

Submission on application  
no. RM24.184 Oceana Gold  
(New Zealand) Limited –  
Macraes Mine that is  
subject to public  
notification by Otago  
Regional Council



Pursuant to the Resource Management  
Act 1991

Form 13

01 May 2025

**To:** Otago Regional Council

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**Name of Submitter:** Royal Forest and Bird Protection Society of New Zealand Incorporated  
(Forest & Bird)

## **Application**

This is a submission on an application from Oceana Gold (New Zealand) Limited for resource consents and change of conditions of existing resource consents to enable the Macraes Phase Four site wide expansion of mining activities at the Macraes Gold Mine, Otago.

The application seeks resource consents under the:

- Regional Plan: Water for Otago
- Regional Plan: Waste for Otago
- Regional Plan: Air for Otago
- Resource Management (National Environmental Standards for Freshwater Regulations) 2020

Consents required from ORC include 34 new resource consents as well as section 127 variations to 20 existing resource consents. Using the bundling method, the application has been assessed as a non-complying activity<sup>1</sup>.

The consents are required to enable the Macraes Phase Four (MP4) project. For brevity, the proposed activities are described in the applicant's application, Assessment of Environmental Effects and supporting technical documents along with the descriptions in sections 7.2 and 8.2 of the Otago Regional Council Notification Recommendation Report. They are not repeated in our submission.

## **Trade competition declaration**

Forest & Bird are not a trade competitor for the purpose of section 308B of the Resource Management Act 1991.

## **The parts of the application that Forest & Bird submission relates to:**

All activities proposed which will result in an adverse effect on indigenous biodiversity and the health and wellbeing of water bodies and freshwater ecosystems.

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<sup>1</sup> As described in section 8.5 of the Otago Regional Council Notification Report.

## Summary of submission

Forest & Bird opposes the application in full because:

- The application will result in significant adverse effects on indigenous vegetation, fauna habitat, wetlands, and freshwater ecosystems.
- The application is inconsistent with the relevant statutory framework, including:
  - Section 6 and 7 of the Resource Management Act 1991 (**'the Act'**)
  - The National Policy Statement for Freshwater Management 2020 (updated October 2024) (**'NPS-FM'**)
  - The National Policy Statement for Indigenous Biodiversity 2023 (updated October 2024) (**'NPS-IB'**)
  - Proposed Otago Regional Policy Statement 2021 (**'proposed RPS'**)
  - Operative Otago Regional Policy Statement 2019 (**'operative RPS'**)
  - Otago Regional Plans
- There is substantial uncertainty about the scale of effects.
- The use of biodiversity compensation for the threatened moth species is inappropriate under the NPS-IB.
- The health and wellbeing of freshwater bodies and freshwater ecosystems are not adequately prioritised in accordance with the NPS-FM.
- Effects on specified highly mobile species like the NZ Falcon and pipit and other indigenous birds and species are not sufficiently mitigated.

## The Royal Forest & Bird Protection Society of New Zealand Incorporated (Forest & Bird)

1. Forest & Bird is New Zealand's largest and oldest non-government conservation organisation. For almost one hundred years, Forest & Bird has been giving a voice to nature on land, in freshwater and at sea, on behalf of its many members and supporters. Volunteers in fifty Forest & Bird branches throughout Aotearoa New Zealand carry out conservation and biosecurity projects in their communities including weed control, restoration and pest trapping.
2. Forest & Bird's constitutional purpose is:  
*To take all reasonable steps within the power of the Society for the preservation and protection of the indigenous flora and fauna and the natural features of New Zealand.*

3. In support of that purpose, Forest & Bird regularly participates in resource management processes at the national, regional, and district level including making submissions on resource consent applications.

