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Gore District Council
29 Bowler Avenue GORE

Dear Matt

CONCISE SUMMARY OF KEY POINTS ON ECO CHAPTER AND VEGETATION MAPPING

Gore District Council is undergoing a plan review process, and its notified district plan has received many submissions on natural environment matters. Wildlands is assisting the Council evaluate submissions and respond to queries of planning staff, as well as producing updated indigenous vegetation mapping for inclusion in the plan process.

As part of the review, Gore District Council now requires a concise memo covering off key points relating to the ECO chapter. Wildlands were engaged to produce this memo. The memo also provides a summary of the process undertaken by Wildlands to produce the most recent desktop mapping of indigenous vegetation within Gore District.

VEGETATION MAPPING

Introduction

A potential SNA mapping exercise was undertaken for Environment Southland in 2019. This was based primarily on Land Cover Data Base (LCDB) polygons but also used spatial data from several other sources and the ecological knowledge of Kelvin Lloyd, to identify areas of indigenous vegetation which could be ecologically significant. However, LCDB provides a relatively poor input layer for this purpose and is likely to contain many misidentified areas.

Consequently, as part of the plan review Gore District Council requested Wildlands to produce updated mapping of terrestrial indigenous vegetation within Gore District. This mapping sought to delineate areas of likely non-significant indigenous terrestrial vegetation (termed 'indigenous vegetation areas', or IVA), and areas of likely significant indigenous terrestrial vegetation (termed 'significant indigenous vegetation areas,' or SIVA). The SIVA are very likely to also be SNA as defined in the NPS-IB and to meet the significance criteria in the Southland RPS, subject to confirmation from field survey. However, 'SIVA' has been used to refer to these areas rather than 'SNA', in order to avoid any changes that may be required to align with future NPS-IB Amendments while still aligning with the Southland RPS.

Methods

Updating of the mapping was undertaken via desktop using the web-based ArcGIS maps application. Manual digitisation of SIVA and IVA was undertaken based on review of recent (post-2022) aerial and satellite imagery by local expert Wildlands staff. Aerial imagery in Google Earth Pro over the available time frames was systematically searched within a base grid map of the Gore District to assist in the identification of indigenous vegetation. This provided an efficient and accurate way to define indigenous vegetation polygons. Mapping was undertaken at a consistent zoomed-in scale of 100 metres.

Areas of indigenous vegetation identified were then classed as either SIVA or IVA, based on an assessment of whether each area was likely to meet any of the significance criteria outlined in Appendix 1 of the NPS-IB or in the Southland RPS. This assessment was based on the structure of vegetation inferred from aerial imagery combined with the local knowledge and expert opinion of the assessors. Areas classed as IVA were generally of lower quality habitat, with a likely higher proportion of exotic species, and frequently of small size. Ecological context factors such as buffering and connectivity were considered in this process where possible.

As the mapping is a desktop exercise, there is inevitably a level of uncertainty, and some misidentifications are possible. Ground truthing is therefore an important next step in the process.

Other points to note:

- Data from existing “High Value Area” surveys undertaken by Environment Southland for which the landowners have given permission for it to be shared, were used in the mapping.
- QEII covenant sites were included in the mapping.
- Wetland and riparian/riverbed habitats were beyond the scope of this assessment and were not mapped, except for Pukerau Reserve (which is scheduled as an SNA in the Operative District Plan).

Environment Southland is currently offering landowners free ecological surveys of their properties as part of the Biodiversity Action on the Ground Programme, which runs until June 2025. A small number of Gore District landowners have already taken up this service. This service provides a good opportunity to refine the vegetation mapping, and it would be advisable to make the most of this opportunity by contacting landowners with mapped SIVA/IVA on their properties.

ECO CHAPTER

OVERVIEW

The overview comprises statutory policy that guides what goes in the ECO chapter, but does not contain any information on the indigenous biodiversity values or where they are located.

OBJECTIVES

The officers report revises the objectives to reflect better alignment with national and regional policy direction and these have been formulated as outcome statements. There was a lot of support for ECO-02 which has the Council working with agencies, mana whenua, stakeholders, and landholders to identify and protect significant natural areas (SNA). This is good, as Council working with landholders generally results in better outcomes for indigenous biodiversity.

