SUBMISSION

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Submission from Straterra to the Ministry for the Environment National Policy Statement for Indigenous Biodiversity – Exposure draft

July 2022

Key Points

- Straterra supports the intent of the Objective of the National Policy Statement for Indigenous Biodiversity - Exposure draft, particularly noting that protecting, maintaining and restoring indigenous biodiversity provides for the social, economic, and cultural wellbeing of people and communities now and into the future.

- There are issues around discrepancies and inconsistencies in the current wording of the exposure draft, most particularly the definition of maintenance. There is case law on the meaning of *maintenance* in the context of Resource Management Act (RMA). It is, therefore, not appropriate for subordinate legislation (the NPS-IB) to override the existing meaning of *maintenance.* It is a matter for amendment to RMA itself if desired. The definition is too extensive, as it relates to maintenance of all indigenous biodiversity and goes beyond the empowering scope of RMA.

- We strongly support the application of the effects management hierarchy, with some amended wording. A company should be able to propose a combination of offsets and compensation. Not restricting development in this way produces the best outcomes for both indigenous biodiversity and the development in question (*emphasis added*).

- The criteria for identifying areas that qualify as significant natural areas (SNAs) is clearly not workable and would have almost everywhere in New Zealand outside of urban boundaries eventually mapped as an SNA. The outcome would be if everything is significant, then nothing is significant. Significant loses all meaning.

Introduction

1. Straterra is the industry association representing the New Zealand minerals and mining sector. Our membership is comprised of mining companies, explorers, researchers, service providers, and support companies.

2. We are grateful for the opportunity to make this submission on the exposure draft of a National Policy Statement for Indigenous Biodiversity (draft NPS-IB).

3. This draft NPS-IB presents significant improvements on the 2019 draft, but there several issues that need attention both at the policy intent level, and in the drafting, as there are a number of discrepancies and inconsistencies in the current wording that will need amending. This submission intends to be constructive in providing comments on the relevant clauses, but it is mostly focused on the policy intent.

4. We assume that the changes that result from this consultation process, as well as the existing discrepancies, will necessitate a new exposure draft and we request an opportunity to look at this before finalisation. This will be important to ensure the workability of the regulations from a mining perspective.

Straterra's position on the National Policy Statement for Indigenous Biodiversity – Exposure draft June 2022

5. Straterra supports the intent of the Objective of the NPS-IB, particularly noting that protecting, maintaining and restoring indigenous biodiversity (2.1, 1 (b)) provides for the social, economic, and cultural wellbeing of people and communities now and into the future.

6. We note the positive role that minerals activities can play in respect of protecting, maintaining and restoring biodiversity and we support the intent the consenting pathway seeks to achieve for mineral extraction and mining activities, for example, constructing settlement ponds and water treatment facilities; building access roads; and mineral handling, processing, and loadout areas.

7. The substance of our submission on the exposure draft is set out below.

Specific comments on the exposure draft

Relationship with New Zealand Coastal Policy Statement

8. 1.4 (1) argues that: If there is a conflict between the provisions of the NPS-IB and the New Zealand Coastal Policy Statement 2010, the latter prevails.

9. We argue for the reverse order of precedence ie, that the NPS-IB should prevail, on the basis that biodiversity crosses over between the land and marine domains.

Fundamental concepts

1.5 (3) Maintenance of indigenous biodiversity

10. The NPS-IB provides a definition of *maintenance.* We have two issues with the introduction of this as a defined term in regulations.

11. Firstly, the term *maintenance* is not defined in Resource Management Act (RMA), although it is used in Part 2, in section 6, in relation to public access to coastal marine areas, lakes and rivers; in section 7(c) in relation to amenity values; and section 7(f) in relation to the maintenance of the quality of the environment; and in Part 4 relating to regional and district council functions under sections 30 and 31. Under section 30(1)(ga) regional councils are required to exercise their functions for the purpose of *maintaining indigenous biological diversity* and under section 31(1)(iii)(b) district councils are required to control use and development etc. for the *maintenance of indigenous biological diversity*.