#### **What has informed our submission**

4. Forest & Bird have relied on Otago Regional Council's Notification Report - Titled: 'ORC Notification Recommendation Report', Subject: 'Application RM24.184 by Oceana Gold (New Zealand) Limited for various consents relating to the Macraes Phase Four mine expansion.', dated 20 March 2025 to inform our submission. We have relied upon the report because it is based upon the findings of independent peer reviews of the application, technical reporting and further information submitted by the applicant to Council. We refer to the report in our submission as 'the Notification Report'.

#### **Our submission is:**

1. Forest & Bird oppose the application to enable MP4 because:
  - a. the effects on indigenous vegetation and the habitat of indigenous fauna are too significant and therefore inappropriate, and
  - b. The extent of impact on wetland values and areas are unacceptable, given the habitat they provide for indigenous fauna, and
  - c. The application is inconsistent with relevant higher order planning documents, including the NPS-IB, NPS-FM and the proposed and operative RPS, and Otago Regional Plans, and
  - d. There is also considerable uncertainty about the extent of ecological effects, which risks greater adverse impacts on indigenous biodiversity and freshwater than currently assessed.
  - e. the reliance on offsetting and compensation is not appropriate in the case of effects on the threatened moth species *Orocrambus sophists*, and
  - f. The ongoing uncertainty the mine's end of life will continue ongoing social and cultural impacts, and
  - g. The mine's existing activities combined with this application and future applications for expansions and extending the lifetime of the mine will result in cumulative effects on the environment.
2. In the sections below, we expand on why this is our position.

### ***Significant adverse effects on terrestrial indigenous biodiversity***

1. The Otago Regional Council and Department of Conservation's recent reporting<sup>2</sup> demonstrated that Otago is one of New Zealand's most ecologically diverse regions of New Zealand, with many regionally threatened, at risk and in some cases regionally extirpated and extinct species.
2. The Notification Report describes the indigenous biodiversity in the zone of impact (ZOI). In summary, the ZOI contains a range of indigenous vegetation types, ephemeral and other natural inland wetlands, riparian vegetation, wetland/riparian mosaics, shrubland, and tussock land. These habitats support 128 indigenous plant species, of which 14 are either nationally At Risk, Data Deficient, or locally uncommon, along with 10 indigenous bird species, including one Threatened, two At Risk species and specified highly mobile fauna.
3. Within the ZOI, there is approximately 90 hectares of suitable or potentially suitable habitat for both lizards and invertebrates. The lizard population is estimated to be in the high thousands, while the invertebrate community is also substantial and includes the threatened moth species *Orocrambus sophistes*.
4. The indigenous vegetation communities occur within three threatened land environments. Notably, the ephemeral wetlands in the Coronation area represent a critically endangered, naturally uncommon ecosystem.
5. Overall, the tussock land, shrubland, wetland, riparian, and ephemeral wetland communities within the project area are recognised as significant under the partially operative and proposed Otago Regional Policy Statement and the Waitaki District Plan. These areas would also meet the criteria for Significant Natural Areas (SNAs) under the NPS-IB.
6. At section 9.9.3 of the Notification Report Ms. McDonald explains:  
*It is evident that the proposal will have more than minor adverse effects on terrestrial ecology even after measures to minimise or remedy effects are considered. In particular, there will be a high level of effect on tussock grassland, lizards, invertebrates, and some bird*

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<sup>2</sup> See Conservation Status of Indigenous Vascular Plants in Otago, March 2025; Regional Conservation Status of Birds in Otago, February 2025; Conservation status of reptile species in Otago Report, August 2024; Conservation Status of Bat Species in Otago, August 2023; Conservation Status of Otago's Amphibians Report, April 2024; Conservation status of selected fungal taxa in Otago, October 2024;

*species, and a very high level of adverse effect on ephemeral wetlands in the Coronation area, which are critically endangered natural ecosystems. [...] The majority of effects will occur in the Golden Bar area, and most of these will have a high level of adverse effect. Additionally, a substantial proportion of the affected areas are classified as LENZ and Significant Natural Areas.*

