

Wānaka-Upper Clutha Community Board

25 September 2025

Report for Agenda Item | Rīpoata moto e Rāraki take [1]

Department: Community Services

Title | Taitara: Final Eely Point Tree Succession Plan

Purpose of the Report | Te Take mō te Pūroko

The purpose of this report is to consider recommending to Council that the Eely Point Tree Succession Plan 2025 be adopted.

Recommendation | Kā Tūtohu

That the Wānaka-Upper Clutha Community Board:

1. **Note** the contents of this report; and
2. **Recommend to Council** to adopt the final Eely Point Tree Succession Plan 2025.

Prepared by:



Name: Dominic Harrison
Title: Parks & Reserves
Planner
27 August 2025

Reviewed and Endorsed by:



Name: Dave Winterburn
Title: Parks Manager
3 September 2025

Reviewed and Authorised by:



Name: Kenneth Bailey
Title: General Manager
Community & Services
4 September 2025

Context | Horopaki

1. Eely Point reserve provides a range of recreational opportunities and is popular for both visitors and residents in Wānaka. Currently, approximately 24% of the reserve is covered with a conifer plantation.
2. The conifer species present at Eely Point (radiata pine and Douglas fir) do provide some benefits to the reserve, including wind protection and shade, however both species are classified as pest plant species in the Otago Regional Pest Management Plan 2019 – 2029. Many of the pines are reaching the end of their functional life and consequently will cause a health and safety concern.
3. Both of these species have adverse effects on the environment, such as reducing biodiversity and soil quality through suppressing light to the understorey and increasing soil acidification that interrupts natural regeneration processes.
4. The purpose of the Eely Point Tree Succession Plan (the Plan) is to provide a framework for the gradual (over 60 years) removal and replacement of pest conifer species and wilding poplar and willow species, to increase biodiversity and create a more ecologically healthy environment at Eely Point.
5. The Plan seeks to replace the existing pest conifer species with a mix of indigenous and appropriate exotic tree species. This will ensure Eely Point continues to provide high amenity recreational opportunities for future generations.
6. The Draft Eely Point Tree Succession Plan (Draft Plan) was shared with the Wānaka-Upper Clutha Community Board (WUCCB) at a Workshop on 27 May 2025.
7. The community was invited to provide feedback on the Draft Plan from 19 May to 8 June 2025. Following feedback from the WUCCB members, a letter drop and email was sent to the properties shown in **Figure 1**. To ensure these properties had sufficient time to provide feedback on the Draft Plan, the feedback period was extended until 21 June 2025.



Figure 1: Aerial image of Eely Point and the properties where a letter drop and email was sent to inform the occupants/owners of the Draft Plan. Source: QLDC GIS.

Analysis and Advice | Tatāritaka me kā Tohutohu

8. The Final Eely Point Tree Succession Plan 2025 (Final Plan) (**Attachment A**) sets out the current status of the vegetation at Eely Point and why there is a need for a strategic plan to manage the removal and replacement of the pest conifer species and wilding willows and poplars.
9. It suggests a long-term succession plan is the best approach to retain the high amenity values associated with Eely Point Reserve. It provides for a transition to a suitable vegetation pattern that balances ecological and amenity values on the reserve.
10. Feedback on the Draft Plan was received via the Let's Talk page and supported by two drop-in sessions held at Eely Point on 24 and 27 May 2025. A summary of the feedback is provided in **Attachment B**.

11. The primary themes of the submissions were:

- **Amenity values**

A number of submissions that opposed the Draft Plan were concerned about losing the amenity values that the existing vegetation provides. Particularly wind protection, shade and the open woodland character of the understory.

- **Biodiversity**

Many submissions were in favour of increasing biodiversity at Eely Point with many different perspectives on the species selection and placement. These addressed:

- Support for fast growing conifer species to provide equal amenity values;
- Support for more native vegetation;
- Request to consider the canopy height of new species (not too tall);
- Support for food producing species;
- Support for appropriate species for the location (climatic conditions); and
- Support for autumn colour.

- **Long term planning**

Most submitters supporting the plan valued the long-term nature of the plan to retain the existing amenity values of the reserve i.e. wind protection and shade.

- **Cost of implementation**

Amongst the submitters that opposed the plan, concern regarding the cost of implementing the plan and ensuring funding was available over the entire timeframe of the plan was highlighted.

- **Existing high amenity feature trees**

Throughout the drop-in sessions and the submissions, the desire to retain the existing high amenity lakeside willows and select conifer trees was highlighted.

12. The feedback was reviewed by Council Parks Officers and changes were made to the Draft Plan (**Attachment C**). The main changes are summarised below:

- The planting strategy has been amended to reflect a 50/50 native/exotic mix to balance feedback that supported increased native biodiversity as well as feedback that valued the existing conifer amenity.
- The Plan has been amended to support a more open woodland when new planting occurs based on feedback received. This will provide increased light and encourage movement

throughout the understorey of new vegetation. The Miyawaki method (dense areas of planting) will be selective to ensure areas of open understorey is achieved.

- The Plan has been amended to clarify that feature trees around the BBQ and beach area will be retained due to the high amenity they provide for the community.
- The Plan was amended to reduce removals in the early stages of the Plan to allow time for the community to become familiar with the project. Early planting sites have also been identified on the plan, where planting can occur prior to any removals taking place.
- The species list has been updated to reflect species more suitable to the Upper Clutha environment rather than the Whakatipu area. It also includes species that will provide more seasonal colours, and some food producing species i.e. nut trees.
- Clarified the life expectancy of the conifers, noting that Douglas firs are long-lived, while radiata pines are not and are nearing the end of their life.
- Replaced the term "invasive" in the document with "undesirable" or "pest species".

13. This report identifies and assesses the following reasonably practicable options for assessing the matter as required by section 77 of the Local Government Act 2002.

14. **Option 1:** Recommend to Council to adopt the Final Eely Point Tree Succession Plan.

Advantages:

- Ensures there is a strategic plan to proactively manage pest conifer species and wilding willow and poplar trees at Eely Point.
- Ensures the amenity values associated with Eely Point are retained whilst improving the ecological values of the reserve.
- It acknowledges the community and stakeholder feedback gathered throughout the engagement / plan preparation process.

Disadvantages:

- Not all community members agreed with the Draft Plan.
- The implementation of the Final Plan is not currently funded in the Long Term Plan.

15. **Option 2:** Do not recommend to Council to adopt the Final Eely Point Tree Succession Plan.

Advantages:

- There will be no changes and the pest species will continue to be monitored and managed as they reach the end of their functional life.

Disadvantages:

- The reserve will continue to have poor ecological and biodiversity values.
- Council will not meet the community's expectations of implementing a long-term succession plan for Eely Point.
- The pest species in Eely Point won't be proactively managed.

16. This report recommends **Option 1** for addressing the matter because it will ensure a clear plan is in place to manage the vegetation through the gradual removal and replacement of pest conifer species and wilding willow and poplar species within the reserve.

Consultation Process | Hātepe Matapaki

Significance and Engagement | Te Whakamahi i kā Whakaaro Hiraka

17. This matter is of medium significance, as determined by reference to the Council's Significance and Engagement Policy 2024 because of the high community and stakeholder interest in the vegetation management of the reserve which is highly valued by the community
18. The persons who are affected by or interested in this matter are users of the reserve, residents and ratepayers of the Upper Clutha, visitors to Wānaka, immediately adjoining residential neighbours, local recreation and conservation groups and organisations, Wānaka Coastguard and Wānaka Scouts Group.
19. The Council has sought feedback from the community on the Draft Plan. The Draft Plan was open to feedback between 19 May and 22 June 2025.

Māori Consultation | Iwi Rūnaka

20. The Council shared the plan with Aukaha and Te Ao Marama Incorporated prior to feedback being sought from the wider community.

Risk and Mitigations | Kā Raru Tūpono me kā Whakamaurutaka

21. This matter relates to the Community & Wellbeing risk category. It is associated with RISK10012 Ineffective mitigation response to the declared climate and ecological emergency within the QLDC Risk Register. This risk has been assessed as having a moderate residual risk rating.
22. The approval of the recommended option will allow Council to avoid the risk. This will be achieved by adopting a plan that will result in the enhancement of ecological values within a high profile Council reserve.

Financial Implications | Kā Riteka ā-Pūtea

23. There is no specific funding in the QLDC Long Term Plan 2024-2034 to implement the Final Plan.
24. There is currently \$60,000 available from the “Better Off” funding that is set aside to contribute towards the implementation of the first stage of the Final Plan, provided it is adopted by Council.

Council Effects and Views | Kā Whakaaweawe me kā Tirohaka a te Kaunihera

25. The following Council policies, strategies and bylaws were considered:

- Vision Beyond 2050: Our Vision and Mission - QLDC
- The Reserves Act 1977
- Local Government Act 2002
- Parks and Open Spaces Strategy 2021
- Significance and Engagement Policy 2021
- Climate & Biodiversity Plan 2025-2028
- Otago Regional Pest Management Plan 2019
- Proposed and Operative District Plan
- QLDC Tree Policy 2024
- Eely Point Development Plan

26. The recommended option is consistent with the principles set out in the named instruments.
27. This matter is not included in the Long Term Plan/Annual Plan.

Local Government Act 2002 Purpose Provisions | Te Whakatureture 2002 o te Kāwanataka ā-Kiaka

28. Section 10 of the Local Government Act 2002 states the purpose of local government is (a) to enable democratic local decision-making and action by, and on behalf of, communities; and (b) to promote the social, economic, environmental, and cultural well-being of communities in the present and for the future. Approval of the Final Plan will support the enhancement of ecological and biodiversity values in the reserve. The long term nature of the plan will ensure amenity values associated with trees in the reserve are maintained throughout the implementation of the plan.

As such, the recommendation in this report is appropriate and within the ambit of Section 10 of the Act.

29. The recommended option:

- Will require funding from the Long Term Plan when it is reviewed;
- Is consistent with the Council's plans and policies; and
- Would not significantly alter the intended level of service provision for any significant activity undertaken by or on behalf of the Council or transfer the ownership or control of a strategic asset to or from the Council.

Attachments | Kā Tāpirihaka

A	Final Eely Point Tree Succession Plan
B	Summary of Feedback
C	Final Plan with Tracked Changes



Eely Point Recreation Reserve Tree Succession Plan

Date:	4 th August 2025
Prepared by:	Lee Rowley lee.rowley@tendtrees.co.nz Senior Consultant Arborist 021638976
Reviewed by:	David Spencer david.spencer@tendtrees.co.nz Principal Consultant 0273223833
Client Contact:	Dominic Harrison dom.harrison@qldc.govt.nz Parks and Reserves Planner, Community Services

Brief: This succession plan outlines a strategic approach for the systematic removal and replacement of conifers within Eely Point Recreation Reserve with native and suitable exotic species. By enhancing biodiversity, improving soil health, and engaging the community, this plan aims to transform the shelter while retaining the reserve as a resilient and vibrant public space that reflects both ecological and cultural values.



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1. Introduction

The conifer plantation at Eely Point Recreation Reserve forms an iconic backdrop to Wanaka and supports the reserve's functionality. However, as these trees age and their ecological impacts become more pronounced, there is a growing need to transition toward a more sustainable and diverse landscape that aligns with the district's long-term ecological objectives.

Current Role of the Conifer Plantation

Covering approximately 3 hectares, or 24% of the reserve, the conifer plantation plays a critical role in providing wind protection, creating shelter for recreational activities, improving the reserve's usability, safeguarding existing vegetation and wildlife, and offering essential shade in summer.

However, these conifer species contribute to ecological harm, including diminished biodiversity, soil degradation, and challenges to long-term sustainability. Notably, the Radiata pines are nearing the end of their Safe Useful Life Expectancy (SULE²), heightening the risk of tree failures within the reserve.

Ecological Impact of Wilding Conifers

The spread of pest species, such as wilding conifer within the Queenstown Lakes District, has led to significant ecological imbalances through biodiversity loss. The dense canopy of these trees blocks sunlight, suppresses understory growth and disrupts natural regeneration processes, significantly reducing native flora and fauna.

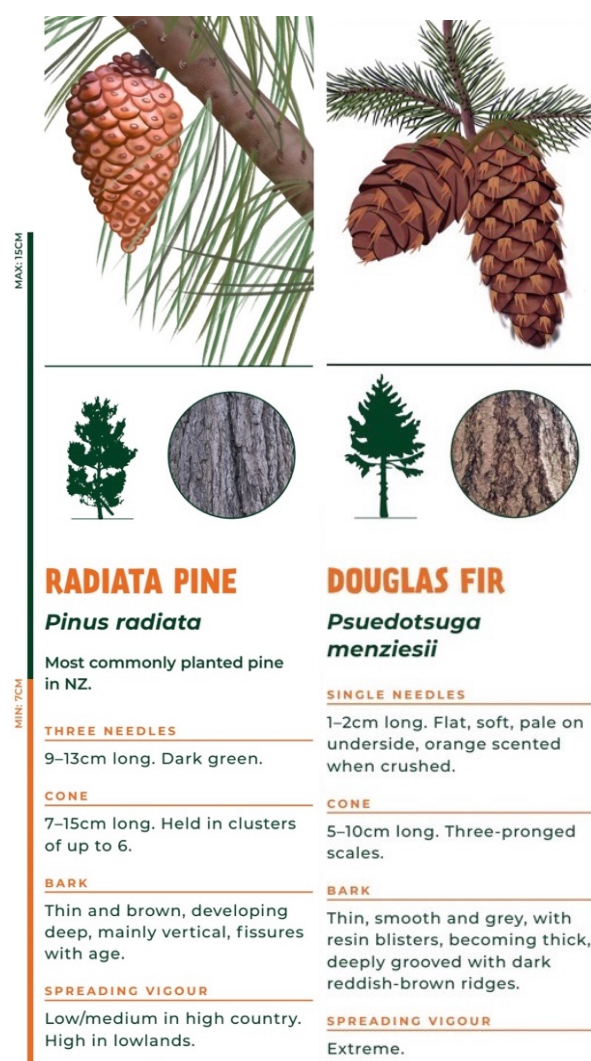
Douglas fir (*Pseudotsuga menziesii*), a longer-lived evergreen, and Radiata Pine (*Pinus radiata*), a fast-growing species with a lifespan of less than 100 years, are often categorised as pest species by regulatory authorities due to their potential to spread invasively and establish as wilding trees.

Managing potential seed sources across the district will help prevent the spread of wilding pest species into nearby natural areas. Conifer control measures within Eely Point lack a comprehensive strategy to systematically manage these species over time.

Management of Willow and Poplar Regrowth

In addition to conifers, regrowth from Willow and Poplar is prevalent within the reserve, particularly along the northern lakeshore. While mature, established trees of these species are valued, their unmanaged spread requires attention.

Controlling this spread involves removing small self-seeded saplings to prevent further spread and dominance, whilst leaving fully mature and established trees.



²refers to the estimated period a tree can be safely and beneficially retained in its environment, considering factors like health, structural stability, and site conditions.

Purpose of the Tree Succession Plan

The primary aim of this tree succession plan is to provide a clear, actionable framework for the systematic removal of conifers and other spreading plant species from Eely Point and their replacement with more suitable species. The plan outlines specific actions, timelines, responsibilities, and resources required to achieve project goals over the coming decades.

A strategic approach involving Zones, Stages, and Phases has been developed to gradually remove and reintroduce a diverse range of plant species to enhance the reserve's ecological resilience. By replanting with a mix of native and suitable exotic species, the plan aims to restore ecological balance, improve soil health, and create a sustainable landscape that offers aesthetic, recreational, and cultural benefits.

This succession plan aligns with regional and national strategies, such as the New Zealand Wilding Conifer Management Strategy, Otago Pest Management Plan 2019-2029 and the Eely Point Development Plan, which advocates for removing pest species to protect ecosystems. Additionally, the plan supports the broader environmental goals of Queenstown Lakes District Council (QLDC), including enhancing public spaces and ensuring the sustainable management of natural resources for future generations.

Importantly, the plan recognises the need for a gradual, carefully managed removal process to mitigate the risks associated with tree removals, such as wind load changes, ensuring that the overall landscape and framework of trees within the reserve remain stable throughout the transition.

Immediate Need for Action

Immediate action is required to prevent further ecological degradation and restore Eely Point to a more natural and resilient state. Conifer species are damaging the reserve's current landscape and threatening the broader ecological integrity of the region. Ageing tree populations also require proactive and ongoing management.

The phased approach outlined in this succession plan spans several decades, making timely action essential. Delaying the start will exacerbate existing issues and increase risks to visitors as the maturing conifers, especially the Radiata Pine, near the end of their safe useful life.



2. Key Challenges

Gradual vs. Large-Scale Removal Approaches

One of the primary challenges facing the succession plan is balancing the need for conifer removal with the potential impacts on the reserve's existing trees and public safety. Large-scale removal poses risks, such as sudden changes in wind dynamics, which can destabilise remaining trees and expose them to damage. While trees naturally adapt their structure to withstand wind over time, through a process called thigmomorphogenesis³, sudden exposure to increased wind can result in branch or complete tree failure. A gradual, staged approach mitigates these risks by allowing trees and landscapes to adapt over time while transitioning to a more diverse canopy.

The staged removal approach also helps manage water retention, as trees play a crucial role in intercepting rainfall through their canopies. This slows down the rate of rainfall, allowing water to gradually infiltrate the soil and reduce the risk of soil erosion and surface flooding. When large numbers of trees are removed all at once, this natural water interception is lost, leading to increased surface runoff, potentially overwhelming stormwater systems. Furthermore, removing many trees, particularly those providing wind protection, may temporarily affect the reserve's usability and amenity provided by the existing vegetation.

Planting Conditions and Soil Challenge

Monoculture established by conifers can significantly impact biodiversity. The dense canopy restricts understory growth, reducing light availability and moisture. These factors can present challenges for the establishment of new trees and the reintroduction of diverse plant species.

While conifer soils can support the re-establishment of many plant species, having a pH range similar to that of native beech forests, some areas can exhibit compacted or nutrient-limited conditions due to long-term monoculture. Compacted, nutrient-poor soils need enhancement through the application of organic amendments, such as compost, mulch or biochar, to improve soil quality. These interventions will help improve soil structure, encourage microbial activity and increase nutrient availability.

Reinvasion Risks

Eely Points exposed location on the peninsula increases the risk of reinvasion from wilding species, as well as a potential seed source for surrounding natural areas. Conifer, Willow and Poplar seeds can travel significant distances, spreading rapidly and undermining control efforts. Continuous reserve monitoring will be essential to quickly identify new seedling growth.

Public Perception

Managing public perception of the succession plan is essential, particularly when visible changes, such as extensive tree removals, are underway. The public may have emotional or cultural connections to the existing landscape, so communicating the project's long-term benefits is important.

Funding and Resource Limitations

Securing sustainable funding is essential for the ongoing implementation of the succession plan. The project's long-term scope, involving removal and replanting over several decades, necessitates consistent financial support.

³the response of plant cells to mechanical stimulation. For example, the thigmomorphogenetic response of trees in windy environments is to grow shorter, with thicker trunks and stronger roots.

