rma ecology

Memo

To:	Susan Jones, Mitchell Daysh	Job No:	2375.200
From:	Graham Ussher, RMA Ecology Ltd	Date:	23 July 2025
cc:	Holly Madden, RMA Ecology Ltd		
Subject:	100 & 110 Te Moana Road PPC: FRI response regarding ecological matters; July 2025		

Dear Susan,

We refer to the set of s92 further information requests from Kapiti Coast District Council (dated 29 May 2025 from David Pickett, senior ecologist at Tonkin & Taylor Ltd) regarding the proposal to undertake a private plan change at 100 and 110 Te Moana Road, Waikanae Beach, Kapiti Coast.

The queries regarding ecological matters are presented below in italics, with Council's request number, followed by our reply.

Ecology 1

Please provide evidence that the watercourse referred to in the application documentation as a 'drain' does not meet the GWRC Watercourse Types Guidance classification for a highly modified watercourse/stream.

Reason: Please see Attachment 1 to this RFI for the technical justification for this question. This information is necessary to better understand the nature of the request regarding the effect it will have on the environment, noting that the accurate identification of natural features on the site will enable Council and any potential submitters to understand what the request seeks and its potential environmental effects. It is recommended that the Applicant contacts Greater Wellington Regional Council to clarify the matter on whether the watercourse is classified as a highly modified watercourse/stream as described in the GWRC Watercourse Types Guidance Note.

Our reply

We have reviewed the GWRC Watercourse Types Guidance Note and agree with T+T that the watercourse that we refer to as a drain does meet the definition of a highly modified stream. We do still contend that this feature is human-created as a drain, and has been dug where there was no historic watercourse (based on a personal account by the landowner). A consequence of this is that the drain likely lowers the local ground water and has contributed to the conversion of the historic wetland flats area to non wetland (see explanation and investigation results in our next response).

As a highly modified watercourse, we understand that maintenance is permitted, and that recent maintenance works have been carried out on the drain in order to maintain the purpose for which it was created, that is, to collect water from the surrounding land and to convey it off-site.

The classification of this feature means that it should be shown on a concept plan (which it is). The concept plan shows that the drain may be realigned through a future consenting process closer to the north-western boundary, and enabling a margin either side to be planted in native plant species. the drain

The potential adverse effects of a future subdivision on this watercourse should be assessed at the time of application for resource consents; however, from the indicative site layout plans, our preliminary assessment is that this human-created watercourse will be improved compared to its current degraded state.

Ecology 2

Please update the Ecological Effects Assessment to correctly identify all wetland areas or otherwise respond to the evidence provided in the Council's ecological review included as Attachment 1 to this RFI.

Reason: This information is required to better understand the nature of the request regarding the effect it will have on the protected wetland. Based on the ecological review included as Attachment 1 to this RFI, it appears that the identification of the ecological site that includes the wetland may not be accurate. Council notes that in accordance with section 75(3)(c) of the RMA the plan change is required to give effect to the Regional Policy Statement, including Policy 23 - Identifying indigenous ecosystems and habitats with significant indigenous biodiversity values. Confirmation of this matter is relevant to the evaluation of the private plan change request against the criteria set out in clause 25(4) of Schedule 1 of the RMA.

Our reply

The T+T review identifies two areas of potential wetland that our report has not identified as wetland. These are the pond and the main flats that comprise most of the proposed developable area of the site.

Pond

The pond was most probably once historic dune wetland. We agree that the margins to the pond support wetland plant species and could be regarded as a wetland strip around the pond.

We do not regard the pond proper as wetland, as it does not support wetland vegetation where there is currently none. To classify the pond as a wetland is the equivalent of classifying a pasture paddock as historic podocarp forest or a drained wetland supporting pasture as a wetland – there is simply no ecological justification to classify it as a feature that no longer exists.

Whether or not the pond is or is not a wetland is somewhat redundant. The pond is hydrologically connected to the adjoining wetland, and any changes to the water level of the pond will affect the wetland margin of the pond. In addition, the concept plan for the site proposes a minimum 10 m planted margin setback to the wetland and the pond, which is in accordance with protections advocated in the NES-F.

Surely an assessment of effects at the time of subdivision will address this. For this Plan Change it is very obvious that the Applicant does not intend draining the pond or the wetland or infilling them. The current suite of protections for these features in the NPS-FM and NES-F provide adequate protection at the time of resource consent applications.

