

SUBMISSION FORM

Submission on a Notified or Limited Notified Application for a Resource Consent

To: The Chief Executive Environment Southland Private Bag 90116 DX YX20175 Invercargill

Matt Francis c/o Waituna Investments Limited l: (Name(s))Registered Office: 1 Princes Street, Paeroa, 3600, New Zealand of: (Address) Section 53 at: (Phone) (Fax) (E-mail) Wish to SUPPORT OPPOSE / ubmit a NEUTRAL submission on (circle one) the application of: Lisa Thorne Name: Te Runanga o Awarua, Department of Conservation, Environment Southland And/or Organisation: Section 29 Block XIII Oteramika APP-20242456 Waituna Lagoon **HUN & Coastal Marine Area Application Number:** Location:

My reasons for my submission are: (State the nature of your submission and give clear reasons. Continue on attached pages if necessary)

Please refer to attached submission Document 20240902WaitunaInvestmentsSubmission

We OPPOSE DUE TO THE FOLLOWING POINTS:

- Increased Lagoon Levels Adversely Impacting the Lagoons Ecology.
- Impacts to Birdlife Movements
- Impacts to Birdlife Habitat
- Increased Tannis Affecting Ruppia
- Degradation of a Ramsar Site
- Impacts to Neighboring Properties impacting property rights, economic values and existing land use.
- Erosion of Tributary Banks
- The Hydraulic Effect on all of the Surrounding Land on Subsurface Drains and Soil Profiles
- Leaching Of Historical Nutrients and Sediments Stored Within the Lagoon
- Destruction/Limited Access to Public Property
- Lack of Long-Term Research on Economic and Social Impacts
- Consent Review and Modify Process

- There has been insufficient consultation with the community by the applicants.
- The applicants have not provided convincing data to demonstrate that maintaining the lagoon at 2.5 meters will benefit its long-term health. Despite meeting some ecological targets, the algal dominance issue observed in late 2023 serves as a stark example of potential adverse outcomes.
- Concerns About the Applicants' Capabilities and the combined expertise and approach of Te Rnanga o Awarua, the Department of Conservation, and Environment Southland. We do not believe these parties have the ability to act together proactively and in a timely manner to manage this consent appropriately.

I wish the Council to make the following decision (Give precise details, including the nature of any conditions sought)

Please refer to attached submission Document 20240902WaitunaInvestmentsSubmission

We propose that the consent be granted to the joint applicant, with the following conditions;

- 1. Trigger Level: The consent should specify a trigger level of 2.2 meters. This means that the lagoon must be opened when the water level reaches 2.2 meters, and the opening should occur as soon as practicable thereafter.
- 2. Acknowledgment of Practical Constraints: We recognize that sea and weather conditions may occasionally complicate the timing of the lagoon's opening. However, a trigger level of 2.2 meters is crucial to minimize potential adverse impacts and to ensure timely action. It is anticipated that with a 2.2-meter trigger level, the lagoon could reach 2.3 meters before the opening occurs. This provision ensures that the lagoon remains within safe parameters and helps to mitigate risks.

I, am not (choose one) a trade competitor* of the applicant (for the purposes of Section 308B of the Resource Management Act 1991).

*If trade competitor chosen, please complete the next statement, otherwise leave blank

- **I, am/** *(choose one)* directly affected by an effect as a result of the proposed activity in the application that:
- (a) adversely affects the environment; and
- (b) does not relate to trade competition or the effects of trade competition.

I, do/death (choose one) wish to be heard in support of my submission.

I, do/demail (choose one) wish to be involved in any pre-hearing meeting that may be held for this application.

SUBMISSION FORM – A33705 – 05/21

I have served a copy of my submission on the applicant.	Yes No	
Signed	Date	2 September 2024

If you have any queries about this form or its purpose, please contact the Consents Division of Environment Southland (03) 211 5115 or 0800 76 88 45.

Notes:

- 1. This submission will become publicly available information.
- 2. The person making this submission must send a copy to the applicant as soon as reasonably practicable after serving Environment Southland.
- 3. A list of all submissions received will be provided to the applicant.
- 4. Please be aware that third parties may request a copy of submissions received and that request is subject to the Local Government Official Information and Meetings Act 1987.

Refer to Public Notification of resource consent application - APP-20242456

Submission on the Application for periodic opening of Waituna Lagoon to maintain and restore ecological health and cultural values of the lagoon ecosystem, on behalf of Awarua, DOC, and Environment Southland.