3. Succession Plan Outline

The succession plan (*Appendix 1 - Succession Plan Maintenance Schedule*) outlines the systematic removal and thinning of conifers along with Willow and Poplar regrowth from Eely Point through a structured approach involving distinct **Zones**, **Stages**, and **Phases**. This gradual approach ensures that wind protection for remaining trees and public safety is carefully managed, reducing the risks associated with increased wind exposure.

A key focus of the plan is to reintroduce a diverse mix of native and exotic species to enhance biodiversity and create a more resilient, ecologically balanced landscape. Tall-growing, desirable conifers will be strategically planted to preserve the crucial windbreak function currently provided by the existing conifers, using their shelter to protect and support the successful establishment of new plantings.

Continuous monitoring of wind impacts, tree health, stability, and the establishment of new plantings will guide adaptive management decisions. Ongoing assessments will inform necessary adjustments to both removal and planting strategies as needed, ensuring the plan remains flexible and responsive to changing conditions.

Zoning, Stages and Phases

Using LiDAR mapping and site assessments, the conifer removal strategy has been divided into ten distinct **Zones** based on existing canopy gaps, groupings and their role in providing wind protection. Each Zone is then assigned **Stages** and **Phases** to determine the sequence of removal and replanting efforts.

Each Stage represents a ten-year cycle, while each Phase corresponds to one year. This structured approach allows for gradual, manageable progress, as well as monitoring and reassessment. The table below shows the structure of the **Zone**, **Stage** and **Phasing** used to form the Maintenance Schedule. The overlay map, *Figure 1*, shows the ten Zoning areas:

Table 1: Succession Plan Maintenance Schedule

	Stage 1 (Years 1-10)										Stage 2 (Years 11-20) etc...									
	Phases (years)										Phases (years) etc...									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
ZONE 1																				
ZONE 2																				
ZONE 3 etc..																				



Figure 1: Zoning Overview

Zoning, Stages and Phases (cont.)

The detailed Maintenance Schedule (*Appendix 1 - Succession Plan Maintenance Schedule*) outlines key milestones and timeframes, covering a 60-year period.

While the proposed timeline is flexible and can be adjusted to accommodate budgetary constraints or other considerations, the overall structure of the schedule should be adhered to. This phased approach allows sufficient time for newly planted shelter species to establish and mature, ensuring that replacement trees provide adequate cover before subsequent removals.

The reserve will maintain a continuous flow of operations by staggering maintenance activities across multiple zones. This approach ensures that trees in one Zone adapt to increased wind exposure while work progresses in other areas, balancing the landscape's transition.

The 60-year timeframe is regarded as the minimum duration needed to balance the removal of conifers and the establishment of a diverse, multi-species shelter. Accelerating this process risks undermining the reserve's windbreak functions, damaging the structural integrity of remaining trees, and impacting the overall usability and amenity values of the reserve.

Activity by Zone

Each Zone will undergo a structured sequence of activities designed to manage removal, replanting and long-term management. Descriptions of activities are identified in the following table:

Table 2: Maintenance Schedule Activities

Activity	Description	Timeline	Key Activities	Monitoring & Evaluation
Removal Period	Systematically thin out conifers in phases to reduce wind load gradually.	Est. 60 years from starting year	Select trees for thinning; Leave trees to acclimate to new wind exposure. Ensure safe public access during operations	Inspect trees for wind damage; Adjust removal strategy if needed. Monitor soil erosion; Reevaluate shelter effectiveness
Rest Period	Pause operations to allow remaining trees to adapt to new conditions.	Allow three years rest minimum between removal phases.	Minimal intervention; Inspect trees regularly.	Record tree health; Plan for next removal phase.
Planting	Introduce native and exotic species in cleared areas, ensuring they are suited to local conditions.	During rest periods.	Prepare soil; Plant tree species; Install protective measures for young plants.	Monitor plant growth; Replace failed plants.
Weed Control	Regularly remove new wilding seedlings and maintain new planting areas.	During rest periods.	Identify and remove new wilding seedlings; Inspect new planting health.	Track seedling recurrence; Evaluate success of new tree plantings
Assessment/Monitoring	Assess overall success and plan the next removal period. Review planting progress and long-term maintenance requirements	Prior to each removal period. During & after planting seasons	Conduct a comprehensive review; Plan for ongoing maintenance. Involve key stakeholders	Document long-term outcomes; Adjust management strategies if needed.

Initial Focus and Early Stages

The first stage (Stage 1: Years 1–10) of the succession plan will prioritise key goals, including sapling control on the Lakeshore Peninsula and addressing focal areas identified in the Eely Point Development Plan, such as Zone 5. Initial efforts will also focus on removing individual conifers. These early focus areas are highlighted on the map below.

Individual conifers scattered throughout the reserve can be removed at any point during the process, as they do not significantly impact wind dynamics. However, certain trees, such as the Ponderosa Pines near the BBQ areas of Zone 7 and Zone 2, hold notable amenity value due to their contribution to the landscape and shade provision. These trees will remain until they reach the end of their Safe Useful Life Expectancy (SULE), despite their potential as wilding seed sources.

The individual conifers identified on the map below, primarily Douglas Fir, are considered low-value and suitable for early removal.

For Willow and Poplar trees, removal efforts will only target saplings and self-seeded vegetation. Mature and established species will be retained for their visual appeal and functional benefits.



Figure 2: Initial Focus Areas

4. Removal and Control Strategy

Methods of Tree Removal

Removing Conifers and other dominant spreading plants will employ mechanical felling, arboricultural dismantling and ground control methods. This approach ensures safe and efficient removal while minimising environmental impacts and maintaining public safety.

5.1.1 Mechanical Felling

Conifers will be felled using mechanised equipment in low public use zones where access allows, and large quantities of trees can be removed quickly. Felling will be staged carefully to avoid damaging nearby trees and vegetation.

5.1.2 Arboricultural Dismantling

Arboricultural dismantling will be employed in sensitive zones near valued trees, newly planted trees, public areas or structures. This method involves manually sectioning trees in a controlled manner, reducing the risk of collateral damage and ensuring precision in constrained spaces.

5.1.3 Ground Control

Operational teams will carry out manual ground control, such as removing saplings with loppers, hand saws, and small mechanical tools, as well as applying herbicide where applicable.

5.1.4 Materials and Debris

Timber will be removed from the site. Branches will be processed into wood mulch of appropriate grade to assist with replanting efforts. The mulch will either be spread directly around planting areas to enhance soil moisture retention and suppress weeds or left in piles to age before further use. Any excess mulch that exceeds on-site requirements will be transported off-site.

5.1.5 Tree Stumps

In high-visibility or heavily frequented public areas, tree stumps will be either ground down or mechanically removed to improve aesthetics and ensure safe access for both users and equipment. In lower-priority zones, stumps will be cut low to the ground, and planting will be established around them, allowing for natural decomposition over time.



Ground Control

Ongoing efforts after the initial removal will focus on managing regrowth and preventing conifers, Willow and Poplar reinvasion. Ground crews will conduct regular inspections of replanting zones to identify and promptly remove new unwanted regrowth.

Targeted herbicide treatments or manual control methods will be employed to prevent re-establishment. Herbicide applications will be carefully managed to minimise environmental impacts, with applications timed for optimal weather conditions. Regular follow-up treatments will address any regrowth, with the frequency of treatment adjusted based on monitoring results. The goal is to reduce herbicide use over time while maintaining effective control.

Control measures and strategies will be adjusted as needed to ensure the long-term success of restoration efforts. Engaging the community and working groups in wilding removal days will provide additional support and increase awareness of the importance of ongoing control of self-seeded vegetation.

Timing and Safety Considerations

The timing of removals will be critical to minimise disruption and ensure public safety. Operations will be scheduled during off-peak times, such as early mornings, weekdays or low-tourism seasons, to reduce impacts on recreational users.

Safety protocols will include path closures, signage and barriers to keep the public away from active work areas. Protective barriers will safeguard sensitive vegetation and waterways. Low-impact machinery will be used where possible, and pre-removal assessments will help identify and mitigate potential risks or issues. Regular communication will inform reserve visitors about the schedule and purpose of removal operations.



5. Replanting Strategy

Following removals, site preparation and replanting will align with optimal seasonal conditions, focusing on Autumn and Spring when the climate is most conducive to successful establishment. Tree planting will remain consistent throughout the duration of the project, with a primary focus on introducing new plants and organic matter to enhance soil conditions, create shelter, and establish microenvironments that support further ecological restoration.

Objectives and Approach

The replanting strategy focuses on:

- Rapid introduction of pioneer and secondary species to create shelter, improve soil conditions, and establish microenvironments.
- A 50% native and 50% exotic species mix to balance ecological restoration with functional shelter.
- A multi-layered canopy structure combining closed-canopy forest, open woodland, and clearings to enhance ecological diversity, visual appeal, recreation and movement through the reserve.
- Strategic retention of existing conifer groups to provide temporary shelter until new plantings are established.

Several zones suitable for early planting have already been identified in *Appendix 1 - Succession Plan Maintenance Schedule*, and planting in these areas should commence as soon as possible, building on progress achieved through community and council planting programmes.

Planting Phases

Replanting is divided into two phases to ensure progressive restoration and adaptability.

5.1.1 Initial and Secondary Planting (Early to Mid-Stages)

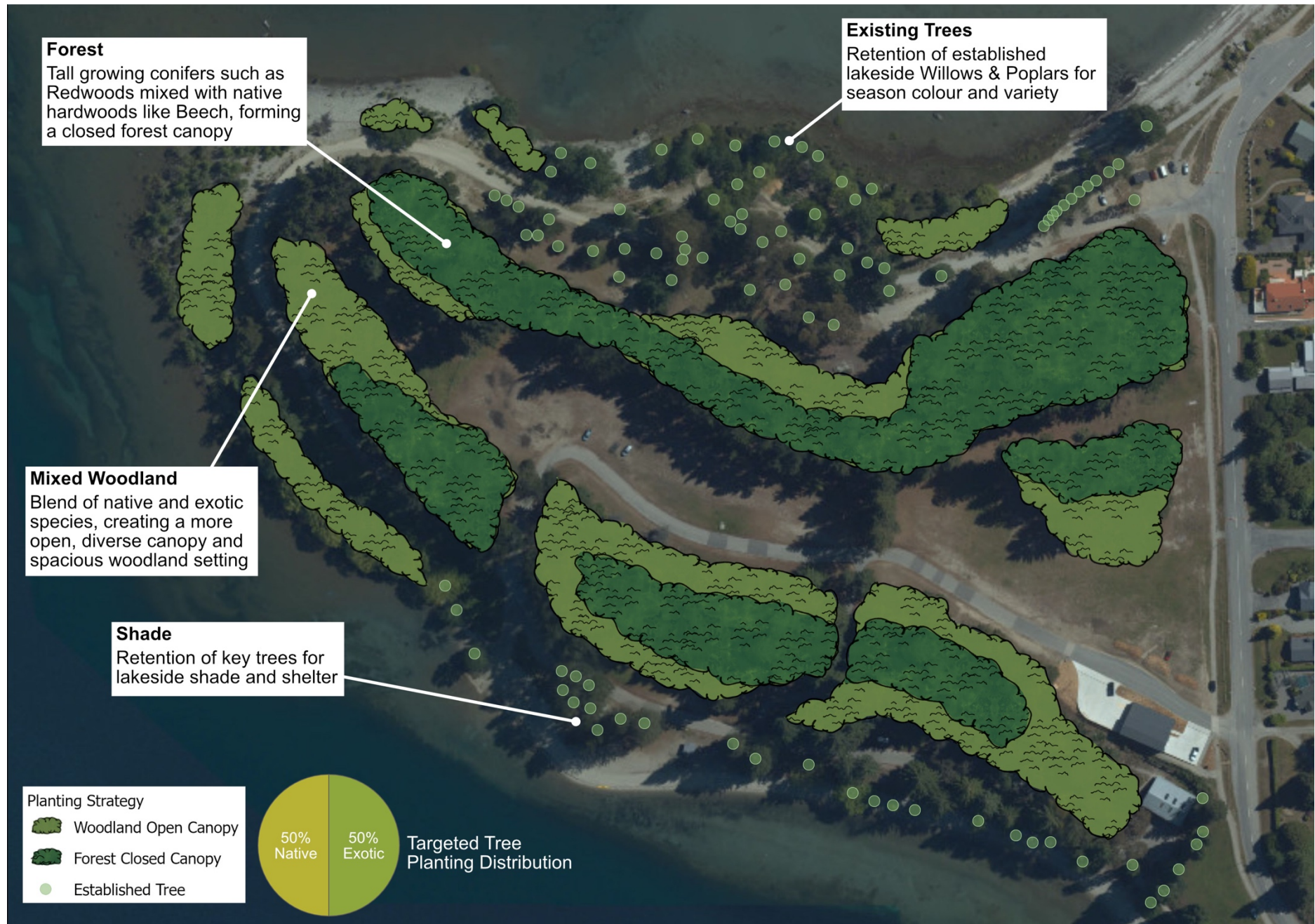
Planting will commence immediately after conifer removal in designated zones. Pioneer species, such as Kānuka, will stabilise soil, improve nutrient cycling, and create microenvironments to support restoration efforts. Concurrently, and inspired by successes in the reserve already, secondary planting will introduce taller native trees, including Kōwhai, Beech, along with carefully selected exotic species. These secondary trees will contribute vertical structure, accelerate canopy development, and establish shelter to replace the existing conifer plantation.

5.1.2 Final Planting (Later Stages)

The final phase will prioritise filling gaps, introducing additional species to boost habitat value, and replacing any failed plantings. This stage ensures that restored zones become ecologically diverse and provide essential shelter. Retained conifer groups will be removed as the new plantings develop sufficient shelter, in alignment with the succession plan's long-term goals.

Appendix 2 - Species Selection Guide outlines potential species, ranging from tall, fast-growing trees that can replace existing shelter and preserve the current character of the reserves, to native species that will boost biodiversity and cultural value of the site.

The map below illustrates the strategic placement of planting styles and preservation of valued trees.



Species Selection and Planting Design

Where possible, native plantings should utilise species naturally found in the Upper Clutha region that have local provenance and are eco-sourced.

Recommended spacing ensures optimal growth:

- Large trees (e.g., Native Beech): 2–3 meters apart to allow dominance.
- Shrubs and smaller trees (e.g., Kānuka): 1 meter apart for effective establishment.
- Grasses and ground covers: 500–800 mm apart for quick coverage.

Planting locations will accommodate existing infrastructure and the usability of the reserve, ensuring new plantings do not obstruct access or hinder recreational activities.

It is essential to recognise that the primary role of early planting is to improve soil conditions and support long-term restoration. Even if trees are damaged or lost during later removal periods, the soil and ecological benefits from the initial plantings remain intact, ensuring continued progress. Where damage is anticipated and unavoidable, lower-value pioneer species should be prioritised over secondary species.

Replanting Strategy Summary

The replanting strategy combines ecological restoration with functional design. By using pioneer and secondary species, keeping selected conifers for temporary shelter, and aligning plantings with optimal seasons, the approach ensures progressive restoration. The resulting multi-layered canopy will boost biodiversity, offer better wind protection, and create an enjoyable, resilient landscape.



Soil Enhancement and Preparation

Improving soil conditions is essential for the successful establishment of new plantings. Applying organic materials such as mulch, compost, biochar and mycorrhizal inoculation will enhance soil structure, improve water retention and increase nutrient availability.

Soil conditioning will involve tilling or screening to break up compacted layers. This process will be followed by incorporating organic matter and applying mulch around plant bases to conserve moisture, suppress weeds, and regulate soil temperature. These practices are essential for improving root establishment and promoting overall plant health.

Soil nutrient levels will be monitored throughout the replanting phases to identify deficiencies. Based on these assessments, targeted applications of fertilisers or additional organic amendments will be made to optimise plant growth conditions. For guidelines and best practices related to soil conditioning and nutrient management, refer to **Appendix 3 - Soil Enhancement Techniques and Best Practices**.

Long-Term Maintenance and Monitoring

Ensuring the success of replanting efforts requires consistent monitoring and adaptive management to respond to challenges as they arise. This adaptive approach ensures that replanting efforts remain resilient and effective, supporting the long-term restoration goals.

Newly planted areas will be inspected regularly to monitor plant health, check for signs of stress or failure and manage wilding species that may compete with new growth. Maintenance will include watering, mulching and replacing any failed plants.

Protective measures, such as tree guards, plant shelters, targeted weed control and public awareness, will safeguard young plants from damage and activities like frisbee golf. Adjustments will be made based on observed impacts to ensure plant survival and success.



Alternative Planting Methodologies

One potential approach to enhance the replanting strategy within the reserve is the **Miyawaki method**, a technique for creating dense, fast-growing and ecologically resilient forests. This method involves planting native species in close proximity, closely mimicking natural forest regeneration processes.

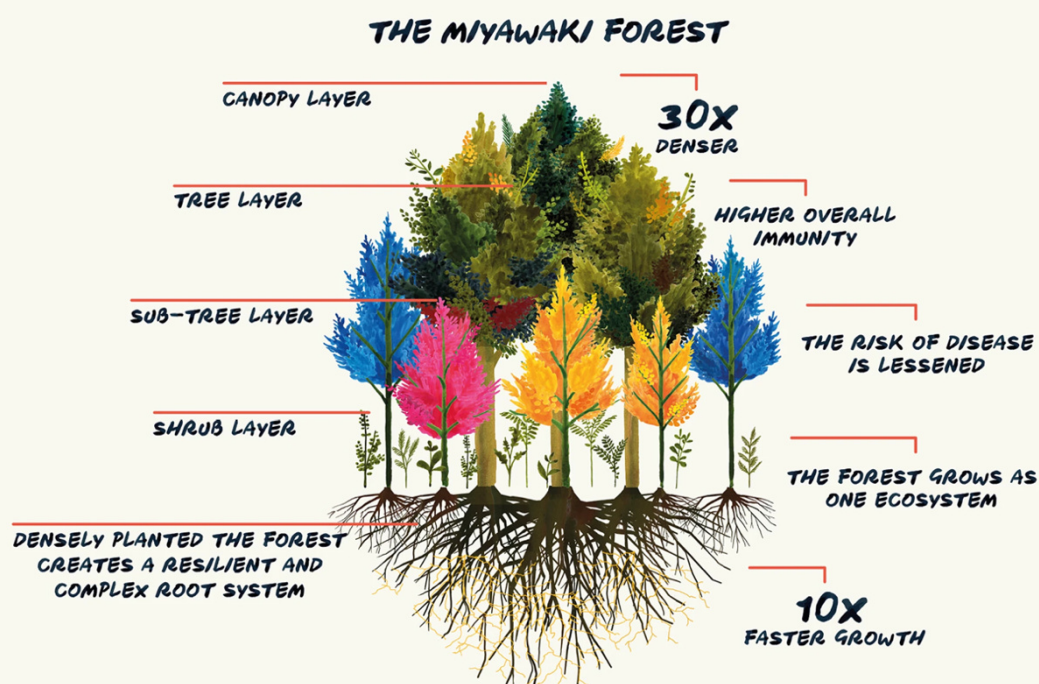
The Miyawaki method encourages plant growth much faster than traditional planting techniques, with vegetation maturing up to 10 times quicker. This acceleration can significantly reduce the time needed to establish functional shelter and achieve soil restoration.

