

**BEFORE THE ENVIRONMENT COURT
AT CHRISTCHURCH**

**I MUA I TE KŌTI TAIAO O AOTEAROA
KI ŌTAUTAHI**

Decision No. [2020] NZEnvC 137

IN THE MATTER of the Resource Management Act 1991

AND of appeals under clause 14 of Schedule 1 to the Act

BETWEEN OCEANA GOLD (NEW ZEALAND) LIMITED
(ENV-2016-CHC-103)

ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INCORPORATED
(ENV-2016-CHC-102)

ENVIRONMENTAL DEFENCE SOCIETY INCORPORATED
(ENV-2016-CHC-122)

Appellants

AND OTAGO REGIONAL COUNCIL
Respondent

Court: Environment Judge J R Jackson
Environment Commissioner D J Bunting

Hearing: in Chambers at Christchurch
(Final submissions received 31 July 2020)

Memoranda lodged by: S Christensen for Oceana Gold (New Zealand) Limited
A J Logan, P Anderson and C Woodhouse for the respondent, Royal Forest and Bird Protection Society of New Zealand Incorporated and Environmental Defence Society Incorporated respectively
R J Wilson for the Queenstown Lakes District Council (section 274 party)

Date of Decision: 27 August 2020

Date of Issue: 27 August 2020

THIRD (FINAL) DECISION



A: Under clause 16 of Schedule 1 and under section 290 of the Resource Management Act 1991 the Environment Court directs that the Otago Regional Council amends policy 5.4.6(c) of the proposed Otago Regional Policy Statement to read as follows:

Policy 5.4.6 Offsetting for indigenous biological diversity

Consider indigenous biological diversity offsetting, when:

...

- (c) The offset ensures there is no loss of individuals of Threatened taxa, other than kānuka (*Kunzea robusta* and *Kunzea serotina*), and no reasonably measurable loss within the ecological district to an At Risk-Declining taxon, other than mānuka (*Leptospermum scoparium*), under the New Zealand Threat Classification System ("NZTCS").

B: Costs are reserved. Any application should be made by **11 September 2020** and any reply within 10 working days, with a final response within a further 5 working days. Applications are not encouraged.

REASONS

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1. Introduction

1.1 What is the issue?

[1] Maintaining indigenous biodiversity is one of the most complex environmental functions¹ of local authorities under the Resource Management Act 1991 (“the RMA” or “the Act”). Among these complexities is the issue “when is it appropriate to provide environmental offsetting or compensation² for the removal or destruction of indigenous flora and fauna³ (and when not)”⁴? One small generic aspect of that issue is raised in this proceeding.

1.2 The proceeding so far

[2] In the proposed Otago Regional Policy Statement (“PORPS”) policy 5.4.6 sets out the circumstances when indigenous biological diversity offsetting might be considered. That was one of the subjects of the appeal to this court by Oceana Gold (New Zealand) Limited (“Oceana”). In particular Oceana was concerned with one of the proposed criteria in policy 5.4.6 as to when offsets could be offset, viz⁴:

(c) the offset ensures there is no loss of rare or vulnerable species.

[3] That wording was supported by the Otago Regional Council (“ORC”). The evidence for Royal Forest and Bird Protection Society of New Zealand Incorporated (“Forest and Bird”) and/or Environmental Defence Society Incorporated (“EDS”) raised concerns about individuals of ‘rare or vulnerable species’⁵ which the Environment Court accepted. In its decision dated 15 March 2019 (“the First Decision”) the court directed⁶ the ORC to make amendments to policy 5.4.6 among other orders. We also reserved leave for the parties to raise any inconsistencies or errors in the orders.

[4] Subsequently after hearing further from the parties policy 5.4.6 was confirmed by the court on 17 July 2019 (“the Second Decision”) as follows (the most relevant words

¹ cf section 30(1)(ga) RMA.

² See (now) section 104(1)(ab) RMA although strictly that does not apply to this proceeding: [2019] NZEnvC 41 [57].

³ Using those terms loosely to cover all indigenous members of the five kingdoms of living organisms.

⁴ Policy 5.4.6(c) PORPS (post-conferencing version) – see [2019] NZEnvC 41 at [25] and [42].

⁵ See [2020] NZHC 436 at [87]-[126].