12. There is case law on the meaning of *maintenance* in the context of RMA. It is therefore, not appropriate for subordinate legislation (the NPS-IB) to override the existing meaning of *maintenance.* It is a matter for amendment to the RMA itself if desired.

13. Secondly, the definition is too extensive, as it relates to maintenance of all indigenous biodiversity and goes beyond the empowering scope of the RMA. Section 6 of the RMA provides for the protection of areas of *significant indigenous vegetation and significant habitats of indigenous fauna* while sections 30 and 31 relate to *indigenous biological diversity* (*emphasis added*).

14. If a definition of *maintenance* is warranted, then it should be limited to *indigenous biological diversity*. And such a definition should not be drafted in absolutes such as *no reduction* or without any reference scale e.g. in relation to an ecological district.

15. A possible definition could be drafted as follows:

Maintenance of indigenous biological diversity

Maintenance of indigenous biological diversity will be achieved if activities are designed and undertaken in a way that does not cause:

(a) The prevention of an indigenous species' or a community's ability to persist in their habitats within their natural range in the Ecological District; or
(b) A change of the Threatened Environment Classification to category two or below at the Ecological District Level; or
(c) Further measurable reduction in the proportion of indigenous cover on those land environments in category one or two of the Threatened Environment Classification at the Ecological District Level; or
(d) A reasonably measurable reduction in the local population of threatened taxa in the Department of Conservation Threat Classification Categories - 1 nationally critical, 2 nationally endangered, and 3 nationally vulnerable.

16. As such, *maintenance of indigenous biological diversity* should be carried through into the following clauses as appropriate, for example clause 3.16.

1.5 (4) Effects management hierarchy

17. We strongly support the application of the effects management hierarchy.

Mitigate vs minimise

18. We note ‘mitigate’ does not appear in the hierarchy as set out in 1.5(4). The term ‘minimise’ is used instead.

19. Minimise is usually defined as "reduce as much as possible” and ‘mitigate’ means to “make less severe”. In the interests of consistency with the RMA we recommend ‘mitigate’ should be used in the hierarchy and not ‘minimise’.

Offsetting and compensation

20. The hierarchy as set out here is to be implemented as a sequence. We note the sequence of ‘offset’ and then ‘compensate’, the effect of which is that compensation cannot be provided unless it’s demonstrated that offsetting is not possible.

21. We argue that after measures to avoid, minimise, and remedy have been offered, a company should be able to propose a combination of offsets and compensation. Not restricting development in this way produces the best outcomes for both indigenous biodiversity and the development in question (*emphasis added*).

22. As an example of where the effects management hierarchy approach has worked in practice, we draw attention to a case study on the Deepdell North pit development: Macraes gold *mine (case study attached)*.

Where possible vs where practicable

23. The term 'where practicable' is used throughout the list apart from (d) where it uses 'where possible' instead, and (e) where it uses 'not demonstrably possible'. For consistency, the term 'where practicable' should be used throughout as 'where possible' is too loose. This is also important in regard to the issue of offsetting and compensation, discussed above, as the word 'possible' here makes the ability to compensate less likely.

24. So specifically, 'possible' in 1.5 (4)(d) and 1.5 (4) (e) needs to be changed to 'practicable'.

1.6 Interpretation

25. In the interpretations, "restoration means the active intervention and management of modified or degraded habitats, ecosystems, landforms, and landscapes in order to **maintain or reinstate** indigenous natural character, ecological and physical processes, and cultural and visual qualities, and may include enhancement activities" (*emphasis added*).

26. The definition of maintain should be consistent with our comments in 1.5 (3).

27. This definition of restoration implies a very high bar. 'Maintain and reinstate' in the definition mean the term could be interpreted as to "put things back exactly as they were" which is impossible.

28. The requirement to rehabilitate a site is a proven way of "restoring" (in a different sense of the term) biodiversity. This is implied with the words 'enhancement activities' but we argue this concept should be brought into the definition more explicitly, and also into the NPS-IB generally, including in clause 3.21 Restoration.

2.1 Objective

29. Straterra supports the Objective. The inclusion of people and economic wellbeing within the ambit of protecting, maintaining and restoring biodiversity is a positive approach.