A critical element of this method is **thorough site preparation**, which involves digging deep and wide pits and enriching the soil with biomass such as compost before planting. These organic additions enhance soil fertility, promote microbial activity and improve soil structure. By enriching the soil beforehand, the root systems of newly planted species benefit from optimal conditions for rapid growth, efficient water retention and improved nutrient absorption. The close planting means plants grow taller quicker as they compete for available light.

Once established, Miyawaki forests require less maintenance due to their density. The compact planting improves moisture retention, suppresses weed growth and provides resistance to environmental stressors, such as drought or pests. This self-sustaining characteristic makes the Miyawaki method a cost-effective and efficient solution when combined with more conventional planting techniques.

The benefits of using the Miyawaki method can be seen in this video by Kent County Council (UK), where they explored techniques to improve tree establishment and survival rates, supporting the expansion of urban tree cover: <https://www.youtube.com/watch?v=OVizWfEIW1U>

While the Miyawaki method's high planting density is not suitable for the entire replanting area, it could be advantageous in isolated pockets. By selectively implementing this technique or other alternative methods, the site can facilitate swift restoration in essential areas.



6. Monitoring and Adaptive Management Strategy

The success of the Eely Point Tree Succession Plan relies on a robust monitoring and adaptive management strategy. This approach ensures flexibility and responsiveness as conditions change throughout the removal process, replanting and restoration efforts. Progress will be tracked using technologies like Geographic Information Systems (GIS) and LiDAR, providing critical data to inform decisions about further removal and planting.

Key metrics, including tree health, growth rates, soil quality and the effectiveness of control measures, will inform necessary adjustments to ensure the plan's objectives are met. Wind load impacts will be closely monitored throughout each stage to assess whether more extensive or cautious removal strategies are appropriate.

Regular evaluations, including in-depth assessments every three years, will track biodiversity gains, soil improvements, and the overall success of replanting phases.

Effective communication strategies, such as visual examples and signage, will educate the community about the plan's ecological benefits. Emphasis will be on the importance of conifer removal for the reserve's long-term health and sustainability.

Ongoing stakeholder consultation will ensure the plan reflects community values and responds to public feedback. By involving stakeholders in the decision-making process, the project can build a broad base of support that helps drive its success, fostering a sense of ownership and stewardship within the community.



7. Conclusion and Recommendations

The succession plan for Eely Point Recreation Reserve provides a comprehensive framework for systematically removing undesirable and ageing tree species and replanting with a diverse mix of native and suitable exotic species. Aligned with the QLDC Tree Policy, the plan prioritises biodiversity and ecological resilience through phased tree removal and immediate succession planting to maintain canopy cover and enhance the reserve's long-term ecological health.

The success of this plan relies on a coordinated approach that includes thorough planning, community engagement, ongoing monitoring, and adaptive management. With effective implementation, the reserve can transform into a resilient and diverse landscape, reflecting the natural beauty and cultural significance of the area. This approach will safeguard the reserve for future generations, creating a lasting legacy of ecological restoration.

Expected Outcomes

7.1.1 Restoration of Biodiversity

The systematic removal of conifers and control of undesired plant species will facilitate the re-establishment of native plant species, enhance habitat for local fauna, and promote biodiversity. This will create a more balanced and thriving ecosystem aligned with regional conservation goals. To complement the restoration, selected exotic species will also be introduced to maintain the reserve's shelter, diversity, colour and character.

7.1.2 Improved Soil Health

Soil enhancement measures will rehabilitate the degraded soil conditions caused by decades of conifer dominance. Improved soil health will support the successful establishment of new plantings and contribute to a more resilient landscape.

7.1.3 Enhanced Recreational and Aesthetic Value

The reserve's transformation will improve its visual appeal, providing a more diverse and dynamic landscape that enhances the visitor experience. New plantings will create further seasonal interest, enhance the aesthetic appeal, and provide natural windbreaks that will protect the reserve and surrounding area.

7.1.4 Strengthened Community Engagement and Stewardship

The project will involve the community and key stakeholders, fostering a sense of ownership and stewardship. This inclusive approach will ensure that the reserve remains a cherished public asset that reflects community values and priorities.

7.1.5 Adaptive Management for Long-Term Success

Ongoing monitoring and adaptive management will ensure the plan remains responsive to new challenges and opportunities. This approach will allow for continuous refinement of management practices, ensuring that the reserve is resilient to changing environmental conditions and can thrive well into the future.

Key Recommendations for Plan Implementation

7.2.1 Secure Funding for Long-Term Implementation

The plan's success depends on securing sustainable funding sources. QLDC should pursue a multifaceted approach to funding, including government grants, local fundraising initiatives, and partnerships with businesses and community organisations. Collaborating with initiatives like **Trees That Count**, which connects businesses to native tree planting projects, can amplify resources. Contingency plans should be established to address potential funding gaps, ensuring continuous progress.

7.2.2 Plan for Long-Term Maintenance and Adaptive Management

To ensure the transformation is sustainable, long-term maintenance plans must be established, with adaptive management strategies that can respond to changing conditions. A dedicated team should oversee the project, adjusting the plan as needed.

7.2.3 Implement Robust Monitoring and Reporting Mechanisms

Effective monitoring and reporting are essential to tracking progress, measuring success, and guiding management decisions. Monitoring protocols should be established, utilising GIS tools, site evaluations, and regular stakeholder feedback sessions.

7.2.4 Develop a Public Communication Strategy

A clear and proactive communication strategy should be developed to manage public perception and educate the community about the plan's benefits. This strategy should include regular updates and educational materials that highlight the ecological, cultural, and recreational improvements the project will result in.

7.2.5 Promote Community Involvement in Planting and Maintenance Activities

Encouraging community participation in planting days and ongoing maintenance activities will enhance public support and contribute valuable volunteer resources. Educational programs that involve schools and youth groups should be considered to inspire the next generation of environmental stewards.



8. Appendices

Appendix 1 - Succession Plan Maintenance Schedule (Spreadsheet)

Appendix 2 - Species Selection Guide

Appendix 3 - Soil Enhancement Techniques and Best Practices

References and Supporting Documentation

1. Wanaka Lakefront Development Plan Eely Point Recreation Reserve (Eely Point Development Plan)
A comprehensive plan detailing the long-term vision for Eely Point Recreation Reserve, including landscape enhancements and management strategies that align with the goals of the succession plan.
2. New Zealand Wilding Conifer Management Strategy 2014
A national strategy that outlines best practices for wilding conifer control across New Zealand, emphasising collaborative approaches, funding mechanisms, and long-term management goals.
3. Otago Regional Council Wilding Conifers
<https://www.orc.govt.nz/environment/biosecurity-and-pests/plant-pests/wilding-conifers/>
4. Otago Pest Management Plan 2019-2029
<https://www.orc.govt.nz/your-council/plans-and-strategies/regional-pest-management-plan/>



Appendix 1: Eely Point Tree Succession Plan - Maintenance Schedule August 2025 v1

August 2025 v1

[illegible]

Appendix1: EelyPointTree Succession Plan - MaintenanceSchedule

[illegible]

Appendix1: EelyPointTree Succession Plan - MaintenanceSchedule

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Appendix 2 -Species Selection Guide

A comprehensive guide to the native and suitable exotic species that will be used in replanting efforts, including information on their ecological roles, growth characteristics, and suitability for different conditions within Eely Point. Including a list of native species suitable for the Upper Clutha Basin.

Species	Type	Ecological Role	Growth Characteristics	Suitability
Pioneer Native Species (non-exhaustive)				
<i>Olearia avicenniifolia</i> (Tree Daisy)	Native	Provides shade and wind protection for slower-growing species	Grows 2-4m; fast-growing shrub tolerates harsh conditions	Suited to dry, rocky sites, provides quick cover for exposed areas
<i>Kunzea serotina</i> (Kānuka)	Native	Provides early shelter, nitrogen-fixing, creates microenvironments	Grows 10-15m; thrives in dry, rocky, low-nutrient soils	Excellent for stabilising soil in rocky outcrops, supports succession
<i>Phormium cookianum</i> (Mountain Flax)	Native	Stabilises soil, attracts nectar-feeding birds	Grows 1-2m; tolerates dry to moist, rocky soils	Ideal for rocky slopes, erosion control in non-wetland areas
<i>Ozothamnus vauvilliersii</i> (Tauhinu)	Native	Coloniser, provides cover in exposed areas	Grows 1-2m; tolerates dry, windy conditions	Perfect for dry, rocky outcrops post-conifer removal
Secondary and Tertiary Native Species (non-exhaustive)				
<i>Sophora microphylla</i> (Kōwhai)	Native	Attracts native birds, provides habitat and visual interest	Grows 8-12m; prefers well-drained, moist soils	Enhances biodiversity, medium canopy in moist, rocky areas
<i>Olearia lineata</i> (Thin Leafed Tree Daisy)	Native	Provides quick cover, supports dry-site succession	Grows 4-6m; adapted to dry, rocky conditions	Ideal for dry, exposed rocky sites post-conifer removal
<i>Aristotelia serrata</i> (Wineberry/Makomako)	Native	Provides food for birds with berries, adds medium canopy	Grows 5-10m; prefers moist, well-drained soils	Excellent for forest margins in moist, sheltered areas
<i>Carpodetus serratus</i> (Putaputaweta)	Native	Contributes to biodiversity, tolerates shaded areas	Grows 6-10m; thrives in moist, well-drained soils	Ideal for secondary planting in moist, shady spots
<i>Griselinia littoralis</i> (Kapuka/Broadleaf)	Native	Provides medium canopy cover, habitat for birds	Grows 6-10m; tolerates wind and rocky soils	Great for filling canopy gaps, hardy against wind
<i>Pittosporum tenuifolium</i> (Kōhūhū)	Native	Creates microclimates, stabilises soil	Grows 5-10m; tolerates wind and poor soils	Provides shelter for delicate species in moist areas
<i>Plagianthus regius</i> (Lowland Ribbonwood)	Native	Fast-growing, provides shade and habitat, stabilises soil	Grows 10-20m; prefers moist, fertile soils	Ideal for quick shelter in moist, well-drained areas
<i>Melicytus ramiflorus</i> (Māhoe)	Native	Improves soil, attracts birds with berries, dense canopy	Grows 5-10m; fast-growing in moist conditions	Provides dense cover in sheltered, semi-shaded areas
<i>Cordyline australis</i> (Tī Kouka/Cabbage Tree)	Native	Attracts birds, adds structural diversity	Grows 8-15m; tolerates moist, rocky soils	Suitable for moist, rocky areas, supports fauna
<i>Pseudopanax crassifolius</i> (Horoeka Lancewood)	Native	Adds structural diversity, transitions to canopy tree	Grows 4-6m; tolerates moist, well-drained soils	Ideal for mid-succession, unique juvenile form
<i>Coprosma propinqua</i> (Mingimingi)	Native	Stabilises soil, attracts birds with berries	Grows 4-6m; tolerates dry to moist soils	Versatile for rocky, exposed to semi-shaded sites
Exotic Species (non-exhaustive)				
<i>Platanus</i> varieties ie. <i>x acerifolia</i> (London Plane)	Exotic Deciduous	Provides broad canopy cover, aesthetic and structural balance	Grows up to 30m	Ideal for shade and structure in high-use public areas
<i>Tilia x europaea</i> (Lime)	Exotic Deciduous	Adds seasonal interest and shelter	Grows up to 25m	Suitable for aesthetic value and providing valuable shelter
<i>Quercus</i> varieties ie. <i>robur</i> 'Fastigiata' (English Oak)	Exotic Deciduous	Provides structural form and wind resistance	Grows up to 20m; fastigate form	Ideal for exposed areas, offering wind tolerance and visual appeal
<i>Ulmus</i> varieties ie. <i>procera</i> (English Elm)	Exotic Deciduous	Provides wind tolerance and broad canopy	Grows up to 35m	Suitable for large areas where shade and shelter are needed
<i>Fagus sylvatica</i> (European Beech)	Exotic Deciduous	Adds structural diversity and dense shade	Grows 25-30m; slow-growing	Ideal for adding long-term shade and visual structure

Appendix 2 -Species Selection Guide

Species	Type	Ecological Role	Growth Characteristics	Suitability
<i>Carpinus betulus</i> (European Hornbeam)	Exotic Deciduous	Provides dense hedge and structural shelter	Grows 20-25m; dense foliage	Suitable for structured hedges and windbreaks in urban gardens
<i>Betula</i> varieties ie. <i>utilis</i> (Himalayan Birch)	Exotic Deciduous	Tolerates a range of soils and conditions, provides fast-growing shelter	Grows 15-20m; fast-growing	Ideal for open areas requiring quick canopy cover and soil stabilisation.
<i>Acer</i> varieties ie. <i>platanoides</i> (Norway Maple)	Exotic Deciduous	Provides broad canopy cover, seasonal interest, and habitat for urban wildlife	Grows 20-25m; fast-growing, tolerates a range of soils and urban conditions	Ideal for urban settings, parks, and large gardens requiring shade and aesthetic appeal
<i>Aesculus</i> varieties ie. <i>hippocastanum</i> (European horse chestnut)	Exotic Deciduous	Adds structural diversity, provides shade, and supports pollinators with flowers	Grows 20-30m; prefers moist, well-drained soils, moderately fast-growing	Suitable for large open spaces, parks, and avenues where shade and visual impact are desired
<i>Juglans regia</i> (English walnut)	Exotic Deciduous	Provides food (nuts) for wildlife and humans, adds structural diversity	Grows 15-25m; prefers deep, fertile, well-drained soils, moderately slow-growing	Ideal for large gardens, or open areas where nut and shade are valued
Native Shelter Species (non-exhaustive)				
<i>Fuscospora cliffortioides</i> (Mountain Beech)	Native	Provides canopy cover, habitat for fauna	Grows 15-20m; prefers well-drained, rocky soils	Excellent for exposed, rocky areas, wind-tolerant
<i>Fuscospora fusca</i> (Tawhai Raunui, Red Beech)	Native	Forms long-term canopy, dense foliage for wind shelter	Grows 25-35m; suited to moist, well-drained soils	Perfect for wind-resistant canopy in moist areas
<i>Podocarpus laetus</i> (Tōtara)	Native	Dense foliage for windbreaks, biodiversity enhancement	Grows up to 20m; slow-growing, adaptable	Long-lived shelter for rocky, well-drained sites
<i>Pectinopitys ferruginea</i> (Miro)	Native	Part of podocarp forests; food for birds	Grows up to 20m; slow-growing	Large tree; slow-growing; well-drained soils
<i>Prumnopitys taxifolia</i> (Matai)	Native	Dense, long-lived windbreak and habitat	Grows 20-25m; slow-growing, adaptable	Durable shelter for moist, rocky areas
<i>Hoheria glabrata</i> (Lacebark)	Native	Fast-growing, provides early canopy and wind protection	Grows 8-10m; prefers moist, well-drained soils	Quick shelter for moist, rocky sites, supports succession
Suitable Exotic Shelter Species (non-exhaustive)				
<i>Sequoiadendron giganteum</i> (Giant Redwood)	Exotic Shelter Tree	Creates iconic, towering landscape features, provides strong wind protection	Grows over 60m; highly wind-tolerant	Ideal for creating iconic and functional shelter in large open areas
<i>Sequoia sempervirens</i> (Coast Redwood)	Exotic Shelter Tree	Provides wind protection, grows rapidly in suitable conditions	Grows 50-70m; very long-lived	Suitable for large spaces where fast-growing, tall windbreaks are needed
<i>Abies</i> varieties ie. <i>grandis</i> (Grand fir)	Exotic Shelter Tree	Strong windbreak species with symmetrical, tall structure	Grows up to 75m	Ideal for large landscape areas requiring dense, tall shelter
<i>Picea</i> varieties ie. <i>abies</i> (Norway Spruce)	Exotic Shelter Tree	Provides dense shelter and is effective at blocking wind	Grows up to 35-55m; prefers cooler climates and well-drained soils, fast-growing	Excellent for areas requiring fast-growing, high shelter, especially in cooler regions
<i>Cedrus</i> varieties ie. <i>deodara</i> (Deodar Cedar)	Exotic Shelter Tree	Fast-growing, evergreen, coniferous tree that provides excellent wind shelter	Grows 40-50m	Ideal for wide open areas requiring strong shelter
<i>Eucalyptus</i> varieties ie. <i>nitens</i> (Shining Gum)	Exotic Shelter Tree	Provides rapid shelter, stabilises soil, attracts pollinators	Grows 20-30m; fast-growing, tolerates frosts to -14°C, requires well-drained soils	Ideal for cold, drier regions, offering quick, tall shelter in well-drained sites
<i>Cupressus × leylandii</i> (Leyland Cypress)	Exotic Shelter Tree	Provides fast-growing, dense shelter and wind protection	Grows up to 20-30m; very fast-growing and adaptable to a range of soils and climates	Ideal for quick shelterbelt establishment, and could be removed later if undesirable
<i>Chamaecyparis lawsoniana</i> (Lawson's Cypress)	Exotic Shelter Tree	Creates dense foliage suitable for wind protection and screening	Grows up to 30-50m; prefers well-drained soils and cooler, moist environments	Great for providing a tall, dense windbreak in areas that experience cooler, moist climates
<i>Cupressus macrocarpa</i> (Monterey Cypress)	Exotic Shelter Tree	Fast-growing, tall, and hardy windbreak species	Grows up to 30m	Perfect for exposed windy areas
<i>Cupressus arizonica</i> (Arizona Cypress)	Exotic Shelter Tree	Offers good wind resistance and dense foliage for shelter	Grows up to 15-20m; drought-tolerant, thriving in dry soils and hot climates	Best for dry, arid regions where strong windbreaks are required
<i>Populus</i> varieties ie. <i>nigra</i> (Black Poplar)	Exotic Shelter Tree	Fast-growing, stabilises soil, provides quick canopy cover and wind protection	Grows 20-30m; very fast-growing, thrives in moist, fertile soils	Suitable for riparian zones, shelterbelts, or areas needing rapid shelter and soil stabilisation

Appendix 2 -Species Selection Guide

Native plant species suitable for Upper Clutha basin/Eely Point

Tall Trees 15m to 25m

Fuscopora cliffortioides (Tawhairauriki/Mountain beech)
 Fuscopora fusca (Tawhairaunui/Red Beech)
 Kunzea seritona (Kānuka/Makahikatoa)
 Metrosideros umbellata (Southern Rata)
 Pectinopitys ferruginea (Miro)
 Plagianthus regius (Lowland Ribbonwood)
 Podocarpus laetus (Tōtara)
 Prumnopitys taxifolia (Matai)

Medium size trees 8m to 10m

Aristotelia serrata (makomako wineberry)
 Carpodetus serratus (putaputaweta/marble leaf)
 Coprosma linariifolia
 Cordyline australis (tī kouka/cabbage tree)
 Fuchsia excorticata (kotukutuku)
 Griselinia littoralis (kapuka/broadleaf)
 Hoheria glabrata (lacebark)
 Melicytus lanceolatus (narrow leafed māhoe)
 Melicytus ramiflorus (māhoe)

