

Cultural Impact Assessment Summary and Site Assessment Results

For Waikaka Gold Mines Limited

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November 2025

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Executive Summary

Waikaka Gold Mines Limited commissioned Hokonui Rūnanga Kaupapa Taiao to prepare a cultural impact assessment to assess the impacts of the Waikaka Gold Mine proposal on the cultural values associated with the site and its surrounding area. The cultural impact assessment will provide recommendations and outcomes sought by Hokonui Rūnanga in relation to the Waikaka Gold Mine site and the surrounding area. It will also identify whether there are any suitable mitigations, remedies, or offsets to address the impacts on cultural values that have been identified.

Waikaka Gold Mines Limited applied for resource consent to establish and operate a gold mine located near 972 Waikaka Road, Chatton North, Southland in August 2024. The site is approximately 22km north of the Gore township, and 4km south-west of the Waikaka township. Waikaka Gold Mines Limited have been engaging with Hokonui Rūnanga Inc. in relation to this proposal since April 2024.

Hokonui Rūnanga Kaupapa Taiao met with Waikaka Gold Mines Limited to discuss the project proposal in May 2024, and received the full application and supporting documents in September 2024, after it had been lodged with Environment Southland and Gore District Council. Both Waikaka Gold Mines Limited and Hokonui Rūnanga have committed to maintaining a strong, collaborative relationship focused on delivering mutual benefits and achieving agreed outcomes. This partnership will include regular engagement, transparent communication, and collaborative decision-making to ensure cultural, environmental, and community values are upheld throughout the mining project.

Two site visits were conducted by Hokonui Rūnanga Kaupapa Taiao staff on the 10th of April and the 22nd of May 2025. These visits involved a walkover of different areas of the proposed gold mine site, discussions with the applicant, and a series of cultural monitoring and assessments at two different locations on the site, Shepherds Creek, and the Waikākahi Stream.

The two site assessments provided Hokonui Rūnanga Kaupapa Taiao staff with basic water quality measurements, cultural monitoring of taonga species present at the sites, and cultural assessment data that involved observations of the site and its surrounding landscape. This data and information fed into the creation of a broader cultural impact assessment that was brought to life by visual indicator tools. These visualisation tools have been included in this cultural impact assessment report.

Key recommendations from the cultural impact assessment include:

- Ongoing engagement between Waikaka Gold Mines Limited and Hokonui Rūnanga.
- Consideration of cultural values throughout all stages of the gold mining process, including site remediation and rehabilitation.
- The inclusion of mitigations, remedies, and offsets that address the potential adverse impacts of the mining activity on the site.

- Specific consideration of the cultural values and significance of the Waikākahī Stream, including in relation to any remediation, rehabilitation or enhancement.

Background Information

Waikaka Gold Mines Limited has applied for resource consent to establish and operate a gold mine located near 972 Waikaka Road, Chatton North, Southland. The site is approximately 22km north of the Gore township, and 4km south-west of the Waikaka township. The total project area is approximately 95 ha. Waikaka Gold Mines Limited require a series of resource consents to establish and operate the gold mine, including land use consents, water permits, and discharge consents.

Waikaka Gold Mines Limited engaged Hokonui Rūnanga Kaupapa Taiao to prepare both a cultural values statement and cultural impact assessment to identify cultural values associated with the site and surrounding area, and assess the potential impact of the proposal on the cultural values. The cultural impact assessment assesses the impacts on cultural values from the proposed Waikaka Gold Mine. It also provides Waikaka Gold Mines Limited with recommendations and outcomes to mitigate, remedy, or offset any identified impacts.

Methodology for Cultural Impact Assessment

Information within the cultural impact assessment is based on current available literature, recorded oral histories, and data collected from visits to the site. The reviewed literature includes Iwi Management Plan(s), previously collected cultural information and Apiti Hono Tatai Hono assessments, data and cultural information collected from site visits and information provided by the applicant.

Site visits were conducted by Hokonui Rūnanga Kaupapa Taiao staff on the 10th of April 2025 and the 22nd of May 2025. These visits involved a walkover of different areas of the proposed gold mine site, discussions with the applicant, and a series of cultural monitoring and assessments at different locations on the site.

Freshwater Assessment

Wai (water) is fundamental to the health and wellbeing of Māori. The health, wellbeing, and mauri of the water are directly linked to the health and wellbeing of the people. Water is particularly important

for mahinga kai. The characteristics of a water body have a direct impact on its health and the health of the surrounding environment, as well as what can be harvested from it and when.