Resource Consent Application and Assessment of Environmental Effects Te Rūnanga o Awarua, Department of Conservation Te Papa Atawhai and Environment Southland July 2024

To: Environment Southland

This submission is from: Waituna Investments Limited

Company Address: 1 Princes Street, Paeroa, 3600, New Zealand

Contact Details: Waituna Investments Limited

Email: Section 53

Phone:

We **OPPOSE** this Resource Consent Application for:

- An increase in the lagoon opening threshold to 2.5m (above msl)

- For years 1-5, summer openings may occur if water levels are at or above 2.5m for 24 hours and winter openings may occur if water levels are at or above 2.3m for seven days;
- For years 6-15, openings may occur if water levels are at or above 2.5m for three days; and
- For years 16-20, openings may occur if water levels are at or above 2.5m for seven days.
 (Currently the Lagoon seems to be holding 2.25-2.3m)

We OPPOSE DUE TO THE FOLLOWING 12 POINTS:

1. Increased Lagoon Levels Adversely Impacting the Lagoons Ecology.

The lagoon margins will be pushed further out which will influence ecology. An increase in lagoon levels will disrupt the delicate balance of the lagoon's ecology, affecting native species, altering habitat structures, and impacting water quality.

Why we oppose: Over The past century the ecology of Waituna Lagoon has adapted to current management of water levels and regular openings, a sudden increase in water levels will have significant impacts such as:

- Altered Habitat Conditions: The lagoon's ecosystems have evolved to thrive under specific conditions.
 A rise in water levels will alter habitats that are critical for various species, including those that rely on the lagoon's shallow areas, mudflats, and surrounding vegetation.
- **Disruption of Species:** Many species in the lagoon are adapted to specific water levels and conditions. Sudden changes will disrupt breeding cycles, feeding patterns, and migration routes, potentially leading to declines in populations or shifts in community composition.
- Changes in Water Quality: Increased water levels will lead to changes in nutrient dynamics, sediment distribution, and water circulation patterns. This will impact the lagoon's water quality, affecting algae blooms to oxygen levels, which in turn influences aquatic life.
- Impact on Plant Life: Aquatic and riparian plants have adapted to certain water levels. Changes will likely stress or even eliminate some plant species, affecting the entire food web and habitat structure.

- **Erosion and Sediment Movement:** Higher water levels will increase erosion and alter sediment deposition patterns, impacting the physical structure of the lagoon and surrounding land.
- Management and Conservation Challenges: The Ramsar status of the lagoon recognizes its importance for biodiversity and ecological health. Significant changes in water levels will likely challenge ongoing conservation efforts and management strategies designed to maintain the ecological balance.
- Impacts on Wildlife: The changes in vegetation will affect wildlife that relies on these plants for food, shelter, or breeding grounds. This will likely lead to shifts in species distributions and affect overall biodiversity.

2. Birdlife Movements

Birdlife is being pushed further out such as geese onto farmland causing damage to pasture. As a general rule, the higher the lagoon level – the more birdlife pushed onto farming land.

Why we oppose: Increased lagoon levels pushing birdlife, like geese and blue herons onto farmland will cause significant issues. Higher bird populations on farmland leads to damage to crops and pastures. This shift underscores the broader ecological impact of changing lagoon levels, affecting both wildlife and agricultural activities.

3. Impacts to Birdlife Habitat

Reduced wading birdlife habitat, one of the reasons Waituna originally gained Ramsar status was for its birdlife.

Why we oppose: Increased water levels will alter the habitat available for wading birds, which are a key factor in Waituna Lagoon's Ramsar designation. This change threatens the habitat that supports these birds, potentially diminishing the lagoon's ecological value and its status as a critical site for birdlife.

4. Increased Tannis Affecting Ruppia

Shading from tannins in the lagoon at the higher water levels will alter light penetration to the Ruppia affecting its growth.

Why we oppose: Higher lagoon levels will potentially lead to increased shading which will limit light penetration and affect the growth of Ruppia, a crucial aquatic plant. This reduction in Ruppia could impact the overall health of the lagoon's ecosystem, as it serves as an important food source and habitat for various species.

5. Degradation of a Ramsar Site

Degradation of a Ramsar site

Why we oppose: Higher lagoon levels will lead to the degradation of this existing Ramsar site. The Ramsar designation recognizes the site for its significant ecological value, including its unique habitats and biodiversity. Changes such as altered water levels will disrupt key ecological processes, degrade important habitats, and threaten species that rely on those conditions. This disruption could undermine the site's value and conservation status.

6. Impacts to Neighbouring Properties

Economic value and existing land use (farming) of neighbouring private land will be compromised.