Olearia hectorii (hectors tree daisy)
 Pennanta corymbosa (kaikomako)
 Phyllocladus alpinus (mtn toatoa)
 Pittosporum tenuifolium (kōhūhū)
 Pseudopanax arboreus (five finger)
 Pseudopanax crassifolius (horoeka lancewood)
 Pseudopanax ferox (horoeka/fierce lancewood)
 Sophora microphylla (kōwhai)

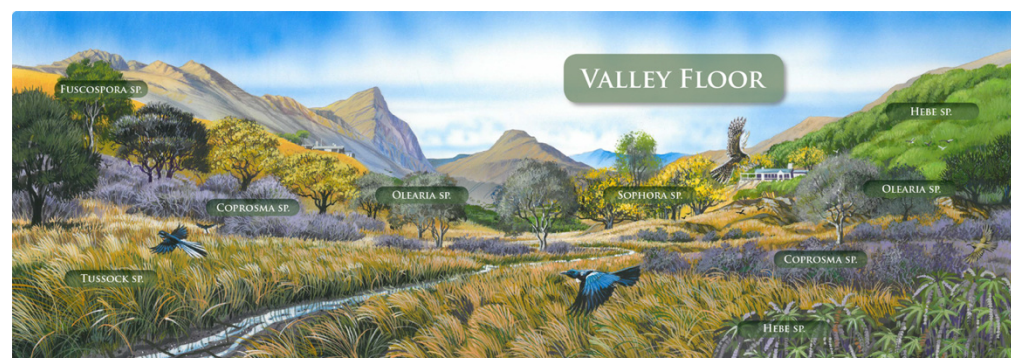
Small Trees to large shrubs 4m to 6m

Aristotelia fruiticosa (mtn wineberry)
 Coprosma lucida (shining karamu)
 Discaria tomatou (matagouri)
 Leptospermum scoparium (mānuka)
 Melicope simplex (poataniwha)
 Myrsine australis (ed mapou/red matipo)
 Olearia avicenniifolia (tree daisy)
 Olearia fragrantissima (scented tree daisy)
 Olearia lineata (thin leafed tree daisy)
 Pseudopanax colensoi var ternatus (three finger)

Small Shrubs

Carmichaelia kirkii
 Carmichaelia petriei (native broom)
 Coprosma brunnea
 Coprosma crassifolia
 Coprosma dumosa
 Coprosma intertexta
 Coprosma propinqua (mingimingi)
 Coprosma rigida
 Coprosma rotundifolia
 Coprosma rugosa
 Coprosma virescens
 Coprosma wallii
 Corokia cotoneaster (korokia)
 Gaultheria crassa (false beech)

Lophomyrtus obcordata (rohutu)
 Melicytus alpinus (porcupine plant)
 Myrsine divaricata (weeping mapou)
 Neomyrtus pedunculata (rohutu)
 Olearia bullata
 Olearia fimbriata
 Olearia nummulariifolia
 Olearia odorata
 Ozothamnus vauvilliersii (tauhinu/cottonwood)
 Pittosporum divaricatum
 Teucrium parvifolium
 Veronica cupressoides (hebe)
 Veronica salicifolia (hebe)



This appendix outlines the soil enhancement techniques that will be employed throughout the restoration process in Eely Point, focusing on reversing the negative impacts caused by long-term conifer dominance. Best practices are included for improving soil health, addressing nutrient deficiencies, and preventing soil erosion to support the successful establishment of new plantings.

1.1 Soil Amendments

Amending the soil is a critical step in restoring the fertility and structure needed for successful plant growth. The following guidelines provide recommendations for organic amendments, including compost, mulch, and biochar.

Compost

Timing: Applied during early planting phases to enhance soil structure and moisture retention.

Benefits: Improves aeration, water retention, and nutrient availability, particularly in soils degraded by conifer needle litter.

Compost improves soil structure, increases organic matter, and promotes microbial activity. Application rates should range from 10-20cm in depth. Compost should be incorporated into the soil during initial site preparation, especially in areas where soil compaction or low organic content is evident.

Mulch

Timing: Applied after planting to maintain moisture and reduce temperature fluctuations.

Benefits: Helps maintain soil temperature, improves water retention, and protects soil from erosion.

Mulch provides soil insulation, reduces water evaporation, and suppresses weed growth. A layer of mulch (5-10cm deep) should be applied around new plantings but kept clear from the plant stem to prevent rot.

Biochar

Timing: Incorporated into soil during the preparation of planting zones.

Benefits: Increases water-holding capacity, enhances soil microbial diversity, and provides a long-term carbon sink.

Biochar is a long-lasting carbon-rich material that improves nutrient retention and microbial health in soils. It should be mixed with compost at a rate of 5-10% by volume.

Mycorrhizal Inoculation

Timing: Applied during planting to enhance root development.

Benefits: Promotes nutrient uptake and plant resilience.

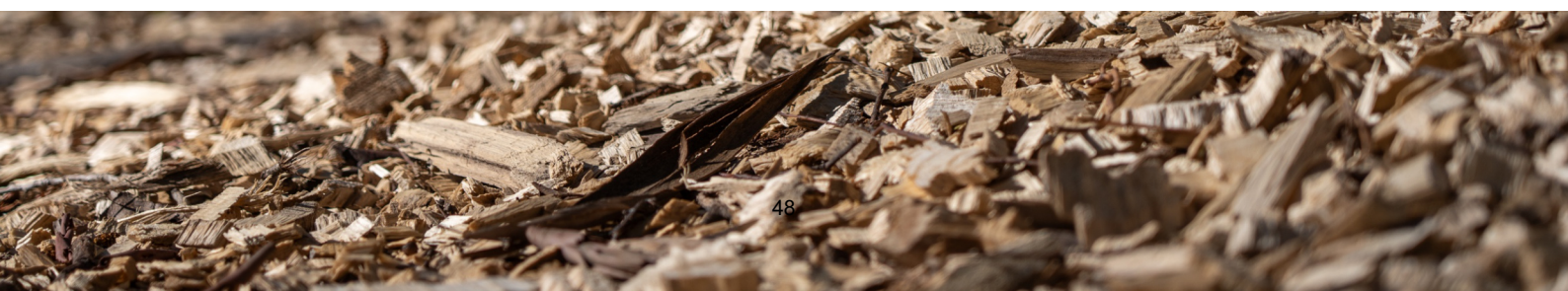
Mycorrhizal fungi form symbiotic relationships with plant roots, improving nutrient and water absorption. Inoculants should be applied directly to the root zones during planting.

Compost Tea

Timing: Applied during planting and throughout the growing season

Benefits: Enhances soil microbial activity and nutrient availability.

Compost tea is a liquid amendment that boosts beneficial microorganisms in the soil, promoting plant health. It should be applied as a soil drench or foliar spray.



1.2 Soil Conditioning

Soil conditioning is an essential part of site preparation for planting, ensuring that the ground is adequately prepared to support root establishment and overall plant health. The following protocols outline the key steps in soil conditioning.

Tilling and Screefing

Tilling: Mechanical tilling will break up compacted layers of soil, enhancing aeration and improving water infiltration.

Screefing: Involves removing the surface cover to expose the soil, allowing for better root penetration and nutrient absorption. This method is particularly useful in areas that have accumulated heavy organic debris or conifer needle litter.

Soil conditioning involves both tilling, which breaks up compacted soil and incorporates organic matter and screefing, which clears surface vegetation or organic debris (needles and cones) to expose the soil. Organic matter such as compost and biochar should be incorporated into the soil during tilling to improve soil structure, nutrient levels and microbial activity. This provides a more favourable environment for plant roots to establish and grow.



1.3 Nutrient Management

Nutrient management is essential to counteract the nutrient depletion caused by years of conifer dominance. The following strategies will support plant establishment by addressing soil nutrient deficiencies:

Slow-Release Fertilisers

Application Rates: Based on soil testing, slow-release fertilisers should be applied at 50-100g per square metre, depending on the species being planted.

Monitoring: Soil nutrient levels should be monitored every 6-12 months to track the progress of soil fertility recovery. Soil samples should be analysed for macronutrients (N, P, K) and micronutrients such as calcium, magnesium, and sulphur.

Corrective Actions: If soil testing reveals deficiencies in key nutrients, targeted amendments such as lime for pH adjustment or organic matter for improving microbial activity should be implemented.

Organic or slow-release fertilisers will be applied to provide essential nutrients gradually over time. Nitrogen, phosphorus, and potassium (NPK) fertilisers should be used based on soil test results, with applications tailored to meet the needs of different species.

Cover Crops

Benefits: Increases organic matter, improves soil structure, and prevents nutrient leaching during periods of soil disturbance.

Planting cover crops such as clover or grasses can improve soil fertility by fixing nitrogen and preventing erosion. These crops should be sown during rest periods between tree removals and replanting phases.



1.4 Watering and Irrigation

Proper watering and irrigation are crucial for the successful establishment of new plantings, particularly in the early stages of restoration. The following strategies ensure optimal moisture levels for plant growth while conserving water resources:

Drip or Irrigation Lines

Timing: Where practical, Drip irrigation systems will be used regularly during the first 2-3 years of establishment, especially during dry periods.

Benefits: Provides targeted watering, reduces water waste, and ensures that young plants receive the moisture they need to establish strong root systems.

Drip irrigation systems will be installed where feasible and existing water supplies exist, delivering water directly to the roots of newly planted species. This method reduces water loss from evaporation and ensures efficient use of water.

Watering Schedule

Timing: Watering should be done early in the morning or late in the afternoon to minimise water loss through evaporation.

Monitoring: Soil moisture sensors can be used to monitor the effectiveness of the watering schedule and prevent overwatering.

A regular watering schedule will be maintained for newly planted trees and shrubs, particularly during the first two growing seasons. Watering should be more frequent during the dry summer months, with adjustments made based on weather patterns and soil moisture levels.

Mulching for Moisture Retention

Benefits: Reduces the frequency of irrigation, improves water retention in the soil, and provides additional protection against temperature fluctuations.

The application of mulch around new planting areas will help retain soil moisture and reduce the need for frequent watering. Organic mulches, such as wood chips, can slow the evaporation of water from the soil.

Water-Saving Measures

Benefits: Minimises water usage while ensuring plant health and resilience in drier areas.

Drought-resistant and native species that are adapted to local moisture conditions will be prioritised for planting in areas with limited water availability. This reduces the need for extensive irrigation and ensures long-term sustainability.



1.5 Erosion Control Measures

Preventing soil erosion is crucial during tree removal and replanting phases. Erosion not only depletes soil nutrients but also damages the landscape, making it difficult for new plantings to establish. The following techniques will ensure soil stability throughout the restoration process:

Temporary Ground Covers

Timing: Applied immediately after tree removal and before new plantings to stabilise the soil surface.

Benefits: Provides temporary protection against erosion while improving soil health through root development.

Planting quick-growing grasses or using biodegradable mats will help stabilise soil during periods of tree removal. These ground covers prevent soil displacement from wind and rain, reducing erosion risks while allowing for future replanting.

Silt Fences and Erosion Barriers

Application: Installed in areas prone to soil displacement or runoff, particularly on slopes or near water bodies.

Benefits: Keeps soil on-site and prevents it from being washed into surrounding areas, thus protecting local ecosystems and water quality.

These barriers should be installed around areas where heavy machinery is used or where soil is likely to be disturbed during removal activities. Silt fences prevent soil runoff into waterways or adjacent areas. Erosion Barriers could consist of felled logs strategically placed and backfilled with soil/mulch and planted.

Stabilisation Plantings

Timing: Planted as soon as possible after tree removal to stabilise soil before other species are introduced.

Benefits: Provides long-term erosion control and improves soil structure, ensuring successful establishment of subsequent plantings.

Early-stage pioneer species, such as Kānuka or erosion-resistant grasses, should be planted in areas susceptible to soil erosion. These plants are quick to establish and help anchor the soil with their root systems.



Attachment B: Summary of Feedback

Survey Response						
Name:	What is your position regarding the draft Tree Succession Plan for Eely Point:	Please explain the reason for your position:	Please share any other comments you have here:	Officer Comment (Summary: Submission key points)	Officer Comment (Response/Action: Response to key point/plan amended)	Theme (Officer)
Lucy Jerram	I support it	Eely Point has been a major part of my childhood and now adulthood - I love the tree area but understand that the pines pose several risks and threats to the native environment. I applaud the long term view of this area and the staging of tree removal while native trees and others are growing up.	The plan mentions 'appropriate exotic species' and I wonder why these are necessary rather than purely native species. I know we all love the autumn colours of poplars, sycamores etc but I would rather return the area to native bush if possible.	Noted support for long term plan. Noted preference for 100% native.	Ratio of native: exotic changed from 40:60 to 50:50. Balancing competing priorities between users.	Native preference. Biodiversity Long Term plan supported.
Di Kenton	I oppose it	The selection of high flammability plants such as Manuka and kanuka to restore land does not fit with your own recommendations to plant low flammability plants when people subdivide. Why? Why is there a significant selection of beech trees recommended? Beech trees mast every 2-6 years and when they do, they attract stoats and rodents which severely compromise our native bird life. Why is there a focus on beech trees when there are so many other beautiful plants such as Ribbonwoods, wineberry, pittosporum and grisileni that could thrive in this area?	Please follow your own recommendations for restoration of soil health and native bird attraction and reconsider the continual recommendation to plant trees that attract stoats and rodents which focus on killing our fantails and thus, our bellbirds etc. Would be great to see the QLDC focus on the removal of pines from Mt Maude instead of doing everything possible to ensure their retention. Would be great to see some consistency from this Council when it comes to its Biodiversity planning, which is hit and miss depending on what area you decide to flavour of the month.	Noted concern for flammability of some species (Kānuka). Noted concern with some species that mast and attract rodents that prey on native bird species. Noted request for focus on Mt Maude pines.	Kanuka and Manuka used as pioneer species to assist in soil health and canopy. Will be sufficiently set back from residential properties in line with subdivision practice. Beech is the predominant historical vegetation cover as per ORC mapping. Pest fauna species are out of scope of this plan and will be managed on an ongoing basis in accordance with QLDC policy.	Fauna pest management. Tree Species selection (pests)
Ian Sawers	I am neutral to it	Agree EP needs a succession plan. Very concerned at planned re planting of tall fast growing, non invasive conifer shelter. Trees to grow over 30m are not needed on this reserve apart from the Northern end which would act as windbreak for NW wind. Keep vast majority of trees to 15 - 20m max. EP reserve needs smaller trees in general, which will allow more day light and sun for longer periods of the day, for the benefit of the public. The West side which gets great use from the public, needs to have more sunlight earlier, each day of the year, - lunchtime in the months from Nov to March now, the sun finally gets to the West beach area too late. The mature heights of existing trees in the replanting should only be half this height at maturity. Make EP so much better by eliminating from your succession plan, the tall fast growing species, apart from the Northern end. Ensure EP picnic areas get more sun earlier in the day.	Establish more picnic tables and gas bbq's. Create more parking space for public vehicles. Concrete access to launching boats from top trailer park, down to waters edge and concrete ramps. Wanaka is a top holiday destination and Great Lake for water sports. The town faces enormous growth over the next 50 years. Make EP even more user friendly, with public safety in mind and more areas of EP getting more daily sun, earlier in the day. 50 years ago, I remember EP with nice sized tree height, more earlier sunlight in the popular West side, for public to enjoy. Now is the chance to have an even better EP reserve for yr 2100. Do not plant trees which grow in excess of 25m height. A real need to cut down the old pines etc near the boat trailer parking, particularly on the NE side. Currently many dangerous to the public and parked vehicles	Noted concern for fast non invasive fast growing conifer species. Noted request for additional park furniture. Noted support for a succession plan and removal of dangerous pines.	The plan will result in a less tall canopy height in general. Beech approx. 25m with select taller conifer species such as redwood in strategic locations. Supported - Pines near boat trailer in early stages of plan for removal. Additional park furniture out of scope of the plan. Plan will provide more view shafts.	Tree Species Selection (height)

Terry is	I oppose it	I think the current trees in the region are mostly still healthy and maturing. Surely we should maintain the valuable growth we have and only remove when they actually get to end of life. The lack of undergrowth in my view is not a negative factor and the leaf litter supports its own environment...and has done for many years. The willows along the foreshore reduce erosion and add to the diversity both environmentally and visually.	Whilst qldc have prepared a comprehensive plan it is evident from the removal of trees on the rugby grounds foreshore that despite the policy of replanting 2 trees for everyone removed, after over a year no planting has actually been done. With so much qldc debt do we see another plan not being executed . Good ongoing maintenance at Eely Pt would be a much better option economically and a much sounder plan in preserving the established environmental growth that these trees already offer.	Noted trees should be removed as they become problematic , many still healthy. Noted concerns for funding and no tree planting/replacement occurring. Noted amenity value of existing vegetation (open understorey and erosion resistance of willows).	Many of the pines are already at the end of their functional life and require removal or monitoring. The plan and removals only progress as funding is available. More removals don't occur until previous planting is successful (assessment period). Planting methodology clarified in plan to ensure retention of large open understorey areas.	Funding constraints. Amenity values of existing vegetation
Kylie	I oppose it	It will completely ruin the whole look of the area. My family love coming there for bbqs and to specifically play disc golf among the pine trees.	I struggle to understand why the QLDC hate pine trees when so much of the public love them. They look better than most of the active plants they plan to use. Keeps all the gorse and crappy matagouri from growing there.	Noted amenity value of current vegetation.	50 :50 native:conifer mix. Balancing competing priorities between users. Long term plan aims to retain amenity.	Enjoys the existing vegetation Shade and Protection
rob jewell	I support it	Eely Point is a wonderful community asset so its pleasing to know that a plan has been drafted and it seems to be comprehensive. I like that there is a proactive response with what I believe is a well balanced and combined short and long term approach. Thank you.	What happens to the current walking/cycling track? Is there any impact to the track or access while the succession plan is being implemented? Is there any future planning to retain/develop or improve or even remove this vital scenic link track to town and the outlet?	Noted support for comprehensive longterm plan. Noted concern regarding future of existing trail.	Existing trail will remain.	Long Term Plan supported. Retain Trail
Bruce Copeland	I support it	Congratulations on proactively planning the future of this valued amenity. I fully support a staged approach to managing the transition to sustainable planting. The community shouldn't lose access because trees become dangerous in high winds. I like the removal of invasive and non-native species, particularly the Willows and suckering poplars. I like the proposal to transition over time, and it will be interesting to watch if the miyawaki method is successful. I look forward to seeing native planting and would be happy to have only natives in time.	I understand that some people will think that the towering conifers and pines are iconic to Wanaka. They also provide protection from strong winds. They are nice to look at from a distance, but completely suppress any undergrowth, making the area largely unattractive at a human level. I think this is the trade-off: a more interesting environment at ground level, but losing the iconic view from a distance to the exotic trees. Seeing that the Conifers and Pines are at the end of their life, it's time to move back to native. There will be significant additional benefits in supporting other endemic biodiversity.	Noted support for long term plan. Noted support for increased biodiversity. Noted support for increasing undergrowth. Noted support for removal of sapling willows and poplars.	Miyawaki method (higher density of planting) utilised in select areas. Wilding poplars and willows to be removed.	Long Term Plan supported. Native preference. Biodiversity Shade and Protection
Claire Perkins	I support it	I support there being a succession plan, but am keen to ensure that the way the Eely Point reserve is utilised is a key consideration. The benefits of high canopy coverage and low levels of understory means that there is a wide area for recreation beneath the trees. Dense native plantings dominated by shrubs do not allow for the same sub canopy use to continue. Please ensure that this is a key consideration on species chosen and their location.	Whilst I understand willows are introduced and spread rapidly, their presence on the margins of the beach area near the Scout Den beach and Bremner Bay area are essential shade during the summer months, replacement of near beach shade is needed if these are removed so families can be down near the water supervising kids.	Noted support for long term plan. Noted concerns about retaining shade along beach front areas as well as open understorey areas.	Willows on western beach are retained for shade. Miyawaki method only implemented in some areas to retain some openness in the understorey.	Shade and Protection
Chris Bowie	I support it	Eely point reserve is an iconic public space, the spread of exotic / invasive plants in this area has resulted in an area lacking in biodiversity and with poor amenity value. The plan sets out a proactive and achievable approach to addressing this and ensuring this community asset is enhanced for future generations.		Noted support for long term plan and enhancement to amenity and biodiversity values.	Plan supports increased biodiversity	Biodiversity