Hokonui Rūnanga Kaupapa Taiao staff conducted two separate visits to the proposed Waikaka Gold Mine site. As part of these site visits, Hokonui Rūnanga Kaupapa Taiao staff conducted cultural health assessments, freshwater assessments, and taonga species assessments. Both of these tools feed into a broader cultural impact assessment, which gives a mātauranga Māori view and understanding of the landscape. The cultural health assessments and freshwater assessments focused on two key sites, one on Shepherds Creek, and one on the Waikākahi Stream.

Shepherds Creek

Hokonui Rūnanga Kaupapa Taiao staff visited the site on Shepherds Creek on the afternoon of the 10th of April 2025. A series of freshwater assessments were carried out at the site, which included a series of simple water quality measurements, and electrofishing of easily accessible areas of the stream. Key freshwater assessment and measurement results are recorded in the tables below.

Electrofishing was carried out on two 30m reaches of Shepherds Creek. In the downstream reach, 7 tuna (longfin eels) were observed; however, no catches were recorded. In the upstream reach, no species were observed or caught.

A macroinvertebrate community index sample was also taken at Shepherds Creek. A variety of species were observed, such as mayflies, caddisflies, sandflies, amphipods, snails, and worms. A common bully was also observed, after making its way into the net used to gather the macroinvertebrate community index sample. Once calculated, the overall macroinvertebrate community index score was 105. This indicates ‘good’ stream health.

Shepherds Creek – 10/04/2025			
Water Quality Attribute	Measurement	Units	Method/Equipment Used
Temperature	11.3	°C	Hanna Instruments DiST 3
Conductivity	181	µs/cm	Hanna Instruments DiST 3

Clarity	55	cm	Clarity Tube
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Waikākahi Stream

Hokonui Rūnanga Kaupapa Taiao staff visited the site on the Waikākahi Stream on the afternoon of the 25th of May 2025. The same series of freshwater assessments was carried out at the site. Key freshwater assessment and measurement results are recorded and summarised below.

Electrofishing was carried out on a 30m reach of the Waikākahi Stream. The Waikākahi Stream is much deeper and quicker flowing than Shepherds Creek, so a second 30m reach was not able to be found. Electrofishing of this 30m reach on the Waikākahi Stream recorded 8 common bullies, 2 trout, 5 small tuna, and one large adult tuna.

A macroinvertebrate community index sample was also taken at the Waikākahi Stream. A similar variety of species was observed, such as mayflies, caddisflies, dobsonflies, amphipods, snails, and worms. Once calculated, the overall macroinvertebrate community index score was 115. This indicates ‘good’ stream health.

Waikākahi Stream – 25/05/2025			
Water Quality Attribute	Measurement	Units	Method/Equipment Used
Temperature	8.9	°C	Hanna Instruments DiST 3
Conductivity	167	µs/cm	Hanna Instruments DiST 3
Clarity	58	cm	Clarity Tube

There are several limitations associated with the freshwater assessments that Hokonui Rūnanga Kaupapa Taiao completed at the two locations on the Waikaka Gold Mine site. A simple methodology

was used to carry out these freshwater assessments. This is due to only a small sample of data and information being required to inform the wider cultural assessment. This simple methodology is not as in-depth as a full freshwater assessment, which Waikaka Gold Mines Limited had already carried out as part of the consent application. The freshwater assessments that Hokonui Rūnanga Kaupapa Taiao staff carried out at the two sites were used only to inform the wider cultural impact assessment.

Visits to the Waikaka Gold Mines site were also constrained by several factors, including costs, scheduling, access arrangements, and weather conditions, including high water levels. This meant that Hokonui Rūnanga Kaupapa staff were only able to visit the site on the two days that these assessments were carried out. Additional visits and assessments would have provided further information for the cultural impact assessment. However, the two visits to the site and the completed assessments provide Hokonui Rūnanga with an understanding of the proposed activities impact on the environmental and cultural values associated with Shepherds Creek, the Waikākahi Stream, and the surrounding environment.

Taonga Species Assessment

While visiting the site, Hokonui Rūnanga Kaupapa Taiao staff conducted simple taonga species assessments. This methodology consisted primarily of using a set of observations of the waterways, and the comparison of the current state to the traditional knowledge and history associated with the site.

Hokonui Rūnanga Kaupapa Taiao staff observed that there were fewer taonga species present than expected. For example, no galaxiids, kanakana, kōura, or kakahi were found as part of the assessments, despite this being included in the methods used. Many of these taonga species that Hokonui Rūnanga would expect to be present on the waterways but were not, are indicator species.

The lack of presence of these species indicates to Hokonui Rūnanga that the freshwater habitats of Shepherds Creek and the Waikākahi Stream are degraded and potentially under stress. This degradation was also observed in the wider surrounding environment, with the landscape primarily being agricultural farmland with little to no remnant native vegetation, and limited introduced and native bird life, as would have been present in the landscape historically.