2.2 Policies

30. Policy 7 - We strongly support the use of the word 'managing' in this policy but the term 'avoiding' has implications when associated with the RMA especially when coupled with managing. To avoid confusion, we propose 'avoiding and managing' be replaced by 'avoiding **or** managing'

3.5 Social, economic and cultural wellbeing

31. This aspect of protecting, maintaining and restoring biodiversity is stronger than the 2019 draft NPS-IB.

32. We support this clause. In doing so we note the positive role that minerals activities can play in respect of protecting, maintaining and restoring biodiversity, as discussed above. We draw attention to the Straterra environmental case studies.

3.10 Managing adverse efforts on SNAs of new subdivision, use, and development

33. Policy 3.10(4) reads:

Every local authority must make or change its plan to ensure that, where adverse effects on an SNA are required to be managed by applying the effects management hierarchy, an application is not granted unless:
(a) the decision-maker is satisfied that the applicant has demonstrated how each step of the effects management hierarchy will be applied; and
(b) any consent is granted subject to conditions that apply the effects management hierarchy.

34. Straterra suggests amending as follows to better match the principles of offsetting and compliance:
"Every local authority must make or change its plan to ensure that, where adverse effects on an SNA are required to be managed by applying the effects management hierarchy, an application is not granted unless:

(a) the decision-maker is satisfied that the applicant has demonstrated how each step of the effects management hierarchy will be applied; and
(b) the decision-maker is satisfied that, if biodiversity offsetting or biodiversity compensation is applied, the applicant has had regard to the principles in Appendix 3 or 4, as appropriate; and
(c) any consent is granted subject to conditions that apply the effects management hierarchy." (Wording and emphasis added.)

3.11 Exceptions to clause 3.10

35. We are pleased to see the elimination of the distinction between high and medium in relation to "significant" biodiversity as featured in the 2019 draft.

36. Clause 3.11 (2) is reproduced below:

Clause 3.10(2) does not apply, and all adverse effects on an SNA must be managed instead in accordance with clause 3.10(3) and (4):

(a) if a new use or development is required for the purposes of any of the following;

(i) specific infrastructure that provides significant national or regional public benefit; or

(ii) mineral extraction that provides significant national public benefit that could not otherwise be achieved domestically; or

(iii) aggregate extraction that provides significant national or regional public benefit that could not otherwise be achieved domestically; and

(b) there is a functional or operational need for the new use or development to be in that particular location; and

(c) there are no practicable alternative locations for the new use, or development.

37. We fully support the intent the consenting pathway seeks to achieve for mineral extraction. This obviously includes the mining activities associated with the actual extraction of the mineral. For example, constructing settlement ponds and water treatment facilities; building access roads; and mineral handling, processing, and loadout areas.

38. While we strongly support the policy intent of 3.11(2)(a)(ii) we have some concerns about many of the terms and so make the following comments.

39. The terms **'significant',** and **'public benefit'** are not defined and there is a lot of subjectivity in them.

40. It is also too hard to distinguish between **public** and **private** benefit. For example, saying there is a public benefit in road construction because the public use roads, is no more valid than saying there is a public benefit in other products. The public use hospitals, eat tomatoes, or buy gold watches, which are all products that rely on minerals.

41. Likewise, it is often a grey area as to whether something is **regionally or nationally significant**. Things that are important for local communities can be significant for the region and the country, especially if taken in agglomeration.

3.16 Maintaining indigenous biodiversity outside SNAs

42. This needs to be consistent with the 1.5(3) Maintenance of indigenous biodiversity. The definition requires no reduction in populations of indigenous species.

3.21 Restoration

43. This needs to be consistent with the definition of restoration in 1.6 and in particular, our recommendations about that definition, including that the requirement to rehabilitate a site is a proven way of "restoring" (in a different sense of the term) biodiversity. This is implied with the words 'enhancement activities' but we argue this concept should be brought into the definition more explicitly and also into the NPS-IB generally, including in clause 3.21 Restoration.

3.24 Information requirements

44. The requirement to include a report prepared by a qualified and experienced ecologist is onerous.

45. We recommend it should be limited to resource consent applications in relation to an SNA and not in relation to general indigenous biodiversity matters.

