Waimakariri District Council
Proposed Waimakariri District Plan

Recommendations of the PDP Hearings Panel

Recommendation Report 24

Hearing Stream 7A
Part 2: District-wide matters – ECO – Ecosystems and Indigenous Biodiversity

This report should be read in conjunction with **Report 1** and **Recommendation Reports 2, 3 and 17.**

Report 1 contains an explanation of how the recommendations in all subsequent reports have been developed and presented, along with a glossary of terms used throughout the reports, a record of all Panel Minutes, a record of the recommendation reports and a summary of overarching recommendations. It does not contain any recommendations per se.

Recommendation Report 2 contains the PDP Panel's recommendations on the PDP's Part 2: District-wide Matters – Strategic directions - SD Strategic directions objectives and policies.

Recommendation Report 3 contains the PDP Panel's recommendations on the PDP's Part 2: District-wide Matters – Strategic directions - UFD Urban Form and Development objectives and policies.

Recommendation report 17 contains the PDP Panel's recommendations on the PDP's EI - Energy and Infrastructure Chapter.

Appendix 1: Schedule of attendances

Appendix 2: Recommended amendments to the Proposed Plan - Tracked from notified version (provisions not consequentially renumbered)

The Hearings Panel for the purposes of **Hearing Stream 7A** comprised Commissioners Gina Sweetman (Chair), Allan Cubitt, Gary Rae, Megen McKay, Neville Atkinson and Niki Mealings.

1. Introduction

Report outline and approach

1. This is Report 24 of 37 Recommendation Reports prepared by the PDP Hearings Panel appointed to hear and make recommendations on submissions to the Proposed Waimakariri District Plan (PDP).

2. The report addresses the provisions relating to the ECO – Ecosystems and Indigenous Biodiversity chapter and the submissions received on those provisions. The relevant provisions are:
   - Introduction
   - Objectives ECO-O1
   - Policies ECO-P1 to ECO-P8
   - Rules ECO-R1 to ECO-R7
   - Advice Note
   - Matters of Discretion ECO-MD1 to ECO-MD3.
   - Schedules
   - Appendices

3. We have structured our discussion on this topic as follows:
   (a) **Section 2** summarises key contextual matters, including relevant provisions and key issues/themes in submissions.

   (b) **Sections 3 - 7** contains our evaluation of key issues and recommended amendments to provisions.

   (c) **Section 8** contains recommended minor changes; and

   (d) **Section 8** contains our conclusions.

4. This Recommendation Report contains the following appendices:
   (a) **Appendix 1: Schedule of attendances** at the hearing on this topic. We refer to the parties concerned and the evidence they presented throughout this Recommendation Report, where relevant.

   (b) **Appendix 2: Recommended amendments to the Proposed Plan – Tracked from notified version.** This sets out the final amendments we recommend be made to the PDP provisions relating to this topic. The amendments show the specific wording of the amendments we have recommended and are shown in a 'tracked change' format showing changes from the notified version of the PDP for ease of reference. Where whole provisions have been deleted or added, we have not shown any consequential renumbering, as this method maintains the integrity of how the submitters and s42A Report authors have referred to specific provisions, and our analysis of these in the Recommendation Reports. New whole provisions

are prefaced with the term 'new' and deleted provisions are shown as struck out, with no subsequential renumbering in either case.

5. We record that all submissions on the provisions relating to the ECO – Ecosystems and Indigenous Biodiversity chapter have been taken into account in our deliberations. In general, submissions in support of the PDP have not been discussed but are accepted or accepted in part. More detailed descriptions of the submissions and key issues can be found in the relevant s42A Reports, Responses to Preliminary Questions, written Reply Reports, and Joint Witness Statements (Energy and Infrastructure Integration), which are available on the Council's website.

6. In accordance with the approach set out in Report 1, this Report focuses only on 'exceptions', where we do not agree fully or in part with the s42A report author's recommendations and / or reasons, and / or have additional discussion and reasons in respect to a particular submission point, evidence at the hearing, or another matter. Original submissions have been accepted or rejected as recommended by the s42A report author unless otherwise stated in our Recommendation Reports. Further submissions are either accepted or rejected in conformance with our recommendations on the original submission to which the further submission relates.

7. The requirements in clause 10 of the First Schedule of the Act and s32AA are relevant to our considerations of the PDP provisions and the submissions received on those provisions. These are outlined in full in Report 1. In summary, these provisions require among other things:
   (a) our evaluation to be focussed on changes to the proposed provisions arising since the notification of the PDP and its s32 reports;
   (b) the provisions to be examined as to whether they are the most appropriate way to achieve the objectives; and
   (c) as part of that examination, that:
      i. reasonable alternatives within the scope afforded by submissions on the provisions and corresponding evidence are considered;
      ii. the efficiency and effectiveness of the provisions is assessed;
      iii. the reasons for our recommendations are summarised; and
      iv. our report contains a level of detail commensurate with the scale and significance of the changes recommended.

8. We have not produced a separate evaluation report under s32AA. Where we have adopted the recommendations of Council's s42A report authors, we have adopted their reasoning, unless expressly stated otherwise. This includes the s32AA assessments attached to the relevant s42A Reports and/or Reply Reports. Those reports are part of the public record and are available on the Council website. Where our recommendation differs from the s42A report authors' recommendations, we have incorporated our s32AA evaluation into the body of our report as part of our reasons for recommended amendments, as opposed to including this in a separate table or appendix.

9. A fuller discussion of our approach in this respect is set out in Section 5 of Report 1.

2. Summary of provisions and key issues

Outline of matters addressed in this section

10. In this section, we provide relevant context around which our evaluation of the notified provisions and submissions received on them is based. Our discussion includes:
    (a) summary of relevant provisions;
    (b) themes raised in submissions; and
    (c) identification of key issues for our subsequent evaluation.

Submissions

11. This chapter attracted 32 original submitters, who made a 266 submission points. There were also 170 further submission points.

Key issues

12. The issues in contention on this chapter addressed in this report are:
    - The Introduction
    - ECO-P4
    - ECO-P5 and ECO-P7
    - SNA 048: 670 Island Road
    - Integration between Natural Hazards chapter and ECO chapter (ECO-R1)

3. Introduction

13. The following is a summary of the Panel's recommended amendments to the Introduction, beyond those recommended by the s42A report author:

Provision	Panel recommendations
Introduction	Reword the recommended addition regarding the NES-CF regulations for clarity and make minor wording changes to a number of the other recommended amendments.

14. The submissions we consider here are those seeking amendments to the Introduction section of the chapter. In summary, these were:
    (a) Rayonier Matariki Forests who highlights a lack of clarity on alignment with NES-PF and requests amendments to address this.[1]
    (b) Judith Roper-Lindsay who requests amendments to clarify that not all 'remnants' are SNAs; outline the degradation that water can cause; and recognise the asset value of indigenous biodiversity to landowners through the bonus lot consideration.[2]

[1] 171.2
[2] 120.3

(c) The Department of Conservation who requests amendments to better align with SD-O1(1) which seeks to ensure an 'overall net gain' for biodiversity. [3]

(d) Forest and Bird who request amendments to provide for section 6(c) of the RMA; explain the relationship with the NZCPS and NPS-FM; recognise the New Zealand Biodiversity Strategy; and address indigenous biodiversity in terms of climate change to have regard to emissions reduction plans and national adaptation plans. They also request the requirement to give effect to the UFD provisions is deleted. [4]

15. The s42A report author recommended accepting a number of these submission point as follows:

(a) Rayonier Matariki Forests - accept in part by acknowledging the NES-CF.

(b) Judith Roper-Lindsay – accept in part by amending reference to 'remnants' and recognising the bonus lot process but not in relation to the water degradation issue.

(c) Department of Conservation – reject request regarding "overall net gain' amendment.

(d) Forest and Bird - accept in part in relation to relationship with the NZCPS and NPS-FM; climate change resilience, and deletion of requirement to give effect to the UFD.

16. The Panel are comfortable with the final position of the s42A report author as set out in the right of reply report; however, we have made several minor amendments to the recommended wording. A more substantial change has been made to the recommended reference to the NES-CF as the two sentences conflict. We acknowledge here that the alignment of the District Plan with this document has been somewhat difficult given it was updated, and renamed, during the hearings process.

4. ECO-P4 - Maintenance and enhancement of other indigenous vegetation and habitats

17. The following is a summary of the Panel's recommended amendments to ECO-P4, beyond those recommended by the s42A report author:

Provision	Panel recommendations
ECO-P4	Retain 'enhance' in the chapeau of the policy as opposed to 'restore' as recommended by s42A report author.

18. The submissions we consider here are those seeking a range of amendments to ECO-P4 as follows:

(a) Fulton Hogan considers ECO-P4 sets a relatively high bar for vegetation clearance in non-SNAs and requests amendments to address this.[5]

[3] 419.71; Forest and Bird [FS78]
[4] 192.40; Federated Farmers [FS83]
[5] 41.23

(b) Judith Roper-Lindsay [120.8] sought a range of amendments addressing water use, protection at the local level, clarification of descriptive references etc.[6]

(c) Canterbury Botanical Society supports the acknowledgement of indigenous vegetation loss on the Canterbury Plains and other flat land but considers the continued risk to flat land within the Oxford Ecological District, particularly Lees Valley, should also be acknowledged.[7]

(d) Forest and Bird support the approach of the policy but is uncertain whether it applies to areas that meet ECO-APP1 (SNA criteria) that are not mapped SNAs as ECO-P4(3) and ECO-P5(5) could both be applicable. They seek a range of amendments to address this concern.[8]

(e) QEII Trust supports continued assessment of indigenous vegetation that may later be determined to be a SNA but opposes ECO-P4(2)(b).[9]

(f) Environment Canterbury question the relevance of the policy and seek amendments accordingly.[10]

(g) North Canterbury Fish and Game Council submit that ECO-P4(2)(b) is ambiguous and requests that it be deleted or amended.[11]

(h) Federated Farmers notes the RMA does not provide a direction on 'enhance' and seek removal of this component within ECO-P4. They also sought the deletion of the broad ecological district restrictions on indigenous vegetation clearance applied without mapped SNAs. [12]

(i) Department of Conservation seek that ECO-P4 be strengthened to include 'avoid policies'.[13]

(j) Waimakariri Irrigation Ltd and Dairy Holdings Ltd request the addition of "or where that is not reasonably practicable, managed," to clause 2(a). [14]

19. The s42A report author recommended a range of changes to ECO-P4 to address the issues raised by submitters. The Panel is largely comfortable with the changes proposed with one exception. That exception relates to the response to the Federated Farmers submission where the s42A report author recommended 'enhance' be replaced with 'restore' in both the titles and chapeau of the policy. That change was promoted on the basis that 'restore' better aligns with the NPSIB, in particular Policy 13 that requires the "*restoration of indigenous biodiversity is promoted and provided for".*

20. While the Panel agrees with the s42A report author that the NPSIB tends to focus on 'restoration' rather than 'enhancement' (see Policies 13 and 16, and clauses 3.5, 3.6 and 3.21), we note that the definition of 'restoration' within the NPSIB includes the phrase *'may include enhancement activities'* while clause 1.7 states that *"Maintaining indigenous biodiversity requires: …(b) where necessary, the restoration and enhancement of ecosystems and habitats."* In this context, the Panel does not think the

[6] 120.8
[7] 122.8; Forest and Bird [FS78]
[8] 192.45
[9] 279.4
[10] 316.97; Christchurch International Airport Ltd [FS80]
[11] 362.4; Forest and Bird [FS78]
[12] 414.109; Forest and Bird [FS78]
[13] 419.76; Forest and Bird [FS78]
[14] 210.20; 420.7

use of 'enhance' is inconsistent with the NPSIB as it is an element of 'restoration'. Given ECO-P5 addresses indigenous biodiversity outside of SNAs, we consider the lesser standard of 'enhance' is appropriate at this level and is consistent with ECO-O1.