7. In addition, she notes that loss of vegetation will result in loss of habitat for the New Zealand falcon, pipit, harrier hawk, spur-winged plover and paradise shelduck. The pipit and New Zealand Falcon are identified in Appendix 2 of the NPS-IB as specified highly mobile fauna.
8. SNAs must be protected from adverse effects by avoiding and managing adverse effects from use and development in accordance with: section 6(c) of the Act, Policy 7 of the NPS-IB, Policy 3.2.2 of the operative Otago RPS, and ECO-P2 of the proposed Otago RPS. Indigenous biodiversity outside of SNAs must be maintained in accordance with section 7(f) of the Act, Policy 8 of the NPS-IB, Policy 3.19 of the operative RPS, and Policy ECO-P6 of the proposed RPS.
9. The application will result in the loss of indigenous biodiversity, including threatened and at-risk indigenous vegetation, birds, invertebrate, lizards, naturally uncommon ecosystems, and land environments. This is contrary to the requirements of the NPS-IB, operative and proposed RPS, and sections 6 and 7 of the Act and amounts to significant adverse effects on indigenous biodiversity.
10. In addition, the NPS-IB requires areas outside SNAs that support specified highly mobile fauna are managed to maintain their populations across their natural range<sup>3</sup>. It also requires regional councils to manage the adverse effects of new subdivision, use, and development on highly mobile fauna areas, in order to maintain viable populations of specified highly mobile fauna across their natural range<sup>4</sup>.
11. As proposed, the application does not protect populations of these highly mobile fauna because it results in habitat loss and fragmentation, which Policy 15 and Clause 3.20 of the NPS-IB seek to avoid.

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<sup>3</sup> Policy 15 of the NPS-IB

<sup>4</sup> Clause 3.20 of the NPS-IB

***Loss of natural inland wetland extent and values***

12. The application will result in the loss of extent and values of natural inland wetlands present within the application site, which is contrary to the directive to avoid such loss under the policy 6 of the NPS-FM and Policies 3.1.1 and 3.2.16 of the operative RPS, and policy LF-FW-O9 of the proposed RPS.
13. Ms McDonald describes the activities proposed through the application. She describes permanent loss, hydrological changes, loss of vegetation all of which result in loss of habitat for local bird populations at section 9.9 of her report.
14. These effects are contrary to section 6 of the Act, the NPS-FM and NPS-IB as it will result in wetland extent and values, which support indigenous biodiversity within them.

***Reliance on uncertain and incomplete assessments and unproven mitigation***

15. Forest & Bird are concerned about the level of uncertainty within the effects assessments on water quality and quantity, aquatic ecology and indigenous biodiversity.
16. For water quantity and quality, this uncertainty is described in the Notification Report (at pages 64, 65, 66, 73 and 82), where she summarises concerns and queries raised by Ms Badenhop in her technical review and audit, including:
  - a. A lack of clarity around the calibration data for groundwater models, particularly whether the water level inputs were based on one-off measurements or representative statistical values.
  - b. Climate change being factored into the surface water modelling but excluded from groundwater modelling.
  - c. GHD recommended more extensive groundwater monitoring (including both quality and levels) using existing and new bores, particularly along the predicted contaminant plume pathways. This would allow better model calibration and provide greater confidence in effect predictions. However, the Applicant has not confirmed they will carry out this monitoring.