⁶ [2019] NZEnvC 41 Order A(1).



for the purposes of this decision are underlined)⁷:

Policy 5.4.6 Offsetting for indigenous biological diversity

Consider indigenous biological diversity offsetting, when:

- (a) Residual adverse effects of activities cannot be avoided, remedied or mitigated;
- (b) The offset achieves no net loss and preferably a net gain in indigenous biological diversity;
- (c) The offset ensures there is no loss of individuals of rare or vulnerable species as defined in reports published prior to 23 May 2015 under the New Zealand Threat Classification System ("NZTCS");
- (d) The offset is undertaken where it will result in the best ecological outcome, preferably:
 - (i) Close to the location of development; or
 - (ii) Within the same ecological district or coastal marine biogeographic region.
- (e) The offset is applied so that the ecological values being achieved are the same or similar to those being lost;
- (f) The positive ecological outcomes of the offset last at least as long as the impact of the activity, preferably in perpetuity;
- (g) The offset will achieve biological diversity outcomes beyond results that would have occurred if the offset was not proposed;
- (h) The delay between the loss of biological diversity through the proposal and the gain or maturation of the offset's biological diversity outcomes is minimised.

[5] That decision was appealed to the High Court by Oceana. The grounds of appeal included that there was a legal difficulty with the emphasised part of policy 5.4.6(c) is because the phrase "rare or vulnerable" is not used in the New Zealand Threat Classification System ('NZTCS'). No party disagreed with that, although most had been happy throughout the first hearing to use the phrase without reference to the NZTCS⁸.

[6] The High Court quashed⁹ this court's confirmation of policy 5.4.6(c) by reason of its reference to "rare or vulnerable species as defined in reports published prior to 14 January 2019 under the New Zealand threat classification system" and remitted the issue back to the court to "provide a workable definition in relation to affected species". Oceana's appeal was otherwise dismissed.

[7] Four memoranda of counsel have been lodged with the court to assist in the consideration of this issue. They were submissions by:

⁷ [2019] NZEnvC 122 at Order A.

⁸ And of course "Nationally Vulnerable" is a status under the NZTCS – see [2019] NZEnvC 41 [19].

⁹ *Oceana Gold (New Zealand) Limited v Otago Regional Council* [2020] NZHC 436 [188].



- Mr Christensen for Oceana (“the Oceana submissions”);
- Mr Logan for the ORC together with Mr Anderson and Ms Woodhouse for the two societies which were section 274 parties (“the joint memorandum”);
- Mr Wilson for the Queenstown Lakes District Council (“the QLDC submissions”);
- Mr Christensen in reply (“the Oceana reply”).

[8] The Oceana submissions were accompanied by a statement of evidence from Dr M J Thorsen, an ecologist, dated 17 July 2020, and an application for leave to call that evidence.

[9] The parties to the joint memorandum have confirmed there is no objection to Dr Thorsen’s evidence being admitted and they in turn sought leave to file evidence from Dr K M Lloyd in reply. That was not opposed by Oceana so both applications are granted as sought and the evidence will be considered below.

[10] No party sought to cross-examine either Dr Thorsen or Dr Lloyd.

1.3 The common ground and the issues in more detail

[11] The joint memorandum states that there is considerable agreement between the joint parties and Oceana. It is agreed that¹⁰:

- Because Policy 5.4.6(c) functions as a limit, there should be no loss of individuals of Threatened taxa and no reasonably measurable loss within an ecological district of an At Risk-Declining taxon;
- The NZTCS¹¹ is the appropriate point of reference for determining what are “Threatened” and “At Risk-Declining” taxa; and
- The classes of “Threatened” and “At Risk-Declining” correspond to “rare or vulnerable”.

[12] The QLDC basically agrees with the joint memorandum. In the Oceana reply Mr



¹⁰ The joint memorandum [5] [Environment Court rehearing document 8].

¹¹ The figure used to demonstrate the structure of the NZTCS was included in the First Decision [2019] NZEnvC 41 at [19]. It is a copy of Figure 1 in A J Townsend et al *New Zealand Threat Classification System manual* (2008) Department of Conservation.

Christensen says¹²: “The only issue as between the parties in relation to amended wording of policy 5.4.6(c) of the PORPS concerns how plants in the family Myrtaceae ... are most appropriately addressed”.