21. Furthermore, we question whether there is scope to make the change recommended by the s42A report author. The Federated Farmers submission sought that 'enhance' be deleted but did not request it be replaced with an alternative. However, our recommendation not to accept this part of their submission does not change the s42A report author's recommendation of 'accept in part' as other aspects of their submission have been recommended to be accepted.

5. ECO-P5 Offsetting Residual Effects and EI Chapter Integration (ECO-P7)

22. The following is a summary of the Panel's recommended amendments to the proposed ECO-P5, beyond those recommended by the s42A report authors.

Provision	Panel recommendations
ECO-P5	Restructure recommended policy to create separate clauses for the following: • Significant adverse effects in SNAs • Other adverse effects in SNAs • Significant adverse effects outside of SNAs • The effects of renewable electricity generation assets and activities and electricity transmission network assets and activities
Consequential amendments to EI-P5	Amend so that regionally significant infrastructure, other than renewable electricity generation activities and National Grid activities, are subject to ECO-P5.
ECO-P7	Change the cross reference from EI-P5 to CE-P7
Rule's introduction section	Amend rules introductory section to note that the ECO rules do not apply to EI activities

23. The submission points we consider here are those that relate to ECO-P5 which set out the circumstances when a biodiversity offset would be considered. We also address an EI integration issue in response to the submissions of Transpower and MainPower[15].

24. In relation to ECO-P5, a number of submissions requested changes as follows:

[15] 195.72; 249.40

(a) Fulton Hogan submitted that ECO-P5(3) most likely conflicts with ECO-APP2 (Principles for biodiversity offsetting) and seeks it deletion.[16]

(b) Forest and Bird[17] submitted that policy direction is needed on how adverse effects will be managed both within and outside SNAs and requested that the policy not apply to the coastal environment or wetlands to give effect to the NZCPS and the NPS-FM respectively. They sought a new policy that includes an effects management hierarchy.[18]

(c) Waimakariri Irrigation Ltd and Dairy Holdings Ltd request the deletion of the word 'only' within the policy.[19]

(d) Federated Farmers request amendments which introduce quantity and quality tests, noting ECO-P5(4) only implies quantity improvements.[20]

(e) Canterbury Botanical Society urges protection over biodiversity offsets.[21]

25. The s42A report author recommended the submissions of Fulton Hogan, the Canterbury Botanical Society, and Forest and Bird be accepted in part. She recommended the submissions of Federated Farmers and Waimakariri Irrigation Ltd and Dairy Holdings Ltd be rejected. Her recommendation in relation to the Forest and Bird submission was to adopt a policy similar to that recommended by the submitter, but more closely aligned to the NPSIB, to replace the notified ECO-P5, which only focused on offsetting. The recommended policy reads as follows:

> ***Managing adverse effects on indigenous biodiversity outside the coastal environment***
>
> *Outside the coastal environment:*
>
> 1. *Avoid significant adverse effects on indigenous biodiversity within SNAs; and*
> 2. *Apply the following effects management hierarchy for non-significant adverse effects on indigenous biodiversity of SNAs, and significant adverse effects on indigenous biodiversity outside of SNAs:*
>
> *(a) adverse effects are avoided where practicable; then*
>
> *(b) where adverse effects cannot be avoided, they are minimised where practicable; then*
>
> *(c) where adverse effects cannot be minimised, they are remedied where practicable; then*
>
> *(d) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, biodiversity offsetting is provided where possible, as set out in ECO-APP2; then*
>
> *(e) where biodiversity offsetting of more than minor residual adverse effects is not possible, biodiversity compensation is provided, as set out in ECO-APP3; then*
>
> *(f) if biodiversity compensation is not appropriate, the activity itself is avoided*.

[16] 41.24
[17] 192.46
[18] 192.46; Federated Farmers [FS83]
[19] 210.21 and 420.8
[20] 414.110; Forest and Bird [FS78]
[21] 122.9

26. The s42A report author considered the use of the word 'avoid' in the first clause "*would appropriately link to the provision for specific adverse effects in Clause 3.10(2) of the NPSIB and also the exceptions to these in Clause 3.11 of the NPSIB, without having to detail these lengthy provisions.*" Clause 3.10(2) of the NPSIB is as follows:

> *Each of the following adverse effects on an SNA of any new subdivision, use, or development must be avoided, except as provided in clause 3.11:*
> *(a) loss of ecosystem representation and extent:*
> *(b) disruption to sequences, mosaics, or ecosystem function:*
> *(c) fragmentation of SNAs or the loss of buffers or connections within an SNA:*
> *(d) a reduction in the function of the SNA as a buffer or connection to other important habitats or ecosystems:*
> *(e) a reduction in the population size or occupancy of Threatened or At Risk (declining) species that use an SNA for any part of their life cycle.*

27. We assume that the s42A report author considers the 'link' is that the effects listed in clause 3.10(2) should be seen as 'significant' by the NPSIB as they attract an 'avoid' directive, and therefore any other adverse effects are therefore 'non-significant' and are to be managed under the effects management hierarchy. Neither Forest and Bird nor Department of Conservation, who also requested a replacement policy that sought to avoid adverse effects on various indigenous species and habitats, commented on the proposed policy at the hearing.

28. Hence, there was little evidence on the appropriateness of this approach, but the Panel is comfortable with where the s42A report author has landed on the issue at this point in time, bearing in mind that a later plan change process will be required to give full effect to the NPSIB. Any assessment of effects under this policy will need to have regard to the NPSIB, given it has not been fully implemented by the PDP at this time, so it is reasonable to assume that the NPSIB will provide the context for assessing what is 'significant' or otherwise, until such time as that plan change has been undertaken. We recommend that the Council reconsider all the ECO chapter provisions for consistency with the NPSIB through that process.

29. The s42A report author also considers the word 'avoid' links to the exceptions provided for in Clause 3.11 of the NPSIB. This clause sets out several activities (such as specified infrastructure; mineral and aggregate extraction) where Clause 3.10(2) does not apply in certain circumstances. Again, we assume that the s42A report author considers the effects of the 'exception' activities are not to be considered 'significant' as they are to be managed in accordance with the effects management hierarchy set out in clause 3.10(3), along with the significant adverse effects of activities on indigenous biodiversity outside an SNA as provided for by clause 3.16 of the NPSIB. In the PDP, these effects are to be managed under ECO-P5(2) which essentially incorporates the effects management hierarchy of the NPSIB.

30. With respect to how 'specified infrastructure' is managed by the PDP, the Panel notes that the consent pathway in SNAs under EI-P5 for regionally significant infrastructure (most of which will be specified infrastructure under the NPSIB), does not accurately reflect the 'effects management hierarchy' set out in this policy. This is further

complicated by the fact that the NPSIB does not apply to *"the development, operation, maintenance or upgrade of renewable electricity generation assets and activities and electricity transmission network assets and activities*", so are not 'regionally significant infrastructure' in relation to the management of this issue in the PDP. However, s6(c) of the Act is still relevant to this infrastructure.

31. As a consequence, we recommend an amendment to both the proposed ECO-P5 and EI-P5 to address this issue. The amendment to EI-P5 retains the consent pathway for renewable electricity generation activities and National Grid activities under the recommended EI-P5(3) and (4) but requires other regionally significant infrastructure to be subject to ECO-P5. The consent pathway for 'other regionally significant infrastructure' through ECO-P5 has been provided for in a new EI-P5(5). We have also recommended that the notified EI-P5(5) be deleted on the basis that it is inconsistent with the 'effects management hierarchy' as highlighted by the Fulton Hogan submission.

32. To accommodate the proposed changes, and to provide better clarity in the recommended ECO-P5, the Panel has recommended a restructure of this policy into five different clauses, which deal with the various levels of effects on biodiversity as identified by the NPSIB and the 'effects management hierarchy'.

33. While we have made a number of changes to the policy recommended by the s42A report author, the recommendation of the report author is not affected.

34. In relation to Transpower and MainPower submissions on ECO-P7, the Panel has noted an error in the integration between the CE chapter and EI chapter in relation to how indigenous vegetation is managed. In response to these submissions, the s42A report author recommended ECO-P7 be amended to be 'subject to EI-P5'. However, subsequent reports and JWS's have recommended that EI-P5 only apply <u>outside</u> the coastal environment, with CE-P7 applying to infrastructure in the coastal environment. That change in approach, which we support, has not been recorded in the Wrap Up reply report for ECO-P7 as recommended by the officers. We have recommended that be rectified, although it does not have any impact on the recommendations of s42A report author in relation to the submissions. We still recommend that the Transpower and MainPower submissions be accepted in part.

6. SNA048 – 670 Island Road

35. The following is a summary of the Panel's recommended amendments to SNA 048, beyond those recommended by the s42A report author.

Provision	**Panel recommendations**
SNA 048	Amend to boundary of SNA 048 to reflect the recommendation of Dr Dollery but join the two northern circles to the continuous SNA area on

	the boundary and delete the two small circles in the southern part of the site.

36. The submission point we consider here is that of Wayne and Emma Taylor[22] who oppose the extension of the SNA 048 boundary beyond the existing boundary of 'Vegetation and Habitat Site V059' in the Operative District Plan. The submitter states that the additional area included in the PDP extends beyond the existing beech vegetation community and there is no significant indigenous vegetation present. They contest the statement in the Wildlands Consultants Ltd report '*Significant Natural Area Assessment Report OX023 Island Road Beech'* that the dominant gorse and scotch broom in this additional area is acting as a nurse crop for indigenous forest species. The Taylor's request that the boundary of SNA 048 be amended to align with boundary of V059 in the Operative District Plan.

37. While not specifically related to SNA 048, the submission of Waimakariri Irrigation Ltd[23] also raises concern that some mapped SNAs are larger than necessary, and do not meet the criteria for significance. It seeks the deletion of SNAs where significance criteria are not met. Department of Conservation[24] did not submit specifically on SNA 048, but they submitted in support of ECO-SCHED1 and requested that it be retained as notified.

38. The s42A report author notes that SNA048 is 10.8ha in area whereas the protected site within the ODP is only 1.75ha (although we note that Dr Dollery's report suggests the ODP area is only 0.5ha). The s42A report author initially recommended accepting the submission in part based on Ms Steel's advice that the 'Significant Natural Area Assessment Report' for SNA 048, prepared by Dr Dollery, "*concluded that the gorse invasion did not merit inclusion in the SNA and also that some areas of remnant beech meet the SNA criteria."* The area recommended for protection was similar to the PDP area but with the addition of a number of unconnected circular areas located within the gorse area that denoted individual trees or small groups of trees.

39. At the hearing, Department of Conservation's ecological expert, Mr Clayton, gave evidence that related to both SNA 048 and SNA 051 rather than SNA 048 specifically. He agreed that the proposed SNA includes areas dominated by woody and herbaceous exotic weeds that should not by themselves be considered as an SNA. He noted that the exotic woody vegetation acts as a buffer to the small remnants of beech (and podocarp) trees still present in the core of the habitat and that *"if this buffer is removed (presumably by a spray operation), the remaining habitat will become severely fragmented and subject to intense edge effects, eventually leading to the virtual destruction of any remaining biodiversity."* He was of the view that notified boundary was preferable to the '*smaller, isolated, fragmented"* boundary recommended in the s42A report.