Appendices

46. We believe there needs to be a check across the appendices for discrepancies and inconsistencies of wording.

Appendix 1: Criteria for identifying areas that qualify as significant natural areas

47. The wording of this appendix on identifying areas to qualify as significant natural areas (SNAs) is clearer than that of the 2019 draft, and it is an improvement.

48. However, we note the following text (page 31, NPS-IB):

(2) An area qualifies as a significant natural area ***if it meets any one of the attributes*** of the following four criteria: (a) representativeness: (b) diversity and pattern: (c) rarity and distinctiveness: (d) ecological context (*emphasis added*).

49. Only one of these attributes has to apply for the area to qualify as an SNA. On that basis, almost everywhere in New Zealand outside of urban boundaries will eventually be mapped as an SNA.

50. This is clearly not workable, and the outcome would be if everything is significant, then nothing is significant. Significant loses all meaning.

51. Under this wording large parts of New Zealand, including in areas of existing mining and quarrying operations, and where there is minerals prospectivity, will end up becoming SNAs, if they are not already SNAs.

Appendix 3 and 4: Principles for biodiversity offsetting and compensation

52. We broadly support principles that must be adhered to when designing and implementing a biodiversity offset and compensation. We note that they should be applied as principles, not rules, and offsetting and compensation should not be so restrictive it becomes counterintuitive. We support an adaptive management approach, but believe, in the parts noted, these appendices restrict that unnecessarily.

53. In **Appendix 3**, the opening sentence reads:
The following sets out a framework of principles for the use of biodiversity offsets. These principles represent a standard for biodiversity offsetting and must be complied with for an action to qualify as a biodiversity offset.

    We would like to see this removed: *These principles represent a standard for biodiversity offsetting and must be complied with for an action to qualify as a biodiversity offset.*

54. **Principle 2**, on "**when biodiversity offsetting is not appropriate**" is too restrictive and would exclude the ability to offset in too many circumstances.

55. We believe **Principle 2** should be amended as follows:
"*Biodiversity offsets are not appropriate in situations where biodiversity values cannot be offset to achieve no net loss, and preferably a net gain outcome. This principle reflects a standard of acceptability for demonstrating, and then achieving, no net loss, and preferably a net gain in biodiversity values" (Emphasis added).*

56. Principle 2 (b), for example, excludes the ability to use offsetting where the effects on indigenous biodiversity are uncertain, unknown, or little understood but the potential effects are significantly adverse. We support an adaptive management approach, which this isn't.

57. Similarly, **Appendix 3**, **Principle 3**, **Net gain**, should be amended as follows:

    "No net loss, and preferably a net gain: The biodiversity values to be lost through the activity to which the offset applies are counterbalanced or exceeded by the proposed offsetting activity, so that the result is no net loss, and preferably a net gain when compared to that lost. No net loss, and preferably a net gain is demonstrated by a like-for-like quantitative loss/gain calculation of the following, and is achieved when the ecological values at the offset site are equivalent to or exceed those being lost at the impact site across indigenous biodiversity:

(a) types of indigenous biodiversity, including when indigenous species depend on introduced species for their persistence; and

(b) amount; and

(c) condition" (Emphasis added).

58. In **Appendix 3**, **Principle 8**, **Time lags**, we believe the principle should remove the unrealistic (and unambitious) restriction on the time period over which an offset is expected to take effect – sometimes big change takes longer, so why arbitrarily restrict it and unintentionally incentivise the impacting activity to last for longer than it needs to? We believe the following should be added, (as per the NPS-FM) at the end of the sentence: *"… so that the calculated gains are achieved within the consent period or, as appropriate, a longer period (but not more than 35 years)" (Emphasis added).*

59. In addition, there should be a new paragraph added, containing a similar exception to that in Policy 3.11(5)(b), ie: *"The presence of a kānuka or mānuka species that is threatened exclusively on the basis of myrtle rust will not prevent a proposed offset meeting these principles for the use of biodiversity offsets"*.