These observations differ from the freshwater assessments described above. The water quality attributes measured indicated relatively good health in both Shepherds Creek and the Waikākahi Stream. Whereas an assessment on taonga species and an observed lack of presence of these species indicate a degraded freshwater environment. This highlights the difference in perspectives on freshwater health between a Te Ao Māori lens, and a Western science perspective. Both of these perspectives are important to consider in the context of the wider environment, as it can be recognised that different aspects of the environment are impacted by activities in and around waterways.

The freshwater assessments and taonga species assessments provide a general overview of what is present in the Shepherds Creek and the Waikāhahi Stream, what the indicative health of the two waterways is, and if there are any immediate areas of concern. The information gathered from the freshwater assessments also allowed Hokonui Rūnanga Kaupapa Taiao to create the He Puna Whakaata o Mātauranga cultural assessment wheels that can be found in Appendix 3.

The He Puna Whakaata o Mātauranga cultural assessment wheels for both Shepherds Creek and the Waikāhahi Stream show primarily red sections, indicating poor scores for these attributes. The poor score indicates that the assessors were dissatisfied with the ability of the site to provide for these specific cultural uses or associations. This can be due to several factors, including any visible modification and degradation surrounding the assessment site. Assessors consider historical and contemporary uses when scoring these attributes.

The cultural assessment wheels for both Shepherds Creek and the Waikāhahi Stream show heavily modified and degraded sites, where cultural and environmental values are not present in ways that they would have been historically. While this is of concern to Hokonui Rūnanga due to the significance of these waterways and the surrounding area, it provides a useful baseline to consider. It is hoped that this may provide Waikaka Gold Mines Limited with information that will assist with the temporary diversion of these two waterways, and guide any remediation, rehabilitation and enhancement efforts following the return of these waterways to their original courses.

Recommendations from Cultural Impact Assessment

The proposed Waikaka Gold Mine has a range of potential adverse effects on the cultural and environmental values associated with the site and its surrounding area. In particular, Hokonui Rūnanga has concerns that there is significant potential for adverse effects on the cultural and environmental values associated with the two waterways on the site, Shepherds Creek and the Waikāhahi Stream. Effective management of these potential adverse effects is critical to ensuring that cultural and environmental values are not degraded or lost entirely.

Engagement

Waikaka Gold Mines Limited must continue to engage with Hokonui Rūnanga regarding all aspects of the project, to provide clarity and transparency, and ensure that any concerns are recognised and actioned appropriately. In particular, Hokonui Rūnanga will have a strong interest in the site works and the remediation and rehabilitation of the site post-mining, should the resource consent be granted. This includes any ecological enhancement carried out on the site, and whether this may present any opportunities for collaboration between the two parties. Additionally, engagement with Hokonui Rūnanga during the creation and implementation of the various site management plans is

recommended. Achieving the goal of leaving the gold mine site in an improved condition compared to its previous state is of critical importance. It also presents an opportunity for collaboration to create enhanced outcomes, not only for the site but also for the surrounding area and environment. Hokonui Rūnanga is open to discussion of potential options with Waikaka Gold Mines Limited.

Cultural Values

Hokonui Rūnanga has concerns that there is the potential for significant adverse effects on cultural and environmental values associated with the proposed activities, due to the nature and scale of the proposal. Namely, the potential for adverse effects on the Waikākahi Stream and Shepherds Creek is of concern. The on-site assessments of these waterways showed varying levels of health degradation across the different habitats present within these systems. Despite this, the Waikākahi Stream and Shepherds Creek remain important features in the wider cultural and environmental landscape. The temporary diversion of these waterways, then returning them to original alignment and carrying out remediation and rehabilitation works, presents a series of concerns and challenges.

Waikaka Gold Mines Limited must recognise the cultural values associated with the site and the surrounding area, and ensure these are considered throughout the lifetime of the proposed activities. Hokonui Rūnanga must continue to be engaged as the proposed activities progress, and provide advice and assistance to Waikaka Gold Mines Limited about how to manage the risks and concerns to cultural and environmental values. Input from mana whenua is a key component of ensuring that the proposed activities can be carried out on-site effectively in a way that minimises significant impacts to the wider environment. It is recommended that an accidental discovery protocol be put in place for all site works, to ensure that any potential archeological sites, wāhi tapu, or wāhi taonga are managed appropriately. Hokonui Rūnanga is open to working with Waikaka Gold Mines Limited to implement this.