[13] In summary the issues arise out of the parties disagreement whether all species in the Myrtaceae family should be excluded from policy 5.4.6(c):

- Oceana considers that the policy should apply to Threatened and At Risk-Declining taxa “other than Myrtaceae species”;
- the joint parties consider that the exclusion should be narrower i.e. restricted to mānuka and kānuka;
- the QLDC agrees with the joint memorandum.

1.4 The Myrtaceae family

[14] The Myrtaceae family contains nearly 6,000 species around the world. Other members of the family are the genera *Eucalyptus*, *Kunzea*, *Metrosideros* (including pōhutukawa and southern rātā) and feijoas. Because of the susceptibility of species in Myrtaceae to a disease called myrtle rust, the most recent review of the application of the NZTCS to vascular plants (published in 2018) “elevated” the threat status of Myrtaceae.

[15] Members of Myrtaceae in the Otago region include kānuka (*Kunzea robusta* and *Kunzea serotina*). *K. robusta* is found in coastal regions with some inland occurrences; *K. serotina* is found inland, mostly in the upper Clutha basin. Another member of the family is mānuka (*Leptospermum scoparium*) which is common in cool uplands, at low fertility sites and in wetlands.

[16] The two kānuka species now have “Threatened” classification under the NZTCS and mānuka has “At Risk-Declining” status.

[17] Other genera within the Myrtaceae family in Otago include¹³:

- *Metrosideros diffusa*, a vine (Threatened-Nationally Vulnerable), found in



¹² Oceana reply [2] [Environment Court rehearing document 11].

¹³ K M Lloyd evidence-in-reply dated 24 July 2020 [12] [Environment Court rehearing document 9].

moist forest in Otago;

- *Lophomyrtus*, with only *Lophomyrtus obcordata* (Threatened-Nationally Critical) present in Otago. This is a small forest tree found in lowland forest habitats, which has recently been identified as susceptible to myrtle rust¹⁴ and susceptible to local extinction from that disease¹⁵;
- *Neomyrtus*, represented in Otago by *Neomyrtus pedunculata* (Threatened-Nationally Critical), a forest species generally found in higher rainfall areas.

[18] Myrtle rust has yet to be reported in Otago, but is widespread in the North Island and across the top and on the west coast of the South Island¹⁶. In Dr Lloyd’s opinion “its continuing invasion process could involve spread to Otago, particularly under a warming climate”¹⁷.

2. The cases for the parties

2.1 Oceana’s position

[19] For Oceana Mr Christensen submits¹⁸ that reference to the NZTCS is still appropriate as it is widely used and understood by ecologists. He considers the court may have equated “rare or vulnerable” with the NZTCS category “threatened” which comprises Nationally critical, Nationally endangered and Nationally vulnerable species.

[20] Dr Thorsen says there is an ecological basis for saying that “Threatened” in the NZTCS is a fair description of species that could be said to be vulnerable but there is no simple and agreed definition of what constitutes a “rare” species. He considers¹⁹ none of the NZTCS categories comfortably fits a definition of “rare” however Threatened species and some species At Risk–Declining category characterised by local population that are countable could be considered rare.

¹⁴ Sutherland R., Soewarto J., Beresford R. and Ganley B. 2020: *Monitoring Austropuccinia psidii (myrtle rust) on New Zealand Myrtaceae in native forest*. New Zealand Journal of Ecology 44: 1-5.

¹⁵ Sutherland R., Soewarto J., Beresford R. and Ganley B. 2020: *Monitoring Austropuccinia psidii (myrtle rust) on New Zealand Myrtaceae in native forest*. New Zealand Journal of Ecology 44: 1-5.

¹⁶ https://www.biosecurity.govt.nz/protection-and-response/long-term-pest-management/myrtle-rust/?utm_source=neighbourly&utm_medium=cpc&tum_campaign=myrtle_rust&utm_content=taranaki.

¹⁷ K M Lloyd evidence-in-reply dated 24 July 2020 [13] [Environment Court rehearing document 9].

¹⁸ Submissions of counsel for Oceana dated 17 July 2020 [12] [Environment Court rehearing document 7].

¹⁹ M J Thorsen evidence dated 17 July 2020 [30] [Environment Court rehearing document 6].