[22] 338.1 & 338.2
[23] 210.18; Federated Farmers [FS83]
[24] Department of Conservation [419.91]

40. In response to Mr Clayton's evidence for SNA048, Ms Steel agreed *"that mapping these SNAs as contiguous areas constitutes best practice reserve design and provides a better buffering function and protection."* Based on that position, she changed her original position to recommending a boundary that *"comprises a continuous polygon that incorporates the area between the patches of beech."* For the new boundary, she relied on a 2006 site survey by David Rossiter (Council file: TRIM: 150416061084) which noted that "*The two sites of beech and shrubs are connected by shrubs and gorse*" and that where gorse has previously been cleared, some native regeneration is evident. Her recommendation would incorporate *"the regeneration and providing some buffering but excluding the extensive areas of pure gorse."*

41. The Panel has concerns over how this particular SNA boundary has been assessed. It is not clear to us whether Ms Steel, or Mr Clayton for that matter, has visited this site. It appears to us that they have both relied on the reports of others. Ms Steel's reply report recommendation relies on a site survey carried out in 2006. No details, maps or photos have been provided from that report, so it is difficult for us to relate the 'two sites of beech and shrub' referred to above to the photos provided in latest ecological assessment report for the site, carried out by Dr Dollery on 3 April 2023.

42. In her report of that site visit, Dr Dollery noted that the majority of the extended SNA area contained thick cover of gorse, bramble and elder. No mention is made of native vegetation within the gorse with the exception of the solitary beech trees that are visible within the gorse area. She recommended a reduced area that would be approximately 8 hectares smaller than the area notified in the PDP, which included those solitary beech trees. She made the following observations about the recommended area:

> *This contains the significant area dominated by beech and other indigenous plants and* ***precludes the areas containing exotic, invasive weed species****. This new boundary is an expansion from the operative district plan boundary and* ***includes a buffer zone of at least 5m around the SNA to mitigate edge effects*** *and allow for the growth of any regenerating indigenous plants found within the gorse. In addition, the beech trees which are disconnected from the beech copse to the north will be retained and assessed as part of the SNA. This would increase the SNA area on the property as mapped in the Operative District Plan from 0.5 ha to approximately 1.35 ha (Figure 5). However, this is a decrease from the area recommended in the Wildlands report by approximately 8 ha. This is due to the* ***Wildlands report having been assessed through desktop survey and not physical site assessment****.* ***The 8 ha*** *which is proposed to be* ***removed*** *from the Proposed District Plan* ***comprises an area which is smothered by exotic plants is not significant and planned to be cleared****.* [our emphasis]

43. Dr Dollery went on to say that *"clearing invasive plants will have a beneficialimpact on the SNA within the property and those on neighbouring properties due to the removal of seed sources, many of which are bird dispersed*". She also notes *that "the landowners are also passionate about retaining any native species found, including the beech trees…".*

44. We accept that a buffer is appropriate when identifying the extent of SNA boundaries. However, it is reasonably clear to us that the buffer proposed by Ms Steel and Mr Clayton is excessive and is not aligned with the view of the only ecologist that we know has visited the site recently, Dr Dollery. Her report states that the final area in her recommendation '*includes a buffer zone of at least 5m around the SNA to mitigate edge effects'.* We cannot rely on the 2006 report referenced by Ms Steel as we have not been provided a copy of that report so cannot compare it with Dr Dollery's assessment. However, it seems reasonably likely to us that the 8ha she has proposed for removal does not contain any significant native regeneration as her evidence is that it was 'smothered by exotic plants'. This is consistent with the comments made in the Taylor submission.

45. We also note that SNA 048 is attached to, and part of, SNA 049 to the north which is significantly larger than SNA 048. Extending such a large area of SNA by incorporating an 8ha buffer of gorse is not considered appropriate given its potential to impact on the SNA itself through weed infestation as noted by Dr Dollery. It would seem reasonable that a property owner would wish to clear large areas of noxious weeds to protect other areas of their properties from similar invasion. In some regions, property owners are in fact required to do this. While the Taylors did not appear in front of us, Dr Dollery's report noted that the *"landowners are also passionate about retaining any native species found, including the beech trees".*

46. We therefore conclude that there is no justification for the extent of SNA 048 under the notified plan or the Reply Report recommendation. However, we are concerned that Dr Dollery's final recommendation includes the isolated trees or pockets of trees, which are not connected to the main body of the SNA. That is unlikely to achieve any real benefit. In our view, the larger two pockets closer to the continuous extent of the SNA on the northern boundary could be easily incorporated into that continuous area thereby maintaining the continuity of the SNA and enhancing the buffer zone. This would avoid the concern Mr Clayton had with singling out of individual trees within patches as outposts of the SNA islands.

47. The Panel therefore recommends that the submission of Wayne and Emma Taylor be accepted in part, as the recommended area is slightly larger than that identified in the ODP. We recommend that the extent of SNA 048 is modified in accordance with Dr Dollery's recommendation, subject to our qualification in paragraph 46 above.

7. Integration between Natural Hazards chapter and ECO chapter (ECO-R1)

48. The following is a summary of the Panel's recommended amendments to changes that have been recommended by the s42A report author to ECO-R1:

Provision	Panel recommendations
ECO-R1	Amend recommended activity status for 'new community scale natural hazard mitigation works' by adding the following matters of discretion: **Matters of discretion are restricted to:** NH-MD2 - Natural hazard mitigation works ECO-MD1 - Indigenous vegetation clearance

52. The issue we address here are the consequential amendments proposed to ECO-R1 by the Natural Hazards chapter s42A report author, in conjunction with the ECO chapter s42A report author, to address the Environment Canterbury submission[25] that sought changes to the PDP provisions to maintain the effective operation of community scale natural hazard mitigation works. A number of changes were recommended by the report authors, and accepted by the Panel, to efficiently facilitate the maintenance of Environment Canterbury's flood protection schemes.

53. One of those recommended changes was to amend ECO-R1 to make the construction of new schemes restricted discretionary (as opposed to non-complying which would otherwise apply). This was accepted by the Panel. However, the amended drafting proposed to ECO-R1 did not include matters of discretion, which essentially invalidated the proposed activity status.

54. To rectify this, the Panel recommends adding two maters of discretion to the rule, the first dealing with the natural hazard mitigation works themselves (NH-MD2) and the second dealing with the effect on indigenous biodiversity (ECO-MD1), which also addresses matters of functional and operational need.

55. The proposed changes do not affect our recommendation in relation to the Environment Canterbury submission, which remains an 'accept in part'.

8. MINOR CHANGES TO RECOMMENDATIONS

56. The following is a summary of the Panel's recommended amendments to changes that have been recommended by the s42A report author to a range of provisions.

Provision	Panel recommendations
Introduction to Rules	Amend to note that the rules do not apply to EI activities
ECO-R3	Amend rule to create two separate rules addressing different spatial contexts as follows:

[25] 316.81

	: (a) Planting of indigenous vegetation within any SNA for 'all zones' and (b) planting of indigenous vegetation within the ONC, VHNC and HNC.

57. The Panel essentially agrees with the conclusions and recommendations of the s42A report author on these provisions but have recommended some minor changes to the wording proposed for reasons of clarity and simplification. The amendments to the introduction to the rules addresses the integration of the chapter with the EI chapter.

58. With respect to ECO-P3, the recommendation was to delete the reference to 'Significant Natural Areas (SNA) Overlay' and replace it with 'All Zones'. However, the Panel notes that this would require all indigenous plantings outside of a SNA (for example, in a private garden) to be 'naturally occurring within the relevant ecological district'. We do not think this is what is intended, and the original rule did not require this. The Panel therefore recommends that this rule be split into two new rules, one applying to the 'Planting of indigenous vegetation in an SNA' for all 'zones', with the other applying to the ONC, VHNC and HNC areas.

9. Conclusion

59. For the reasons summarised above, we recommend the adoption of a set of changes to the PDP provisions relating to Part 2: District-Wide Matters – ECO – Ecosystems and Indigenous Biodiversity chapter. Our recommended amendments are shown in Appendix 2.

60. Overall, we find that these changes will ensure the PDP better achieves the statutory requirements, national and regional direction, and our recommended Strategic Directions, and will improve its useability.

Appendix 1: Submitter attendance and tabled evidence for Ecosystems and Indigenous Biodiversity - Hearing Stream 7A

Attendee	Speaker	Submitter No.
Council Reporting Officers	• Shelley Milosavljevic • Kate Steel	N/A
Department of Conservation	• Pene Williams • Elizabeth Williams • Richard Clayton	419 FS 77
Canterbury Regional Council	• Victoria Watt • Phillip Grove • Kate Dickson	316 FS 105
Tabled evidence		
MainPower New Zealand Limited	• Melanie Foote	249
Horticulture New Zealand	• Sarah Cameron	295 FS 47

Appendix 2: Recommended amendments to the Proposed Plan - Tracked from notified version (provisions not consequentially renumbered)

Appendix 2:

- Ecosystems and Indigenous Biodiversity Chapter
- Standards for creation of any bonus allotment and establishment of any bonus residential unit

ECO - Pūnaha hauropi me te rerenga rauropi taketake - Ecosystems and indigenous biodiversity

Introduction

Indigenous biodiversity includes all plants and animals that occur naturally in New Zealand and have evolved or arrived without human assistance. It provides important ecosystem services, including resilience to climate change and natural hazards,[1] shaping our local and cultural identity and has considerable intrinsic value to mana whenua and people of the District.

The diverse ecosystems of the District contain remnants of indigenous vegetation and habitats of indigenous fauna which were once widespread, but over time have been destroyed, fragmented and degraded by land use and pests. These remnants ~~(SNAs)~~[2] have ~~significant~~[3] biodiversity value, and areas that meet SNA criteria are determined to be ecologically significant[4] and are critical for preventing the extinction of rare species and loss of ecosystems.

The purpose of this chapter is to protect SNAs, and maintain indigenous biodiversity, as required under the RMA.

~~SNAs are areas of significant indigenous vegetation and/or significant habitat of indigenous fauna. They comprise two types:~~
~~Mapped SNAs~~ Significant Natural Areas[5] – are areas of ~~significant~~ [6]indigenous vegetation and/or ~~significant~~[7] habitat of indigenous fauna shown on the planning map and listed in ECO-SCHED1, or any other area of indigenous vegetation and or habitat of indigenous fauna[8] that meet one or more of the ecological significance criteria listed in ECO-APP1.

- ~~Unmapped SNAs – are areas containing significant indigenous vegetation and/or significant habitat of indigenous fauna types listed in ECO-SCHED2 that occupy at least the specified minimum contiguous area, and are not mapped SNAs.~~[9]

This approach provides a resource consent pathway for both identified and unidentified areas of significant indigenous vegetation and/or significant habitat of indigenous fauna.