Why we oppose: Higher lagoon levels and water "backing up" will impact neighbouring private property rights and economic value for privately owned land situated close to the lagoon. This will have the following impacts;

- Flooding and Land Use: Higher water levels will lead to saturation of adjacent lands. This will reduce the usability of these properties for agriculture, recreation, or other purposes. Farmers may face crop damage or loss of pastureland, affecting their income and property value.
- Land Value: Properties that experience frequent or prolonged saturation will see a decrease in land market value. The risk of continued or increased saturation will make these lands less attractive for purchase or investment.
- **Economic Disruption**: For properties used for commercial purposes or tourism, changes in lagoon levels that affect the lagoon's health or accessibility will disrupt business operations and reduce economic returns.
- Property Rights and Management: Landowners will face additional costs related to managing or mitigating the impacts of higher water levels, such as constructing barriers or improving drainage systems. These costs can affect property profitability and value.
- Regulatory and Legal Issues: Changes in lagoon levels might lead to new regulations or policies aimed
 at protecting the lagoon's ecological health. Landowners need to comply with these regulations, which
 can impact their land use and property rights.

7. Erosion of Tributary Banks

Higher water levels eroding Tributary Banks which will increase sediment losses into the lagoon.

Why we oppose: Prolonged high-water levels will lead to significant erosion of tributary banks. Higher water levels will lead to:

- Saturation of Soil: Extended periods of high-water levels saturate the soil in tributary banks, reducing
 its stability. Saturated soils become soft and more prone to erosion, particularly during heavy rains or
 high-flow events.
- Bank Erosion: As the soil becomes more saturated and loses its structural integrity, it is more easily eroded by flowing water. This erosion will lead to the undercutting of banks, collapse, and increased sediment movement into the lagoon.
- Increased Sediment Load: Eroded sediment from tributary banks is transported into the lagoon. This
 can increase the sediment load in the lagoon, which will negatively impact water quality by contributing
 to turbidity and affecting light penetration.
- Impact on Aquatic Ecosystems: Increased sedimentation can smother aquatic habitats, such as those used by fish and invertebrates for spawning or shelter. It can also affect the growth of aquatic plants like Ruppia, which are crucial for maintaining ecological balance.
- Nutrient Loading: Eroded sediment often carries nutrients like nitrogen and phosphorus, which
 contribute to nutrient loading in the lagoon. This can exacerbate problems such as algal blooms and
 reduce oxygen levels, further stressing the aquatic ecosystem.

8. The Hydraulic Effect on all of the Surrounding Land on Subsurface Drains and Soil Profiles

High water levels in the lagoon will significantly impact surrounding land, especially concerning subsurface drains and soil profiles

Why we oppose: This will affect;

- Saturation of Soil Profiles: Prolonged high-water levels can cause the surrounding soil to become saturated. This saturation can alter soil profiles, making them more prone to issues such as reduced aeration and increased risk of compaction.
- Impact on Subsurface Drains: Subsurface drainage systems, designed to remove excess water from the soil to prevent waterlogging, becomes less effective or overwhelmed when water levels are persistently high. This can lead to:
 - Increased Water Table: The water table can rise, leading to waterlogging of fields and reduced effectiveness of subsurface drains. This will affect agricultural productivity by creating overly wet conditions that are detrimental to crop growth.
 - Drainage System Overload: Higher water levels can exceed the capacity of existing subsurface drains, leading to flooding or pooling in areas that rely on these systems for proper drainage.
- Soil Erosion and Stability: Saturated soils are more susceptible to erosion. The increased moisture
 content leads to soil instability, affecting both surface and subsurface soil layers. This can have longterm implications for soil health and land usability.
- Nutrient Leaching: Excessive water in the soil can lead to increased leaching of nutrients from agricultural fields into the lagoon. This can contribute to nutrient pollution in the lagoon, potentially leading to harmful algal blooms and other water quality issues.
- Structural Damage: Persistent high-water levels and saturation can cause structural damage to land
 improvements such as roads, buildings, and infrastructure, particularly if these are built on or adjacent
 to unstable soils.
- Changes in Soil Chemistry: The influx of water and possible changes in pH levels can alter soil
 chemistry, impacting nutrient availability and soil fertility. This can affect agricultural practices and land
 management strategies.

9. Leaching Of Historical Nutrients and Sediments Stored Within the Lagoon

Managing the accumulation of historical nutrients and sediments (such as nitrogen and phosphorus) from various sources, including agricultural runoff, atmospheric deposition, and natural processes. These substances are stored in the lagoon bed.

Why we oppose: The potential release of these stored nutrients if water levels rise or conditions change. Stored nutrients and sediments can be resuspended and released back into the water. This release can contribute to nutrient enrichment and result in algal blooms from elevated nutrient levels, particularly of phosphorus and nitrogen. These blooms can deplete oxygen levels in the water, harm aquatic life, and disrupt the lagoon's ecological balance.

