

Project	Resource consent application by Auckland Shooting Club Incorporated for 287 Tuhirangi Road, Kakanui – LUC60419114
Matters addressed	Ecology
Date issued	16/08/2023
Attention of	Mark Ross

BACKGROUND

Wild Ecology have been asked to provide a response relating to a S92 request for LUC60419114 dated 13/07/2023 in respect to ecological matters. All Auckland Council requests that are relevant to ecological matters have been included below in black, with Wild Ecology response in blue below. All numbering follows the numbering of the S92 request letter.

S92 REQUEST RESPONSE

REQUEST 4

4. The proposed earthworks for shooting bay 5 appear to be within an area which could potentially meet the definition of a natural inland wetland under the NESFW. Accordingly, please provide wetland delineation results for the area, including soil plots, as this will provide a strong support tool for wetland extent alongside vegetation. In addition, please supply all wetland delineation data sheet forms for all wetland plots along the survey transects undertaken, as shown within the submitted Ecology Report.

Response: A wetland assessment based on the MfE (2022) Wetland delineation methodology was carried out on site during 2 separate occasions, being 4th October 2022, and 8th of February 2023. This ensured that all potential areas that could meet the natural inland definition were comprehensively surveyed and mapped, with precautionary approach applied to any area that could potentially meet the natural inland wetland definition. This was done to ensure that the proposed development does not result in an adverse ecological effect and avoids any work within a 10m setback where feasible and practicable to ensure that the natural inland wetland areas on site are appropriately protected. No evidence of any vegetation that would be able to meet the determinants of a natural inland wetland were noted within the area of proposed shooting bay 5. This area was in its entirety covered in exotic weeds being pampas at the time of Wild Ecology survey visits in 04/10/2022 and 08/02/2023 as indicated under Figure 1. Further site photographs provided by Terra Consultants dated 21/06/2023 (Figure 2) revealed no indication the any area within shooting bay 5 general location and immediate surrounds could be considered as dominated by hydrophytic species. From the photo provided under Figure 2 It is evident that a historically excavated area (date of works is unknown) within the wider general location of proposed shooting bay 5 has been abandoned, and is dominated by regrowth of pampas. This area is to be revegetated as part of the ecological enhancement proposal for the site. Analysis of historic aerial imagery, topographic information and site photographs reveal no indication of potential wetland type vegetation within this area. Should Auckland Council require that further information as to the vegetation composition within the proposed shooting bay 5 is required, please provide specific areas they require further assessment of and any photographic

evidence of any potential natural inland wetland presence, so that it is possible to prepare an informed response to this request.

In respect to request to provide all wetland delineation data sheet forms, a summary of these have been provided within Appendix 3 of the Ecological Report prepared by Wild Ecology. The request to submit the field data sheets is onerous and would involve multiple hours of scanning and converting data sheets to a user-friendly virtual format, which is unnecessary because all of the relevant information has already been summarised and provided under Appendix 3 of the Ecological Report.



Figure 1: Showing the vegetation cover within proposed shooting bay 5 - vegetation cover is limited to exotic weeds with no indication of wetland type vegetation in this area – note raupo wetland identified as W15 in Ecological Report is located outside of shooting bay 5 and will be protected and enhanced as part of the development proposal



Figure 2: Disused area within the wider shooting bay 5 area – the area is dominated by exotic weeds, significant pampas regrowth is evident within the lower historically excavated area – this area is to be abandoned and revegetated as part of the ecological enhancement proposal for the site

REQUEST 6

6. The existing driveway directly below the existing track which is to be re-vegetated was earthworked in September 2021 as per Google Earth Imagery (see image below). These earthworks were undertaken within 10m of natural inland wetland and are therefore subject to retrospective consent under Regulation 54(b) of the NESFW. Please provide an updated AEE to include this reason for consent along with the necessary level of assessment, noting that any retrospective works would have taken place prior to the 5 January 2023 NESFW amendments.

Response: Please note that Wild Ecology were engaged by the Applicant's Agent to carry out a preliminary assessment in October 2022, and therefore is unable to comment on any retrospective works that have been carried out prior to the date of engagement. From reviewing the mapped wetland extent (as shown within Ecological Report prepared for the development), it does appear that a minor isolated section of the existing driveway would have encroached into a 10m wetland setback. The effects of this are likely to have been negligible. All wetland areas within the immediate development footprint and access road will be rehabilitated and revegetated and thus any effects associated with any historic earthworks or vegetation clearance within a 10m setback will be fully mitigated.

REQUEST 13

13. Please provide the Ecological Management Plan (EMP) detailed on page 43 of the AEE, (see Appendix 16 – stock-exclusion, fencing, weed control etc.). Noting that the AEE states 4.33 ha is proposed to be protected in perpetuity, please provide further details as to how this will be achieved e.g., covenant title instrument.

Response: It is proposed that the Ecological Management Plan is prepared as part of conditions of consent. This will allow to confirm the final design details, make any changes as required and ensure that the Ecological Management Plan is based on an approved final scheme/engineering drawings. It is deemed that the Ecological Report provides a sufficient detail as to the proposed works – being revegetation planting with appropriate indigenous species, eco-sourcing, stock exclusion, pest animal and plant control, biosecurity and disease management, fencing/demarcation, ongoing maintenance and monitoring. It is proposed to protect this area in perpetuity through the provisions of a conservation covenant.

