impact is permanent, then the offset must be permanent. The BBOP Guidance notes place heavy emphases on the need for financial and legal security for an offset. This is in terms of having the financial means to carry out the outcomes and those outcomes will not be affected if the developer goes bankrupt, or has other financial difficulties. In terms of legal security, the concern is to ensure that the land will not be sold or transferred to a party who then has no obligation to carry out or continue the offset.

According to the Guidance Notes: "the long-term viability of the offset depends on the ability to ensure finance over the long term. Systems need to be in place to ensure that the financing is guaranteed and management systems are in place to deal with changing conditions, such as if the developer sells its interest in the operation to a third party". The emphasis is therefore on guaranteed financing, rather than the duration of the offset.

There are two important components to establishing financial stability for an offset<sup>91</sup> Guidance Notes:

- a. A financial plan; this would include a budget to include a cost of activities required over the period for which the offset is designed to operate (including costs associated with building a capacity to implement the defined measures), along with an indication of the source of the funds available for this purpose; and
- b. Clear financial mechanism for delivery; as well as knowing how much the offset activity will cost and where the funds will come from, some mechanism will be needed to ensure the delivery of funds. The financial mechanism will need to be in place to guarantee offset financing for as long as the offset operates.

<sup>90</sup> Principle 8 of BBOP is "Long term outcomes: the design and implementation of a biodiversity offset should be based on an adaptive management approach, incorporating monitoring evaluation, with the objective of securing outcomes that last at least as long as the development project's impacts and preferably in perpetuity".

<sup>91</sup> Guidance Notes to the Standard on Biodiversity Offsets; Business and Biodiversity Offsets Programme (BBOP) 20 March 2012, page 87.

The Guidance Document then sets out three factors to consider in assessing conformance with Principle 8:

1. Does the biodiversity offset management plan include a financial plan (or is there a separate financial plan) that clearly outlines and commits the financial resources needed to ensure the successful implementation of the offset?

Conformance with this factor requires:

- A budget that includes all investment and operational costs required to meet the objectives outlined in the biodiversity offset management plan for at least as long as the development projects impacts will last;
- The financial plan identifies the source(s) of revenue to cover the offset management plan requirements and contains commitments to provide those financial resources; and
- Guarantees are in place that funding for the offset will be available as part of any settlements relating to the operation of the project.

2. Are legal arrangements and financial mechanisms in place to ensure that the offset will be guaranteed funding into the future?

Conformance with this factor requires:

- Financial mechanisms are in place so that the project will be funded into the long term and that the financing will not be affected by changes in ownership or the financial condition of the company; and
- Legal arrangements have been established to ensure the long term delivery of the offset, through appropriate means, such as trusts, contracts, covenants, designation of land use and protected status of land or biodiversity components, etc.

3. Have the appropriate institutional arrangements been put into place to ensure the effective management of the offset, including development of management objectives and corresponding financial plans and budgets?

Conformance with factor 3 requires:

- Clear and appropriate institutional arrangements (between the developer and any organisations involved in the design, implementation, monitoring and audit of the offset) have been put into place to ensure the management of the offset over the long term and to deliver the outcomes outlined in the biodiversity offset management plan.

To date, no decision has required pest control in perpetuity. The requirements for pest control are limited to the length of time the project is operating (eg the Mt Cass wind farm)<sup>92</sup>, a specified duration time (eg Transmission Gully proposal<sup>93</sup> and Escarpment Mine<sup>94</sup>) or a time limit has not been specified (eg HMR wind farm).

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<sup>92</sup> See condition 86.

<sup>93</sup> See conditions TL10 and TL12A.

<sup>94</sup> 35 years for the Heaphy Enhancement Area and 50 years for the Denniston Enhancement Area.

## Where to from here?

In our article on biodiversity offsets in the April 2010 edition of the Resource Management Journal<sup>95</sup> we wrote:

Currently, the debate over biodiversity offsets is being fought out before Council hearing panels and the Environment Court. This is an expensive, time consuming and ultimately uncertain process with regard to the outcome obtained. We suggest that a practical way forward is to remove the heat of this debate from the adversarial process. This will require the introduction of a standard methodology and a means by which the design of an offset can be certified as achieving no net loss. This will enable developers to have certainty about what is acceptable or not and how much a necessary offset will cost<sup>96</sup>.

We then suggested the introduction of both a National Policy Statement which provides national policy direction and a National Environment Statement which sets out an appropriate methodology or methodologies which can be used.

In the four years since that was written, the need for national direction has become even clearer. As we believe this paper demonstrates, practitioners and the Courts have had to grapple with basic offsetting concepts such as the distinction between mitigation and offsetting, limits to offsets, the mitigation hierarchy, metrics, like-for-like and so on. While the decisions overall are leading to a clearer understanding of the concepts, there remain some different interpretations and opinions on various issues. The overall result remains, with respect, somewhat inconsistent and confusing. This leads to an offsetting process that is inefficient (high transaction costs), slow (applications have to work their way through the courts) and uncertain (outcomes cannot be anticipated). This was recognised in part by the Environment Court in the Escarpment decision where it noted that:

... the Court is not the forum to determine technical ecological debates about the merits of different approaches.

In our view, it remains highly desirable that a national statutory offsetting framework be established which sets the 'rules of the game' with respect to issues such as the mitigation hierarchy, like-for-like, metrics, acceptable gain, no net loss etc. The system would then mostly operate by administration rather than litigation. Reducing transaction costs would also enable the prospect of including an offsets regime for smaller biodiversity effects which are generally not addressed by the larger, more complex models.