Flats (not including the pond, pond margin, or QEII wetland areas)

The T+T report reiterates the belief that the main paddock flats of the site may be a natural inland wetland. We disagree.

We have been back to the site (July 2025) and undertaken an additional 19 x vegetation plots and soil cores in accordance with the NPS-FM wetland delineation/ pasture exclusion methodology. The location of the plots, vegetation community results, representative soil core pictures and pictures of the site are contained within Attachment A.

As a summary:

- The site has been mown – as it is on a periodic basis to maintain pasture and for stock feed. Mowing the site has not had any effect on our ability to detect and classify plants or to determine their absolute cover abundance. Mowing this site is the normal state of management and has been for many decades.
- At a broad level, the entire site does not qualify as wetland, as it is excluded under the Rapid Pasture Test of the Pasture Exclusion Test Methodology. The site is grazed/ mown for stock feed, it supports only minor amounts or none of OBL or FACW plant species, is not pugged and has dry soils (apart from near the drain), and is dominated by exotic pasture species
- Even if it is determined that a wetland investigation is necessary (which we have done), the results show
    - None of the 19 vegetation plots (or the previous set undertaken several months ago) have a prevalence index score of less than 3 – so the vegetation is not a wetland plant community across any parts of the site.

- None of the soil cores show obvious signs of hydric activity. There are no concretions, no low chroma colour changes to gleyed soils within the top 300 mm, and the cores either have no mottling, or mottling is well below the 50 % threshold across the matrix or cut ped face to qualify.
- There are some soil cores where possible lighter colouring points to an uncertain soil type. Even if these are considered to be hydric soils (which we doubt), the lack of hydrological indicators means that these soils (at P2, P9 and P20) key out as a possible drained wetland spoil – which we know because the site was historically a wetland prior to it being drained for farming purposes!
- None of the soils are peat soils – they are all either sandy soils (most cores) or have tilled topsoil.
- Deeper soils (beyond 400 mm deep show hydric signs, as would be expected of soils of a historic wetland. These deeper profiles cannot contribute to an assessment of soil status under the NPS-FM guidelines.

Overall, the messaging from the vegetation plots and soils cores, and in conjunction with historic aerial images is very clear – that the site used to be a wetland, and it has been very effectively drained for a long time for farming purposes, such that it now supports non-wetland soils, non-wetland vegetation, no wetland hydrology across most of the site, supports predominantly pasture grassland comprising exotic pasture species, and is used for pasture grazing purposes.

The flat areas of this site are not natural inland wetland – they are pasture paddock used for grazing.

Ecology 3

Please update the Ecological Effects Assessment to reflect the potential presence of copper skink or provide specific evidence of their absence. Please see the Council's ecological review for further information (Attachment 1).

Reason: Please see Attachment 1 to this RFI for the technical justification for this question. This information is necessary to enable Council to better understand the nature of the request regarding the effect it will/may have on indigenous fauna and habitat.

Our reply

Most of the site is low lying, comprises closely mown or cropped pasture grassland and is periodically wet – all of these characteristics mean that most of the site is simply not habitat that is suitable for native lizards. We know this because we have undertaken ACO, manual search and pitfall studies across many similar sites in the Kapiti Coast/ Porirua area and have never found grass skink or copper skink in these types of habitats.

The longer grass areas around the wetland and pond, and the drier sloping north margins of the wetland offer better habitat for native skinks, however even this is of poor quality as this area has recently been cleared of weedy vegetation and replanted in natives.

I have been a herpetologist for 35 years, including 10 years of working extensively in the Wellington region. Copper skinks are not the most abundant species of skink in Wellington – indeed, they comprise around 1/100th of skink catches in typical rural areas such as this site.

In my experienced opinion, copper skinks are unlikely to be present at the site, and even if they are, the only marginally suitable habitat for them is on the sloping upper areas behind the pond and wetland – which is not proposed to be affected by any future development works.

Even if copper skinks were present (which is doubtful), this site is marginal habitat and it is very unlikely that it would constitute an important, core or critical habitat for this species – even locally. Therefore, standard approaches to salvage and relocation would be appropriate – as are regularly approved by the Department of Conservation (we are currently conducting native skink salvages across four similar sites locally as part of consented development projects).