Waikaka Gold Mines Limited must work closely with Hokonui Rūnanga on all proposed activities associated with the Waikākahi Stream and Shepherds Creek. This includes how the temporary diversions will be managed, how taonga species within these waterways will be managed, and all aspects of the remediation, rehabilitation and enhancement of these two waterways once the diversions are completed and they have been returned to their original courses. This includes any monitoring and reporting of Waikākahi Stream and Shepherds Creek once remediation, rehabilitation and enhancement work is complete. By engaging with Hokonui Rūnanga on this, Waikaka Gold Mines Limited will ensure that cultural and environmental values will be appropriately considered throughout the mine life and following it.

Mitigations, Remedies, and Offsets

Waikaka Gold Mines Limited has identified a series of mitigations, remedies and offsets to address the potential adverse impacts of the mining activity on the site. These are built into the draft consent conditions that have been lodged as part of the application. However, it is the view of Hokonui Rūnanga that these consent conditions are not stringent enough. Additional mitigation, remedy, and offset measures are required, not only to address the potential impacts on cultural values as illustrated in the sections above, but also to address the potential impacts on the wider environment from the proposed activities.

Hokonui Rūnanga must have direct involvement in the development of any updated consent conditions, especially those related to the Waikākahi Stream and Shepherds Creek. This includes the diversion of these waterways, as well as all remediation, rehabilitation, and ecological enhancement of the waterways, along with ongoing monitoring and reporting. Furthermore, any monitoring of the wider site following the conclusion of mining activities must also be discussed. Hokonui Rūnanga requests independent annual monitoring and reporting of the rehabilitated sections of the Waikākahi Stream and Shepherds Creek. This must include some form of cultural monitoring, which should be carried out by Hokonui Rūnanga Kaupapa Taiao. Ongoing monitoring is essential to ensure transparency, foster ongoing collaboration, and confirm that the site and surrounding environment are left in a significantly improved state than what existed previously.

Waikākahi Stream

The remediation and enhancement of the Waikākahi Stream is of particular interest to Hokonui Rūnanga, given its importance in both a historical and contemporary context. Any activities occurring in or adjacent to the Waikākahi Stream must contribute to the aspiration of naturalising the stream and its wider ecosystem. This includes supporting native vegetation planting, the removal of exotic weeds, and activities that have positive effects on water quality and taonga species. These actions will allow mana whenua to continue to enjoy and engage with the Waikākahi Stream in ways similar to their tīpuna, and accentuate the presence of the various atua visible in the space.

Hokonui Rūnanga strongly opposes all activities that further modify the Waikākahi Stream from its natural state, degrade the ecological health of the waterway and its ability to provide habitat for taonga mahinga kai species, or detract from the naturalness and tranquility of the area.

Further modification and degradation of culturally significant waterways, such as the Waikākahi Stream, present major concerns to Hokonui Rūnanga. The health, wellbeing, and mauri of water is directly linked to the health and wellbeing of people. If modification and degradation occur to an

extent where mana whenua are unable to connect to important cultural features, such as waterways, it can cause further distress.

Summary of Key Recommendations

- 1) **Ongoing Engagement and Transparency** - Waikaka Gold Mines Limited must maintain regular, meaningful engagement with Hokonui Rūnanga throughout all phases of the project. This includes early consultation, timely updates, and co-development of decisions, ensuring that concerns are clearly documented, acknowledged, and addressed in a culturally appropriate manner.
- 2) **Recognition and Integration of Cultural Values** - Waikaka Gold Mines Limited must formally recognise the cultural, historical, and spiritual significance of the site and surrounding area. These values must be embedded into project planning, implementation, monitoring, and closure activities, with clear mechanisms to ensure they are respected and upheld.
- 3) **Collaborative Development of Mitigations and Consent Conditions** - Waikaka Gold Mines Limited must work in active partnership with Hokonui Rūnanga to co-design mitigation strategies, remedies, offsets, and consent conditions. These must address both cultural impacts and environmental risks, and be supported by robust monitoring and adaptive management frameworks.
- 4) **Protection and Restoration of the Waikākahi Stream** - All activities in or near the Waikākahi Stream must be designed to enhance its ecological health and cultural significance. Waikaka Gold Mines Limited must support naturalisation and restoration efforts, guided by Hokonui Rūnanga's values and aspirations, ensuring the stream remains a thriving, culturally significant taonga for mana whenua.

Appendix 1: He Puna Whakaata o Mātauranga Assessment 2025

Shepherds Creek



Colour	Description
	Very Poor/Very Dissatisfied
	Poor
	Moderate/Marginal
	Good
	Very good/Satisfied

Waikākahi Stream



Colour	Description
	Very Poor/Very Dissatisfied
	Poor
	Moderate/Marginal
	Good
	Very good/Satisfied