- d. Additional monitoring was also recommended in the wider area surrounding the proposed pit extension and WRS, and in the catchments of McCormicks Creek and Murphys Creek, both before and during mining. Again, there is no indication the Applicant has committed to this work.
  - e. The very low predicted risk (<1% probability) of sulphate and nitrate-nitrogen exceedance at monitoring points MB01 and MB02 post-closure is contingent on the indefinite retention of the Trimbells and Maori Hen silt ponds. Since future plans for these ponds are unclear, the reliability of this prediction is uncertain.
  - f. There are further uncertainties related to assumptions about the Trimbells WRS. Specifically, it is assumed that water quality will not degrade as it passes through the WRS. Although the Applicant has committed to installing engineering measures such as a toe drain, buttress, and potentially an advective barrier, the actual effectiveness of these measures in preventing oxygen ingress and subsequent contaminant release remains to be demonstrated.
  - g. Lastly, the GHD and Ryder assessments do not appear to incorporate the proposed additional mining in Coronation North. It remains unclear whether these assessments accounted for the pit's existing state or assumed full mining under the existing (soon expiring) consent. As a result, current predictions may not reflect the full extent of proposed activity.
17. On page 85 of the Notification Report, Ms McDonald concludes that effects on aquatic ecology are likely to be no more than minor. However, she notes this finding is contingent on future water quality aligning with modelled outcomes — specifically, that contaminant levels stay below ecological thresholds. These predictions depend on key mitigation measures being implemented, especially in the NBWR catchment. Since some of these measures are not yet in place, may require further consents, and will need active management to maintain effectiveness, there remains a degree of uncertainty about whether the assumed ecological and water quality protection will be realised. This fails to prioritise the health and wellbeing of waterbodies and maintain indigenous biodiversity in line with the NPS-FM, NPS-IB and operative and proposed RPS.
18. At page 87, Ms McDonald highlights inconsistencies across the various terrestrial ecology reports regarding the scale of vegetation, habitat, and fauna affected by the proposal. She notes that this variation partly stems from the inherent difficulty in measuring such features

precisely. As a result, the figures presented in assessments should be considered approximations. This introduces a level of uncertainty about the full extent of ecological impacts. The potential effects on indigenous biodiversity are uncertain but may be significant or irreversible. A precautionary approach is therefore required under Policy 3 of the NPSIB. As proposed, the application does not adopt a precautionary approach.

19. The level of uncertainty inherent in the application and as described above is at an unacceptable level to grant consent. Given the indigenous biodiversity and freshwater ecosystems within the zone of impact it is crucial the effects envelope, effects management and mitigation methods are well understood.

***Inappropriate use of biodiversity compensation***

20. The applicant is proposing to provide biodiversity compensation for more than minor residual effects on the threatened moth<sup>5</sup> known to be present in the zone of impact. As described at page 96 of the Notification Report, the NPS-IB and proposed and operative RPS describe when biodiversity compensation is not appropriate.
21. The applicant is required to manage effects on indigenous biodiversity by applying the effects management hierarchy.
22. Clause 1.6 of the NPS-IB defines the effects management hierarchy. It requires a sequential approach to managing adverse effects on indigenous biodiversity from activities. It requires that adverse effects are:
- a. Avoided where practicable, then
  - b. Where they cannot be avoided, minimised where practicable, then
  - c. Where they cannot be minimised, remedied where practicable, then
  - d. If more than minor residual adverse effects remain after avoidance, minimisation and remediation, biodiversity offsetting is provided where possible, then
  - e. Where biodiversity offsetting of more than minor residual adverse effects is not possible, biodiversity compensation is provided, then
  - f. If biodiversity compensation is not appropriate, the activity itself is avoided.

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<sup>5</sup> *Orocrambus sophistes*