I have been involved in dozens of Plan Change projects over the years. None have required a comprehensive survey for lizards at the time of zoning change, as the issues of lizard conservation, salvage and relocation are solely addressed at the resource consent stage. The only time that lizards are a relevant Plan Change matter is when there is a likelihood of the site supporting either a substantial, locally important population of an At Risk listed species, or supporting any population of a Threatened species. This site is not one of those potential locations.

Despite however much optimism an ecologist may have that this site could be important for native lizards, in my experienced opinion as a herpetologist, it is unlikely that the site will support native lizards in the places proposed for

development, or support species of lizards that demand anything other than a typical, good practice approach to survey, salvage and relocation at the time of applying for a resource consent.

Ecology 4

Please update the Ecological Effects Assessment to reflect the potential for NZ pipit and include effects mitigation for ground nesting avifauna.

Reason: Please see Attachment 1 to this RFI for the technical justification for this question. This information is necessary to enable Council to better understand the nature of the request regarding the effect it will/may have on indigenous fauna and habitat.

Our reply

The site has been visited by RMA Ecology Ltd three times over the past year and no pipit have been recorded. Most of the site is managed as mown/ grazed pasture, which is not pipit nesting habitat (but is habitat used by pipit elsewhere as feeding areas).

The longer grass areas around the pond and wetland offer poor quality nesting habitat for pipit, which typically require dense bracken or low shrubs for nesting. Even if pipit were present on the site (which we do not think occurs as they have not been detected at this site), clearance and management of pasture is a permitted activity, which means that removal of potential foraging pasture habitat is not an effect that needs to be addressed.

To mitigate against the unlikely potential effect of a future subdivision on pipit nesting, it would be appropriate to include a condition of consent that requires the inspection of the site for pipit nests prior to undertaking vegetation clearance/ earthworks, or to undertake earthworks outside of the pipit breeding season. This is most appropriately included in the suite of resource consent conditions at the time of a resource consent application.

Ecology 5

Please clarify whether the overflows via secondary overflow paths will be diverted within or away from the site.

Reason: Please see Attachment 1 to this RFI for the technical justification for this question. This information is necessary to enable Council to better understand the nature of the request regarding the effect it will/may have on indigenous fauna and habitat.

Our reply

(from the project stormwater/ civil works expert; Awa Ltd)

The Chillingworth Breach model results represent a 100YR event in the Waikanae River including a stop-bank breach scenario, so is very conservative. The Chillingworth Breach model results show the breach flow entering the site and overflowing over Te Moana Road into the Waimeha Stream in the existing situation. At this stage it is anticipated that the "effective functionality" of the secondary overflow path will be maintained within the site.

Filling of the site will be required; however, this does not result in a fundamental change in the overall catchment area and overland discharge as it is proposed to mitigate the effects of the filling through a diffuse mitigation strategy with run-off flows returned to ground as close to the source as possible therefore maintaining as close as possible the existing infiltration patterns.

We trust that is provides the information requested by Council. If clarification or further information is required, please contact Dr Graham Ussher at graham.ussher@rmaecology.co.nz or at 027 2727 930.