10. Destruction/Limited Access to Public Property

Higher lagoon levels will impact public property and infrastructure, including roads, bridges, and tourist attractions. For example, the road and new bridge heading to the DOC look out/viewing platform and track, which is part of the Southern Scenic Route and a tourist attraction due to its Ramsar status.

Why we oppose: Increased water levels will potentially lead to flooding and erosion of roads, bridges, and other infrastructure, particularly those that are close to or run alongside the lagoon. This can result in prolonged and expensive repair work, and also restricted public access. Restricted public access from damaged infrastructure may impact the Southern Scenic Route, which includes the DOC lookout and viewing platform.

The lagoons significance due to its Ramsar status contributes to its tourism appeal. Damage or restricted access can diminish its value as a destination. Limited access may also encourage the public to access the Lagoon through public property – Trespassing.

11. Lack of Long-Term Research on Economic and Social Impacts

Lack of research and long-term understanding from the effects and impacts of the higher lagoon levels on the ecology of the area, local economy and cultural impacts.

Why we oppose: The following impacts require further assessment:

- Economic Effects: Assessment is required on how higher lagoon levels affect local economic activities, such as agriculture and tourism. This includes potential damage to farmland, changes in tourism patterns, and impacts on local businesses.
- **Local Hunters and Fishermen**: Assessment is required on how changes in lagoon levels will affect local hunters and fishermen. This is important for maintaining access to traditional resources and activities.
- **Tourists**: Assessment is required the impact on tourism, including access to sites and overall visitor experience.

12. Consent Review and Modify Process

After the first 5 years of the consent how easy will it be to review and alter certain consent conditions

Why we oppose: There is no process in the application for the consent to include provisions for scheduled reviews, where conditions are evaluated at specific intervals so that the consent can be modified or changed based on new information or impacts observed. In particular the impacts from water backed up and impacts on agriculture land and farming business.

We wish to make the following comments to support our OPPOSITION to the consent application.

We are firmly opposed to the application as we believe that granting consent at the proposed levels will have a detrimental impact on both the community and the health of Waituna Lagoon.

- 1. **Environmental Concerns**: The proposed consent levels are likely to result in increased sediment runoff from farms, particularly during flood events. This will exacerbate erosion in feeder creeks and lead to a higher influx of nutrients into the lagoon, further compromising its ecological health.
- 2. **Economic Impact**: The anticipated increase in nutrients and sediment will degrade the quality of land within the catchment area, making it more challenging to farm and less desirable for land ownership. This is expected to lead to a significant decrease in land values.
- 3. **Infrastructure Damage:** The increased flooding and inundation resulting from the proposed levels will negatively impact infrastructure within the catchment. This could restrict access to properties and roads, leading to further economic losses for landowners and affecting their livelihoods.
- 4. Lack of Consultation: There has been insufficient consultation with the community by the applicants. Their failure to engage meaningfully with local stakeholders suggests a lack of understanding of the complexities of Waituna Lagoon and its surrounding environment.
- 5. **Questionable Expertise and Data**: The applicants have not provided convincing data to demonstrate that maintaining the lagoon at 2.5 meters will benefit its long-term health. The algal dominance issue observed in late 2023 serves as a stark example of potential adverse outcomes. Despite meeting some

- ecological targets, the resulting near-tragedy indicates a deeper lack of knowledge about the lagoon's complex dynamics.
- 6. Concerns About the Applicants' Capabilities: The combined expertise and approach of Te Rūnanga o Awarua, the Department of Conservation, and Environment Southland do not appear to be sufficient to manage the consent effectively, especially given their limited proactive measures to date. We do not believe these parties have the ability to act proactively and in a timely manner to manage this consent appropriately.

Given these points, we strongly urge reconsideration of the consent levels proposed and advocate for a more thorough and informed approach to ensure the future health of Waituna Lagoon and the well-being of the community and stakeholder.

Decision we would like Environment Southland to make:

We propose that the consent be granted to the joint applicant, with the following conditions;

- 1. **Trigger Level:** The consent should specify a trigger level of 2.2 meters. This means that the lagoon must be opened when the water level reaches 2.2 meters, and the opening should occur as soon as practicable thereafter.
- 2. Acknowledgment of Practical Constraints: We recognize that sea and weather conditions may occasionally complicate the timing of the lagoon's opening. However, a trigger level of 2.2 meters is crucial to minimize potential adverse impacts and to ensure timely action. It is anticipated that with a 2.2-meter trigger level, the lagoon could reach 2.3 meters before the opening occurs. This provision ensures that the lagoon remains within safe parameters and helps to mitigate risks.