POLICIES

With respect to ECO-P3, Croydon Bush and Pukerau Red Tussock Reserve both meet the significance criteria in the NPS-IB. They both would be significant for **Representativeness**. Pukerau Red Tussock Reserve would also be significant for **Rarity/Distinctiveness**, and Croydon Bush would likely be significant for Diversity of species, and **Ecological Context**.

Most of Dolamore Park also contains indigenous vegetation that would be significant for the same reasons as Croydon Bush. However, portions of Dolamore Park contain exotic vegetation, and an ecological survey was undertaken for Gore District Council (the landowner) in November 2024 under the Biodiversity Action on the Ground Programme to verify the SNA status of the park (no previous survey had been undertaken). This survey found that areas of exotic plantation forest, arboretum, and lawn are present that do not meet the criteria for significance. The updated mapping for Dolamore Park is incorporated in the district-wide mapping of SIVA/IVA. Note that both the Dolamore Park and Croydon Bush significant indigenous vegetation areas include public mountain bike and walking tracks within them.

ECO-P8 is proposed for deletion. The protection of Threatened and At Risk species within SNAs is already contained in ECO-P3, in the clause which comes from Section 3.10(2) of the NPS-IB and outlines effects which must be avoided within SNAs except as provided for in 3.11. However, no other policy seeks to avoid effects on these values outside SNAs, and if ECO-P8 is deleted then an additional clause could be added to ECO-P10 to cover this. The clause should refer to avoidance of effects of new subdivision, use or development that result in a reduction in the local population of threatened taxa in the Department of Conservation Threat Categories 1 – 3a - nationally critical, nationally endangered and nationally vulnerable.

Inclusion of At Risk-Declining species in ECO-P8(3) (or in any clause added to ECO-P10) could be unnecessarily prescriptive for species that may be nationally threatened but not locally or regionally threatened. Examples of this type of scenario arose under the previous threat classification for species such as kānuka (*Kunzea serotina*) and matagouri (*Discaria toumatou*). The broader effects-based approach provided by the other policies is considered appropriate for At Risk-Declining species, allowing consideration of effects management on a species-specific basis.

Relevant to ECO-P12, plant and animal pests known to affect indigenous biodiversity are:

- Wilding conifers on the Hokonui Hills
- Chilean flame creeper (*Tropaeolum speciosum*) in lowland forest remnants
- Feral deer, pigs (*Sus scrofa*), and cats (*Felis catus*) in and around areas of forest
- Mustelids (*Mustela* spp), rats (*Rattus* spp), brushtail possum (*Trichosurus vulpecula*), cats, hedgehogs (*Erinaceus europaeus*) and mice (*Mus musculus*) will be present in and around areas of indigenous forest.

If this policy is retained, it would be best to remove the word 'weed', as it means different things to different people. It would be more appropriate to use 'pest plant' and 'pest animal' if the policy is retained.

Farm stock do not fit into the category of pest animals but can have significant adverse effect on indigenous biodiversity and ecological functions. They need to be included in ECO-P12 if it is to be retained, but with this clause excluded if existing grazing rights are present.

Regarding terminology in ECO-P12, it is noted that the Biosecurity Act 1993 refers to 'organisms', and the Southland Regional Pest Management Plan (RPMP) refers to plant pests and animal pests. Where policy relates to SNAs it would be best to refer to 'exotic plant species', as no exotic planting (whether invasive or not) would be justifiable in SNAs. However, it is not common for district plans to refer to

pest control other than as part of enhancing a site, as the provisions are already laid out in the RPMP. Nevertheless, the district plan could simply refer to the RPMP and prohibit plantings or releases of listed species.

VEGETATION CLEARANCE RULES

The vegetation clearance rules should allow for permitted clearance of regrowth indigenous vegetation after previous clearance. This will be particularly relevant to farming operations, but also for any areas which were cleared for purposes other than pastoral farming. The regrowing vegetation must be less than 15 years old. While the permitted maintenance of improved pasture would cover this in many cases, addition of this clause will provide clarity and certainty for landowners and Council around historical use rights. It is extremely unlikely that any areas of such young vegetation are mapped as SIVA/IVA.

A rule could possibly permit incidental clearance of a small amount of indigenous vegetation within IVA. Many other plans allow a small amount (e.g. 25-50m²) of annual or 5-yearly clearance. That would permit additional clearance outside the existing limits at certain locations, for example, such as where a slightly wider band of clearance was required to undertaken maintenance or upgrade works. Given the depletion of indigenous forest in Gore District, restricting the rule to non-forest vegetation would be appropriate. The rule could also exclude removal of individual trees greater than 10 centimetres in diameter at breast height, and clearance for the purpose of developing new areas of pasture.