Tracey van Gool	I support it	I support the removal of the invasive willows and poplars	I only support the removal of the conifers if necessary due to safety concerns as the trees age. The trees currently provide the best shade and protection from the elements such as wind/sun which is lacking in other public spaces around Wanaka. If the trees are to be removed I think they should be replaced with like for like trees to ensure the continued beauty and enjoyment of Eely Point.	Noted support for invasive willows and poplars and conifers reaching end of life. Noted request for like for like replacement.	50:50 exotic to native to retain the conifer amenity value. Focus is on ageing trees first.	Biodiversity Shade and Protection
Andrew Millar	I support it	I think the Plan is a good one. Thorough and well detailed. It is necessarily long term (20 years plus) in order to achieve the objectives, but at the same time there will undoubtedly be opportunity to speed up some aspects of the succession plan, which should be taken up as they become available in order to achieve the end result as early as possible.	I believe retention of the disc golf amenity ought to be a priority. Lake views from the perimeter pathway should be maintained wherever possible. There should be an increase in the number of viewing seats in various places throughout the reserve, and these should be a mixture of view sites with a mostly sunny aspect. Care needs to be taken so as not to create shade throughout the sunbathing/swimming areas on the sheltered side of the reserve (shade at the edges, but sunny in the open spaces). In this regard I think that trees over 35 metres (of which there are a number within the appendix of suggested species) are too tall for this reserve.	Noted support for long term plan. Noted request for increasing viewing areas. Noted concern for amenity value (sun) around the swimming areas with taller species.	The taller species will be strategically placed. Balance between conifer amenity and native shorter species.	Long term plan supported. Shade and Protection Viewshafts
Nick Crang	I support it	I fully support the replacement of the exotic fast spreading trees with natives and other sensible choices. It will be more sustainable and more appropriate for the lake.	Thank you for the well thought out plan and consultation.	Noted support for long term plan.	No amendments proposed.	Biodiversity Long term plan supported.
Chris Hill	I oppose it	There is nothing wrong with it. Just QLDC waiting more money!		Noted concerns about cost.	No amendments proposed.	Funding constraints.
Eva Fernandez	I support it	Thea area and ecosystem will be benefited long term		Noted support for long term plan.	No amendments proposed.	Biodiversity Long term plan supported.
Leigh Mutton	I support it	I support the change from invasive conifers to a native ecosystem.		Noted support for long term plan and ecosystem enhancement.	No amendments proposed.	Biodiversity Long term plan supported.

Emberly Wetherall	I support it	I support the majority of it. I would like to put a few things out for consideration. See below.	<p>1. I would like to add the following trees to the list of exotic, which will provide additional foraged food sources to the reserve for enhancing community food security and food resilience. Mulberry, Walnut, Hazelnut, Chestnut, Fig, Apple, and Pear. And Alders as a nitrogen fixing support species.</p> <p>2. I'd like council to reconsider the removal of the poplars and willows. These tree species are the best support trees, they have powerful relationships with mycorrhizal fungi for a flourishing underground network which can support other species in times of stress or drought. When managed through coppicing these trees provide a high quality green mulch. This is an on site yearly and endless supply of mulch to support the long term succession plantings of the reserve. These trees are incredible nutrient cyclers dropping leave litter, which adds nutrient rich organic matter to the soil, which feeds the soil food web and provides habitat for all sorts of insects, lizards etc. And incredibly willow's also add immune support to the trees around them and/or through their mulch as their bark contains salicylic acid (what we know as aspirin), which can strengthen other trees natural resistance to pests and diseases. Beyond this willows are one of the only tree species that hang over the lakes edge provide shade, shelter and habitat for aquatic species esp through the hottest months of the year. These trees offer so many ecosystem services that shouldn't be overlooked, as well as the huge potential to support the successional plans of the reserve.</p> <p>3. I'd also like to propose the establishment of an educational and research hub placed on the reserve. The felled pines could be locally milled for building construction and the building itself could be passive solar design, generate all its own electricity, capture rainwater and recycle grey water to showcase what low impact building design looks like, and what we should be striving for in our built environment. The building would be an education and research hub for the many regenerative organisations in the district, inviting in school groups, tourists, Uni students etc., providing a connection point and housing equipment for researchers such as WAI and touchstone etc. providing meeting rooms for sharing ideas, holding workshops etc.</p> <p>Thanks for providing the opportunity for feedback and ideas.</p>	<p>1. Noted request for inclusion of additional tree species.</p> <p>2. Noted concern around willow and poplar removal.</p> <p>3. Outside scope of this plan.</p>	<p>Plan amended: Walnut, Chestnut, Hazelnut added to species list as they are adequate replacement amenity trees. Other fruit trees sit outside the scope of this plan. Too dry for Alders.</p> <p>Willow and Poplar will remain except wilding i.e in the shallows.</p>	Tree species selection (food) Ecosystem services of exotics
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Murray Gifford	I support it	A long term plan to retain the green state of Eely Point is a positive response to the current old and wilding pines. A mix of natives and selected introduced trees is the preferred option. The new planting need to retain the current wind break effect of the existing trees. I would support Beech plantings. Planting needs to consider the use of the area for summer recreation and shade trees are important. Trees will need improved soils and water available for watering in mid summer. I also enjoy the autumn when poplars and related species turn yellow or orange, it would be a loss to lose them all. Liquidamber could be possible replacement. I note some sequoia have already been planted and some specimen trees such as this would be good replacement. Rabbit protection of small trees will be needed. Retain all existing tea tree lots.	I live in Bremner Bay and walk the point most days, so for me this is important and positive direction. Would be great if QLDC also had plans to cull introduced weed plants and improve the diversity of the lake front from the Boat club, all of Bremner Bay to Beacon Point.	<p>Noted support for long term plan.</p> <p>Noted support for mixed exotic/native</p> <p>Noted importance of the amenity values existing vegetation provides (autumn colour and wind/shade protection).</p>	<p>Seasonal tree colour added to plan and species list.</p> <p>Poplars and willows will remain except wilding, and saplings in shallows.</p> <p>Long term plan will provide for ongoing amenity of shade and protection.</p>	Biodiversity Shade and protection Autumn colours
Michaela Blacklock on behalf of WAI Wānaka	I support it	The planned approach complements work being done by other groups around the lake edge to restore biodiversity and regenerate and protect the health of ecosystems around the lake edge.	If there is an opportunity to accommodate thinking about additional uses of some of the area other than tree succession, it seems a potential place for environmental groups to be located. For some time, there has been discussion about a physical location to support local groups and the work they collectively do - community engagement and action, education etc. Perhaps this could be an opportunity for an extension of this thinking with respect to an Eely Point location?	<p>Noted support of plan to achieve increased biodiversity.</p> <p>Noted request for educational centre.</p>	Other uses of reserve out of scope of plan.	Biodiversity
William Vink	I oppose it	<p>The mature exotic trees at Eely Point are an essential part of the reserve's character and identity. Their presence was a key reason we chose to purchase property in this area — not only for the beauty and shelter they provide, but also for the vital role they play in the local ecosystem.</p> <p>These trees offer a critical windbreak for our property and many others. Their removal would expose our homes and landscapes to harsh prevailing winds, fundamentally altering the experience of living here.</p> <p>The proposed “succession” approach suggests new plantings will replace this value over time. But these trees are generations old. It will take decades — likely the rest of our lives — for any replacement to offer comparable shade, shelter, and ecological value.</p> <p>Furthermore, the current tree canopy supports a wide range of native birds, many of which also visit the stand of pine trees on our property. The removal of their habitat will have an immediate and significant impact on birdlife in the area.</p> <p>I urge QLDC to reconsider this plan. Any changes to Eely Point should involve meaningful community consultation and acknowledge both the ecological function and emotional significance of these trees to those who live nearby and use the reserve regularly.</p>	A 10-year timeline for removal is far too aggressive. Any conifer that is not classified as a wilding should be retained. Coniferous species should also be considered as part of the future planting plan, given their ecological value and the shelter they provide.	<p>Noted opposition to the removal of the existing conifers.</p> <p>Noted request for inclusion of conifers in re-planting.</p> <p>Noted amenity value that the existing vegetation provides (shelter & bird habitat).</p>	<p>60 year plan to retain shade and shelter amenity values.</p> <p>The plan will improve biodiversity and native bird habitat.</p> <p>Coniferous habitat retained 50:50 ratio of planting amended in the plan.</p>	<p>Enjoying the existing vegetation.</p> <p>Shade and protection</p>

		Please retain the existing mature trees and manage them sustainably, rather than removing them wholesale.				
John & Lynne stark	I support it		We are supportive of the concept of replacing the pine area as long as there is shelter retained whilst the new plants and trees are growing up The parking area also needs to be replaced with a better laid out to so that the grasslands can be better retained The shelter for the beaches must be retained ongoing reviews with the local property owners must be continued while the project is underway	Noted support for long term plan to ensure retention of shade/shelter by beaches. Noted request for better laid out parking.	Long term plan will retain shelter throughout plan. Willows and select specimen trees along western beach retained. Parking out of scope of plan.	Shade and protection Long term plan supported
Sally Anderson	I oppose it	Can we please stop with removing picturesque willow tree and some pine replacing with ugly kanuka and other unattractive native plants and shrubs , small trees. I understand it's fashionable and represents a particular ideological view, but they are ugly and mediocre at best. Willows and poplars around that section of the lake if looked after are spectacular and do reflect an iconic part of the area's history	Please see above	Noted request for retention of willows and poplars. Noted request for retention of larger trees rather than Kānuka etc.	Willows and poplars to remain, wildings and saplings removed. Kanuka are a pioneer species that will eventually be outshadowed by the canopy trees. 50:50 mix added to plan to retain existing amenity values. Autumn colour added to plan.	Enjoys existing vegetation. Autumn colours
Barry Johnston	I support it	I support the addition of native trees but would like to see more varieties such as Kahikatea & Rimu . I'm surprised the council doesn't plant more Totara in public areas. They are hardy and rabbits don't like them. There was once many Totara & other podcasts growing in the Upper Clutha and some are regenerating in Queensberry. This was identified by Wildlands Consultants in 2021. There are also Kauri growing in the area (I have 5 growing in Pukerangi Drive) . Plant as many varieties as possible (create a native arboretum) for educational purposes for schools etc)	Include taps for watering purposes so that members of the public can help sustain trees during dry periods We don't have public gardens (although Wanaka Station Park is the nearest such facility.) but we should give urgency to establishing such areas at Ely Point and Lismore Park.	Noted support for native planting, additional species proposed. Noted request for food production trees (nuts). Noted request for water availability for community watering. is already available onsite for watering.	Totara and nut trees added to species list. Too dry for Kahikatea. Species list is not exhaustive but indicative. Water has already been made available on site for watering.	Biodiversity. Tree species (natives and food)

		Give consideration to a food forest so people can harvest fruit & nuts (walnuts , hazelnuts chestnuts etc)				
PETER DORRINGTON	I oppose it	<p>Being a mandatory field I have had to choose one of your options for question 5. However this is an extremely simplistic way to offer reaction to the plan. I have selected the third option because I question some of the fundamental drivers behind the plan but in fact do not necessarily oppose all aspects of it. Please read below for a more detailed explanation of my views.</p> <p>Could you please acknowledge receipt of my submission in case this portal has failed to transmit it in full.</p>	<p>First let me say I do cherish Eely Point just as it is. I visit the reserve several times a week to wander beneath the magnificent mature trees enjoying the calm, the filtered light and the perfect sanctuary from the north west wind. In almost all seasons it is a joy to see so many people, especially families, making great use of the location. In my view, the shelter and shade offered by the mature plantings present is the very essence of Eely Point.</p> <p>I therefore urge great caution when considering the future of this wonderful amenity.</p> <p>I have read the Tree Succession Plan prepared for the QLDC by Trend Trees Ltd and as a Wanaka resident, QLDC ratepayer and regular Eely point visitor, offer my reaction to it here.</p> <p>I do accept that the QLDC has a responsibility to keep our reserves safe, to maintain and even enhance them and of course to ensure their longevity. These points are mentioned in the Succession Plan, but the document as a whole clearly has a dominating agenda based on the notion that the trees present at Eely Point constitute a great danger to open areas in the wider district from the spread of undesirable wilding infestation.</p> <p>Side note: The Tree Succession Plan and QLDC's published summary consistently refer to the Eely Point trees as "wilding conifers" or "invasive conifers". This is emotionally charged, inaccurate language. It implies that the trees are a wilding population themselves. They are not. They were deliberately planted decades ago expressly for the amenity they now provide today.</p> <p>I do not suggest that open area wilding infestation is not a problem in our district. What I do suggest is that the proposed plan for Eely Point offers no clear evidence that trees there create an identifiable risk. In effect the plan amounts to wholesale vilification of species (particularly Douglas Fir and Pinus Radiata) without supporting evidence that the trees in question are actually contributing to problematic widespread seed distribution.</p> <p>In fact, I would suggest that Eely Point's down wind zone</p>	<p>Noted values of existing vegetation (shade and protection).</p> <p>Noted reference to conifers as wilding is incorrect.</p> <p>Noted lack of evidence regarding existing conifers are invasive seed source.</p> <p>Noted preference of open areas underneath canopy.</p> <p>Noted request for retention of conifers.</p> <p>Noted support for viewshafts.</p>	<p>60 year plan aims to retain existing amenity values (shade/protection).</p> <p>Plan amended to remove reference to existing conifers as wilding. Referred to instead as pest or undesirable.</p> <p>Plan amended to clarify Miyawaki method only used in some areas to retain some open understorey.</p> <p>Plan amended to show 50:50 split of natives:appropriate exotics including conifers.</p> <p>Plan will result in additional viewshafts.</p>	<p>Shade and protection. Enjoys existing vegetation. Viewshafts.</p>

			<p>is highly unlikely to experience problematic wind born seed loadings. The down wind area consists entirely of residential, commercial and other intensively managed land uses which offer a very large buffer between Eely Point and any susceptible open spaces.</p> <p>To single out the existing plantings at Eely Point as dangerous is to ignore the ubiquity of the questioned species in our district. These trees are everywhere. Is the QLDC going to take steps to outlaw them completely?</p> <p>I suggest that removal of even every conifer at Eely Point would have a zero net effect on the district's wilding problem. I believe the real question here is how to balance risk against existing amenity and I do not feel the proposed plan addresses that equation adequately.</p> <p>It is my strong preference to retain large areas of mature, healthy Douglas Fir particularly in zones 6 and 7, but I do agree that Pinus Radiata in zones 4 and 5 are nearing the end of their natural life and a succession plan for them is desirable. If I read the plan correctly, it seems that some of the healthier specimens would be retained to offer shelter to succession planting. I believe creation of lightwells within an existing stand can be a very effective way to establish succession trees. It mimics a normal forest self regeneration mechanism and would also retain much of the amenity offered by the existing planting while the next generation becomes established. In contrast, an approach employing deliberately planted pioneer species to aid establishment of a tall canopy is going to detract from access and general amenity for a very long time. The present fully open access for people at ground level is one of the pleasures of this reserve.</p> <p>Another area I feel would benefit from early intervention is the riparian fringe at the end of the peninsular. This growth IS wilding and invasive and has become sufficiently dense to affect opportunities to view the lake from the perimeter track.</p> <p>I do read in the Plan such terms as "biodiversity", "understory", "local provenance" not to mention an inherent preference for native species. To me, this is the language of a re-afforestation project and I am afraid such ethos could dominate action at the reserve.</p> <p>There are many laudable re-afforestation projects in New Zealand, but let's not be coy about this, Eely Point is not a forest and possibly never was, it is an urban park with the sole purpose of providing amenity to the people who live in and visit this town.</p> <p>This is a park for people, and the ability to wander freely</p>			
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Georgina Gray	I oppose it	<p>I don't support removing the conifer trees outright. If anything the reserve should be protected as a heritage area of significance within Wanaka. There are very few public spaces as old as this in the town centre.</p> <p>I don't think you have provided enough evidence to support your position on the "invasive" status you have pegged to these trees. The reserve was established post WWII. The majority of trees were purposely planted, they didn't spread there. Where is the evidence these trees have spread outside of the immediate area? Seedlings can be removed and maintained ongoing.</p> <p>Linked are photos of the reserve taken by Whites aviation. 1951 - See below photo link (high res available on click-thorough)The trees are young, but clearly planted in rows to shape the space. https://bit.ly/3l5geXc</p>		<p>Noted opposition to plan and removal of conifers outright.</p>	<p>Plan amended to refer to existing conifers as pest not wilding species. Reference to trees being an invasive seed source removed from plan.</p> <p>50:50 mix of appropriate exotics to native added to plan to ensure conifer amenity is retained.</p>	<p>Enjoys existing vegetation.</p>

		<p>1970 - Smaller trees have been cleared from the center of the peninsula to create an open space. The perimeter trees are retained. https://bit.ly/45xPV5Z</p> <p>This area was cultivated by old residents before our time - you need to rethink the strategy completely.</p>				
Tim mitchell	I oppose it	<p>This area is well established and is part of wanaka as it is. Removal of the tree with create a new list of issues</p>		Noted enjoyment of existing vegetation cover.	<p>60 year plan will retain amenity throughout.</p> <p>First 10 years of plan amended to soften the extent of removals in the beginning.</p>	Enjoys existing vegetation
Kathleen	I oppose it			Noted opposition to plan.	No amendments proposed.	
Rod Macleod	I support it	<p>The very large conifers have outgrown there usefulness at this location. The plan provides a timeline and species for replanting</p>	<p>The plan does not address the very significant problems associated with boat launching and trailer parking or of demand for general family carparking at Eely Point. Unfortunately the navigation safety bylaw review has reduced the designated areas for family water activities (swimming, Kayaking etc) and these activities spill over into the power boat area. Immediate attention should be given to adequate carparking with an entry and exit driveway built now and retained in the final landscape plans. The families with kayaks or picnic hampers etc will not willingly walk from outside the immediate shoreline and will not heed the fenced off planting areas as these evolve.</p>	<p>Noted support for the plan duration and species.</p> <p>Noted request for attention to be given to boat launching and trailer parking.</p>	<p>Re-planting will occur where existing vegetation is so won't impede existing activities.</p> <p>Boat parking and launching improvements are out of scope of this plan.</p>	Biodiversity