[21] Dr Thorsen acknowledges the difficulties caused by the arrival of myrtle rust disease and the corresponding elevation of the conservation status of all New Zealand myrtle species within the NZTCS to Threatened. However, he considers that no species of Myrtaceae present in Otago should be considered Threatened, if threat criteria are applied without consideration of the potential impact of myrtle rust²⁰.

[22] Mr Christensen submits that because in Otago some Myrtaceae species (including various kānuka species and mānuka) are common, it makes sense for those species to be specifically excluded from consideration in the context of policy 5.4.6(c). Dr Thorsen acknowledges that the draft National Policy Statement for Indigenous Biodiversity recognises this exception but continues²¹:

It is not obvious why only kānuka and mānuka were singled out as many other Myrtaceae are, ... also common. No species of Myrtaceae present in Otago are what I would consider Threatened if applying the criteria without consideration of the potential impact of myrtle rust fungus.

[23] He added²²:

Excluding species based on common names is problematic as there is uncertainty on which entity is being referred to. In the case of kānuka there are now 12 species ...

[24] Oceana therefore proposes the policy should read:

The offset ensures there is no loss of individuals Threatened taxa, and no measurable loss within the ecological district to an At Risk-Declining taxon under the New Zealand Threat Classification System ('NZTCS') **other than Myrtaceae species**.
(emphasis added)

2.2 The position of the joint parties

[25] The ORC, Forest and Bird and EDS – together called “the joint parties” – accept that loss of individual kānuka and mānuka plants can be tolerated and should not limit the availability of offsets which otherwise satisfy the requirements of policy 5.4.6.

²⁰ M J Thorsen evidence dated 17 July 2020 [24] [Environment Court rehearing document 6].

²¹ M J Thorsen evidence dated 17 July 2020 [24] [Environment Court rehearing document 6].

²² M J Thorsen evidence dated 17 July 2020 [25] [Environment Court rehearing document 6]



However, that is the only exception they concede. They rely on the evidence of Dr Lloyd who opines²³ that Threatened and At Risk species in the Myrtaceae species should not be generally excepted from limits to offsetting because the myrtle rust invasion has not yet fully played out in New Zealand. Dr Lloyd says that the Myrtaceae species in Otago have either demonstrated susceptibility or unknown susceptibility to myrtle rust and that many Myrtaceae species have restricted distributions.

[26] Dr Lloyd gives evidence²⁴ of surveys undertaken by his firm over the last 12 years of two districts within²⁵ the region – Dunedin City and the Waitaki District (the latter includes Macraes which is the area of primary interest to Oceana). The results for some of the Myrtaceae of most relevance are²⁶:

(1) *Lophomyrtus obcordata* was recorded at:

- 7% of the 97 sites in Waitaki District;
- 5% of 77 sites in Dunedin City District (“so is uncommon in both districts”).

(2) *Neomyrtus pedunculata* was recorded at:

- 10% of the 77 sites in Dunedin City District;
- 2% of the 97 sites in Waitaki District (“and is uncommon in both districts”).

(3) *Metrosideros diffusa* was recorded at:

- 4% of the 97 sites in Waitaki District;
- in 50% of 77 sites in forest in Dunedin City.

[27] Accordingly, the joint parties consider that any exclusion should be narrow. They propose that the policy reads:

The offset ensures there is no loss of individuals of Threatened taxa, other than kānuka (*Kunzea robusta* and *Kunzea serotina*), and no reasonably measurable loss within the ecological district to an At Risk-Declining taxon, other than mānuka (*Leptospermum scoparium*), under the New Zealand Threat Classification System (“NZTCS”).

²³ K M Lloyd evidence-in-reply dated 24 July 2020 [5] [Environment Court rehearing document 9].

²⁴ K M Lloyd evidence-in-replay dated 24 July 2020 [20] et ff [Environment Court rehearing document 9].

²⁵ In fact Waitaki District is only half within the Otago Region; the other half is in Canterbury.

²⁶ K M Lloyd evidence-in-reply dated 24 July 2020 [23]-[25] [Environment Court rehearing document 9].



2.3 QLDC's position

[28] The QLDC submissions²⁷ generally supports the ORC's proposed wording because reference to the categories of the NZTCS is an efficient means of identifying those species for which the risks of offsetting are so great that it should not be considered, and the proposed exemptions for kānuka and mānuka are more targeted than what is proposed by Oceana which would inappropriately allow offsetting of some Threatened species such as southern rata without apparent justification.