The provisions of this chapter also provide landowners the opportunity to gain bonus allotment or bonus residential unit development rights for the legal protection, physical protection and restoration of SNAs.[10]

[1] Forest and Bird [192.40]
[2] Judith Roper-Lindsay [120.3]
[3] Judith Roper-Lindsay [120.3]
[4] Judith Roper-Lindsay [120.3]
[5] Federated Farmers [414.19] and Department of Conservation [419.92]
[6] RMA Schedule 1 Clause 16(2)
[7] RMA Schedule 1 Clause 16(2)
[8] Federated Farmers [414.19] and Department of Conservation [419.92]
[9] Federated Farmers [414.20], MainPower [249.41] Federated Farmers [414.123], Department of Conservation [419.92], Christchurch City Council [360.18], Judith Roper-Lindsay [120.2 & 120.14], and Environment Canterbury [316.108]
[10] Judith Roper-Lindsay [120.3]

The NES-CF regulates commercial forestry and allows District Plans to be more stringent than the NES-CF for afforestation within SNAs. ECO-R7 is more stringent for afforestation within SNA but indigenous vegetation clearance is managed under the NES-CF as the provisions in the District Plan are not less stringent.[11]

This chapter gives effect to requirements of the NZCPS and NPS-FM that relate to terrestrial biodiversity.[12]

The provisions in this chapter are consistent with the matters in Part 2 - District Wide Matters - Strategic Directions ~~and give effect to matters in Part 2 - District Wide Matters - Urban Form and Development~~[13].

Other potentially relevant District Plan provisions

As well as the provisions in this chapter, other District Plan chapters that contain provisions that may also be relevant to ecosystems and indigenous biodiversity include:

- Appendix APP2: contains standards for creation of a bonus allotment and establishment of a bonus residential unit.
- General Rural Zone and Rural Lifestyle Zone: the underlying zones for SNAs, contains correlating provisions relating to bonus allotments and bonus residential units, along with setback requirements for certain activities from SNAs.
- Subdivision: contains provisions for creation of a bonus allotment, and subdivision of an area containing a ~~mapped~~[14] SNA;
- Earthworks: contains provisions for earthworks within a SNA.
- Natural Character of Freshwater Bodies: contains provisions regarding activities within natural character of scheduled freshwater bodies setbacks.
- Coastal Environment: contains provisions for activities within the coastal environment including natural character areas (ONC, VHNC, HNC), many of which overlay SNAs.
- Natural Features and Landscapes: contains provisions for natural features and landscapes, many of which overlay SNAs.
- Hazardous Substances HS-R2: contains a rule precluding the establishment of a major hazard facility within a SNA.
- Energy and Infrastructure: ~~contains provisions managing activities within a SNA.~~ includes provisions to manage energy and infrastructure activities in relation to ecosystems and indigenous biodiversity; as such the rules within the ECO Chapter do not apply to energy and infrastructure. The objectives, policies, matters of discretion, appendices, and planning map overlays relating to the ECO chapter do apply to energy and infrastructure activities in relation to ecosystems and indigenous biodiversity.[15]
- Temporary Activities TEMP-R5: contains provisions managing temporary military training activities within a SNA.
- Special Purpose Zone (Kāinga Nohoanga): how the Ecosystems and Indigenous Biodiversity provisions apply in the Special Purpose Zone (Kāinga Nohoanga) is set out in SPZ(KN)-APP1 to SPZ(KN)-APP5 of that chapter.

[11] Rayonier Matariki Forests [171.2 & 171.8]
[12] Forest and Bird [192.40]
[13] Forest and Bird [192.40]
[14] Federated Farmers [414.19] and Department of Conservation [419.92]
[15] Transpower [195.69]

- Sites and Areas of Significance to Māori: this chapter recognises the cultural values of certain including wetlands/repo. It also aims to protect the ecological values of wāhi tapu and wāhi taonga sites.
- Natural Open Space Zone and Open Space Zone: the underlying zone for many SNAs.
- Any other District wide matter that may affect or relate to the site.
- Zones: the zone chapters contain provisions about what activities are anticipated to occur in the zones.

Objectives	
ECO-O1	**Ecosystems and indigenous biodiversity** ~~Overall~~[16]~~, there is an increase in~~[17] I~~i~~ndigenous biodiversity is maintained so there is at least no overall loss[18] throughout the District, comprising: 1 protected and restored Significant Natural Areas ~~SNAs~~[19]; and 2 other areas of indigenous vegetation and habitat of indigenous fauna that are maintained, and where practicable ~~or~~[20] enhanced.
Policies	
ECO-P1	**Identification of mapped Significant Natural Area~~SNA~~[21]s** Recognise the additional clarity and certainty provided by identifying and mapping ~~mapped SNA~~ Significant Natural Areas and ~~by~~[22] listing them in ECO-SCHED1, and continuing to identify new ~~mapped SNAs~~ Significant Natural Areas[23] through applying the significance criteria in ECO-APP1.
ECO-P2	**Protection and restoration of** Significant Natural Area~~SNAs~~ Protect and restore SNAs by: 1. limiting indigenous vegetation clearance within Significant Natural Area~~SNAs~~ s; 2. limiting planting within ~~mapped~~[24] Significant Natural Area~~SNAs~~[25]; 3. limiting irrigation near ~~mapped~~[26] Significant Natural Area~~SNAs~~[27] in order to provide a buffer from edge effects; 4. providing for an on-site bonus allotment or bonus residential unit incentive[28] within sites containing a ~~mapped~~[29] Significant Natural Area~~SNA~~[30]which has been protected in perpetuity[31]; 5. supporting and promoting the use of covenants, reserves, management plans and community initiatives;

[16] Federated Farmers [414.51]
[17] Federated Farmers [414.51]
[18] Federated Farmers [414.51]
[19] Department of Conservation [419.19]
[20] Forest and Bird [192.41]
[21] Department of Conservation [419.19]
[22] Federated Farmers [414.19] and Department of Conservation [419.92]
[23] Federated Farmers [414.19] and Department of Conservation [419.92]
[24] Federated Farmers [414.19], Department of Conservation [419.92, 419.74], Judith Roper-Lindsay [120.6]
[25] Department of Conservation [419.19]
[26] Federated Farmers [414.19], Department of Conservation [419.92, 419.74], Environment Canterbury [316.95], Forest and Bird [192.43]
[27] Department of Conservation [419.19]
[28] Department of Conservation [419.74]
[29] Federated Farmers [414.19] and Department of Conservation [419.92, 419.74]
[30] Department of Conservation [419.19]
[31] Department of Conservation [419.74]

	6. ~~encouraging~~ actively supporting and advising on[32] pest and weed management, and stock management ~~control;~~[33] and 7. working with and supporting landowners, the Regional Council, the Crown, Queen Elizabeth the Second National Trust, NZ Landcare Trust, and advocacy groups, including by providing information, advice and advocacy.
ECO-P3	**Bonus allotments and bonus residential units** 1. Enable an on-site bonus allotment or bonus residential unit within a site containing a ~~mapped~~ [34]Significant Natural Area~~SNA~~[35], where: a. an eligible Significant Natural Area~~SNAs~~ is legally protected in perpetuity; and b. the Significant Natural Area~~SNAs~~ is physically protected and restored, as set out in Appendix APP2; and c. ~~substantial and~~ significant[36] long-term net benefits to indigenous biodiversity are likely to be achieved. 2. One additional on-site bonus allotment or bonus residential unit may be considered where: a. the ~~mapped~~[37]Significant Natural Area~~SNA~~[38] area to be protected and restored is at least twice the minimum area required by Appendix APP2; and b. the protection and restoration would: i. provide significant additional long-term net[39] benefits to the ~~mapped~~[40] Significant Natural Area~~SNA~~[41]; or ii. support further ongoing indigenous biodiversity restoration and enhancement activities elsewhere on the site.
ECO-P4	**Maintenance and enhancement of ~~other~~[42] indigenous vegetation and habitats outside a Significant Natural Area** [43] Maintain and enhance indigenous vegetation and habitats of indigenous fauna outside Significant Natural Area ~~that do not meet the significance criteria in ECO-APP1~~[44] by: 1. continuing to assess the current state and extent[45] of indigenous biodiversity across the District; 2. ~~restricting~~ minimising[46] indigenous vegetation clearance or modification of habitat of indigenous fauna~~, by recognising that indigenous vegetation within:~~

[32] Forest and Bird [192.43]
[33] Forest and Bird [192.43]
[34] Federated Farmers [414.19] and Department of Conservation [419.92]
[35] Department of Conservation [419.19]
[36] Forest and Bird [192.44]
[37] Federated Farmers [414.19] and Department of Conservation [419.92]
[38] Department of Conservation [419.19]
[39] Forest and Bird [192.44]
[40] Federated Farmers [414.19] and Department of Conservation [419.92]
[41] Department of Conservation [419.19]
[42] Environment Canterbury [316.97]
[43] Environment Canterbury [316.97]
[44] Environment Canterbury [316.97]
[45] Forest and Bird [192.45]
[46] Fulton Hogan [41.23]

	~~a. the Lower Plains Ecological District and High Plains Ecological District has been widely destroyed, fragmented and degraded by land use and pests and therefore clearance of any remaining indigenous vegetation needs to be restricted in order to protect what remains; and~~ ~~b. the Oxford Ecological District, Torlesse Ecological District and Ashley Ecological District, has a larger proportion of indigenous vegetation remaining and therefore some clearance of indigenous vegetation may be acceptable;~~[47] 3. recognising that the District contains species that are threatened, at risk, or reach their national or regional distribution limits in the District, and naturally uncommon ecosystems, and limiting their clearance; 4. providing information, advice and advocacy to the landowner and occupier; 5. supporting and promoting the use of covenants, reserves, management plans and community initiatives that maintain indigenous biodiversity and support connectivity with a Significant Natural Area[48]; and 6. working with and supporting landowners the Regional Council, the Crown, the QEII National Trust, NZ Landcare Trust and advocacy groups.
ECO-P5	~~**Offsetting residual effects**~~ ~~A biodiversity offset will only be considered where there are residual adverse effects which cannot practicably be avoided, remedied or mitigated (in that order of hierarchy); and:~~ ~~1. the biodiversity offset is consistent with ECO-APP2;~~ ~~2. the biodiversity offset will recognise the limits to offsets due to irreplaceable and vulnerable biodiversity (including effects that must be avoided in accordance with ECO-P7 (1));~~ ~~3. there is a strong likelihood that the offsets will be achieved in perpetuity; and~~[49] ~~4. the biodiversity offset will achieve a net gain of indigenous biodiversity if the area contains any of the following:~~ ~~a. indigenous vegetation in land environments where less than 20% of the original indigenous vegetation cover remains;~~ ~~b. areas of indigenous vegetation associated with sand dunes and wetlands;~~ ~~c. areas of indigenous vegetation located in 'originally rare' terrestrial ecosystem types not covered under (a) and (b) above; or~~ ~~d. habitats of threatened, and at risk, indigenous species.~~[50] **Managing adverse effects on indigenous biodiversity outside the coastal environment** Manage adverse effects on indigenous biodiversity outside the coastal environment through:

[47] QEII Trust [279.4], North Canterbury Fish and Game Council [362.4], Canterbury Botanical Society [122.8]
[48] Forest and Bird [192.45]
[49] Fulton Hogan [41.24]
[50] Forest and Bird [192.46]; Canterbury Botanical Society [122.9]

