

Landscape Assessment Report

Waitui Farm, Geraldine

20 February, 2025



Preamble

1. This assessment provides a landscape architecture-focused examination of the proposed landscape strategy and plan for Waitui Farm. The proposal has been developed by WildLab and Milward Finlay Lobb, and which the author of this assessment, Dr Mick Abbott, in his capacity as director of WildLab, has been a lead contributor.
2. Dr Mick Abbott holds both a Master of Landscape Architecture, and PhD in Landscape Architecture. He is a former Professor of Landscape Architecture and former head of Lincoln University's School of Landscape Architecture.

Context

3. Waitui Farm is a 115ha working farm located directly north of Geraldine. It is accessed along the gravelled Waitui Rd, that runs directly next to the west side of the Opihi River.
4. It is located in the Geraldine Downs Area, which is a distinctive landform in South Canterbury. This area features the Talbot Forest Scenic Reserve which is home to native vegetation (e.g., matagouri, mānuka, kānuka) and a long-tailed bat population. The Downs area also includes other native bush remnants, diverse landforms such as rolling hills, escarpments, and incised gullies.
5. Geraldine Downs Area is historically rural, with the landscape now including pastoral grazing, rural residential development, small-scale forestry, and horticulture. Exotic pasture dominates productive areas, with limited plantation forestry.
6. The Downs provide panoramic views of the surrounding plains and mountains, maintaining a strong visual and ecological identity. Key scenic reserves (Ōrāri Gorge, Waihi Gorge) include sites that contribute to conservation efforts.
7. At the time of European settlement the land the farm is on was cleared of its native forest. The original homestead was built in 1865, with a photo taken showing bareland in front of the farmhouse, while behind some stands of what appear to be native trees still standing (see figure 1).



Figure 1: 1865 Photo of Waitui Farm

8. Accounts provided by the current owners show that the land was first grazed for sheep and cattle, then later planted in exotic forestry for timber and firewood production, before again reverting to pasture for sheep, cattle and deer.
9. The current owners have until 2024 farmed deer on the property, with that now shifted over to beef cattle, with pasture, kale (and other related) both directly grazed, or harvested to be given out as winter feed.

Current Zoning and focus areas for this assessment



Figure 2: see p5 of Waitui Farm Strategy and Plan Document

10. 26.22ha of land at the southern end of the property, being the area closest to the town of Geraldine, has been zoned to allow subdivision into 2 hectare land parcels. This is shown as Area A in Figure 2.
11. Council is currently considering options for extending this zoning to other lands in the district, including the parts of Waitui Farm directly north of the current area, and running south of the unformed legal road that extends Kalaugher Rd. For this area (totalling 41ha), subdivision into 10ha is currently permitted. This is shown as Area B in Figure 2.
12. This report examines the capacity and suitability of this area for a zoning that would allow 2ha lifestyle blocks.
13. It also takes the opportunity to extend this examination of the remainder of the property, being those parts of the farm directly north of the unformed legal road that extends the current Kalaugher Rd. Likewise, for this area (totalling 48ha), subdivision into 10ha is currently permitted. This is shown as Area C in Figure 2.

Local Ecological Areas and Values

14. Before human settlement, the region was covered in extensive podocarp forests, including species such as matai, tōtara, kahikatea, and rimu, with broadleaf species like fuchsia and tarata thriving in the undergrowth.
15. Today, the 26-hectare Talbot Forest Scenic Reserve is one of the few remaining fragments of this once-widespread native forest in southeastern Canterbury. Since its establishment in 1886, the reserve has become a critical area for conservation, supporting approximately 90 indigenous plant species, including an 800-year-old tōtara.
16. It is also home to several at-risk species, including the endangered long-tailed bat, one of only two known colonies on the South Island's east coast. As the largest unlogged podocarp-hardwood forest in the South Canterbury downlands, the reserve remains a cornerstone of regional biodiversity, providing critical habitat for local flora and fauna.
17. The reserve's significance extends beyond its size. A 2012 survey (see appendix in Waitui Farm Strategy and Plan Document) identifies 91 indigenous vascular plant species, several of which are rare and have not been recorded in other local ecological areas. Species such as *Blechnum membranaceum*, previously unrecorded in South Canterbury, and *Brachyglottis sciadophila*, an at-risk species, demonstrate the unique ecological value of Talbot Forest.
18. The reserve also stands out due to its high species diversity compared to other nearby sites. Other important native areas such as Peel Forest Park, Ōrāri Gorge, Waihi Gorge, and Pioneer Park are small in scale, highlighting the scarcity of remaining podocarp forests in the region. Together, these areas emphasise the critical need for large-scale restoration and conservation efforts.

Waitui Farm's Ecological Potential

19. As noted, Waitui Farm, located in close proximity to Talbot Forest Scenic Reserve and the Waihi River, is characterised by steep slopes and limited native vegetation.
20. The landscape is currently dominated by pasture and exotic trees, with areas prone to significant degradation due to livestock trampling. However, the land's varied topography presents an opportunity for restoration.
21. The steep and low-lying areas on the farm are especially suitable for native plant restoration, which can help stabilise slopes and improve moisture retention on south-facing aspects. These features create an ideal environment for regenerating native flora and enhancing the overall ecological integrity of the farm.
22. The farm's location within the broader ecological context of the Talbot Forest Reserve and the Waihi River provides an opportunity for landscape-scale restoration.
23. By shifting land-use practices and reducing farming intensity, Waitui Farm can contribute to regional biodiversity goals. Restoration could include removing invasive hawthorn and willow trees from gullies and river margins, allowing native species like harakeke, kahikatea, and tōtara to thrive.
24. The ecological restoration efforts at Waitui Farm could also support the expansion of Talbot Forest's biodiversity and foster ecological connections to the Southern Alps foothills, thus improving the overall resilience of the local ecosystem.