60. Similar to Appendix 3, in **Appendix 4**, the opening sentence reads:
The following sets out a framework of principles for the use of biodiversity compensation. These principles represent a standard for biodiversity compensation and must be complied with for an action to qualify as a biodiversity compensation.

    We would like to see this removed: *These principles represent a standard for biodiversity compensation and must be complied with for an action to qualify as a biodiversity compensation.*

61. In **Appendix 4, Principle 2. When biodiversity compensation is not appropriate**, (a) the indigenous biodiversity affected is irreplaceable or vulnerable; or

    Straterra asks that the word "*vulnerable"* is removed to avoid catching huge areas of biodiversity and rendering them incapable of compensation, or alternatively use the less prescriptive formulation used in Principle 2 of the Appendix 3 - "*residual adverse effects cannot be compensated for because of the irreplaceability or vulnerability of the indigenous biodiversity affected*".

62. In **Appendix 4, Principle 3. Scale of biodiversity compensation**, the following words should be added, *"…..that are equivalent to or outweigh…." (Emphasis added).*

63. In **Appendix 4, Principle 8, Trading up,** includes the sentence, *"The proposal also shows the values lost are not to Threatened or At Risk specie or to species considered vulnerable or irreplaceable"*. This is too restrictive and is inconsistent with current practice where good biodiversity outcomes result for those species, and in general. We recommend the sentence be deleted.

64. In addition, there should be a new paragraph added, containing a similar exception to that in Policy 3.11(5)(b), ie: *"The presence of a kānuka or mānuka species that is threatened exclusively on the basis of myrtle rust will not prevent proposed compensation meeting these principles for the use of biodiversity compensation".*

Appendix 5: Regional biodiversity strategies

65. In 5 (2), to be consistent with the Objective (2.1), we recommend that providing for social, economic, and cultural wellbeing should be included within regional biodiversity strategies.

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Case Study

September 2021

Macraes mine at sunrise.

Deepdell North pit development: Macraes gold mine

OceanaGold has been mining at Macraes flat in East Otago since 1990. Along the journey the company has gone to extra lengths to manage environmental effects and to work with the local community. The Deepdell North pit development is the latest in a string of nature conservation successes.

Introduction

OceanaGold's opencast Macraes mine in East Otago is New Zealand's largest gold mine which has been in operation since 1990.It covers more than 1000 hectares and has produced more than 5 million ounces, providing employment for around 600 full time staff.

The company's approach to environmental management at all of its sites is to follow the "effects management hierarchy" – a stepwise process of avoiding, remedying (repairing) and then mitigating (making less severe) environmental effects; and, for residual effects, offsets and compensation to enhance biodiversity and wetlands at other sites.

Research is a key component of OceanaGold's work at Macraes. Toxicology studies on elevated sulphate levels in mine drainages confirmed the instream fauna tolerance to consented discharges of SO_4, an important finding to ensure continued operations. For this work, OceanaGold won a Minerals Sector Award for environmental management in 2019.

This case study focuses on the reopening of the Deepdell pit, which provides a two-year bridge between operations drawing to a close at parts of Macraes, and new operations starting, eg the Golden Point underground mine.

Deepdell presents a challenge in managing surplus rock, as well as for wetland, shrubland and lizard conservation.

Macraes open pit – the Deepdell project.

New rock stack

The largest waste stream at a mine is usually the non-ore bearing rock that the operator must remove to access mineable gold resources. This is surplus rock and it has to be put somewhere.

The Deepdell North Stage Three Project entails extending the existing backfilled open pit and creating a new rock stack, one of three new projects consented in late 2020 that will extend the mine life of Macraes to at least 2028.

Finding a suitable place for the 53.5 million tonnes rock stack from the Deepdell North pit entailed extensive consultation with the local community and iwi, farmers, landowners, councils and the Department of Conservation to bring them deeply and early into project design.

This engagement started as far back as 2017 to discuss three options for the rock stack, with an eye to both safeguarding unusual plant and animal species in this part of the Otago high country, and to determine an optimum design, to balance out the effects on the values of each stakeholder group. This occurred two years before OceanaGold lodged resource consent applications, and informed and contributed to obtaining consent.