A small, permitted clearance within IVA is not likely to undermine the maintenance of indigenous biodiversity in the district. In the absence of human intervention, indigenous biodiversity values within the many early successional communities represented by SIVA/IVA will increase over the life of the plan as these areas become more mature. The proposed plan's overall focus on protecting indigenous-dominant vegetation and habitats within SIVA/IVA will allow for these gains to be realised, ensuring no net loss of indigenous biodiversity.

The clearance thresholds proposed in Table 5 of Ms Hampson's evidence are appropriate widths for permitted activities. Generally, indigenous vegetation should not be cleared under a permitted framework from more than 1.0 metre from a structure that needs to be maintained, except for 1(g) which covers fire risk to buildings. Appropriate vegetation clearance widths around buildings for reducing fire risk will depend on several factors including species flammability, vegetation height and density, vegetation maintenance regime, and climatic factors, and are therefore best assessed on a case-by-case basis at the time of consenting for new developments. Guidance from FENZ regarding an appropriate general clearance threshold around existing buildings in Gore District would however be helpful in setting a permitted clearance limit for existing buildings.

Threatened and At Risk plant species and highly mobile fauna species will sometimes be located outside areas of SIVA/IVA. Threatened/At Risk plants should ideally be protected as they are easily defined, while highly mobile fauna areas have not yet been mapped by Environment Southland.

Hokonui Hills

A different rules framework has been prepared for Stoney Creek Station and Wantwood Station in the Hokonui Hills. This is appropriate because the framework was developed using detailed ecological and farm management information shared through a working group comprising ecologists, landscape architects, planners, and farm managers; this level of information and collaboration was not available for other parts of the district. The framework takes into account the extensive nature of farming over large properties in the Hokonui Hills, compared to the smaller and intensive nature of farming over most of Gore District, and the more extensive areas of indigenous vegetation present on these farms, unlike in the intensively farmed lowlands. These properties have been surveyed by ecologists to map areas of indigenous vegetation and habitats and identify ecological values, with clearance limits

established based on an understanding of the ecological values and farm management planning over the next decade. A new policy reflects this situation. Areas of significant indigenous vegetation have been mapped as 'high value' areas by ecologists, and these are treated in the rules the same way as SNAs. This approach could also be used at Mt Wendon in the north of Gore District, and in other locations which also have large properties and relatively large areas of indigenous vegetation.

The permitted clearance limits are not likely to undermine the maintenance of indigenous biodiversity in the Hokonui Hills. In the absence of clearance, indigenous biodiversity values within the many early successional communities represented by SIVA/IVA will increase substantially over the life of the plan as these areas become more mature. This will continue to occur even with ongoing stock grazing, as evidenced by the fact that virtually all indigenous vegetation currently on the properties has itself regenerated in the presence of stock following historic indigenous vegetation clearance and conversion to farmland. The proposed plan's overall focus on protecting indigenous-dominant vegetation and habitats within SIVA/IVA in the Hokonui Hills will allow for these gains to be realised, while allowing for limited additional fencing and track development in appropriate areas of indigenous vegetation. No new fences or tracks are proposed in areas of mature forest or high value lizard habitat on rocky ridge crests. The clearance limits are sufficiently low to ensure no net loss of indigenous biodiversity over the life of the plan, and proposed new fences or tracks avoid key areas of high value vegetation and habitats.

DEFINITIONS

The definition of 'vegetation clearance' in the PDP corresponds with the definition in the NES-FW. However, sphagnum moss harvesting is unlikely in Gore District as the climate is unlikely to be sufficiently wet. While this definition could be retained, it is tailored to freshwater applications rather than to terrestrial vegetation. It would therefore be appropriate and provide greater clarity to remove this definition and rely instead on the definition of 'indigenous vegetation clearance'.

If reference to mob stocking is retained, a definition of this could be: Mob stocking is the restricting of a high number of animals within an area for a short period of time. However, mob stocking is more of a concern for wetlands.