Graham Ussher

Principal Ecologist

24-Jul-25

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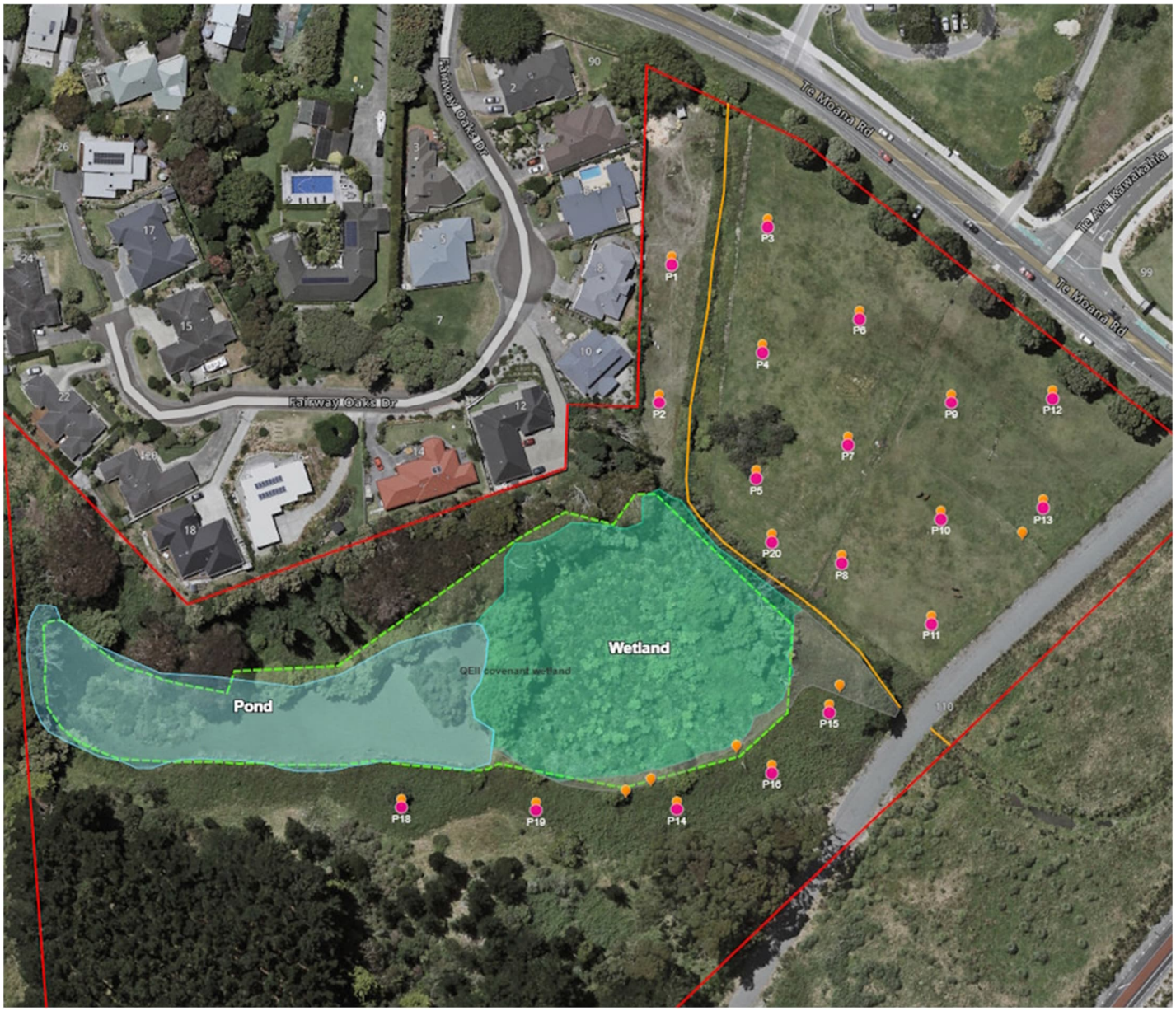
Attachment A – wetland investigations July 2025

The map below shows the location of wetland vegetation plots (red dots) and soil cores (orange dots) taken in July 2025 (numbered 1-20) as well as previous samples taken during prior investigations.



The table below contains all of the plant species, their wetland indicators status, and percentage cover within each of the 2 m x 2 m wetland plots (numbered in columns 1-20 (plot 17 not done).