	1. Avoiding significant adverse effects on indigenous biodiversity within a Significant Natural Area;[51] 2. Applying the effects management hierarchy in clause 5 to adverse effects on indigenous biodiversity of within a Significant Natural Area, other than significant adverse effects addressed in (1) above; 3. Applying the effects management hierarchy in clause 5 to significant adverse effects on indigenous biodiversity outside of within a Significant Natural Area; 4. Managing the effects of the development or major upgrade of renewable electricity generation activities and National Grid activities in accordance with EI-P5 (3) and (4).[52] 5. When applying the effects management hierarchy under clauses 2 and 3 above: (a) adverse effects are avoided where practicable; then (b) where adverse effects cannot be avoided, they are minimised where practicable; then (c) where adverse effects cannot be minimised, they are remedied where practicable; then (d) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, biodiversity offsetting is provided where possible, as set out in ECO-APP2; then (e) where biodiversity offsetting of more than minor residual adverse effects is not possible, biodiversity compensation is provided, as set out in ECO-APP3; then (f) if biodiversity compensation is not appropriate, the activity itself is avoided.[53]
ECO-P6	**Cultural heritage and customary rights** Ngāi Tūāhuriri cultural heritage values associated with indigenous biodiversity will be maintained and enhanced through: 1. providing for the customary harvesting of taonga species by Ngāi Tūāhuriri, while ensuring such harvesting will maintain the indigenous biodiversity of the site; 2. providing for the planting of indigenous vegetation for the purpose of customary harvesting; and 3. encouraging the protection of the values of indigenous species that are taonga to Ngāi Tūāhuriri.
ECO-P7	**Indigenous biodiversity in the coastal environment** 1. Except where managed by CE-P7,[54] avoid adverse effects of activities on: a. indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists; b. taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened; c. indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare;

[51] Forest and Bird [192.46]
[52] Transpower [195.23]
[53] Forest and Bird [192.46]; Canterbury Botanical Society [122.9]
[54] MainPower [249.40] and Transpower [195.72]

	d. habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare; e. areas containing nationally significant examples of indigenous community types; and f. areas set aside for full or partial protection of indigenous biological diversity under other legislation; and 2. Except where managed by CE-P7,[55] avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on: a. areas of predominantly indigenous vegetation in the coastal environment; b. habitats in the coastal environment that are important during the vulnerable life stages of indigenous species; c. indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, eelgrass and saltmarsh; d. habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes; e. habitats, including areas and routes, important to migratory species; and f. ecological corridors, and areas important for linking or maintaining biological values identified under this policy.
~~ECO-P8~~	~~**Waterbodies**~~ ~~Recognising Te Mana o te Wai, maintain the ecological integrity of waterbodies by avoiding indigenous vegetation clearance near them.~~[56]
ECO-P8	**Climate change resilience** Encourage nature-based indigenous biodiversity solutions to promote resilience to the effects of climate change.[57]

Activity Rules

How to interpret and apply the rules

1. The rules within this chapter shall not apply to the activities provided for in NH-R7 (the maintenance of existing community scale natural hazard mitigation works), NH-R8 (upgrading existing community scale natural hazard mitigation works) and NH-R9 (construction of new community scale natural hazard mitigation works), except for ECO-R1 and ECO-R2 which shall apply to NH-R9.[58]

[55] MainPower [249.40] and Transpower [195.72]
[56] Federated Farmers [414.112]
[57] Forest and Bird [192.40]
[58] Environment Canterbury [316.81]

2. The rules within this chapter do not apply to energy and infrastructure activities.[59]

ECO-R1	Indigenous vegetation clearance within any ~~mapped~~ [60]Significant Natural Area~~SNA~~[61] ~~or unmapped SNA~~[62]	
All Zones	**Activity status: PER** Where: 1. within any ~~mapped~~ Significant Natural Area~~SNA~~[63] or ~~unmapped SNA~~[64], the indigenous vegetation clearance is: a. required for maintenance, repair or replacement purposes and is: i. within an existing access track; or ii. within 3m of an existing building; or iii. within 2m of an ~~existing fence,~~[65] existing gate, existing fire pond, existing stock yard, existing trough, existing buried pipeline[66] or existing water tank; ~~iv. within 2m of existing critical infrastructure, regionally significant infrastructure, strategic infrastructure or lifeline utility;~~ [67] b. for the purpose of protecting, maintaining, restoring or accessing the Significant Natural Areas ecological values where it involves: i. carrying out activities in accordance with a registered protective covenant under the	**Activity status when compliance not achieved, and activity is for the purpose of constructing new community scale natural hazard mitigation works under NH-R9: RDIS** **Matters of discretion are restricted to:** NH-MD2 - Natural hazard mitigation works ECO-MD1 - Indigenous vegetation clearance[71] **Activity status when compliance not achieved for all other activities[72]: NC**

[59] Transpower [195.23]
[60] Federated Farmers [414.19] and Department of Conservation [419.92]
[61] Department of Conservation [419.19]
[62] Federated Farmers [414.20] and MainPower [249.41]
[63] Department of Conservation [419.19]
[64] Federated Farmers [414.20] and MainPower [249.41]
[65] Canterbury Botanical Society [122.13]
[66] Federated Farmers [414.113]
[67] Transpower [195.73]
[71] Environment Canterbury [316.81]
[72] Environment Canterbury [316.81]

	Reserves Act 1977, Conservation Act 1987 or Queen Elizabeth the Second National Trust Act 1977; ii. carrying out activities in accordance with a Reserve Management Plan approved under the Reserves Act 1977; iii. carrying out activities by or on behalf of the Crown in accordance with a Conservation Management Plan prepared under the Conservation Act 1987; or iv. erecting a fence provided there is no more than 1.0m width of clearance along each side of the fence and the fence is required to either delineate a property boundary or must be located within, not adjacent to, the Significant Natural Area due to difficult terrain;[68] c. for biosecurity purposes and is undertaken by, or on behalf of, the District Council, the Regional Council or Crown, or their nominated agent; d. for the purpose of harvesting indigenous vegetation that was planted for the purpose of ~~plantation~~ commercial[69] forestry; e. for the purpose of customary harvesting; f. ~~expressly authorised under the NESF~~it involves wetland maintenance or restoration of a natural inland wetland that is a permitted activity under the Freshwater NES[70]; or	

[68] Forest and Bird [192.49]
[69] Rayonier Matariki Forests [171.2 & 171.8]
[70] Forest and Bird. [192.49]; and Clause 16(2) of Schedule 1 of RMA

	g. for the purpose of forming a walking or cycling access track where: i. the track has a maximum width of 2m; and ii. the area of indigenous vegetation clearance is a maximum of 1% of the total area of the SNA on that site, or a maximum of 50m^2 from the SNA on that site, whichever is lesser; and iii. does not involve the clearance of any tree with a trunk greater than 15cm in diameter when measured 1.4m above ground.	
	Advisory Note Upon request, the Council Ecologist may be able to formally confirm whether an area comprises, or does not comprise, ~~an unmapped~~[73] Significant Natural Area~~SNA~~[74] ~~as described in ECO-SCHED2 within the area of proposed indigenous vegetation clearance.~~ A~~n~~ ~~applicant~~ person looking to carry out indigenous vegetation clearance[75] can also seek alternative professional advice. ~~If the area does not comprise an unmapped~~ Significant Natural Area~~SNA~~[76] ~~as described in ECO-SCHED2, then this rule will not apply~~[77].	
ECO-R2	**Indigenous vegetation clearance outside any ~~mapped~~[78] Significant Natural Area~~SNA~~[79] ~~or unmapped SNA~~[80]**	
~~**Low Plains Ecological District High Plains**~~	**Activity status: PER** Where: ~~1. the indigenous vegetation is not within any mapped SNA or unmapped SNA; and~~[82] ~~2. the indigenous vegetation clearance is not within 75m of a lake, 20m of the bank of a river,~~	**Activity status when compliance not achieved: RDIS** **Matters of discretion are restricted to:**

[73] Federated Farmers [414.20], MainPower [249.41] Federated Farmers [414.123], Department of Conservation [419.92], CHRISTCHURCH CITY COUNCIL [360.18], Judith Roper-Lindsay [120.2 & 120.14], and Environment Canterbury [316.108]
[74] Department of Conservation [419.28]
[75] Forest and Bird [192.49]
[76] Department of Conservation [419.28]
[77] Federated Farmers [414.20], MainPower [249.41], Federated Farmers [414.123], Department of Conservation [419.92], Christchurch City Council [360.18], Judith Roper-Lindsay [120.2 & 120.14], and Environment Canterbury [316.108]
[78] Federated Farmers [414.19] and Department of Conservation 419.92]
[79] Department of Conservation [419.19]
[80] Federated Farmers [414.20, 414.115, 414.116] and MainPower [249.41 and 249.42]
[82] MainPower [249.42]

~~Ecological District~~ All Zones[81]	~~or 50m of any wetland, unless the clearance is expressly authorised under the NESF; and~~[83] 3. the indigenous vegetation clearance is: a. required for maintenance, repair or replacement purposes and is: i. within an existing access track; or ii. within 3m of an existing building; or iii. within 2m of an ~~existing fence,~~[84] existing gate, existing fire pond, existing stock yard, existing trough, existing buried pipeline[85] or existing water tank; b. for the purpose of protecting, maintaining, restoring, and accessing ecological values and involves: i. carrying out activities in accordance with a registered protective covenant under the Reserves Act 1977, Conservation Act 1987 or Queen Elizabeth the Second National Trust Act 1977; ii. carrying out activities in accordance with a Reserve Management Plan approved under the Reserves Act 1977; iii. carrying out activities by or on behalf of the Crown in accordance with a Conservation Management Plan prepared under the Conservation Act 1987; or iv. erecting a fence ~~provided there is no more than 1m width of clearance along each side of the fence~~[86]; c. is for the purpose of customary harvesting; d. for biosecurity purposes and is undertaken by, or on behalf of, the District Council, Regional Council or Crown, or their nominated agent; e. of indigenous vegetation which has been planted and/or is managed as part of a domestic garden or has been planted for amenity purposes or as a shelterbelt; or ~~f. for the maintenance, repair, or replacement of existing flood protection~~	ECO-MD1 - Indigenous vegetation clearance

[81] Consequential to QEII Trust [279.6]
[83] Federated Farmers [414.112]
[84] Canterbury Botanical Society [122.14]
[85] Federated Farmers [414.115]
[86] Judith Roper-Lindsay [120.10], Forest and Bird [192.50]

	~~works administered by the Regional Council or District Council;~~ [87] ~~g. for the purpose of harvesting indigenous vegetation that was planted for the purpose of plantation forestry;~~ [88] ~~h. of the indigenous understorey to plantation forest, and is incidental to permitted or otherwise authorised plantation forest clearance; or~~[89] i. required for the purpose of maintaining improved pasture.	
~~**Oxford Ecological District**~~ ~~**Torlesse Ecological District**~~ ~~**Ashley Ecological District**~~	~~**Activity status: PER**~~ ~~Where:~~ ~~4. the indigenous vegetation is not within any mapped SNA or unmapped SNA: and~~[90] ~~5. the indigenous vegetation clearance is not within 75m of a lake, 20m of the bank of a river, or 50m of any wetland, unless the clearance is expressly authorised under the NESF; and~~[91] 6. the indigenous vegetation clearance is not on land above 900m in altitude; and ~~7. the indigenous vegetation clearance of indigenous vegetation shall be a maximum of 100m^2 or 10% of the total area of the site, whichever is lesser, on any site in any continuous five year period and the indigenous vegetation does not comprise any species or habitats listed in ECO-SCHED3 that are naturally occurring;~~[92] ~~8. the indigenous vegetation clearance is:~~ ~~a. required for maintenance, repair or replacement purposes which is:~~ ~~i. within an existing access track; or~~ ~~ii. within 3m of an existing building; or~~ ~~iii. within 2m of an existing fence,~~[93] ~~existing gate, existing fire pond, existing stock yard, existing trough,~~ [94]~~or existing water tank;~~ [95]	~~**Activity status when compliance not achieved: RDIS**~~ ~~**Matters of discretion are restricted to:**~~ ~~ECO-MD1 - Indigenous vegetation clearance~~