Richard Howarth	I support it	<p>'My support is conditional upon a significant reduction being made to the plan timescale. See further below:</p> <ul style="list-style-type: none">- Aesthetically, the wilding pines covering a significant part of the Eely Point domain are well past their 'use-by' date, and as identified in your succession plan, they contribute to biodiversity loss, soil quality degradation, and the risk of seed spreading. The latter issue is completely counter to the significant efforts currently being made by various bodies around the region to control the ongoing spread of wilding conifers.- From a practical standpoint, they do provide wind shelter across certain areas of the domain which is really the only 'positive' justifying their ongoing presence.- I am in support of the plan to replace the conifers and self-seeded willows & polars etc with the proposed species including natives and selected exotics.- I oppose the timescale for this plan. Sixty years is hugely excessive, and the chance of the succession plan remaining in place and being executed as currently drafted over such an excessive timescale is, frankly, zero to nothing! It also means that very few current Wanaka residents will be around to see the plan completely executed (perhaps my grandchildren and great-grandchildren?!).- Accordingly I strongly urge that the timescale for the plan is completely revisited with a view to completing the conifer/willow/poplar removal and native/exotic replacement over a significantly shorter period which should not exceed 10 years.		<p>Noted support for removal of existing conifers, willows and poplars.</p> <p>Noted opposition to proposed 60 year timeframe plan unlikely to be fulfilled over this time.</p>	<p>Plan provides for assessment periods to allow for more aggressive removal if conditions allow for this. 60 year timeframe is a guide. No amendments made.</p>	<p>Biodiversity Shade and protection</p>
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<p>Florence Micoud</p>	<p>I oppose it</p>	<p>The plan is destructive for the landscape, for the ecosystem services these trees provide, for the community wellbeing and for the planet (carbon impact). It is also costly, in a context of increasing rates and insufficient infrastructures.</p>	<p>Eely Point trees removal plan feedback By Florence Micoud 21 June 2025</p> <p>As you know at the Council, following my multiple submissions, in particular on the Tree Policy 2022-24 (see Appendix 1), I speak for the trees, I speak for nature, I speak for future generations because they can't.</p> <p>I am sorry to read this plan to kill hundreds of healthy beautiful useful sacred beings, trees. I am sorry I couldn't make it to the information meetings but I have sent questions and had little answers (see Appendix 2). I have read the 30 pages document and the story map (not user friendly). Summary of my Feedback Deceivingly called a succession plan, this draft really is a removal plan, many prominent trees being removed from the first year.</p> <p>The plan is destructive for the landscape, for the ecosystem services these trees provide, for the community and for the planet (carbon impact). It is also costly, in a context of increasing rates and insufficient infrastructures.</p> <p>My feedback is to shelve this draft altogether to stop any further expenses in this bad, sad, ideological and unnecessary plan. Instead, I suggest a native forest to be planted without tree destruction 500m north, just after Brebner Bay.</p> <p>Details of my feedback The pages refer to the Eely Point Succession Plan Draft document.</p> <p>Douglas firs, <i>Pseudotsuga menziesii</i>, are mighty giant conifers, living up to 2000 years, naturally occurring in western North America and eastern Asia. They are highly adapted to wind and fire conditions. They can grow up to 100m high and reach 2.5 meters diameter. They offer very high quality wood, leading to its exploitation. Douglas Firs are one of the best carbon absorbers trees. All trees, and especially mature trees, are incredibly resilient, so intelligent we only begin to understand how trees are communicating and surviving in the most difficult places, they deserve reverence and protection.</p> <p>In the exposed Eely Point peninsula, Douglas firs are the right trees at the right place. The trees are young, healthy and do a great job as a windbreak both on the land and on the lake; they provide shelter, shade, beauty and wellbeing. “Invasive Nature”? Page 3 mentions “these trees have become an invasive</p>	<p>Noted opposition to the plan.</p> <p>Noted plan confusion regarding functional life of pine vs douglas fir.</p> <p>Noted opposition to removal of Douglas Fir as they offer amenity values.</p> <p>Noted plan references wilding incorrectly.</p> <p>Noted amenity values of open understorey.</p> <p>Noted comment supporting the existing biodiversity /ecosystem values of existing vegetation.</p> <p>Noted amenity values of shade of existing vegetation.</p> <p>Noted comment regarding soil acidification.</p> <p>Noted fire risk inaccuracy.</p> <p>Noted construction site concern.</p> <p>Noted enjoyment of natives and non-natives.</p> <p>Noted concern with plan being in opposition to Tree Policy.</p> <p>Noted budget concerns.</p>	<p>Plan amended: Douglas Fir and Pine age limit separated.</p> <p>Douglas Fir are a pest species on both ORC and QLDCs list.</p> <p>Plan amended: Removed wilding, referred instead as pest.</p> <p>Plan amended: Clarify mix of planting densities to retain open areas under canopy.</p> <p>Increased biodiversity will lead to increased ecological outcomes in comparison to the status quo at Eely Point now.</p> <p>Plan will retain beach front trees for shade.</p> <p>Conifer needles are highly acidic.</p> <p>Plan amended: Whilst the needles and dead wood is the fire risk not the bark, Fire Risk is not the driver of delivering this plan. Fire Risk removed from plan.</p> <p>Plan amended: 60 year plan ensures not construction site or clear felling. Amended to soften removals in first 10 years.</p> <p>Plan amended: 50:50 replanting.</p> <p>Plan amended: Section referencing tree policy alignment. At least 2:1 replacement will be achieved. Plans in accordance with Tree policy.</p> <p>Plan only progresses if budget is available.</p>	<p>Enjoys existing vegetation/Amenity Shade and protection Funding constraints Ecosystem services of existing vegetation</p>
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			<p>and dominating feature over time” without any substantiation.</p> <p>There is no evidence that the seeds of these trees are actually growing somewhere unwanted. In fact, the cones and kindling are quite systematically collected by locals and their children to start their fire for the winter, contributing to community resilience.</p> <p>Can proof of invasion be shown in the Wānaka area please? (Which is very different from McKenzie country).</p> <p>Trees are not invasive. Trees grow. Trees in forests maintain their own forest sustainably and collaboratively. It is not an invasion. Seeing a forest as invasive is a fear of nature. It is a popular perception but it leads to unethical removal of important living beings.</p> <p>The invoked “invasive feature” of the Eely point trees is a FALSE ideology and needs to be removed from the report.</p> <p>Age of the trees</p> <p>Page 3, the draft evokes the “advancing age” of douglas firs without any substantiation.</p> <p>On the QLDC Facebook page, a community member, Ian Thomas Gazzard, mentions that the trees were planted by Mr. H Kidson, a retired rector of Otago Boys High School to provide a shelter belt to his home on Kidson Lane. This doesn’t give an exact planting date for the douglas firs but OBHS being founded in 1863, the trees are no more than 150 years old. It is important to know that conifers live a VERY long time. Douglas firs easily reach the age of 500 years and some specimens in the world are 2000 years old.</p> <p>These trees are therefore not in an “advancing age”, they are no more than 25 years old in human age.</p> <p>The second main reason invoked for removing the trees, “advancing age”, is therefore FALSE and needs to be removed from the report.</p> <p>Ecological impact of the tree</p> <p>The paragraph on page 3 depicts trees as bad for nature...</p> <p>Conifers do limit understory growth which is perfect in Eely Point reserve where people and children play (Scouts, Mt Aspiring College Houses, Disc-golf circuit, young children bike area...). This characteristic of the douglas firs is perfectly appropriate for the recreational area. Walking on the soft conifers needles mattress under a beautiful canopy provides a forest experience, excellent for wellbeing and tourism, close to the town centre. This Douglas firs forest is an asset, not a threat.</p> <p>Have the Mount Aspiring College students been consulted? That is very important as two Houses (Barker and another) meet there regularly for their activities.</p>			
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			<p>Have the scouts been consulted? Kids are the future of our town. For their whole life, will they witness the Eely point reserve being destroyed for “succession”? Their advice is essential for this plan.</p> <p>“Biodiversity loss” compared to what? There is certainly more biodiversity in Eely Point reserve than on lawns or in a pasture. The underlying assumption is to compare the existing with a native forest in full growth. It is unrealistic. Even native forests in DOC protected land are often sadly devoid of birds. There are birds in Eely Point Reserve and ferns, thyme and other plants. The report does not include any biodiversity inventory. In order to refer to biodiversity loss, such an inventory is necessary.</p> <p>“Blocks sunlight”, YES they do and are greatly appreciated for that, keeping kids and beach users' skins protected from the harsh rays of the sun; keeping the heat out of the parked cars. On the Sunsmart website, the NZ Cancer Society clearly identifies shade as a prevention for cancer. The Eely Point Douglas firs have reached a nearly 100% shade structure, a rare occurrence in Wanaka and should therefore be treasured.</p> <p>“Soil Acidification” is not substantiated. Lawns are also acidic. Schist, underlying the soil in most places in the Wanaka area, is also acidic. Establishment of other plants, should this be wished for, can be implemented by enriching the soil around the planted tree. It is done all the time, everywhere.</p> <p>Fire risk False! Conifer bark is particularly resistant to fire. The bark of mature trees reaches 25 cm thickness which protects the tree from burning. Besides, cutting trees for the pretext of risk of fire is like killing someone because they are going to die. It is absurd. Remove that point from the report.</p> <p>All these points show that the assumptions on which the need to remove the Douglas firs are false and unsubstantiated. There is no need to remove these trees. Management - “succession” It is very easy to manage fallen branches. This understory is easy to maintain, therefore cheap too. There is no need for succession as those trees will live healthily for another 400 years minimum.</p> <p>What is proposed is barbaric: killing trees, living beings, with noisy machines in 10minutes, leaving massive scars and a “construction site” look for the rest of my life and that of many people, as it takes 60 to 70 years for a tree to grow to maturity.</p>			
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The visual map on the Story Map shows that many trees will be removed in the first 10 years, meaning the place will be bare for years to come. Phase One involves removing all the “individual trees” an the periphery, all the most important trees at the end of the peninsula and all the trees on the flat at the entrance of the reserve. Very visible, very ugly for years to come. The plan is called a succession plan but it is a clearfelling followed by decades of bare land with baby ferns growing with a few seedlings in tree guards. Honestly, I am sorry that some people really think it is the best for us all; I think it is a very damaging and disturbing idea.

It is therefore inhumane too, hugely detrimental to my wellbeing and that of many locals and tourists too. Not to reiterate the skin cancer risk for many people. I talked about the plan to many people. ALL of them were appalled. This plan is an environmental, ethical and community disaster and should be flagged.

Natives and non-natives

These Douglas firs have been planted by someone educated who planned ahead. At the time, natives were not in fashion; probably unavailable in nurseries; perhaps there were lots of native forest remnants in the gullies around. A fast growing, sturdy, wind-resistant conifer was a great choice, thank you Mr Kidson. We now have a large group of mighty, much loved and enjoyed living beings. Conifers are so intelligent in fact, they have survived when the dinosaurs didn't (note 1). Their capacity to withstand harsh climate and climate changes is an invaluable asset that we should not relinquish nowadays.

The “functional benefits” of this forest cannot be underestimated, the windbreak is apparent (ripples on the lake) from the Eely Point to the marina and all the way to the Dinosaur park; Inside the streets, the microclimate is obvious for walkers and gardeners who can plant species otherwise difficult to grow (ex. yuccas, lemons...).

I understand the need to plant more native and recreate native forests nowadays. I have volunteered planting natives with Te Kakano from the start ; we plant lots of natives on the land we are gratefully guardians of. There are very few places with mature trees in Wanaka, and many many bare places which would welcome a native forest plantation. I love natives and it is sad that ancient forests were systematically destroyed for centuries but I don't believe it can be reversed by cutting more trees.

Native forests are great in Conservation land, on riverbanks and lakesides, but they don't have to be everywhere. Forest is the important concept for people and the planet, not only native forest.

			<p>I am concerned that this report demonstrates another example of fashion for all-natives. This anti-wilding fashion aims at killing everything that grows freely and usefully because that's what nature does, thank you nature. Control of nature is common yet not necessarily a good thing.</p> <p>Now fashion is not at the same timescale as trees. It is essential to become aware of a potential bias before the damage is done. I believe this report is biased in this "all-native" "anti-non-native" fashion. Then the fashion will pass, the mature trees gone, the new trees still babies, a loss for all in our lifetimes.</p> <p>I believe the fashion for native is widespread in the QLDC, with anti wilding groups thriving and the Council actively submitting plans to cut all non-native in Queenstown gardens, and Kelvin Heights already. It's none of my business to send feedback about areas I don't live in. But I live in Wanaka and often go for romantic walks in Eely Point forest and I am most affected by what is planned here. Gutted in fact, I couldn't sleep for several nights, grieving in advance for the trees. This is how it affects me and it needs to be heard.</p> <p>Furthermore, does this mean other non-natives planted areas will come under "succession plans" next? "In addition to Conifers, species such as Willow and Poplar" are a problem too! The whole of the lakefront, making Wanaka iconic much admired landscape; Lismore Park, Rippon hill, Cardrona road, what's next?</p> <p>I hear "they are just douglas firs, or just willows, or just pinus radiata...", and they are removed like on the road to Albert Town.</p> <p>According to this all-native fashion, pastures, lawns, cows, sheep, flowers, fruit, food, and most of us people should be culled! Is this what the Council wants? I believe we can live in harmony, without drastic replacement eugenic plans.</p> <p>The fashion for native is unethical and irrelevant in a world that needs mature trees so much.</p> <p>About carbon</p> <p>I would hope the Council staff and elected members would have heard about the importance of trees to combat climate change and its impacts. Trees are columns of carbon and water. Mature trees should be protected and treasured at all cost, whatever their species.</p> <p>Trees absorb a lot of carbon when they are mature; Baby trees don't absorb anywhere near as much as established trees. In the climate emergency the Council has declared, we need trees to absorb as much as possible now as we</p>			
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are working towards reducing our emissions, all absorption counts. No mature trees should be cut whatsoever. In this draft plan, the carbon calculation is very diminutive (40kg per year). I found several sources online stating that Douglas fir absorb between 48 and 55 kg per year, which is very high among trees. A detailed carbon report must be made for the plan.

Besides, the report mentions no evaluation of the amount of carbon currently held in those trees. The plan doesn't consider offsetting these enormous amounts when the carbon is released as the trees are cut. This is a severe lack and the plan should not progress until this is done.

In the climate emergency, it is not wise to cut existing healthy long lived trees to plant something else. The QLDC Climate Reference Group commentary must be included in the plan.

We can't tell other people, in Brazil or Indonesia, to protect their forests for the health of the planet; But we can protect the forests that we do have. Especially when it is possible to interplant or plant native forest somewhere bare -which is widely done by Te Kakano. This plan is an irresponsible move for the climate and I ask that the plan to cut trees be stopped.

Incompatibility with QLDC Tree Policy
This plan to cull large amounts of trees is not compatible with the tree policy supposed to protect trees on public land. The policy and the draft plan states the importance of trees. The recent QLDC Tree Policy is here.
The Tree Policy states that "Trees are a vital part of our district's sustainable health and wellbeing. They provide wildlife habitat, carbon sequestration, shade, and are part of our identity as an active outdoor adventure district with outstanding natural landscape values. Trees can be significant landmarks..." and "The greatest benefits are derived from mature trees". Why then turning around and proposing to cut hundreds of mature trees, even in a diluted way over the years?

Cutting these mature landmark healthy useful trees is incompatible with the very principles declared by the council.
In particular, the canopy rule is not respected within this plan. A 100% canopy cover of douglas firs cannot be replaced in 20 years by ferns and kowhais.
The plan to replace these Eely Point trees is illegal in the Council's own rules.

It is contrary to the QLDC tree policy principles to cut trees to accommodate new roads, or to cut them "because" they are rotting but it is seen as necessary. In the case of Eely Point trees, there is no necessity whatsoever.

			<p>Budget The plan omits the budget. How much does it cost? How are we sure we will have the money to replant after we have used it to cut all the trees? We already have the situation in town where the Douglas firs at the corner of Cardrona Road on Pembroke Park have been felled and not replaced one year later. In fact, affordability is a big issue in our community when the rates skyrocket and basic needs (eg. water infrastructures) are not met. How much was already spent on this report and plan and who has agreed to it? I am opposed to the draft plan to be updated as it costs me as ratepayer. I ask that the plan is cancelled now.</p> <p>Conclusion I think this plan is based on ideological preconceptions designed to prove the need to cull a major asset of Wanaka. Most public comments on Facebook posts about the plan are opposed and showing sadness. But elected members are defending the draft plan fiercely.</p> <p>Please find my feedback on the tree policy in Appendix 1 and my questions to the QLDC about the Eely Point trees removal -mostly unanswered- in Appendix 2.</p> <p>Our area and our climate is desperately in need of trees; the nearest big forest is 60km away; and we have these big beautiful useful beloved trees right here in town. Let's keep them as they are, with a little maintenance as already done. Let's keep the microclimate, other services and beauty that the Eely Point trees supply. "It ain't broke, don't fix it".</p> <p>There is plenty of bare public land further along the lake to establish a native forest as wished for, without killing trees and jeopardising the microclimate and wellbeing they provide. This so-called succession plan is an aggression on nature and community wellbeing and I am completely opposed to cutting any tree in the Eely Point reserve, as well as anywhere in the district.</p> <p>Florence Micoud 21 June 2025</p>			
Patrick Maslen	I oppose it	I don't think we should cut the pine trees down, they provide an amazing wind break and anything else planted would take years to grow.		<p>Noted opposition to plan.</p> <p>Noted enjoyment of existing vegetation (shade / protection).</p>	Long term plan will retain existing amenity of shade and protection (60 years).	Shade and protection. Enjoys existing vegetation.