2.4 Oceana's reply

[29] Mr Christensen in his reply²⁸ states that it is most appropriate for policy 5.4.6(c) to "record that where a proposed offset results in the loss of an individual myrtle plant then this should not in and of itself operate to mean that an offset should not be considered". Mr Christensen suggests the purpose of policy 5.4.6(c) and its relationship to the other provisions in that policy has become confused.

[30] Mr Christensen acknowledges that the court judged²⁹ that while generally an offset design that shows "no net loss" will be adequate, it is too risky to extend that method of management to threatened species. He submits that in determining the most appropriate wording this aim needs to be borne in mind. Offsets still need to be designed properly and need to address risk of failure and uncertainty of outcome.

[31] Mr Christensen submits³⁰ that the other parties propose that the loss of an individual of any other myrtle species should always operate as a bar to the consideration of an offset. It is submitted that in light of the purpose of policy 5.4.6(c) the response from the other parties is disproportionate and unduly restrictive. He submits³¹ that the possibility that myrtle rust might make its presence felt in Otago in the future "provides an insufficient reason to write a region-wide policy that could be read as an effective prohibition on considering an offset today, where there is a loss of an individual of one of the relevant species".

²⁷ QLDC submissions [Environment Court rehearing document 10].

²⁸ Oceana reply [3] [Environment Court rehearing document 11].

²⁹ [2019] NZEnvC 41 [95].

³⁰ Oceana reply [14] [Environment Court rehearing document 11].

³¹ Oceana reply [19] [Environment Court rehearing document 11].



3. Consideration

[32] The remaining issue for us to resolve is narrow because the parties agree that policy 5.4.6(c) should ensure that an offset should be considered if it ensures there is:

- no loss of individuals of any ‘Threatened’ taxa under the NZTCS except for kānuka (*Kunzea robusta* and *K. serotina*); and
- no reasonably measurable loss within the ecological district to an At Risk-Declining taxa except for mānuka (*Leptospermum scoparium*).

[33] The only disagreement is that Oceana considers there should be a further exception – similar to those for kānuka and mānuka – for all other members of Myrtaceae. We are grateful for the further evidence of Dr Thorsen and Dr Lloyd which enables us to consider the issue in a more informed way.

[34] The PORPS now uses³² the NZTCS as one of its tools for maintaining indigenous biological diversity³³. We described this in the First Decision. It will be recalled that there are basically two parts to the classification of species: first a series of definitions is set out so that any species can be evaluated and categorised as one of the following:

- Extinct;
- Threatened;
- At risk;
- Not threatened.

Within the ‘Threatened’ and ‘At Risk’ categories there are further sub-categories with (in most cases) objective criteria for establishing which one a taxon fall into. There is one criterion which is less objective and we discuss this shortly.

[35] For example a taxon is defined as “Nationally Critical” if it meets any one of the

³² Policy 3.2.2 Managing significant indigenous vegetation and habitats; policy 5.4.6 Offsetting for indigenous biological diversity; policy 5.4.6A Biological diversity compensation; method 5.1.2 Research, monitoring and reporting; and schedule 4 Criteria for the identification of areas of significant indigenous vegetation and habitat of indigenous fauna.

³³ A function of the ORC under section 30(1)(ga) RMA.



following criteria³⁴:

A. Very small population (natural or unnatural)

A taxon is 'Nationally Critical', regardless of population trend and regardless of whether the population size is natural or unnatural, when evidence³⁵ indicates that:

1. There are fewer than 250 mature individuals; or
2. There are ≤ 2 sub-populations and ≤ 200 mature individuals in the largest sub-population; or
3. The total area of occupancy is ≤ 1 ha (0.01 km²).

B: Small population (natural or unnatural) with a high ongoing or predicted decline

A taxon is 'Nationally Critical' when evidence indicates that it fits at least one Status criterion and the Trend criterion as follows:

Status

1. The population comprises 250-1000 mature individuals; or
2. There are ≤ 5 sub-populations and ≤ 300 mature individuals in the largest sub-population; or
3. The total area of occupancy is ≤ 10 ha (0.01 km²).

Trend

There is an ongoing or predicted decline of 50-70% in the total population due to existing threats, taken over the next 10 years or three generations whichever is longer.