REQUEST 14

14. There are significant quantities (monoculture) of pampas surrounding the existing shooting bays (see photo below) including within the location of proposed shooting bay 5. While pest plant control is proposed for within the Ecological Enhancement Zone, it is unclear if pest plant control is proposed across the shooting bays. Pampas seeds spread very long distances by wind and water. Seeds are also spread by soil movement, livestock, and contaminated machinery. Accordingly, please comment if pampas will be controlled across the proposed, and current bays. If pampas within this location is not proposed to be controlled, please provide further assessment on maintaining the ecological integrity of the proposed Ecological Enhancement Zone from resurgence of pampas, noting that objective H19.2.3(1) of the AUP(OP) requires, amongst other things, the biodiversity values of rural areas to be maintained or enhanced while accommodating the localised character of different parts of these areas and the dynamic nature of rural production activities.

Response: Comprehensive weed control is proposed to be carried out within the Ecological Enhancement Zone (EEZ). If required, weed control can also be carried out within the proposed shooting bays, to ensure that weedy species can be appropriately controlled and do not readily spread within the EEZ. It is recommended that following control, the shooting bays are either re-seeded with an appropriate non-invasive grassland species mix or low growing shrubs and trees. Please note that the vegetation will have to be compatible with the proposed recreational use of the development.

REQUEST 15

15. Pampas is known to provide habitat for native lizard species, which is acknowledged in the submitted Ecology Report. Accordingly, please provide a lizard management plan detailing how searches will be carried out, how salvage will occur, and the availability of suitable habitat on site for translocation.

Response: It is proposed that the Lizard Management Plan (LMP) is prepared as part of conditions of consent. This Plan will cover any avoidance, remediation, mitigation and monitoring that will be carried out in association with the development of the site. Recommendations will follow the key principles to lizard salvage as described in DOC (2019). There is plentiful suitable habitat for relocation available on-site.

REQUEST 16

16. Parts of the accessway through the site and the area where the ancillary structures sit were vegetated prior to the site being used as an active shooting range, albeit probably comprising of largely pasture grasses and herbaceous species. A significant portion of this area sits within the 20m riparian yard setback. A retrospective assessment of the loss and infringement of the riparian yard in these areas has not been quantified or assessed within the reporting provided. Accordingly, please provide an assessment of effects, including cumulative effects, for the retrospective removal of this vegetation. Within this reporting, please provide the area (m²) of vegetation retrospectively removed from within the riparian yard. Please also update the provided mitigation accordingly.

Response: As noted previously Wild Ecology were engaged by the Applicant's Agent to carry out a preliminary assessment in October 2022, and therefore is unable to comment on any retrospective works that have been carried out prior to the date of engagement. From analysing historic aerial imagery, it is deemed that only minimal earthworks are likely to have taken place within the 20m riparian yard. The existing shooting bays, access track and ancillary structures largely sit outside the 20m riparian yard.

Analysis of historical aerial imagery reveals that this area prior to development has been in exotic pasture at least since 1966, and it is highly unlikely that the works associated with the development of the shooting bays and associated infrastructure have resulted in any quantifiable indigenous vegetation clearance.

In respect to further mitigation request by Auckland Council, it is deemed that a high level of ecological enhancement and protection is already proposed as part of the site's development. The proposed protection and enhancement of 4.33 ha of stream, wetland and existing bush areas encompassing the immediate development footprint boundaries provides for an exceptionally high level of ecological mitigation and enhancement that goes over and beyond the requirements for mitigation associated with the development itself, given that the potential ecological effects have largely been avoided through comprehensive iterative design principles. The design has been based on avoiding, where feasible and practicable, any requirement for earthworks or vegetation clearance within a 20m riparian yard or 10m setback from a natural inland wetland areas. The overall layout of the development footprint has been designed to integrate with the wider ecological values and serve multiple purposes, including provision of a vegetated buffer area between the development and the wider ecological setting. The proposed protection area includes all areas where historic earthworks or vegetation clearance may have taken place prior to the initial site's development.

REQUEST 17

17. Please provide details of planting and earthworks proposed for the green outfall, noting that this structure is proposed within the riparian yard.

Response: This will be addressed by Terra Consultants. From an ecological perspective, it is recommended that the outfall is revegetated utilising low growing appropriate riparian and/or wetland type planting that is complimentary to the wider ecological setting, noting that the planting utilised in this area will have to be compatible with the ongoing functioning and maintenance of the green outfall structure to ensure that the vegetation does not form any unnecessary blockages to water movement.

REQUEST 18

18. As noted in the Ecology Report, the long-tailed bat has been recorded roughly 3km from the site. While roosting habitat for this species was not observed within the direct footprint of the proposal, potential roosts in WF11 were identified across the wider site. The effect of additional lighting on fauna (bats / birds / insects) may be significant, as discussed in the Ecology Report. Accordingly, please confirm all existing lighting arrangements and if additional lighting is proposed to be installed. If so, please provide a fauna friendly lightening scheme plan to prevent light spill into sensitive areas e.g., PIR sensor lights, low lux, hooded lighting options etc. noting the list of recommended mitigation measures that has been included under 'light' in the effects assessment.

Response: The nature of the operation of the shooting ranges is unlikely to have any effect on any potential bat populations utilising the area given that bats typically forage after dusk and before dawn, while the operational hours of the proposed shooting ranges will be limited to daylight hours. However, to ensure that any potential adverse effects on any potential bat populations that may periodically be commuting within the wider area the effects of artificial lighting can be significantly minimised through the following:

- Exterior lights should be cowled (shielded) and or low-level downward directional, to reduce light spill and direct lighting only where required.
- Exterior lights are to be on a short (1 min) timer, set to automatically switch off when not in use.
- No flood lights within areas facing forest vegetation.


Any external lighting should be LED, narrow spectrum, with minimum ultraviolet spectrum. Should be warm spectrum avoiding white and blue light spectrum.

The detail regarding lighting can be conditioned as part of conditions of consent.


Should have you any further queries, do not hesitate to contact me.



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