Te Kakano Aotearoa Trust	I support it	<p>Re: feedback to Eely Point Tree Succession Plan</p> <p>Thank you for the opportunity to provide feedback to the Eely Point Tree Succession Plan (tree succession plan). Te Kākano Aotearoa Trust (Te Kākano) values its strong relationship with Queenstown Lakes District Council (QLDC) and looks forward to continuing to work with QLDC on Council reserve land.</p> <p>Te Kākano initiated a native planting site in 2020 at Eely Point. The eco-sourced native plants came from Te Kākano’s community nursery and were planted by volunteers as part of the Matariki Tu Rākau project. The plants are growing well with some of them reaching over 3m. Te Kākano has also planted with the community along the lake side of Bremner Bay.</p> <p>Te Kākano is supportive of the tree succession plan which offers an opportunity to improve the biodiversity at Eely Point and enhance its value as a natural and recreational asset for Wānaka. With our extensive experience in native habitat restoration in the Upper Clutha, this submission outlines specific recommendations in relation to the tree succession plan and how QLDC and Te Kākano can partner for success for the implementation of this plan at this important and special location.</p> <p>Te Kākano context:</p> <ul style="list-style-type: none"> · We inspire community native habitat planting through propagation, education and hands-on participation. · Since 2010, we have planted more than 58,000 native plants in the Upper Clutha basin, most of which are on QLDC reserves. · Each year, our volunteers donate over 3,500 hours of their time to grow and plant native plants. This is the equivalent of a \$82,250 in kind donation to the community, per year. · Our experienced educators engage with young people from local early childhood centres and schools, including visits to the nursery, planting sessions and collaborative teacher workshops with other environmental educators. · Alongside the environmental benefits of these activities, the contribution to the wellbeing of people that literally dig in and get their hands dirty cannot be underestimated. · We are proud of our ongoing partnership with QLDC, our strong governance, reputation in the community, our plant and planting expertise, and strong relationships with like-minded organisations in the Upper Clutha. · Te Kākano view that increasing native biodiversity at Eely Point goes hand in hand with other activities in the reserve. Enhancing the natural environment, increasing the bird chorus, creating habitats for lizards and protecting 	<p>Noted support for the plan.</p> <p>1. Noted concern regarding pest management (rabbits).</p> <p>2. Noted tree species recommendations.</p> <p>3. Noted request to work with community groups.</p>	<p>1. Out of scope. This will come as part of the operational side of planting and be managed on an ongoing basis by Councils biodiversity officer.</p> <p>2. Te Kākano provided a species list for the Upper Clutha. This has been incorporated into the species list for appropriate species for the Upper Clutha.</p> <p>3. QLDC will work with community groups throughout implementation for best species selection and planting.</p>	<p>Biodiversity.</p> <p>Tree species (natives)</p> <p>Community partnership.</p>
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		<p>rare and endangered native species can all be done in a way that aligns with other recreational users.</p> <p>Key submission points in relation to the Eely Point Tree Succession Plan:</p> <ol style="list-style-type: none"> 1. The development plan is silent on how rabbits will be managed. The site doesn't have a lot of rabbits, but plants will need protection for the first few years after planting to ensure their survival. Te Kākano strongly recommends that pest management, specifically rabbits, is provided for in the plan. 2. It is recommended that QLDC use native plant species that are local to the Upper Clutha rather than the Whakatipu. This is due to the difference in climate between the two areas, especially the amount of rainfall (which is a lot lower in the Upper Clutha than in the Whakatipu basin). We also support the use of eco-sourced native plants as much as possible. 3. Te Kākano suggests working alongside QLDC to agree on the best species for this special area. Examples in the plan where changes could be made to better ensure survival and success include: <ol style="list-style-type: none"> (a) Some of the pioneer species listed in the plan are not well suited to the local climate. For example, ferns—except for bracken—generally struggle in this environment. Similarly, while mānuka can act as a pioneer species near lake edges, it is not well adapted to drier inland conditions; kānuka is the more appropriate pioneer species for the Upper Clutha region. (b) Regarding secondary planting, Southern rātā grows very slowly in the Upper Clutha and is not recommended. Other species such as Plagianthus regius, Pittosporum tenuifolium, and Olearia lineata establish more quickly and are better suited for the early stages of revegetation. These species not only grow well in local conditions—demonstrated at the Living Memorial planting site established in 2020—but also provide valuable food sources for native moths and other invertebrates. (c) Additionally, silver beech is uncommon in the Upper Clutha. Mountain beech is better adapted to the area's climate. <p>Appendix 3 of the tree succession plan includes several native plant species that do not naturally grow in the Upper Clutha region, such as Coprosma robusta (Karamu), Pittosporum eugenoides (Tarata/Lemonwood), and Elaeocarpus hookerianus (Pōkākā). As mentioned above, the Whakatipu basin receives significantly more annual rainfall than the Upper Clutha, which results in a slightly different range of native flora.</p> <p>What Te Kākano can offer for the Eely Point tree succession plan:</p> <ul style="list-style-type: none"> · Te Kākano has multiple areas of expertise and resources with respect to native planting and community 			
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		<p>engagement to assist with the implementation of the tree succession plan. This includes:</p> <ul style="list-style-type: none">· expertise - our volunteers and contractors have a wealth of knowledge on what to plant, as well as how to prepare land, plant and maintain plantings in the Upper Clutha· plants - we grow eco sourced plants from the Upper Clutha at our community based nursery, suitable for our growing conditions· plantings - we have been successfully coordinating volunteer plantings that foster our community's sense of connection with the land since 2008. We would very much like to be involved in community planting and caring for the environmental value of the reserve· watering - we coordinate volunteer watering rosters for plantings on QLDC land, which is essential to plant survival in the harsh Upper Clutha climate· education - we employ experienced educators who can work with all ages to design learning spaces and facilitate experiences. <p>Te Kākano welcomes the opportunity to discuss the future of Eely Point further with QLDC and look forward to continuing to work together to inspire and achieve native habitat restoration in our special part of the motu.</p> <p>This feedback has been approved by the Te Kākano board of trustees.</p>			
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Eely Point Recreation Reserve Tree Succession Plan

Date: 4th August 2025

Prepared by: Lee Rowley
lee.rowley@tendtrees.co.nz
Senior Consultant Arborist
021638976

Reviewed by: David Spencer
david.spencer@tendtrees.co.nz
Principal Consultant
0273223833

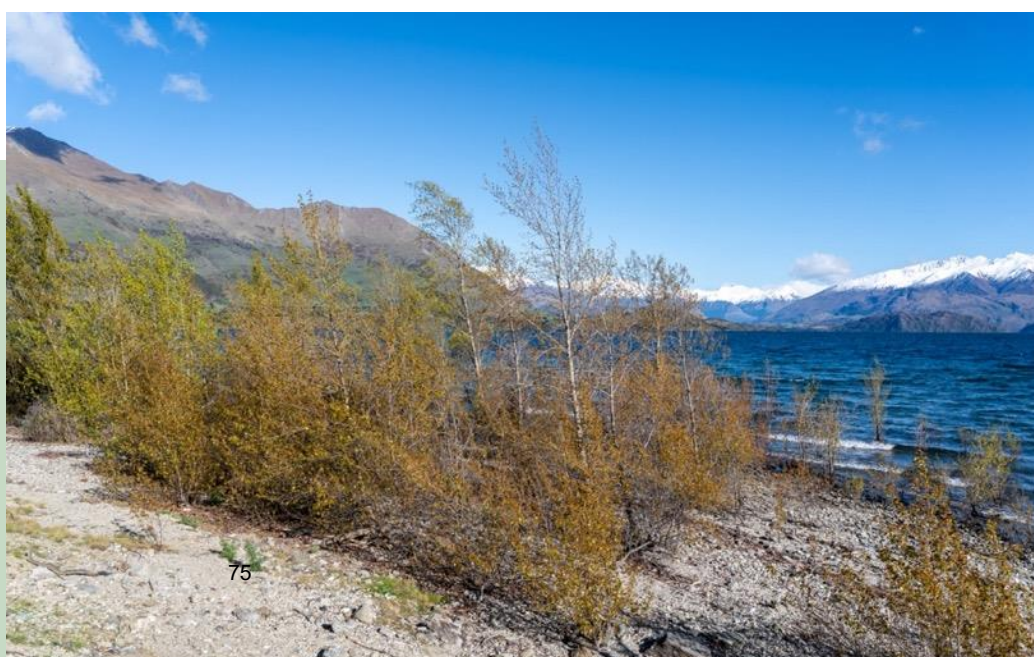
Client Contact: Dominic Harrison
dom.harrison@qldc.govt.nz
Parks and Reserves Planner, Community Services

Brief: This succession plan outlines a strategic approach for the systematic removal and replacement of conifers within Eely Point Recreation Reserve with native and suitable exotic species. By enhancing biodiversity, improving soil health, and engaging the community, this plan aims to transform the shelter while retaining the reserve as a resilient and vibrant public space that reflects both ecological and cultural values.



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1. Introduction

The conifer plantation at Eely Point Recreation Reserve forms an iconic backdrop to Wanaka and supports the reserve's functionality. However, as these trees age and their ecological impacts become more pronounced, there is a growing need to transition toward a more sustainable and diverse landscape that aligns with the district's long-term ecological objectives.

Current Role of the Conifer Plantation

Covering approximately 3 hectares, or 24% of the reserve, the conifer plantation plays a critical role in providing wind protection, creating shelter for recreational activities, improving the reserve's usability, safeguarding existing vegetation and wildlife, and offering essential shade in summer.

However, these conifer species contribute to ecological harm, including diminished biodiversity, soil degradation, and challenges to long-term sustainability. Notably, the Radiata pines are nearing the end of their Safe Useful Life Expectancy (SULE²), heightening the risk of tree failures within the reserve.

Ecological Impact of Wilding Conifers

The spread of pest species, such as wilding conifer within the Queenstown Lakes District, has led to significant ecological imbalances through biodiversity loss. The dense canopy of these trees blocks sunlight, suppresses understory growth and disrupts natural regeneration processes, significantly reducing native flora and fauna.

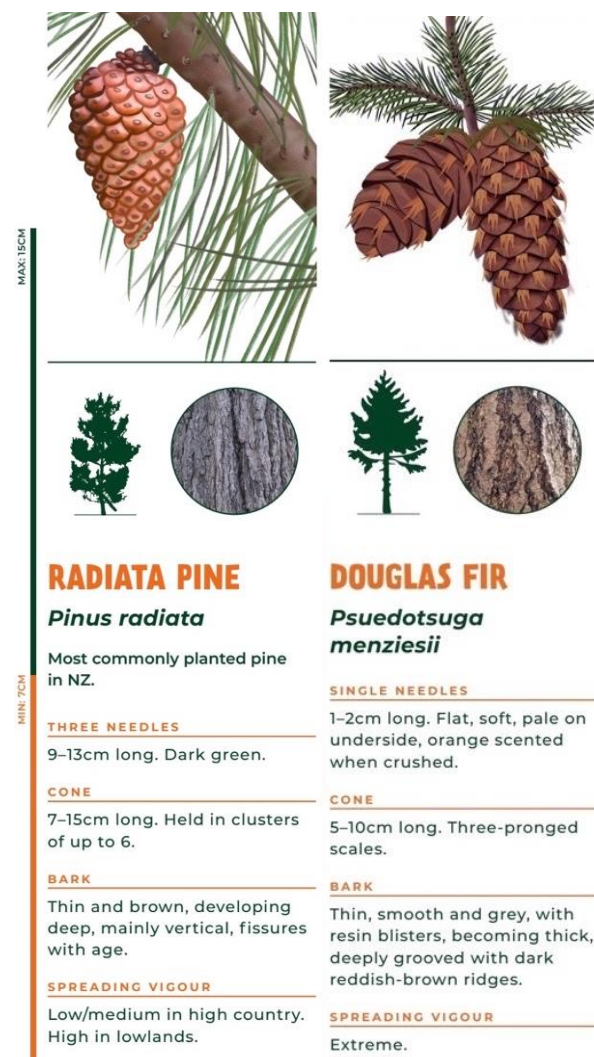
Douglas fir (*Pseudotsuga menziesii*), a longer-lived evergreen, and Radiata Pine (*Pinus radiata*), a fast-growing species with a lifespan of less than 100 years, are often categorised as pest species by regulatory authorities due to their potential to spread invasively and establish as wilding trees.

Managing potential seed sources across the district will help prevent the spread of wilding pest species into nearby natural areas. Conifer control measures within Eely Point lack a comprehensive strategy to systematically manage these species over time.

Management of Willow and Poplar Regrowth

In addition to conifers, regrowth from Willow and Poplar is prevalent within the reserve, particularly along the northern lakeshore. While mature, established trees of these species are valued, their unmanaged spread requires attention.

Controlling this spread involves removing small self-seeded saplings to prevent further spread and dominance, whilst leaving fully mature and established trees.



² refers to the estimated period a tree can be safely and beneficially retained in its environment, considering factors like health, structural stability, and site conditions.

Purpose of the Tree Succession Plan

The primary aim of this tree succession plan is to provide a clear, actionable framework for the systematic removal of conifers and other spreading plant species from Eely Point and their replacement with more suitable species. The plan outlines specific actions, timelines, responsibilities, and resources required to achieve project goals over the coming decades.

A strategic approach involving Zones, Stages, and Phases has been developed to gradually remove and reintroduce a diverse range of plant species to enhance the reserve's ecological resilience. By replanting with a mix of native and suitable exotic species, the plan aims to restore ecological balance, improve soil health, and create a sustainable landscape that offers aesthetic, recreational, and cultural benefits.

This succession plan aligns with regional and national strategies, such as the New Zealand Wilding Conifer Management Strategy, Otago Pest Management Plan 2019-2029 and the Eely Point Development Plan, which advocates for removing pest species to protect ecosystems. Additionally, the plan supports the broader environmental goals of Queenstown Lakes District Council (QLDC), including enhancing public spaces and ensuring the sustainable management of natural resources for future generations.

Importantly, the plan recognises the need for a gradual, carefully managed removal process to mitigate the risks associated with tree removals, such as wind load changes, ensuring that the overall landscape and framework of trees within the reserve remain stable throughout the transition.

Immediate Need for Action

Immediate action is required to prevent further ecological degradation and restore Eely Point to a more natural and resilient state. Conifer species are damaging the reserve's current landscape and threatening the broader ecological integrity of the region. Ageing tree populations also require proactive and ongoing management.

The phased approach outlined in this succession plan spans several decades, making timely action essential. Delaying the start will exacerbate existing issues and increase risks to visitors as the maturing conifers, especially the Radiata Pine, near the end of their safe useful life.



2. Key Challenges

Gradual vs. Large-Scale Removal Approaches

One of the primary challenges facing the succession plan is balancing the need for conifer removal with the potential impacts on the reserve's existing trees and public safety. Large-scale removal poses risks, such as sudden changes in wind dynamics, which can destabilise remaining trees and expose them to damage. While trees naturally adapt their structure to withstand wind over time, through a process called thigmomorphogenesis³, sudden exposure to increased wind can result in branch or complete tree failure. A gradual, staged approach mitigates these risks by allowing trees and landscapes to adapt over time while transitioning to a more diverse canopy.

The staged removal approach also helps manage water retention, as trees play a crucial role in intercepting rainfall through their canopies. This slows down the rate of rainfall, allowing water to gradually infiltrate the soil and reduce the risk of soil erosion and surface flooding. When large numbers of trees are removed all at once, this natural water interception is lost, leading to increased surface runoff, potentially overwhelming stormwater systems. Furthermore, removing many trees, particularly those providing wind protection, may temporarily affect the reserve's usability and amenity provided by the existing vegetation.

Planting Conditions and Soil Challenge

Monoculture established by conifers can significantly impact biodiversity. The dense canopy restricts understory growth, reducing light availability and moisture. These factors can present challenges for the establishment of new trees and the reintroduction of diverse plant species.

While conifer soils can support the re-establishment of many plant species, having a pH range similar to that of native beech forests, some areas can exhibit compacted or nutrient-limited conditions due to long-term monoculture. Compacted, nutrient-poor soils need enhancement through the application of organic amendments, such as compost, mulch or biochar, to improve soil quality. These interventions will help improve soil structure, encourage microbial activity and increase nutrient availability.

Reinvasion Risks

Eely Points exposed location on the peninsula increases the risk of reinvasion from wilding species, as well as a potential seed source for surrounding natural areas. Conifer, Willow and Poplar seeds can travel significant distances, spreading rapidly and undermining control efforts. Continuous reserve monitoring will be essential to quickly identify new seedling growth.

Public Perception

Managing public perception of the succession plan is essential, particularly when visible changes, such as extensive tree removals, are underway. The public may have emotional or cultural connections to the existing landscape, so communicating the project's long-term benefits is important.

Funding and Resource Limitations

Securing sustainable funding is essential for the ongoing implementation of the succession plan. The project's long-term scope, involving removal and replanting over several decades, necessitates consistent financial support.

³ the response of plant cells to mechanical stimulation. For example, the thigmomorphogenetic response of trees in windy environments is to grow shorter, with thicker trunks and stronger roots.

3. Succession Plan Outline

The succession plan (*Appendix 1 - Succession Plan Maintenance Schedule*) outlines the systematic removal and thinning of conifers along with Willow and Poplar regrowth from Eely Point through a structured approach involving distinct **Zones**, **Stages**, and **Phases**. This gradual approach ensures that wind protection for remaining trees and public safety is carefully managed, reducing the risks associated with increased wind exposure.

A key focus of the plan is to reintroduce a diverse mix of native and exotic species to enhance biodiversity and create a more resilient, ecologically balanced landscape. Tall-growing, desirable conifers will be strategically planted to preserve the crucial windbreak function currently provided by the existing conifers, using their shelter to protect and support the successful establishment of new plantings.

Continuous monitoring of wind impacts, tree health, stability, and the establishment of new plantings will guide adaptive management decisions. Ongoing assessments will inform necessary adjustments to both removal and planting strategies as needed, ensuring the plan remains flexible and responsive to changing conditions.

Zoning, Stages and Phases

Using LiDAR mapping and site assessments, the conifer removal strategy has been divided into ten distinct **Zones** based on existing canopy gaps, groupings and their role in providing wind protection. Each Zone is then assigned **Stages** and **Phases** to determine the sequence of removal and replanting efforts.

Each Stage represents a ten-year cycle, while each Phase corresponds to one year. This structured approach allows for gradual, manageable progress, as well as monitoring and reassessment. The table below shows the structure of the **Zone**, **Stage** and **Phasing** used to form the Maintenance Schedule. The overlay map, *Figure 1*, shows the ten Zoning areas:

Table 1: Succession Plan Maintenance Schedule

	Stage 1 (Years 1-10)										Stage 2 (Years 11-20) etc...									
	Phases (years)										Phases (years) etc...									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
ZONE 1																				
ZONE 2																				
ZONE 3 etc..																				



Figure 1: Zoning Overview

Zoning, Stages and Phases (cont.)

The detailed Maintenance Schedule (*Appendix 1 - Succession Plan Maintenance Schedule*) outlines key milestones and timeframes, covering a 60-year period.

While the proposed timeline is flexible and can be adjusted to accommodate budgetary constraints or other considerations, the overall structure of the schedule should be adhered to. This phased approach allows sufficient time for newly planted shelter species to establish and mature, ensuring that replacement trees provide adequate cover before subsequent removals.

The reserve will maintain a continuous flow of operations by staggering maintenance activities across multiple zones. This approach ensures that trees in one Zone adapt to increased wind exposure while work progresses in other areas, balancing the landscape's transition.

The 60-year timeframe is regarded as the minimum duration needed to balance the removal of conifers and the establishment of a diverse, multi-species shelter. Accelerating this process risks undermining the reserve's windbreak functions, damaging the structural integrity of remaining trees, and impacting the overall usability and amenity values of the reserve.