C. Population (irrespective of size or number of sub-populations) with a very high ongoing or predicted decline (> 70%)

A taxon is 'Nationally Critical' when the population has an ongoing trend or predicted decline of > 70% in the total population due to existing threats taken over the next 10 years or three generations, whichever is longer.

[36] The second step in the classification of any taxon is its evaluation under the criteria in the NZTCS. That is carried out by an expert panel whose report is published by the Department of Conservation and (preferably) in a scientific journal.

[37] The most recent assessment under the NZTCS relevant³⁶ to this proceeding is by Peter J. de Lange et al³⁷ in a paper called *Conservation status of New Zealand*

³⁴ A J Townsend et al *New Zealand Threat Classification System manual* (2008) Department of Conservation. See definition of 'Natural' in Appendix 1 of the Manual.

³⁵ Evidence in this context is defined as quantitative data and supporting information about the status of a candidate taxon.

³⁶ K M Lloyd evidence-in-reply dated 24 July 2020 [10] [Environment Court rehearing document 9].

³⁷ de Lange PJ, Rolfe J R, Barkla J W, Courtney S P, Champion P D, Perrie L R, Beadel S M, Ford K A, Breitwieser L, Schönberger I, Hindmarsh-Walls R, Heenan P B and Ladley K 2018: *Conservation status of New Zealand indigenous vascular plants, 2017*. New Zealand Threat Classification Series 22 Department of Conservation, Wellington. 82 pp.



*indigenous vascular plants, 2017*³⁸ (“the 2018 Report”). That report elevated the threat on the basis of the recent invasion of myrtle rust (*Austropuccinia psidii*) and the potential effects that this Fungai pathogen could have on indigenous species of Myrtaceae. The status of members of Myrtaceae was raised (except mānuka) to one of three ‘Threatened’ categories, while mānuka was elevated only to ‘At Risk-Declining’³⁹.

[38] The 2018 Report appears to have relied on criterion C. above in relation to either an ongoing trend or a predicted decline of more than 79% in most of the members of Myrtaceae due to myrtle rust. To the extent the evaluation was based on predicted declines it was less objective than other criteria. On the other hand it appears the prediction by the expert panel was based on evidence as we discuss shortly.

[39] The draft *National Policy Statement – Indigenous Biodiversity*⁴⁰, Appendix 2, recognises the practical problems caused by the recent raising of the status of Myrtaceae species:

The recent arrival of myrtle rust (*Austropuccinia psidii*) in New Zealand (April 2017) is anticipated to have significant, negative consequences for all New Zealand Myrtaceae taxa. However, precisely what those impacts will be is not yet known. As a result, a precautionary approach has been taken in the most recent New Zealand Threat Classification System lists for vascular plants and all Myrtaceae taxa have been classified as Threatened. However, some Myrtaceae taxa are relatively common in some areas, in particular mānuka and kānuka would classify as Threatened only due to the risk of myrtle rust.

If a Significant Natural Area is identified only because of the presence of mānuka and kānuka that is considered Threatened only because of the threat posed by myrtle rust, it should not be managed as if it is a Significant Natural Area. Assessment against the other criteria in Appendix 1 must also determine whether it is a Significant Natural Area. If it qualifies as significant for any other reason, then it should be managed as a Significant Natural Area.

The exception must be reviewed within five years of gazettal.

That exception has been included in policy 5.4.6(c). The question is whether there should be more exceptions.

³⁸ de Lange PJ et al *the 2018 Report* above n 37.

³⁹ de Lange PJ et al *the 2018 Report* above n 37.

⁴⁰ <https://www.mfe.govt.nz/publications/biodiversity/draft-national-policy-statement-indigenous-biodiversity>.



[40] Dr Thorsen says many species of Myrtaceae are common in Otago⁴¹. Further, Dr Lloyd acknowledges that no case of myrtle rust has been identified in Otago⁴². Given that background, Dr Thorsen challenges the assessment of the expert panel⁴³ or at least its relevance to Otago.

[41] Dr Lloyd has two reasons for disagreeing with Dr Thorsen about the status of Myrtaceae members (other than kānuka and mānuka). First he gives an example⁴⁴:

Lophomyrtus obcordate (currently classified as Threatened-Nationally Critical) has a distribution that is patchy and is often absent over large parts of New Zealand, but it is occasionally dominant in alluvial forest remnants of the eastern South Island⁴⁵. In my opinion its current distribution alone is consistent with a threat status of At Risk-Relict; and its now proven vulnerability to myrtle rust should ensure it retains a classification of Threatened after the next revision of the threat status of indigenous vascular plant species.

