

Submission on Publicly Notified Application for Resource Consent

To: Environment Southland
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Attention: Alex Smith – Senior Consents Officer

Name of submitter: Fish & Game New Zealand – Southland Region (Fish & Game)
7 (2)(a)

Name of applicant: Waikaka Gold Mines Limited (the applicant)

Application: APP-20242608

Description of activity: Waikaka Gold Mines Limited has applied to Environment Southland and Gore District Council for a suite of resource consents for the purpose of establishing and operating a gold mine, including the following:

- **Water permit** to take, dam, and divert surface water from the Waikaka Stream
- **Water permit** to take and use groundwater for mine pit dewatering, gold processing, dust suppression, and site rehabilitation.
- **Land use consent** to install, use, maintain, and decommission a bore.
- **Land use consent** to disturb the beds of Waikaka Stream and Shepherd's Creek for damming, diversion, and channel rehabilitation.
- **Discharge permit** to discharge cleanfill onto land.
- **Discharge permit** to discharge treated stormwater, gold processing return water, and dewatering water into the Waikaka Stream.
- **Discharge permit** to discharge stormwater, gold processing return water, and dewatering water to land via settlement ponds.
- **Discharge permit** to discharge air contaminants from mineral extraction and overburden storage.

Activity location: The site is near 972 Waikaka Road, Chatton North, Southland, about 4 km southwest of Waikaka township and 22 km north of Gore. Its approximate NZTM2000 coordinates are 1289065E, 4904586N.

The land within the application site is under a combination of private and public ownership.

Our submission relates to: The whole application to Environment Southland.

Our submission is: Fish & Game oppose the whole application to Environment Southland.

Our reasons for comments are:

Fish and Game is responsible for the management of sports fish and game birds within the Southland region. Fish and Game have an interest in mining activities, particularly where they may affect water quality, aquatic ecosystems, and instream habitat.

The applicant proposes to mine gold-bearing wash from depths of 20 to 50 metres using a dry, open-cut method, over an 85-hectare area across 7 to 8 years. The operation will include dewatering, on-site gold processing, discharge of treated water to the Waikaka Stream, stockpiling of overburden, temporary diversion of local streams, and site rehabilitation.

The site includes the Waikaka Stream, Shepherds Creek, and several unnamed ditches and ponds. As part of the gold mining operation, the applicant proposes to disturb land, take water, discharge to water, and divert the Waikaka Stream on multiple occasions.

The Waikaka Stream is a gravel-bed stream with a straightened, channelised form, flowing through a catchment mainly used for pastoral farming. It joins the Mataura River upstream of Gore. The Waikaka Stream and its tributaries have the following sports fish and game values, including recreational hunting and fishing opportunities:

1. It is a habitat of indigenous and introduced birds, including game species that are actively hunted during the annual game bird hunting season.
2. The Waikaka Stream supports a brown trout fishery, which is open for fishing between 1 October – 30 April annually. Anglers are permitted to catch 2 brown trout per day.

The Waikaka Stream offers a small stream brown trout angling experience, with a mix of run – riffle sequences and pool habitats that provide conditions for fly fishing.

3. The Waikaka Stream and its tributaries provides brown trout spawning and juvenile rearing habitat in the mid Mataura catchment.

Brown trout typically spawn in riffles — gravel ridges on the streambed — between June and October, although spawning can also occur in May and November.

Position on the Application:

The Waikaka Goldmines Ltd Aquatic Ecology Survey (Dungey, 2021) records the presence of:

1. Longfin eel, brown trout, upland bully, and Gollum galaxias in the Waikaka Stream;

2. Longfin eel, shortfin eel, perch, and koura in various ponds; and
3. Longfin eel, brown trout, upland bully, and Gollum galaxias in various 'ditches, with the latter considered common in these areas, suggesting the ditches provide good habitat.

Water quality in the Waikaka Stream, based on MCI and QMCI scores, is generally rated as "good."

Fish & Game raises the following concerns regarding the application and the ecological assessment.

1. Ecological Impact Assessment

The report does not include a comprehensive assessment of the ecological value, magnitude, or level of effect that the proposed activity will have on surface water bodies, including Waikaka Stream, Shepherds Creek, unnamed ditches, and ponds across the site. Without this, it is not possible to adequately assess the potential or actual impacts on aquatic ecology and habitat.

2. Riparian and Instream Disturbance

The application involves significant instream and riparian habitat disturbance to enable mining, including multiple relocations of the bed of Waikaka Stream and Shepherds Creek. Fish & Game notes that the application proposes measures aimed at preventing net loss of species and / or habitat, including:

- a. Strategic planting to increase shade and cover;
- b. More riffles and cobble substrate to boost food production;
- c. Use of rock riprap to create habitat for eels and small fish;
- d. Large woody debris to provide cover until undercut banks form;
- e. Stock exclusion fencing;
- f. Fish salvage from sections of stream to be diverted; and
- g. Creation of some backwater habitat.