Activity by Zone

Each Zone will undergo a structured sequence of activities designed to manage removal, replanting and long-term management. Descriptions of activities are identified in the following table:

Table 2: Maintenance Schedule Activities

Activity	Description	Timeline	Key Activities	Monitoring & Evaluation
Removal Period	Systematically thin out conifers in phases to reduce wind load gradually.	Est. 60 years from starting year	Select trees for thinning; Leave trees to acclimate to new wind exposure. Ensure safe public access during operations	Inspect trees for wind damage; Adjust removal strategy if needed. Monitor soil erosion; Reevaluate shelter effectiveness
Rest Period	Pause operations to allow remaining trees to adapt to new conditions.	Allow three years rest minimum between removal phases.	Minimal intervention; Inspect trees regularly.	Record tree health; Plan for next removal phase.
Planting	Introduce native and exotic species in cleared areas, ensuring they are suited to local conditions.	During rest periods.	Prepare soil; Plant tree species; Install protective measures for young plants.	Monitor plant growth; Replace failed plants.
Weed Control	Regularly remove new wilding seedlings and maintain new planting areas.	During rest periods.	Identify and remove new wilding seedlings; Inspect new planting health.	Track seedling recurrence; Evaluate success of new tree plantings
Assessment/Monitoring	Assess overall success and plan the next removal period. Review planting progress and long-term maintenance requirements	Prior to each removal period. During & after planting seasons	Conduct a comprehensive review; Plan for ongoing maintenance. Involve key stakeholders	Document long-term outcomes; Adjust management strategies if needed.

Initial Focus and Early Stages

The first stage (Stage 1: Years 1–10) of the succession plan will prioritise key goals, including sapling control on the Lakeshore Peninsula and addressing focal areas identified in the Eely Point Development Plan, such as Zone 5. Initial efforts will also focus on removing individual conifers. These early focus areas are highlighted on the map below.

Individual conifers scattered throughout the reserve can be removed at any point during the process, as they do not significantly impact wind dynamics. However, certain trees, such as the Ponderosa Pines near the BBQ areas of Zone 7 and Zone 2, hold notable amenity value due to their contribution to the landscape and shade provision. These trees will remain until they reach the end of their Safe Useful Life Expectancy (SULE), despite their potential as wilding seed sources.

The individual conifers identified on the map below, primarily Douglas Fir, are considered low-value and suitable for early removal.

For Willow and Poplar trees, removal efforts will only target saplings and self-seeded vegetation. Mature and established species will be retained for their visual appeal and functional benefits.



Figure 2: Initial Focus Areas

4. Removal and Control Strategy

Methods of Tree Removal

Removing Conifers and other dominant spreading plants will employ mechanical felling, arboricultural dismantling and ground control methods. This approach ensures safe and efficient removal while minimising environmental impacts and maintaining public safety.

5.1.1 Mechanical Felling

Conifers will be felled using mechanised equipment in low public use zones where access allows, and large quantities of trees can be removed quickly. Felling will be staged carefully to avoid damaging nearby trees and vegetation.

5.1.2 Arboricultural Dismantling

Arboricultural dismantling will be employed in sensitive zones near valued trees, newly planted trees, public areas or structures. This method involves manually sectioning trees in a controlled manner, reducing the risk of collateral damage and ensuring precision in constrained spaces.

5.1.3 Ground Control

Operational teams will carry out manual ground control, such as removing saplings with loppers, hand saws, and small mechanical tools, as well as applying herbicide where applicable.

5.1.4 Materials and Debris

Timber will be removed from the site. Branches will be processed into wood mulch of appropriate grade to assist with replanting efforts. The mulch will either be spread directly around planting areas to enhance soil moisture retention and suppress weeds or left in piles to age before further use. Any excess mulch that exceeds on-site requirements will be transported off-site.

5.1.5 Tree Stumps

In high-visibility or heavily frequented public areas, tree stumps will be either ground down or mechanically removed to improve aesthetics and ensure safe access for both users and equipment. In lower-priority zones, stumps will be cut low to the ground, and planting will be established around them, allowing for natural decomposition over time.



Ground Control

Ongoing efforts after the initial removal will focus on managing regrowth and preventing conifers, Willow and Poplar reinvasion. Ground crews will conduct regular inspections of replanting zones to identify and promptly remove new unwanted regrowth.

Targeted herbicide treatments or manual control methods will be employed to prevent re-establishment. Herbicide applications will be carefully managed to minimise environmental impacts, with applications timed for optimal weather conditions. Regular follow-up treatments will address any regrowth, with the frequency of treatment adjusted based on monitoring results. The goal is to reduce herbicide use over time while maintaining effective control.

Control measures and strategies will be adjusted as needed to ensure the long-term success of restoration efforts. Engaging the community and working groups in wilding removal days will provide additional support and increase awareness of the importance of ongoing control of self-seeded vegetation.

Timing and Safety Considerations

The timing of removals will be critical to minimise disruption and ensure public safety. Operations will be scheduled during off-peak times, such as early mornings, weekdays or low-tourism seasons, to reduce impacts on recreational users.

Safety protocols will include path closures, signage and barriers to keep the public away from active work areas. Protective barriers will safeguard sensitive vegetation and waterways. Low-impact machinery will be used where possible, and pre-removal assessments will help identify and mitigate potential risks or issues. Regular communication will inform reserve visitors about the schedule and purpose of removal operations.



5. Replanting Strategy

Following removals, site preparation and replanting will align with optimal seasonal conditions, focusing on Autumn and Spring when the climate is most conducive to successful establishment. Tree planting will remain consistent throughout the duration of the project, with a primary focus on introducing new plants and organic matter to enhance soil conditions, create shelter, and establish microenvironments that support further ecological restoration.

Objectives and Approach

The replanting strategy focuses on:

- Rapid introduction of pioneer and secondary species to create shelter, improve soil conditions, and establish microenvironments.
- A 50% native and 50% exotic species mix to balance ecological restoration with functional shelter.
- A multi-layered canopy structure combining closed-canopy forest, open woodland, and clearings to enhance ecological diversity, visual appeal, recreation and movement through the reserve.
- Strategic retention of existing conifer groups to provide temporary shelter until new plantings are established.

Several zones suitable for early planting have already been identified in *Appendix 1 - Succession Plan Maintenance Schedule*, and planting in these areas should commence as soon as possible, building on progress achieved through community and council planting programmes.

Planting Phases

Replanting is divided into two phases to ensure progressive restoration and adaptability.

5.1.1 Initial and Secondary Planting (Early to Mid-Stages)

Planting will commence immediately after conifer removal in designated zones. Pioneer species, such as Kānuka, will stabilise soil, improve nutrient cycling, and create microenvironments to support restoration efforts. Concurrently, and inspired by successes in the reserve already, secondary planting will introduce taller native trees, including Kōwhai, Beech, along with carefully selected exotic species. These secondary trees will contribute vertical structure, accelerate canopy development, and establish shelter to replace the existing conifer plantation.

5.1.2 Final Planting (Later Stages)

The final phase will prioritise filling gaps, introducing additional species to boost habitat value, and replacing any failed plantings. This stage ensures that restored zones become ecologically diverse and provide essential shelter. Retained conifer groups will be removed as the new plantings develop sufficient shelter, in alignment with the succession plan's long-term goals.

Appendix 2 - Species Selection Guide outlines potential species, ranging from tall, fast-growing trees that can replace existing shelter and preserve the current character of the reserves, to native species that will boost biodiversity and cultural value of the site.

The map below illustrates the strategic placement of planting styles and preservation of valued trees.



Species Selection and Planting Design

Where possible, native plantings should utilise species naturally found in the Upper Clutha region that have local provenance and are eco-sourced.

Recommended spacing ensures optimal growth:

- Large trees (e.g., Native Beech): 2–3 meters apart to allow dominance.
- Shrubs and smaller trees (e.g., Kānuka): 1 meter apart for effective establishment.
- Grasses and ground covers: 500–800 mm apart for quick coverage.

Planting locations will accommodate existing infrastructure and the usability of the reserve, ensuring new plantings do not obstruct access or hinder recreational activities.

It is essential to recognise that the primary role of early planting is to improve soil conditions and support long-term restoration. Even if trees are damaged or lost during later removal periods, the soil and ecological benefits from the initial plantings remain intact, ensuring continued progress. Where damage is anticipated and unavoidable, lower-value pioneer species should be prioritised over secondary species.

Replanting Strategy Summary

The replanting strategy combines ecological restoration with functional design. By using pioneer and secondary species, keeping selected conifers for temporary shelter, and aligning plantings with optimal seasons, the approach ensures progressive restoration. The resulting multi-layered canopy will boost biodiversity, offer better wind protection, and create an enjoyable, resilient landscape.



Soil Enhancement and Preparation

Improving soil conditions is essential for the successful establishment of new plantings. Applying organic materials such as mulch, compost, biochar and mycorrhizal inoculation will enhance soil structure, improve water retention and increase nutrient availability.

Soil conditioning will involve tilling or screeding to break up compacted layers. This process will be followed by incorporating organic matter and applying mulch around plant bases to conserve moisture, suppress weeds, and regulate soil temperature. These practices are essential for improving root establishment and promoting overall plant health.

Soil nutrient levels will be monitored throughout the replanting phases to identify deficiencies. Based on these assessments, targeted applications of fertilisers or additional organic amendments will be made to optimise plant growth conditions. For guidelines and best practices related to soil conditioning and nutrient management, refer to **Appendix 3 - Soil Enhancement Techniques and Best Practices**.

Long-Term Maintenance and Monitoring

Ensuring the success of replanting efforts requires consistent monitoring and adaptive management to respond to challenges as they arise. This adaptive approach ensures that replanting efforts remain resilient and effective, supporting the long-term restoration goals.

Newly planted areas will be inspected regularly to monitor plant health, check for signs of stress or failure and manage wilding species that may compete with new growth. Maintenance will include watering, mulching and replacing any failed plants.

Protective measures, such as tree guards, plant shelters, targeted weed control and public awareness, will safeguard young plants from damage and activities like frisbee golf. Adjustments will be made based on observed impacts to ensure plant survival and success.



Alternative Planting Methodologies

One potential approach to enhance the replanting strategy within the reserve is the **Miyawaki method**, a technique for creating dense, fast-growing and ecologically resilient forests. This method involves planting native species in close proximity, closely mimicking natural forest regeneration processes.

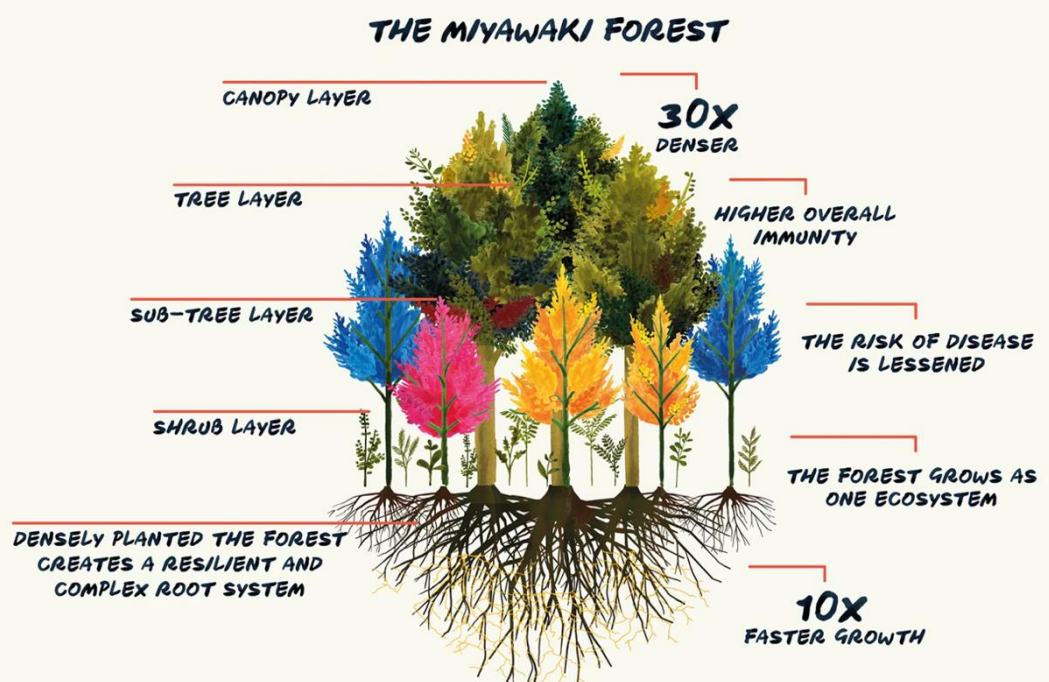
The Miyawaki method encourages plant growth much faster than traditional planting techniques, with vegetation maturing up to 10 times quicker. This acceleration can significantly reduce the time needed to establish functional shelter and achieve soil restoration.

A critical element of this method is **thorough site preparation**, which involves digging deep and wide pits and enriching the soil with biomass such as compost before planting. These organic additions enhance soil fertility, promote microbial activity and improve soil structure. By enriching the soil beforehand, the root systems of newly planted species benefit from optimal conditions for rapid growth, efficient water retention and improved nutrient absorption. The close planting means plants grow taller quicker as they compete for available light.

Once established, Miyawaki forests require less maintenance due to their density. The compact planting improves moisture retention, suppresses weed growth and provides resistance to environmental stressors, such as drought or pests. This self-sustaining characteristic makes the Miyawaki method a cost-effective and efficient solution when combined with more conventional planting techniques.

The benefits of using the Miyawaki method can be seen in this video by Kent County Council (UK), where they explored techniques to improve tree establishment and survival rates, supporting the expansion of urban tree cover: <https://www.youtube.com/watch?v=0VizWfEIW1U>

While the Miyawaki method's high planting density is not suitable for the entire replanting area, it could be advantageous in isolated pockets. By selectively implementing this technique or other alternative methods, the site can facilitate swift restoration in essential areas.



6. Monitoring and Adaptive Management Strategy

The success of the Eely Point Tree Succession Plan relies on a robust monitoring and adaptive management strategy. This approach ensures flexibility and responsiveness as conditions change throughout the removal process, replanting and restoration efforts. Progress will be tracked using technologies like Geographic Information Systems (GIS) and LiDAR, providing critical data to inform decisions about further removal and planting.

Key metrics, including tree health, growth rates, soil quality and the effectiveness of control measures, will inform necessary adjustments to ensure the plan's objectives are met. Wind load impacts will be closely monitored throughout each stage to assess whether more extensive or cautious removal strategies are appropriate.

Regular evaluations, including in-depth assessments every three years, will track biodiversity gains, soil improvements, and the overall success of replanting phases.

Effective communication strategies, such as visual examples and signage, will educate the community about the plan's ecological benefits. Emphasis will be on the importance of conifer removal for the reserve's long-term health and sustainability.

Ongoing stakeholder consultation will ensure the plan reflects community values and responds to public feedback. By involving stakeholders in the decision-making process, the project can build a broad base of support that helps drive its success, fostering a sense of ownership and stewardship within the community.



7. Conclusion and Recommendations

The succession plan for Eely Point Recreation Reserve provides a comprehensive framework for systematically removing undesirable and ageing tree species and replanting with a diverse mix of native and suitable exotic species. Aligned with the QLDC Tree Policy, the plan prioritises biodiversity and ecological resilience through phased tree removal and immediate succession planting to maintain canopy cover and enhance the reserve's long-term ecological health.

The success of this plan relies on a coordinated approach that includes thorough planning, community engagement, ongoing monitoring, and adaptive management. With effective implementation, the reserve can transform into a resilient and diverse landscape, reflecting the natural beauty and cultural significance of the area. This approach will safeguard the reserve for future generations, creating a lasting legacy of ecological restoration.

Expected Outcomes

7.1.1 Restoration of Biodiversity

The systematic removal of conifers and control of undesired plant species will facilitate the re-establishment of native plant species, enhance habitat for local fauna, and promote biodiversity. This will create a more balanced and thriving ecosystem aligned with regional conservation goals. To complement the restoration, selected exotic species will also be introduced to maintain the reserve's shelter, diversity, colour and character.

7.1.2 Improved Soil Health

Soil enhancement measures will rehabilitate the degraded soil conditions caused by decades of conifer dominance. Improved soil health will support the successful establishment of new plantings and contribute to a more resilient landscape.

7.1.3 Enhanced Recreational and Aesthetic Value

The reserve's transformation will improve its visual appeal, providing a more diverse and dynamic landscape that enhances the visitor experience. New plantings will create further seasonal interest, enhance the aesthetic appeal, and provide natural windbreaks that will protect the reserve and surrounding area.

7.1.4 Strengthened Community Engagement and Stewardship

The project will involve the community and key stakeholders, fostering a sense of ownership and stewardship. This inclusive approach will ensure that the reserve remains a cherished public asset that reflects community values and priorities.

7.1.5 Adaptive Management for Long-Term Success

Ongoing monitoring and adaptive management will ensure the plan remains responsive to new challenges and opportunities. This approach will allow for continuous refinement of management practices, ensuring that the reserve is resilient to changing environmental conditions and can thrive well into the future.

Key Recommendations for Plan Implementation

7.2.1 Secure Funding for Long-Term Implementation

The plan's success depends on securing sustainable funding sources. QLDC should pursue a multifaceted approach to funding, including government grants, local fundraising initiatives, and partnerships with businesses and community organisations. Collaborating with initiatives like **Trees That Count**, which connects businesses to native tree planting projects, can amplify resources. Contingency plans should be established to address potential funding gaps, ensuring continuous progress.

7.2.2 Plan for Long-Term Maintenance and Adaptive Management

To ensure the transformation is sustainable, long-term maintenance plans must be established, with adaptive management strategies that can respond to changing conditions. A dedicated team should oversee the project, adjusting the plan as needed.

7.2.3 Implement Robust Monitoring and Reporting Mechanisms

Effective monitoring and reporting are essential to tracking progress, measuring success, and guiding management decisions. Monitoring protocols should be established, utilising GIS tools, site evaluations, and regular stakeholder feedback sessions.

7.2.4 Develop a Public Communication Strategy

A clear and proactive communication strategy should be developed to manage public perception and educate the community about the plan's benefits. This strategy should include regular updates and educational materials that highlight the ecological, cultural, and recreational improvements the project will result in.

7.2.5 Promote Community Involvement in Planting and Maintenance Activities

Encouraging community participation in planting days and ongoing maintenance activities will enhance public support and contribute valuable volunteer resources. Educational programs that involve schools and youth groups should be considered to inspire the next generation of environmental stewards.



8. Appendices

Appendix 1 - Succession Plan Maintenance Schedule (Spreadsheet)

Appendix 2 - Species Selection Guide

Appendix 3 - Soil Enhancement Techniques and Best Practices

References and Supporting Documentation

1. Wanaka Lakefront Development Plan Eely Point Recreation Reserve (Eely Point Development Plan)
A comprehensive plan detailing the long-term vision for Eely Point Recreation Reserve, including landscape enhancements and management strategies that align with the goals of the succession plan.
2. New Zealand Wilding Conifer Management Strategy 2014
A national strategy that outlines best practices for wilding conifer control across New Zealand, emphasising collaborative approaches, funding mechanisms, and long-term management goals.
3. Otago Regional Council Wilding Conifers
<https://www.orc.govt.nz/environment/biosecurity-and-pests/plant-pests/wilding-conifers/>
4. Otago Pest Management Plan 2019-2029
<https://www.orc.govt.nz/your-council/plans-and-strategies/regional-pest-management-plan/>