[42] Second, he points to the reasons and data on which the *2018 Report* evaluation were founded⁴⁶:

These elevations in threat status for New Zealand species in the Myrtaceae were based on myrtle rust susceptibility in related Australian Myrtaceae (which indicated that *Lophomyrtus* and *Neomyrtus* would be the most likely species to be seriously affected by myrtle rust in New Zealand), the unforeseen severe effect of myrtle rust on *Metrosideros kermadecensis* (endemic to the Kermadec Islands), and the debilitating impact on New Zealand Myrtaceae cultivated in Australia⁴⁷.

[43] We prefer the evidence of Dr Lloyd. Our reasons are:

- (1) we prefer the more precise evidence of Dr Lloyd as to the occurrence of Myrtaceae species within the region;
- (2) he relies on the evaluation by an Expert Panel of the status of Myrtaceae species as “Threatened” under the NZTCS;
- (3) we have been given insufficient reasons to believe that classification is inappropriate (and note that there would need to be quite powerful evidence

⁴¹ M J Thorsen evidence dated 17 July 2020 [24] [Environment Court rehearing document 6].

⁴² K M Lloyd evidence-in-reply 24 July 2020 [13] [Environment Court document 9].

⁴³ M J Thorsen evidence dated 17 July 2020 [24] [Environment Court rehearing document 6].

⁴⁴ K M Lloyd evidence-in-reply dated 24 July 2020 [19] [Environment Court rehearing document 9].

⁴⁵ <https://www.nzpcn.org.nz/flora/species/lophomyrtus-obcordata/>.

⁴⁶ K M Lloyd evidence-in-reply 24 July 2020 [11] [Environment Court rehearing document 9].

⁴⁷ de Lange P J et al above n 37.



to make the court not adopt the report of an (independent) Expert Panel⁴⁸ under the NZTCS);

- (4) we accept that kānuka and mānuka are true exceptions because they are “successional species”⁴⁹ and they are “commonly propagated and planted in ecological restoration projects”⁵⁰. Other indigenous species within Myrtaceae possess neither of those qualities;
- (5) while Dr Thorsen is correct that using common names such as kānuka is not good practice (because the genus *kunzea* contains up to 13 species), the other parties are prepared to live with that ambiguity at present and it does not prejudice Oceana and its operations.

[44] We have considered Mr Christensen’s example of the one individual of a threatened species (in the Myrtaceae family) on a proposed mining site. First we notice that unscrupulous operators could draw site boundaries so as to include just one plant, even though there may be other individuals nearby. Second and more importantly, the presence of outlier individuals may be significant for the conservation of the Threatened species given the context, i.e. the potential spread of myrtle rust into the Otago region and the risks of harmful climate change. An individual in a “new” location may be important to the survival of the species because, for example, it may reflect a response to the stressors or opportunities caused by climate change.

[45] Given the Threatened status of the ‘other’ Myrtaceae species and the uncertainties about their future, a more appropriate reaction for a developer finding such an individual (or number of plants) on a development site would be to establish another site and establish a larger number of them in a measured and monitored fashion with appropriate legal protection, and then, after a reasonable period demonstrated the viability of the project, to apply for a plan change.

4. Result

[46] Given the Threatened status of various members of the Myrtaceae (family) we consider the response represented by policy 5.4.6(c) in the joint parties’ version is not unduly restrictive or disproportionate. We are satisfied that the joint parties’ wording of

⁴⁸ A J Townsend et al *New Zealand Threat Classification System manual* (2008) Department of Conservation.

⁴⁹ K M Lloyd evidence-in-reply 24 July 2020 [17] [Environment Court rehearing document 9].

⁵⁰ K M Lloyd evidence-in-reply 24 July 2020 [18] [Environment Court rehearing document 9].



policy 5.4.6(c) is sufficiently certain and allocates the risks appropriately given the policies of the PORPS discussed in the First Decision.

[47] After careful consideration of the evidence and submissions we consider that policy 5.4.6(c) should contain no further exceptions for other members of the Myrtaceae.

For the court:



J R Jackson
Environment Judge