An expanded definition of SNA to include any area that meets the significance criteria (regardless of whether it is mapped and scheduled in a plan) has been included in several district plans since the release of the NPS-IB. This expansion provides a practical way to ensure that the appropriate effects management framework is applied to areas containing significant ecological values, which are required to be identified and appropriately managed under the RMA and the Southland RPS. The Southland RPS and NPS-IB significance criteria are broadly comparable, as discussed below, although the RPS includes wetlands and the NPS-IB does not. The existing desktop mapping of 'SIVA' and 'IVA' provides guidance only and anticipates further ecological assessment in conjunction with landowners before areas are formally classed as SNA.

GENERAL

Habitats for highly mobile fauna species would need to be assessed further, and mapped once this assessment is completed. Braided river birds may use gravel bars in the rivers as breeding habitat. Matuku-hūrepo/Australasian bittern (*Botaurus poiciloptus*) will use wetland habitats. There will also likely be other habitats identified in further investigations.

The appendices need to take account of changes in threat status of species. For example, vascular plants have recently been reviewed, and matagouri is currently classified as Not Threatened.

COMPARISON OF SOUTHLAND RPS AND NPS-IB CRITERIA

Representativeness

The first clause of the SRPS representativeness criterion is very similar to the NPS-IB criterion, and also contains some of the matters referred to in the assessment principles. The SRPS does not refer to ecological integrity. The representativeness criterion in the NPS-IB is complex, and three different outcomes are possible with inconsistent criterion, attributes, and key assessment principles.

Diversity

The SRPS requires high diversity values to be present to trigger significance, whereas the NPS-IB criterion requires only moderate diversity, and only requires the presence of ecotones, complete or partial gradients or sequences. These are much lower thresholds than the SRPS criterion.

Rarity

The SRPS and the NPS-IB have broadly similar rarity criteria/attributes. The main difference is that the SRPS refers to all At Risk categories, whereas the NPS-IB specifies At Risk-Declining. The NPS-IB also refers to type localities, but the SRPS does not.

Ecological context

The SRPS ecological context criterion refers to connectivity/buffering, wetland roles, and important fauna habitats but the NPS-IB ecological context criterion only refers to connectivity/buffering and size/shape. The absence of an important fauna habitat criterion in the NPS-IB to capture important habitats for fauna is presumably why there is specific policy about highly mobile indigenous fauna.

Summary

Overall, the generally broader reach of the NPS-IB criteria, and particularly the representativeness criteria, will most likely result in more areas of terrestrial indigenous vegetation and habitats of indigenous fauna being classed as significant under the NPS-IB than under the SRPS criteria. This is consistent with the intention of the NPS-IB expressed during its development phase that it should not result in any narrowing of the recognition currently given to areas of significant indigenous vegetation and the significant habitats of indigenous species under section 6(c) of the RMA¹.

The NPS-IB criteria have many 'moving parts' with initial clauses, criteria, attributes, and key assessment principles, and risks internal inconsistency. This has happened with the representativeness criterion which would capture almost any example of indigenous vegetation/habitat under a present-day context (which the attributes suggest). The low thresholds associated with the diversity attributes would also capture many sites. Most second generation plans have a fauna habitat criterion that the NPS-IB criteria do not. The NPS-IB criteria warrant tightening in places, broader coverage in others,

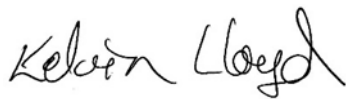
¹ Ministry for the Environment 2011. *Explanation document for the Proposed National Policy Statement on Indigenous Biodiversity*. 4 pp.

and streamlining to individual criteria and subcriteria; the key assessment principles can go in non-statutory guidelines.

Kelvin Lloyd was approached by MfE and gave them detailed feedback on the above issues.

Given the delay in mapping of SNAs and the likelihood of changes to the NPS-IB, it would be reasonable to adapt the SNA definition to reflect SIVA and to refer to areas that meet the criteria for significant natural areas as set out in the SRPS. This approach is consistent with some other recently revised plans, including the Te Tai o Poutini Plan, which rely on RPS criteria rather than NPS-IB criteria for identifying SNA. It would also ensure indigenous fauna habitat values are captured, including highly mobile fauna values prior to mapping being undertaken by Environment Southland.

Yours sincerely

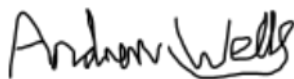


Kelvin Lloyd
Senior Principal Ecologist
Wildland Consultants Ltd

Reviewed and approved for release by:



Des Smith
Director/South Island Regional Manager
Wildland Consultants Ltd



Andrew Wells
Senior Ecologist
Wildland Consultants Ltd