[87] Environment Canterbury [316.81]
[88] Rayonier Matariki Forests [171.2]
[89] Rayonier Matariki Forests [171.2]
[90] MainPower [249.42]
[91] Federated Farmers [414.112]
[92] QEII Trust [279.6]
[93] Canterbury Botanical Society [122.14]
[94] Consequential to QEII Trust [279.6]
[95] Consequential to QEII Trust [279.6]

	~~b. required for the purpose of maintaining improved pasture; or~~[96] ~~c. for the maintenance, repair, or replacement of existing flood protection works administered by the Regional Council or District Council;~~[97] ~~d. for the purpose of protecting, maintaining, restoring, or accessing ecological values and involves:~~ ~~i. carrying out activities in accordance with a registered protective covenant under the Reserves Act 1977, Conservation Act 1987 or Queen Elizabeth the Second National Trust Act 1977;~~ ~~ii. carrying out activities in accordance with a Reserve Management Plan approved under the Reserves Act 1977;~~ ~~iii. carrying out activities by or on behalf of the Crown in accordance with a Conservation Management Plan prepared under the Conservation Act 1987; or~~ ~~iv. erecting a fence~~[98]~~;~~ ~~e. for the purpose of customary harvesting;~~ ~~f. for biosecurity purposes and is undertaken by, or on behalf of, the District Council, the Regional Council or Crown, or their nominated agent;~~ ~~g. of indigenous vegetation which has been planted and/or is managed as part of a domestic garden or has been planted for amenity purposes or as a shelterbelt;~~.[99] ~~h. for the purpose of harvesting indigenous vegetation that was planted for the purpose of plantation forestry.; or~~ ~~i. of the indigenous understorey to plantation forest, and is incidental to permitted or otherwise authorised plantation forest~~	

[96] Consequential to QEII Trust [279.6]
[97] Environment Canterbury [316.81]
[98] Consequential to QEII Trust [279.6]
[99] Consequential to QEII Trust [279.6]

	~~clearance.~~ ~~:~~[100]	
ECO-R3	**Planting of indigenous vegetation within any SNA**	
All Zones	**Activity status: PER** Where: 1. planting shall be of an indigenous species naturally occurring (either now or historically) within the relevant ecological district in which the planting is to take place.	**Activity status when compliance not achieved: RDIS** **Matters of discretion are restricted to:** ECO-MD2 - Species selected for planting
ECO-R4	**Planting of indigenous vegetation within any Outstanding Natural Character Area, High Natural Character Area, Very High Natural Character Area in the Coastal Environment**	
~~**Significant Natural Areas (SNA) Overlay**~~ **Ashley River/ Rakahuri Saltwater Creek Estuary - ONC** **Jockey Baker Creek - VHNC** **Te Kōhanga Wetlands - HNC** **Tūtaepatu Lagoon - HNC**[101]	**Activity status: PER** Where: 1. planting shall be of an indigenous species naturally occurring (either now or historically) within the relevant ecological district in which the planting is to take place.	**Activity status when compliance not achieved: RDIS** **Matters of discretion are restricted to:** ECO-MD2 - Species selected for planting
~~**Ashley River/ Rakahuri Saltwater Creek Estuary - ONC**~~ ~~**Jockey Baker Creek - VHNC**~~ ~~**Te Kōhanga Wetlands - HNC**~~ ~~**Tūtaepatu Lagoon - HNC**~~	~~**Activity status: PER**~~[102] ~~Where:~~ ~~2. planting shall be of an indigenous species naturally occurring (either now or historically) within the relevant ecological district in which the planting is to take place.~~	~~**Activity status when compliance not achieved: RDIS**~~ ~~**Matters of discretion are restricted to:**~~ ~~ECO-MD2 - Species selected for planting~~
	Advisory note: Species planted should be from a seed that is sourced from within the relevant ecological district. Please contact the District	

[100] Rayonier Matariki Forests [171.2]
[101] RMA Schedule 1 Clause 16(2)
[102] RMA Schedule 1 Clause 16(2)

	Council Ecologist for free[103] advice on selecting species, and a list of local nurseries that stock such species, or a restoration plan and/or planting plan[104].	
ECO-R45	**On-farm mobile or fixed[105] ~~I~~irrigation equipment ~~infrastructure~~[106] near any ~~mapped~~[107] Significant Natural Area~~SNA~~[108]**	
All Zones	**Activity status: PER** Where: 1. any ~~new~~[109] on-farm mobile or fixed[110] irrigation equipment[111] ~~infrastructure~~ shall be set back a minimum of ~~20m~~50m[112] from any ~~mapped~~[113] Significant Natural Area~~SNA~~[114] ~~that is not part of a registered protective covenant under the Queen Elizabeth the Second National Trust Act 1977~~.[115]	**Activity status when compliance not achieved: RDIS** **Matters of discretion are restricted to:** ECO-MD1 - Indigenous vegetation clearance
ECO-R~~5~~6	**Bonus allotment**	
Rural Zones	**Activity status: RDIS** As set out in SUB-R8.	**As set out in SUB-R8**
ECO-R~~6~~7	**Bonus residential unit**	
Rural Zones	**Activity status: RDIS** Where: 1. all applicable standards in Appendix APP2 are met. **Matters of discretion are restricted to:** ECO-MD3 - Bonus allotment or bonus residential unit	**Activity status when compliance not achieved: NC**
	Advisory Note	

[103] Canterbury Botanical Society [122.15]
[104] Canterbury Botanical Society [122.15]
[105] Dairy Holdings Limited [420.10], Transpower [195.23], MainPower [249.1, 249.47, 249.48], and Chorus, Spark and Vodafone [62.6]
[106] Dairy Holdings Limited [420.10], Transpower [195.23], MainPower [249.1, 249.47, 249.48], and Chorus, Spark and Vodafone [62.6]
[107] Federated Farmers [414.19], Department of Conservation [419.89 & 419.92], Forest and Bird [192.52], Judith Roper-Lindsay [120.12] Environment Canterbury [316.103]
[108] Department of Conservation [419.19]
[109] Dairy Holdings Limited [420.10]
[110] Dairy Holdings Limited [420.10], Transpower [195.23], MainPower [249.1, 249.47, 249.48], and Chorus, Spark and Vodafone [62.6]
[111] Dairy Holdings Limited [420.10], Transpower [195.23], MainPower [249.1, 249.47, 249.48], and Chorus, Spark and Vodafone [62.6]
[112] Department of Conservation [419.89]
[113] Federated Farmers [414.19], Department of Conservation [419.89 & 419.92], Forest and Bird [192.52], Judith Roper-Lindsay [120.12] Environment Canterbury [316.103]
[114] Department of Conservation [419.19]
[115] QEII Trust [279.8] and Department of Conservation [419.89]

	• Applicants are strongly advised to undertake a pre-application meeting with the District Council before lodging any application for a bonus residential unit.	
ECO-R~~7~~8	**Woodlot, shelterbelt or planting of any non-indigenous vegetation within any ~~mapped~~[116] Significant Natural Area~~SNA~~[117]**	
~~Significant Natural Areas (SNA) Overlay~~ All Zones[118]	**Activity status: NC**	**Activity status when compliance not achieved: N/A**

Advice Note

ECO-AN1	There may be additional requirements under: 1. the Regional Council's regional plans regarding vegetation clearance including within or near wetlands, the coastal marine area, ~~within~~[119] erosion-prone areas, beds of rivers and lakes,[120] and riparian areas, and the planting of pest species; 2. the NESC~~P~~F which regulates ~~plantation~~ commercial[121] forest and includes restrictions on afforestation within and 10m of any a Significant Natural Area; and 3. the ~~NESF~~ Freshwater NES[122] which regulates activities that pose risks to the health of freshwater and freshwater ecosystems.

Matters of Discretion

ECO-MD1	**Indigenous vegetation clearance** 1. The extent to which the proposal adequately identifies indigenous biodiversity values including: a. any values that meet the criteria for significance under ECO-APP1; and[123] b. whether any naturally occurring species that are threatened, at risk, or reach their national or regional distribution limits in the District, or any naturally uncommon ecosystems listed in ECO-SCHED~~3~~2[124] are present and if so, how they will be protected or managed.

[116] Federated Farmers [414.19] and Department of Conservation [419.92]
[117] Department of Conservation [419.19]
[118] Forest and Bird [192.55] and Department of Conservation [419.90]
[119] Environment Canterbury [316.104]
[120] Environment Canterbury [316.104]
[121] s44A RMA
[122] Clause 16(2) of Schedule 1 of RMA
[123] Forest and Bird [192.56]
[124] Consequential renumbering

	2. The extent to which the proposal will protect ~~achieve no net loss of~~[125] indigenous biodiversity values identified as significant. 3. The actual or potential effects on indigenous biodiversity or ecological values, including intrinsic values, expected to occur as a result of the proposal, including those on ecosystem connectivity, function, and integrity and species diversity. 4. Any potential for avoiding, minimising[126], remedying, ~~mitigating~~[127] or otherwise offsetting or compensating for adverse effects on indigenous vegetation and habitats of indigenous fauna in accordance with ECO-P5[128]. 5. Any conditions to ensure ~~obligations~~ measures for protection, maintenance, restoration or enhancement[129] in respect of indigenous biodiversity endure, including beyond any changes of ownership (wholly or partially) of the landholding and review of conditions. 6. Where the clearance is within an ONL, ONF, SAL, ONC, VHNC, HNC, or any natural character of scheduled freshwater body setback (NATC Figure 1)[130], whether the indigenous vegetation proposed to be cleared contributes to the values of these areas and the extent that[131] ~~the degree to which~~ the proposed clearance would adversely affect these values.[132] 7. The relevance and quality of a Biodiversity Management Plan, (as set out in ECO-APP3)[133], if provided. 8. The extent of adverse effects on indigenous biodiversity in the coastal environment. 9. The extent to which, if any, the health of any indigenous vegetation and/or habitat of indigenous fauna is improved. 10. The extent to which, if any, the spatial extent of any indigenous vegetation and/or habitat of indigenous fauna is increased. 11. Adverse effects on Ngāi Tahu cultural values including mahinga kai and other customary uses, and access for these purposes. 12. The extent of the functional need or operational need for the activity, and consideration of any alternatives.[134] 13. Within a within a Significant Natural Area, the extent, and likely benefits, of any pest control proposed.[135]
ECO-MD2	**Species selected for planting** 1. The extent to which the species proposed to be planted will benefit or otherwise[136] adversely affect the: a. ecosystem function and indigenous biodiversity values of the Significant Natural Area; and

[125] Forest and Bird [192.56]
[126] Forest and Bird [192.46]
[127] Forest and Bird [192.46]
[128] Forest and Bird [192.56]
[129] Forest and Bird [192.56]
[130] Forest and Bird [192.56]
[131] Forest and Bird [192.56]
[132] Forest and Bird [192.56]
[133] Environment Canterbury [316.105]
[134] Chorus, Spark and Vodafone [62.46], MainPower [249.45], Transpower [195.76], and Environment Canterbury [316.81]
[135] Forest and Bird [192.43]
[136] Forest and Bird [192.57]

	b. natural character of the coastal environment.
ECO-MD3	**Bonus allotment or bonus residential unit** 1. The extent to which the Significant Natural Area will be protected and restored. 2. The adequacy and quality of the information provided with the application as required by Appendix APP2. 3. The extent to which the bonus allotment or bonus residential unit may result in conflict and/or reverse sensitivity effects with other activities occurring on adjacent sites. 4. Where an additional bonus allotment or bonus residential unit is sought where the Significant Natural Area to be protected is at least twice the minimum areas required by APP2, the extent to which the protection and restoration would provide significant additional long-term benefits to the Significant Natural Area, or support further ongoing indigenous biodiversity restoration and enhancement activities elsewhere on the site.[137]