In addition to establishing offsetting 'rules of the game' in a policy sense, another area which could be considered in order to achieve an efficient and predictable offsetting system is the stimulation and regeneration of a market for the supply of offsets. A market in third party offsets may be a partial solution, although such a system would require careful design and integration of both the offsetting rules and the market rules, as well as additional legislation.

In January 2011 the government publicly notified a draft National Policy statement on indigenous Biodiversity which contained some provisions on offsets. Over 400 submissions were received by May 2011, but no further progress on the NPS appears to have been made.

Separately to the development of national policy direction, the Department of Conservation released draft guidelines on the use of offsets in November 2012. These guidelines were focussed on metrics. However, significant concerns about the practicality and inconsistency of the guidelines with both the RMA and the BBOP approach were raised by a range of ecologists, policy makers and lawyers. They continue to be the subject of extensive criticism.

The Environment Court in the Escarpment Mine refused to admit the draft guidelines as evidence because they were unhelpful in light of their draft nature and the significant and extensive criticism

<sup>95</sup> Available at [http://www.rmla.org.nz/upload/files/2010april\\_final.pdf](http://www.rmla.org.nz/upload/files/2010april_final.pdf)

<sup>96</sup> Biodiversity Offsets – A Suggested way Forward, Resource Management Law Association Journal, April 2010, page 15, available as above.

made about them. It remains unclear why the Department of Conservation has produced these guidelines when the guidelines themselves question whether offsets are legally available under the Conservation Act (rather than the RMA). Nonetheless, the status of the guidelines is unclear. They were not referred to at all in the May 2013 Department's report to the Minister of Conservation on the access arrangement application by Buller Coal Limited for the Escarpment Mine. That would have been an opportunity for them to have been subjected to independent analysis and consideration.

In our view, national policy (including guidance or regulation on metrics) by way of national policy statement process (with or without public hearings) is the appropriate way to develop policy in this area because it allows for proper public input. It is important to recognise that the development of a proper regime to provide for, and assess the adequacy of, both offsets and compensation is not solely a scientific debate. Rather, it is a policy debate that should be informed by science. It is important that the underpinning science be both generally accepted and practically based. Above all, a biodiversity offsetting system needs to be capable of practical application. Biodiversity needs to be reasonably conserved and enhanced, developers need to understand the costs and implications of offsets for their projects, and they need to be able to implement them in a timely and cost effective manner. This means that, like the rest of the world's offsetting regimes, the way forward for New Zealand requires some reasonable compromises at the intersection of the worlds of ecologists, economists, regulators and business.

A number of other countries have introduced, or are introducing, policies on biodiversity offsets. For example, in the United Kingdom, the Government has recently released for consultation a Green Paper titled "Biodiversity Offsetting in England"<sup>97</sup>. This document sets out options for the proposed biodiversity offsetting system, and poses questions on how the system may operate. The UK government intends to develop detailed proposals for using biodiversity offsetting by the end of 2013.

In October 2012 the Australian federal government introduced an Environmental Offsets Policy<sup>98</sup> as part of the National Law Reform agenda. The Policy is a replacement of the 2007 draft policy statement<sup>99</sup> and aims to improve environmental outcomes through the consistent application of best practice offset principles, provide more certainty and transparency, and encourage advanced planning of offsets. The Policy applies to all impacted matters protected under the *Environment Protection and Biodiversity Conservation Act 1999*.

The Policy sets out 5 key aims, and also sets out the principles and requirements for a suitable offset, and the role of offsets within the broader environmental impact assessment process.

In New South Wales, the state government has introduced a new biodiversity offset policy for major projects<sup>100</sup> (defined as state significant development and infrastructure). The policy sets out seven principles to be used in assessing the impact on biodiversity of a proposal, and determining the acceptable offset. A policy framework<sup>101</sup> has also been developed for use in projects which are not defined as state significant developments or infrastructure but which requires approval under the *Environment Planning and Assessment Act 1979*.

The West Australian State Government introduced a biodiversity offsets policy<sup>102</sup> in September 2011 to serve as an overarching framework to underpin environmental offset assessment and decision making. The Policy sets out the principles which are intended to form the basis of the assessment and decision-making process in WA.

<sup>97</sup> Biodiversity Offsetting in England – September 2013. Available at [https://consult.defra.gov.uk/biodiversity/biodiversity\\_offsetting](https://consult.defra.gov.uk/biodiversity/biodiversity_offsetting).

<sup>98</sup> *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012. Available at <http://www.environment.gov.au/epbc/publications/pubs/offsets-policy.pdf>.

<sup>99</sup> *Use of Environmental Offsets under the EPBC Act (2007)*.

<sup>100</sup> Available at <http://www.environment.nsw.gov.au/biodivoffsets/nswoffsetprincip.htm>.

<sup>101</sup> <http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm>.

<sup>102</sup> WA Environmental Offsets Policy, September 2011. Available at <http://www.epa.wa.gov.au/EPADocLib/WAEnvOffsetsPolicy-270911.pdf>.

In the State of Victoria the regulation of native vegetation clearing includes provision for 'unavoidable' clearing to be compensated for by 'offsetting' that damage, either in the same area or, in certain instances, elsewhere. Native vegetation clearing controls primarily operate under the Victorian planning system, informed by overarching policy as contained in the Victorian Native Vegetation Management Framework<sup>103</sup> and recently released reforms of native vegetation permitted clearing regulations<sup>104</sup>.

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<sup>103</sup> <http://www.dse.vic.gov.au/land-management/victorias-native-vegetation-management-a-framework-for-action>.

<sup>104</sup> See [www.depi.vic.gov.au/environment\\_and\\_wildlife/biodiversity/nativevegetation](http://www.depi.vic.gov.au/environment_and_wildlife/biodiversity/nativevegetation)