Following the stakeholder engagement and extensive studies, OceanaGold found that all three options were likely to have difficulty in obtaining consent. A fourth option – identified during early design brainstorming and stakeholder engagement, and initially discarded because of perceived landscape effects – was brought back to the table.

This change from the original design eliminates the need for freshwater management at the site, now placed on a high point in the terrain/watershed, reduces noise impacts, avoids impacts on heritage, and

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avoids impacts on Taieri flathead galaxiid habitat, and on an individual 200-year-old tree daisy (*Olearia fimbriata*), classified as Nationally Vulnerable.

Net positive wetlands

Despite the efforts to avoid significant biodiversity values, the Deepdell development affects six ephemeral wetlands on grazing land within its footprint. While classified as Critically Endangered and Naturally Uncommon ecosystems, OceanaGold demonstrated these ecosystems occur extensively across the Macraes Ecological District, and are highly degraded. DOC concurred with this finding.

Ephemeral wetland.

To mitigate the loss of 0.3 ha of wetlands, OceanaGold is offsetting the disturbance by enhancing a nearby 5.4ha wetland on a nearby farm (the largest of its kind in Otago). The goal of the offset is to improve the wetland's indigenous biodiversity within the next 10 years to achieve 50% cover in 15 indigenous plant species, including at least 10 species characteristic of Macraes ephemeral wetlands, as well as five ephemeral wetland species of national conservation concern.

Wetland offset – October 2019.

A second aspect of the offset package is the enhancement of terrestrial habitat over 50ha of covenanted land, which includes stock exclusion, conversion of tussockland to native shrubland, and a 50-year commitment to manage the site, via a community trust supported with funding.

Ecologist Mike Thorsen (Ahika Ltd) is in the second year of leading this project, which comprises:

- Shrubland: offset effects on 3.75ha (15 plant species) over 4.23ha (22 species). The 10-year goal is to expand shrubland to 10ha with 18 species and 75% canopy cover.
- Seepage wetland: offset effects on 0.07ha (700m^2) over 0.82ha. The 10-year goal is a 20% increase in indigenous species dominance, and inclusion of a Naturally Uncommon reed species, *Juncus distegus*.

Tree planting at Cranky Jims.

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Lizard conservation

Also associated with Deepdell is disturbance of lizard (ngarara) populations and habitat, a special feature of indigenous biodiversity in the Otago region, and classified as threatened species. The first step was to find and translocate lizards, working with DOC and local iwi. Completed in early March 2021, the results were:

- 1500 kōrero geckos (found in the crevices of rocky tors);
- 350 southern grass skinks (which prefer moist, grassy areas).

Kōrero gecko

The company placed the kōrero geckos into an existing covenant of 100ha (land already set aside for conservation) and mimicked the rocky tors the geckos prefer with replacement rocky outcrops built to resemble landforms typical of the Otago high country. As well, OceanaGold has salvaged rocky tors from the impact site and are placing these on the rehabilitated waste rock stack.

In light of insufficient knowledge of the life cycle of lizards in Macraes, OceanaGold's herpetologist, Dr Mandy Tocher, advised that she did not deem offsetting to the standard required to be possible. As a result, the company developed an extensive compensation package, which includes four streams of research investigating lizard conservation issues, and lasting 7-10-years, to which DOC agreed.

The first research stream investigates the impact on four lizard species of removing grazing. This research has a 7-year duration, and OceanaGold is establishing this in and outside the Redbank offset site.

Southern grass skinks salvaged from the mining area are the subject of the second research stream, which examines the skink's preference for constructed habitat types. A trial site of rocky habitat with different grades of rock will determine the optimal spacing between stones that best suit the skinks to live in.

The third research streams includes studying the effect on lizard populations of a 6-year mammalian pest control programme over a 100ha covenant, to be followed by monitoring the population for a further four years after ceasing the pest control. In the first six months of this project, OceanaGold caught 150 pest animals, including 70 hedgehogs, 48 mustelids (ferrets, stoats and weasels), and 29 feral cats.

The final research stream seeks to determine the most optimal method for determining kōrero gecko populations. This research will run concurrently with the removal of pest control research.

Case study source: OceanaGold Corporation

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