Schedules

ECO-SCHED1 - Schedule of ~~mapped~~[138] Significant Natural Area~~SNA~~[139]s

Site ID	Site name	Site description	Ecological District
SNA001	**Main Race Road Kānuka Dryland**	Main Race Road Kānuka Dryland is a block of dryland kānuka forest, scrub and shrubland growing on drought-prone Lismore soils on the north side of the Waimakariri River. In total, 36 indigenous plant species were recorded at this site. Main plant species include kānuka (*Kunzea serotina*) (threatened-nationally vulnerable), pātōtara (*Leucopogon fraseri*), Mercury Bay weed (*Dichondra repens*), button daisy (*Leptinella squalida subsp. mediana*) and prickly mikimiki (*Leptecophylla juniperina subsp. juniperina*) which are both naturally uncommon in the Low Plains Ecological District. This site contains a number of species which have a conservation status of at risk-declining such as *Coprosma intertexta*, grassland hypericum (*Hypericum involutum*), dryland button daisy (*Leptinella serrulata*), mānuka	Low Plains

[137] Forest and Bird [192.58]
[138] Federated Farmers [414.19] and Department of Conservation [419.92]
[139] Department of Conservation [419.19]

		(*Leptospermum scoparium*), and matagouri/tūmatakuru (*Discaria toumatou*), which is uncommon in the Low Plains Ecological District. Other uncommon species include native broom (*Carmichaelia australis*), porcupine shrub (*Melicytus alpinus*) and native bedstraw (*Galium propinquum*). Notable fauna on site include chirping cicada (*Amphipsalta strepitans*), South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*) and welcome swallow/warou (*Hirundo neoxena*).	
SNA002	**Canterbury Regional Council Lease Kānuka Dryland**	Canterbury Regional Council Lease Kānuka Dryland is a kānuka forest and treeland with occasional dryland shrub, herb, grass and sedge species. Notable flora on site includes kānuka *(Kunzea serotina)* (threatened-nationally vulnerable), and four indigenous plant species that are uncommon in the Low Plains Ecological District including grassland sedge (*Carex breviculmis),* native weeping grass *(Microlaena stipoides),* tauhinu (*Ozothamnus leptophyllus)* and kōpata (*Pelargonium inodorum).*	Low Plains
SNA003	**Native Broom Trig Site**	Native Broom Trig Site consists of native broom clumps scattered through exotic grasses, shrubs and planted radiata pines. In total two indigenous plant species were recorded at this site. Notable flora includes native broom (*Carmichaelia australis*) which is considered to be uncommon in the Low Plains Ecological District.	Low Plains
SNA004	**Western Kānuka Dryland**	Western Kānuka Dryland is an area of kānuka forest and scrubland. Notable flora includes kānuka (*Kunzea serotina*) (threatened-nationally vulnerable).	Low Plains
SNA005	**Monopoli's Pond**	Monopoli's Pond is an artificial pond with open water adjacent to the Waimakariri River. Notable flora species include raupō (*Typha orientalis*) and small amounts of lowland flax/harakeke (*Phormium tenax*).	Low Plains

SNA006	**Coffey Road Kānuka Dryland**	Coffey Road Kānuka Dryland is an area of kānuka forest and scrubland along a fenceline. Notable flora include kānuka (*Kunzea serotina)* (threatened-nationally vulnerable), and Mercury Bay weed (*Dichondra repens*) which is considered to be uncommon in the Low Plains Ecological District.	Low Plains
SNA007	**Wrights Road Kānuka Dryland**	Wrights Road Kānuka Dryland is a strip of kānuka scrub remnant. Notable flora include kānuka (*Kunzea serotina)* (threatened-nationally vulnerable), matagouri/tūmatakuru (*Discaria toumatou*) (at risk-declining), and mānuka (*Leptospermum scoparium)* (at risk-declining). Also recorded at the site is prickly mikimiki (*Leptecophylla juniperina subsp. juniperina*), and a range of indigenous plant species are present in the understorey.	Low Plains
SNA008	**Kānuka Pond Dryland**	Kānuka Pond Dryland is a kānuka scrub remnant. Notable flora include kānuka (*Kunzea serotina)* (threatened-nationally vulnerable), mikimiki (*Leptecophylla juniperina subsp. juniperina*) and a variety of indigenous plant species in the understorey.	Low Plains
SNA009	**Dagnum Dryland**	Dagnum Dryland is a remnant of indigenous dry shrubland and herb-mossfield vegetation on outwash plains. Notable flora on site includes at risk-declining species such as bidibidi/piripiri (*Acaena buchananii*), *Coprosma brunnea*, *Coprosma intertexta*, matagouri/tūmatakuru (*Discaria toumatou*), dryland button daisy (*Leptinella serrulata*), common mat daisy (*Raoulia australis*), danthonia (*Rytidosperma exiguum*) and prickly couch (*Zoysia minima*). This site also contains threatened-nationally vulnerable species such as dwarf broom (*Carmichaelia corrugata*), kānuka (*Kunzea serotina*), leafless pōhuehue (*Muehlenbeckia ephedroides*), and fan-leaved mat daisy (*Raoulia monroi*). Other species located on site include	Low Plains

		grassland sedge (*Carex breviculmis*), native broom (*Carmichaelia australis*), mat coprosma (*Coprosma atropurpurea*), turfy coprosma (*Coprosma petriei*), plume grass (*Dichelachne crinita*), dichondra (*Dichondra brevifolia*), willow herb (*Epilobium alsinoides*), silver tussock (*Poa cita*), small-leaved kōwhai (*Sophora microphylla*), prostrate kōwhai (*S. prostrata*), and New Zealand harebell (*Wahlenbergia albomarginata*) which are uncommon in the Low Plains Ecological District. A total of 76 invertebrate species have been identified in field visits between 2015 and 2018. This includes a wide range of indigenous moths as well as indigenous butterflies and grass hoppers.	
SNA010	**Saltwater Creek Wetland**	Saltwater Creek Wetland contains indigenous saline and freshwater wetland vegetation adjacent to Saltwater Creek. In total 22 indigenous plant species were recorded at this site. This includes saltmarsh ribbonwood (*Plagianthus divaricatus*), lowland flax/harakeke (*Phormium tenax*), raupō/bull rush (*Typha orientalis*), toetoe (*Austroderia richardii*), cutty grass/rautahi (*Carex coriacea*), oioi (*Apodasmia similis*), bachelors button (*Cotula coronopifolia*), native musk (*Thyridia repens*) (at risk-naturally uncommon), NZ celery (*Apium prostratum var. filiforme*), slender club rush (*Isolepis cernua*) and sea rush (*Juncus kraussii*). Other species considered uncommon in the Low Plains Ecological District include toetoe (*Austroderia richardii)*, marsh club rush/kukuraho (*Bolboschoenus caldwellii*), giant rush/wī (*Juncus pallidus*), leafless rush/wī (*Juncus sarophorus*), three-ribbed arrowgrass (*Triglochin striata*) and raupō/bull rush (*Typha orientalis*). Fauna identified on site include common bag moth (*Liothula omnivora*), nursery web spider (*Dolomedes minor*), paradise shelduck (*Tadorna variegata*), and pūkeko (*Porphyrio melanotus melanotus*). Australiasian	Low Plains

		bittern/matuku-hūrepo (*Botaurus poiciloptilus*) (threatened-nationally critical) have also been identified in the Saltwater Creek area. The Saltwater Creek estuary also provides important habitat for at risk-declining indigenous fish species including common galaxis/īnanga (*Galaxias maculatus*), torrentfish/piripiripohatu (*Cheimarrichthys fosteri*), climbing galaxias/kōaro (*Galaxias brevipinnis*), shortfin and longfin eel/tuna (*Anguilla australis, A. dieffenbachii*). Other species include common smelt/paraki (*Retropinna retropinna*), flounder/pātiki (*Rhombosolea* sp.), and bullies/kōkopu (*Gobiomorphus spp*.).	
SNA011	**Douds Road Wetland**	Douds Road Wetland is a riparian wetland dominated by rushland. In total six indigenous plant species were recorded at this site. This includes cabbage tree/tī kōuka (*Cordyline australis*), wīwī (*Juncus distegus*) (at risk-naturally uncommon), *Carex sinclairii*, and sharp spike sedge (*Eleocharis acuta*). Fauna identified on site include nursery web spider (*Dolomedes minor*).	Low Plains
SNA012	**Barkers Road Wetland**	Barkers Road Wetland is a wetland basin within Okuku Downloads. Notable flora on site include mānuka *(Leptospermum scoparium)* (at risk-declining), and raupō (*Typha orientalis*) which is considered to be uncommon in the Low Plains Ecological District.	Low Plains
SNA013	**Yaxleys Road Wetland**	Yaxleys Road Wetland is one of the largest areas of indigenous wetland vegetation remaining in the Low Plains Ecological District. In total, 25 indigenous plant species were recorded at this site. Main plant species include lowland flax/harakeke (*Phormium tenax*), cabbage tree/tī kōuka (*Cordyline australis*), leafless rush/wī (*Juncus edgariae*) and cutty grass/rautahi (*Carex geminata*). This site contains a number of indigenous	Low Plains

		plant species that are considered uncommon in the Low Plains Ecological District including little hard fern (*Blechnum penna-marina)*, mikimiki (*Coprosma dumosa)* (*Coprosma propinqua*), karamū (*Coprosma robusta)*, native cudweed (*Euchiton involucratus)*, giant rush/wī (*Juncus pallidus)*, *Machaerina tenax* and native buttercup (*Ranunculus amphitrichus/glabrifolius)*. Fauna identified on site include bellbird/korimako (*Anthornis melanura melanura*), South Island fantail/pīwakawaka (*Rhipidura fuliginosa*), spur-winged plover (*Vanellus miles*), flax widow maker moth (*Orthoclydon praefectata*) and nursery web spider (*Dolomedes minor*).	
SNA014	**Yaxleys Flax Swamp Wetland**	Yaxleys Flax Swamp is a wetland in the Low Plains Ecological District in Loburn. Notable flora on site include kānuka (*Kunzea robusta or K. serotina)* (threatened-nationally vulnerable), mānuka (*Leptospermum scoparium*) (at-risk declining), lowland flax/harakeke (*Phormium tenax*) and cabbage tree/tī kōuka (*Cordyline australis*).	Low Plains
SNA015	**Okuku Downlands Flax Wetland**	Flax remnant within Okuku downloads. Notable flora on site include flax (*Phorimum tenax*), pūkio (*Carex secta)*, coprosma species and mānuka (*Leptospermum scoparium*) (at risk-declining).	Low Plains
SNA016	**Eyredale Road Northern Kānuka Dryland**	Eyredale Road Northern Kānuka Dryland is a small remnant of kānuka shrubland. Notable plants include kānuka, makahikatoa (*Kunzea serotina*) (threatened-nationally vulnerable). This site was subject to a desktop review and other plant species may be present. Kānuka remnants are known to support a variety of indigenous plant species such as vascular plants, mosses, lichens, grasses, sedges and shrubs. Kānuka remnants are also known to support a variety of indigenous birds and invertebrates.	Low Plains