23. Clause (2) of Appendix 4 of the NPS-IB sets out when biodiversity compensation is not appropriate. It is not appropriate when the indigenous biodiversity affected is irreplaceable or vulnerable. The moth species is threatened therefore biodiversity compensation is not appropriate under the NPS-IB and the activity itself should be avoided in accordance with applying the effects management hierarchy.
24. Policy 5.4.6A of the Operative RPS is to only consider biological diversity compensation when adverse effects cannot be avoided, remedied, mitigated or offset and the residual adverse effects will not result in:
- a. Removal or loss of viability of habitat of a threatened or at risk indigenous species of fauna or flora under the New Zealand Threat Classification System (“NZTCS”);
  - b. Removal or loss of viability of an originally rare or uncommon ecosystem type that is associated with indigenous vegetation or habitat of indigenous fauna;
25. Appendix 4 of the proposed RPS states when biodiversity compensation is not appropriate including (e) ‘removal or loss of viability of the habitat of a Threatened indigenous species of fauna or flora under the New Zealand Threat Classification System (Townsend et al, 2008).’
26. Vegetation loss, which provides habitat for the moth is proposed through the application. Thus, the compensation cannot be considered. We also question whether compensation is available to the applicants for a) loss of habitat for the NZ Falcon or pipit which are classified in Appendix 2 of the NPS-IB as threatened and at risk, and b) loss of vegetation and ephemeral wetlands given these uncommon ecosystem types.
27. Forest & Bird are concerned that because the applicant has not identified where compensation is not appropriate and avoided effects that cannot be compensated for, the effects management hierarchy has not been applied correctly for other effects on indigenous biodiversity and freshwater ecosystems on site. This requires careful assessment and consideration moving forward.

***Adverse effects on the health and well being of water bodies and freshwater ecosystems***

28. Ms McDonald describes changes in flow or water quality can adversely impact aquatic flora or fauna through physical changes to instream habitat or through toxicity effects.

29. At section 9.7.3 of her Notification Recommendation Report, Ms McDonald describes the potential adverse effects on water quality. She concludes that most contaminants are anticipated to remain below guideline thresholds that protect ecological health.
30. However, she identifies two exceptions: elevated copper levels at site GB01 in the Clydesdale Stream, and at the NBWRRF site, where copper could also cause more than minor toxic effects if proposed mitigation measures are not put in place or do not perform as expected.
31. Ms McDonald also raises concerns about the reliance on the 'selected mitigation' scenario for the NBWR catchment. She notes that some of the proposed measures would require additional resource consents, and that the effectiveness of others—such as passive treatment systems—remains uncertain without further testing or feasibility assessment. While the Applicant has indicated they will temporarily redirect seepage back into pits to meet current compliance standards, Ms McDonald points out that this does not necessarily guarantee compliance with water quality guidelines aimed at protecting ecological health. Accordingly, she considers there is a risk of more than minor adverse effects on water quality in the NBWR catchment until the full suite of mitigation measures is both authorised and effectively implemented.
32. More than minor effects arising from copper contaminants and from uncertainty of mitigation measures is not consistent with maintaining the health and wellbeing of water bodies and freshwater ecosystem health in line with Policy 5 of the NPS-FM, Policy 3.1.1 of the operative RPS and Objective LF-WAI-O1 and Policy LF-WAI-P1 of the proposed RPS.

### ***Social and cultural impacts***

33. Whilst we acknowledge the economic benefits of the mine, the reality is granting consent will perpetuate the ongoing uncertainty around the mine's closure and end of life that impacts the cultural and social wellbeing of the area.

### ***Cumulative effects***

34. Forest & Bird are concerned that existing mine activities, already consented activities, and this application will result in cumulative effects on indigenous biodiversity. We submit the cumulative effects must be assessed and avoided, remedied and mitigated. Because of the uncertainty around cumulative effects on indigenous biodiversity and the potential for significant and irreversible effects, a precautionary approach should be taken when managing the cumulative effects in accordance with Policy 3 of the NPS-IB.

### **Decision sought**

35. Forest & Bird seek the following decision from Otago Regional Council:

- a) Decline the application in full

If the council is minded to approve the application:

- i) Include significant changes to effects management, mitigation and compensation to account for the significant effects on indigenous species and habitats.

### **Hearing options**

Forest & Bird wish to be heard in support of this submission.

Forest & Bird would consider presenting a joint case with others making a similar submission.

### **Delegation to hear and decide**

Forest & Bird request/~~do not request~~\*, pursuant to section 100A of the Act, that you delegate your functions, powers, and duties to hear and decide the application to 1 or more hearings commissioners who are not members of the local authority.



Date: 01 May 2025

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