Fish & Game is concerned that:

- a. The proposed measures cannot be considered true mitigation, as they are based solely on achieving no net loss, rather than delivering any measurable ecological gain or improvement. Further it is unclear whether the proposed measures are formally included in the suite of consent conditions or any associated rehabilitation plan, making it difficult to assess their certainty, enforceability, timeliness, and long-term effectiveness.

- b. Historic survey maps overlaid on aerial imagery (see Appendix 1) show that the Waikaka Stream once had a more natural, meandering form with greater variation in width and length, including within the proposed mining area. Channelisation and straightening have replaced this with more uniform habitat, reducing the variety of features such as riffles and pools that are vital for brown trout, especially for juvenile rearing and spawning.

There is a significant opportunity to enhance instream and riparian habitat in the disturbed sections of the Waikaka Stream and its tributaries — not just to avoid net loss, but to achieve meaningful ecological improvements beyond the current, highly modified state. This could include restoring natural stream sinuosity to match the surveyed bed (see Appendix 1).

The proposal to create backwaters does not adequately offset the high level of disturbance proposed, as it fails to replicate the full range of natural stream habitats — such as riffles, pools, and undercut banks — essential for sustaining healthy aquatic ecosystems, including brown trout.

Replanting riparian vegetation will also take time to establish and provide effective shade to limit instream temperatures and growth of nuisance macrophytes. Planting hybrid willows (as proposed) will not produce the willow grubs associated with crack willow currently found along the Waikaka Stream margins, which are an important seasonal food source for brown trout.

The benefit of the proposed stock exclusion should not be overstated, as the application itself notes that stock is already mostly excluded from the Waikaka Stream and its tributaries.

- c. The use of tied-in large woody debris, including repurposed crack willow, should be preferred over rock riprap as it better mimics natural stream processes, enhances habitat complexity, and provides more effective cover and feeding areas for fish and aquatic life.
- d. Fish salvage is supported in principle; however, the applicant should be required to prepare a detailed plan to ensure it is carried out effectively and supports high fish survival. All personnel involved must be trained in best-practice fish handling techniques to minimise stress and harm during capture and relocation.
- e. A fish passage and migration timing assessment is needed to ensure brown trout can move freely through the disturbed or relocated sections, particularly over peak spawning periods. This assessment should consider bed gradient, flow velocity, and the avoidance of physical instream barriers.
- f. The application does not clearly explain how it will comply with the Conservation Act 1987. Under the Conservation Act, it is an offence to disturb or damage freshwater fish spawning grounds or harm their eggs or larvae.

Brown trout, which spawn in Waikaka Stream and Shepherds Creek, could be impacted by the proposed diversions and physical waterway relocations. Brown trout need clean, stable, moderately sized gravels (10–50 mm) with good flow and

oxygenation to successfully spawn. Maintaining these conditions is critical for supporting healthy trout populations in the Waikaka Stream and Shepherds Creek.

3. Discharges

Weekly monitoring of discharge quality to the Waikaka Stream as proposed (conditions 48 – 52) is inadequate for assessing the effects of sediment from mining operations on visual clarity. Sediment levels and visual clarity can fluctuate significantly within short time frames, especially during or after rainfall or active mining phases. Infrequent monitoring risks missing peak sediment discharges and underestimating their impact on aquatic life and habitat quality. More frequent or event-based monitoring is necessary to provide an accurate picture of effects and ensure appropriate management responses.

The applicant should prioritise minimising the amount of sediment discharged to the Waikaka Stream from mining activities, rather than merely aiming to meet the minimum discharge standards, which may not adequately protect aquatic habitat and water quality.

4. Public access

The proposed public access condition (condition 89) is vague, lacking clear details on the location, extent, and timing of alternative public access, making it difficult to assess its value or enforceability.

5. Consent duration

There is a clear tension between the proposed consent duration of 20 years and the suggested 7 to 8 years needed to complete the associated activities. Granting a much longer consent period than the expected operational timeframe could lead to ongoing environmental risks without sufficient oversight or reassessment.

The consent duration should match the actual length of the activities to allow proper monitoring, management, and timeliness of measures associated with instream and riparian habitat disturbance - delay is unacceptable if the goal is to protect the site's ecological values.

6. Review

The proposed consent conditions do not provide for any utilization of reviews. Fish & Game considers a consent of this nature if granted should be subject to a rigorous reporting and review process, i.e., 5-yearly reviews, particularly given the 20-year consent sought. This should include including reporting on progress and effectiveness of the proposed instream habitat measures, given the importance of them to offset the effects of the stream relocation activities.

Decision that Fish & Game wishes the Council to make:

That the application to Environment Southland be declined.

Fish & Game wishes to be heard in support of its submission at a hearing if needed.

Fish & Game wishes to be involved in any pre-hearing meeting that may be held for this application.