Code	Binomial	Common	Rating	Pastu	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	WP9	WP10	WP11	WP12	WP13	WP14	WP15	WP16	WP17	WP18	WP19	WP20
RANrep	Ranunculus repens	Creeping buttercup	FAC	No	25	10	5	10	35	7	30	30	20	15	20	15	5	60	15	25		7	10	15
TRIrep	Trifolium repens	White clover	FACU	Yes	5	5	3	8	10	5	6	5	5	5	3	5	3	20	10	40		2	2	1
LOTped	Lotus pedunculatus	Lotus	FAC	Yes	5	3	0	2	1	3	0	0	1	5	1	0	3	1	0	0		2	3	0
HOLlan	Holcus lanatus	Yorkshire fog	FAC	Yes	55	0	5	25	5	30	2	10	10	15	40	45	5	10	64	28		3	60	0
ACHmil	Achillea millefolium	Yarrow	FACU	Yes	2	0	2	2	0	0	2	0	0	3	1	0	2	0	0	0		1	0	0
HYPrad	Hypochaeris radicata	Catsear	FACU	No	0	2	3	0	0	3	0	0	7	0	0	0	1	0	0	0		0	0	0
STAsyl	unknown	unknown	UPL	No	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
PLAlan	Plantago lanceolata	Narrow-leaved plantain	FACU	Yes	0	2	5	10	11	10	15	10	20	15	20	5	10	0	0	0		10	5	10
CENcla	Cenchrus clandestinus	Kikuyu	FACU	Yes	0	30	0	0	0	0	0	0	0	0	0	0	0	2	10	1		0	10	38
RUMace	Rumex acetosella	Sheep's sorrel	FACU	Yes	0	1	0	15	0	0	0	2	0	0	0	0	2	0	0	0		0	0	0
LOLper	Lolium perenne	Perennial ryegrass	FACU	Yes	0	45	75	5	35	40	23	38	40	40	15	20	69	0	0	0		20	0	30
CREcap	Crepis capillaris	Hawksbeard	FACU	No	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
ERIsum	Erigeron sumatrensis	unknown	FACU	No	0	0	0	3	0	0	0	0	2	0	0	0	0	0	0	1		0	1	0
NEEdle grass	unknown	unknown	unknown	unknow	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
RUBfru	Rubus fruticosus	Blackberry	FAC	No	0	0	0	0	3	0	0	5	0	0	0	0	0	0	0	0		2	0	0
PRUvul	Prunella vulgaris	Self-heal	FACU	No	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0		0	0	0
VERpho	Veronica phormiiphila	unknown	FACW	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
RUMobt	Rumex obtusifolius	Broad-leaved dock	FAC	No	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		0	0	0
MYOsotis	unknown	unknown	FAC	No	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0		0	0	0
MODcar	unknown	unknown	UPL	No	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0		4	7	0
PASdis	Paspalum distichum	Mercer grass	FACW	No	0	0	0	0	0	0	20	0	0	0	0	2	0	0	0	0		0	0	0
PLAmaj	Plantago major	Broad-leaved plantain	FACU	No	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0		0	1	0
RUMcri	Rumex crispus	Curled dock	FAC	No	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0		5	1	1
STEmed	Stellaria media	Chickweed, Kohukohu	FACU	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		25	0	0
TRIpra	Trifolium pratense	Red clover	FACU	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5		0	0	0
LAMpur	unknown	unknown	FACU	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		7	0	0
BELper	Bellis perennis	Daisy	FACU	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		5	0	0
CIRvul	Cirsium vulgare	Scotch thistle	FACU	No	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0		0	0	0
AGRsto	Agrostis stolonifera	Creeping bent	FACW	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	5

The table below shows the overall summary data for each plot, in terms of pasture exclusion test, dominance test, prevalence score, soil status, hydrology indicators, and overall status as a natural inland wetland. The various tests are as laid out in the technical guidelines that accompany the NPS-FM.

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P18	P19	P20
Vegetation																			
Pasture exclusion passed (i.e. not wetland)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Prevalence test passed?	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Fail
Dominance test passed?	Fail	Pass	Pass	Fail	Fail	Fail	Fail	Fail	Pass	Fail	Fail	Fail	Pass	Fail	Fail	Fail	Pass	Fail	Pass
Hydrophytic vegetation?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Soils																			
Hydric soils present?	Uncetain	Uncertain	No	Uncertain	Uncertain	No	Uncertain	Uncertain	Uncertain	No	Uncertain	No	No	Uncertain	Uncertain	Uncertain	No	Uncertain	Uncertain
Hydrology																			
Wetland hydrology present?	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No	No
Natural inland wetland?	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**
fails dom & prev tests?	yes			yes	yes	yes	yes	yes		yes	yes	yes		yes	yes	yes		yes	
fails soils & hydro?			yes										yes				yes		
drained wetland?		yes							yes										yes

The Table below shows the Prevalence Index Scores for each plot. For a plot to contain a wetland vegetation community, the Prevalence score must be less than or equal to 3.0.

None are less than or equal to three, and so none of the plots – across the wider part of the site's flat land - supports wetland vegetation.

	Prevalence index score	Is not wetland if >3.0. Is this wetland?
WP1	3.08	not inland natural wetland
WP2	3.88	not inland natural wetland
WP3	3.9	not inland natural wetland
WP4	3.54	not inland natural wetland
WP5	3.56	not inland natural wetland
WP6	3.6	not inland natural wetland
WP7	3.26	not inland natural wetland
WP8	3.55	not inland natural wetland
WP9	3.7	not inland natural wetland
WP10	3.65	not inland natural wetland
WP11	3.39	not inland natural wetland
WP12	3.37	not inland natural wetland
WP13	3.87	not inland natural wetland
WP14	3.24	not inland natural wetland
WP15	3.21	not inland natural wetland
WP16	3.47	not inland natural wetland
WP17	n/a	n/a
WP18	3.84	not inland natural wetland
WP19	3.33	not inland natural wetland
WP20	3.74	not inland natural wetland

Soil core photos and site photos from plots (selection). This was taken immediately after heavy rain and after a prolonged period of weeks of periodic rain, and the site shows no water ponding. Plot locations were determined by laying down a grid over the site at a set spacing as a desktop exercise. On site plots were located within 0.5 m (accuracy of GPS) of the desktop randomly selected points.