Ecological Restoration Strategy for Waitui Farm

25. The proposed landscape design offers the opportunity to create a continuous native forest spanning individual 2ha lifestyle properties, including restoration of wetland, riparian, and gully areas, as well as the designated Significant Natural Areas (SNAs).
26. Each 2ha property could have a 4000m² area for house sites or other development, while maintaining 80% of the land as native forest. The scale of planting per property (including purchase, planting and maintenance activities), as well as associated pest management would also be feasible on this scale, with landowners able to contribute effectively.
27. The landscape plan allows for the planting of 1.6ha of native plants (which would total 8000-9000 plants per property) with this potentially a requirement to be completed by the developer before title transfer.
28. With 80% native forest cover, the project could effectively create 80ha of unbroken forest. While not original, this eco-sourced forest would contribute essential ecosystem services, enhancing the resilience of Talbot Reserve in a similar ways to other restoration projects in the region.
29. The restoration process would prioritise the most suitable areas, such as the steepest, wettest, and low-lying sections, and involve phased planting to enhance biodiversity

gradually. This approach would allow the land to recover over time, contributing to regional ecological goals and supporting Talbot Forest Reserve’s restoration efforts.

Broader Ecological Context

30. The Geraldine area shows strong commitment to native restoration, with both council-led and community-led projects underway. Numerous property owners are also planting native species in gullies, waterways, and on south-facing slopes.
31. Significant planting initiatives include those at Pekapeka Track and Riddells Reserve, located on the southern (opposite) side of Talbot Reserve (see figures 3 and 4)



Figure 3: Bareland planting underway on Pekapeka Track



Figure 4: Bareland planting underway at Riddells Reserve

32. Native planting has also occurred along the western side of the Waihi River near Waitui Farm, with plans to remove exotic deciduous trees once the native understorey is established. (see figure 5)



Figure 5: Under canopy planting underway on Waihi Stream

33. These restoration efforts offer local and regional benefits, such as providing habitat and food for native species, improving soil health, enhancing water retention, and reducing runoff during heavy rainfall.
34. Restoring Waitui Farm into a functioning native ecosystem would have broad ecological benefits. By improving biodiversity and creating habitat corridors, the farm could help strengthen the ecological connectivity between Talbot Forest Reserve, the Waihi River, and surrounding areas.
35. The farm's restoration could also inspire other landowners in the Geraldine area and across Canterbury to engage in similar conservation efforts. This form of ecological stewardship would promote community engagement and raise awareness of the importance of native species restoration. The ongoing involvement of local communities in these efforts will be key to fostering a sustainable future for the region's biodiversity.
36. Through strategic planting and habitat restoration, Waitui Farm could play a pivotal role in creating ecological linkages across the landscape. These linkages would facilitate the movement of native species, ensuring long-term ecological resilience. By fostering stronger connections between protected areas such as Talbot Forest and other native remnants, the restoration of Waitui Farm would contribute to the broader goal of conserving South Canterbury's unique natural heritage

Supporting local amenity and recreation values

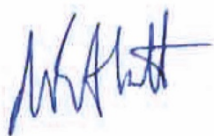
37. The unformed legal road extending from Kalaugher Rd to Barkers Stream is too steep for vehicle use, but offers strong potential for development as a walking track. This track could connect to the existing walking/cycling track along the western bank of the Waihi River.

38. By linking into the Talbot Reserve track network, this new route could create an extended walking loop, benefiting both local residents and the wider community.
39. The track would offer diverse views, from the foothills to the plains, while also providing insight into the restoration efforts proposed in the landscape strategy. The experience could be complemented by walking alongside the Waihi River and exploring the mature native forest of Talbot Reserve.
40. If the land were no longer used for grazing, allowing for full ecological restoration on both sides of the road, it would eliminate stock movement and associated issues like mud and other debris, particularly at crossing points. This would reduce potential conflicts between track users and farming activities, such as ensuring gates are closed and preventing cattle from being disturbed.

Conclusion

41. There are multiple factors to consider when determining what land-use activities to permit. This assessment finds that a subdivision approach focused on regenerative design principles could provide enduring, considerable ecological benefit at a regional scale.
42. This would involve the repurposing of rolling farmland, on lands that have not been designated as having high productive value, into a replanted native forest.
43. Options exist to require covenants related to native planting activities and protections, as well as access along current unformed legal roads as well as other easement provisions.
44. The scale of such planting would no doubt provide invaluable ecological connections to nearby Talbot Forest Reserve, and in time extend both the range and number of the native plant and animal species found there.
45. It is my opinion that returning a significant area (115ha) of the Geraldine Landscape could create a lasting legacy for future citizens of Geraldine.

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