P14 soils


P19 soils

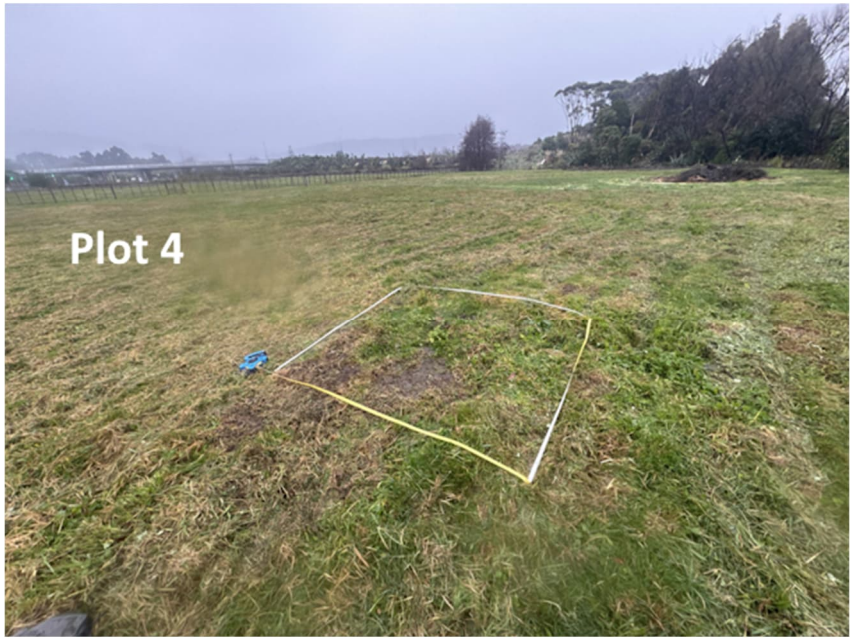

P4 soils


P8 soils


P20 soils

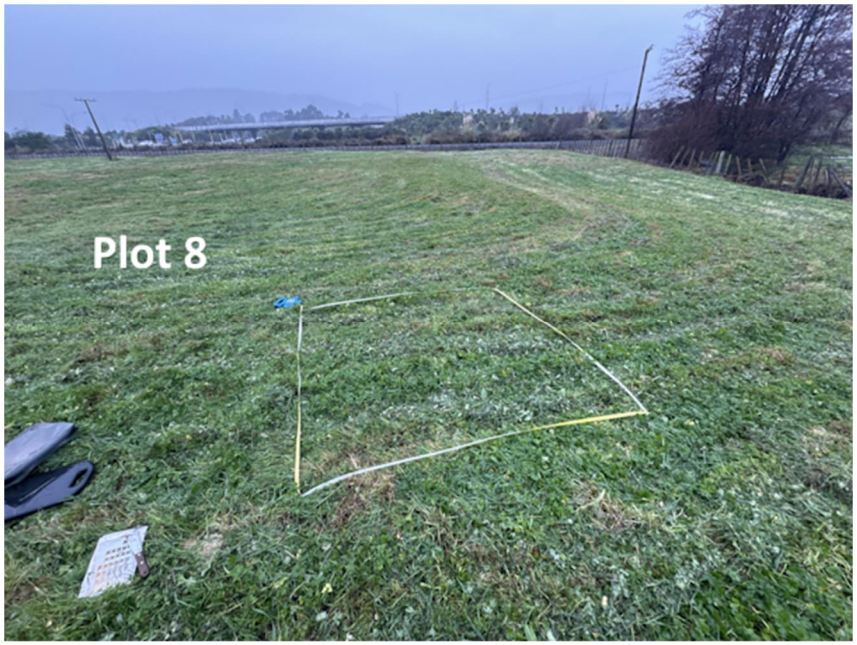

Plot 1


Plot 2


Plot 4


Plot 7


Plot 12


Plot 8


Plot 16


Plot 18


Plot 19


Plot 13


Plot 6