SNA017	**Eyredale Road Southern Kānuka Dryland**	Eyredale Road Southern Kānuka Dryland is a small remnant of kānuka shrubland. Notable plants include kānuka, makahikatoa (*Kunzea serotina*) (threatened-nationally vulnerable). This site was subject to a desktop review and other plant species may be present. Kānuka remnants are known to support a variety of indigenous species such as vascular plants, mosses, lichens, grasses, sedges and shrubs. Kānuka remnants are also known to support a variety of indigenous birds and invertebrates.	Low Plains
SNA018	**Poyntzs Road Southern Kānuka Dryland**	Poyntzs Road Southern Kānuka Dryland contains numerous remnant patches and threads of kānuka shrubland. The patches are separated by open grassland and a shelter belt but are treated as a contiguous area for management purposes. Notable plants include kānuka, makahikatoa (*Kunzea serotina*) (threatened-nationally vulnerable). This site was subject to a desktop review and other plant species may be present. Kānuka remnants are known to support a variety of indigenous species such as vascular plants, mosses, lichens, grasses, sedges and shrubs. Kānuka remnants are also known to support a variety of indigenous birds and invertebrates.	Low Plains
SNA019	**Pesters Road Eastern Kānuka Dryland**	Pesters Road Eastern Kānuka Dryland is a remnant of kānuka shrubland on the edge of a centre pivot. Notable plants include kānuka, makahikatoa (*Kunzea serotina*) (threatened-nationally vulnerable). The stems of kānuka in this site are covered in native grey and orange lichens (*Ramalina*, *Usnea*, *Physcia*, *Lecanora*, *Teloschistes*, *Xanthoria*). Indigenous ground cover plants are present on site including Mercury Bay weed (*Dichondra repens*) and moss (*Racomitrium, Triquetrella, Hypnum*). There is a small patch of stonecrop (*Crassula* sp.)	Low Plains

		This site was subject to a desktop review, with information included from a previous site visit in 2017. Kānuka remnants are also known to support a variety of indigenous birds and invertebrates.	
SNA020	**Burnt Hill Shrubland**	Burnt Hill is a volcanic rocky scarp with shrubland. 38 indigenous plant species were recorded at this site. This site contains flora with a conservation status of at risk-declining such as speargrass *(Aciphylla subflabellata), Coprosma intertexta*, matagouri/tūmatakuru *(Discaria toumatou),* and common mat daisy *(Raoulia australis).* This site also contains grassy mat sedge (*Carex inopinata*) (threatened-nationally vulnerable), and *Chenopodium allanii* (at risk-naturally uncommon). Notable fauna on site include New Zealand praying mantis *(Orthodera novaezealandiae),* Canterbury copper butterfly (*Lycaena* new species), Green-veined cicada (*Rhodopsalta cruentata),* magpie moth (*Nyctemera annulata)* and yellow admiral butterfly (*Vanessa itea).*	High Plains
SNA021	**Raineys Road Treeland**	Raineys Road Treeland is an area of treeland in the High Plains Ecological District. In total, six indigenous plant species were recorded at this site. Notable flora on site include kōhūhū (*Pittosporum tenuifolium*), cabbage tree/tī kōuka (*Cordyline australis*) and mikimiki (*Coprosma propinqua*). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*), grey warbler (*Gerygone igata*) and South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*).	High Plains
SNA022	**Springvale Flaxland**	Springvale Flaxland comprises one of the largest areas of indigenous wetland vegetation in the High Plains Ecological District. In total, 36 indigenous plant species were recorded at this site. Main plant species include lowland flax/harakeke (*Phormium*	High Plains

		tenax), cabbage tree/tī kōuka (*Cordyline australis*), matagouri/tūmatakuru (*Discaria toumatou*) (at risk-declining), wī (*Juncus edgariae*), pūkio (*Carex secta*), cutty grass/rautahi (*Carex coriacea*), raupō/bull rush (*Typha orientalis*), wīwī (*Juncus distegus*) (at risk-naturally uncommon), and creeping pōhuehue (*Muehlenbeckia axillaris*). Other indigenous plant species recorded at the site that are uncommon in the High Plains Ecological District include *Carex sinclairii*, leafless rush/wī (*J. sarophorus*), native willowherbs (*Epilobium chionanthum)* (*E. pallidiflorum)*, native blinks (*Montia fontana subs. fontana*), and common water milfoil (*Myriophyllum propinquum*). Notable fauna on site include Australasian harrier/kahu (*Circus approximans*), bellbird/korimako (*Anthornis melanura melanura*), flax window maker moth (*Orthoclydon praefectata*), grey warbler (*Gerygone igata*), nurseryweb spider (*Dolomedes minor*), South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*) and spur-winged plover (*Vanellus miles*).	
SNA023	**Mountain Road Treeland**	Mountain Road Treeland is roadside vegetation. Notable flora includes cabbage tree/tī kōuka (*Cordyline australis*), kōhūhū (*Pittosporum tenuifolium*), five-finger/whauwhaupaku (*Pseudopanax arboreus*), broadleaf/kāpuka (*Griselinia littoralis*), Puāwananga (*Clematis paniculata*) and karamū (*Coprosma robusta*). Broadleaf/kāpuka (*Griselinia littoralis*), Five-finger/whauwhaupaku (*Pseudopanax arboreus*) and Puāwananga (*Clematis paniculata*) are considered to be uncommon in the High Plains Ecological District.	Oxford
SNA024	**Hayland Road Wetland**	Hayland Road Wetland consists of mostly swamp vegetation dominated by flax. Notable flora on site includes lowland flax/harakeke (*Phormium tenax*), mānuka (*Leptospermum scoparium*) (at risk-declining), mikimiki (*Coprosma propinqua*), *C. dumosa*, cabbage tree/tī kōuka (*Cordyline australis*), swamp kiokio (*Blechnum minus*), rautahi (*Carex sp.)*, wīwī (*Juncus edgariae)*,	High Plains

		mānatu (*Plagianthus regius*), kōhūhū (*Pittosporum tenuifolium*) and beech (*Fuscospora solandri*). Mānuka (*Leptospermum scoparium*) and mikimiki (*Coprosma dumosa* and *C. dumosa)* are considered to be uncommon in the High Plains Ecological District. The site also contains two species of notable fauna on site includes Australiasian harrier/kahu (*Circus approximans*), pūkeko (*Porphyrio melanotus melanotus*) and grey warbler (*Gerygone igata*).	
SNA025	**Maori Reserve Road Wetland**	Maori Reserve Road Wetland is a wetland with a small stream. In total, 20 indigenous plant species were recorded at this site. Main plant species include cabbage tree/tī kōuka (*Cordyline australis*), lowland flax/harakeke (*Phormium tenax*), kōhūhū (*Pittosporum tenuifolium*), wīwī (*Juncus distegus)* (at risk-naturally uncommon), and kānuka (*Kunzea robusta*) (threatened-nationally vulnerable). Twelve species of indigenous mosses and lichens have also been identified on this site. This site contains a number of indigenous plant species considered to be uncommon in the High Plains Ecological District such as little hard fern (*Blechnum penna-marina*), mikimiki (*Coprosma rhamnoides*), leafless rush/wī (*Juncus sarophorus*), native blinks (*Montia fontana fontana*), native jasmine/akakaikiore (*Parsonsia heterophylla*), silver tussock (*Poa cita*) and prickly shield fern (*Polystichum vestitum*). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*), grey warbler (*Gerygone igata*), South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*), spur-winged plover (*Vanellus miles*) and flax window maker moth (*Orthoclydon praefectata*).	High Plains
SNA026	**Bald Hills Road Wetland**	Bald Hills Road Wetland is a toeslope wetland in the lower part of a small gully. 20 indigenous plant species have been recorded at this site. The site contains a	High Plains

		number of plant species that are considered to be uncommon in the High Plains Ecological District such as necklace fern (*Asplenium flabellifolium)*, creek fern/kiwikiwi (*Blechnum fluviatile)*, swamp kiokio (*B. minus)* and little hard fern (*B. penna-marina)*, swamp sedge (*Carex virgata),* marbleleaf/putaputawētā (*Carpodetus serratus)*, mikimiki (*Coprosma propinqua*), sharp spike sedge (*Eleocharis acuta)* and prickly shield fern/pūniu (*Polystichum vestitum)*. Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura),* silvereye/tauhou *(Zosterops lateralis lateralis),* flax widow maker moth (*Orthoclydon praefectata),* Yellow admiral butterfly (*Vanessa itea)* and nursery web spider (*Dolomedes minor).*	
SNA027	**Waimakariri Gorge Bridge River Terraces Mixed Forest**	Low canopy mixed forest. Notable flora include black beech (*Fuscospora solandri*), tutu (*Coriaria sp.*), kōhūhū (*Pittosporum tenuifolium*), five-finger/whauwhaupaku (*Pseudopanax arboreus*), kōwhai (*Sophora sp.*) wineberry/makomako (*Aristotelia serrata*), akiraho (*Olearia paniculata*), *Hebe salicifolia*, karamū (*Coprosma robusta)* and native iris/mīkoikoi (*Libertia ixioides*). A rich array of shrubs and ground-based ferns are also present.	High Plains
SNA028	**Burnt Hill Southern Outcrop Shrubland**	Burnt Hill Southern Outcrop Shrubland is a volcanic hill with small rock outcrops. Notable flora on site include prostrate kōwhai *(Sophora prostrata).*	High Plains
SNA029	**Reserve Road Wetland**	Reserve Road Wetland is a spring-fed wetland along the bottom of a riparian scarp, and a small area of palustrine wetland with areas of flaxland and sedgeland and a steep terrace scarp containing secondary growth hardwood forest. Notable flora include lowland flax/harakeke (*Phormium tenax*), mikimiki (*Coprosma propinqua*), pūkio (*Carex secta*), swamp kiokio (*Blechnum minus*), large-leaved pōhuehue (*Muehlenbeckia australis*), giant	High Plains

		rush (*Juncus pallidus*), baumea (*Machaerina rubiginosa*), Carex species, including *Carex tenuiculmis* (at risk-declining), whiteywood/māhoe (*Melicytus ramiflorus*), tree fuchsia/kōtukutuku (*Fuchsia excorticata*), bracken/rārahu (*Pteridium esculentum*), mānuka (*Leptospermum scoparium*) (at risk-declining), five-finger/whauwhaupaku (*Pseudopanax arboreus*), broadleaf/kāpuka (*Griselinia littoralis*), karamū (*Coprosma robusta*), wineberry/makomako (*Aristotelia serrata*), kōhūhū (*Pittosporum tenuifolium*), and cabbage tree/tī kōuka (*Cordyline australis*), and New Zealand myrtle/rōhutu (*Lophomyrtus obcordata*) (threatened-nationally critical) which was planted at the site. Fauna identified on this site include Australiasian harrier/kahu (*Circus approximans*), bellbird/korimako (*Anthornis melanura melanura*), grey warbler (*Gerygone igata*), paradise shelduck (*Tadorna variegata*), South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*), and the New Zealand praying mantis (*Orthodera novaezealandiae*) (at risk-declining).	
SNA030	**Garry River Shrubland**	Garry River Shrubland is a large silver tussock shrubland situated on two alluvial terraces. Notable flora on site include seven indigenous plant species. Notable flora include matagouri (*Discaria toumatou)* (at risk-declining), mikimiki (*Coprosma propinqua*), and species considered to be uncommon in the High Plains Ecological District silver tussock (*Poa cita*), porcupine shrub (*Melicytus alpinus*), and creeping pōhuehue (*Muehlenbeckia axillaris*). Fauna identified on site include the South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*), paradise shelduck (*Tadorna variegata*), and spur-winged plover (*Vanellus miles*). Porcupine shrub is also known to provide habitat for a number of specialist indigenous moth species such as leaf-roller (*Harmologa* sp.), crambid moth (*Heliothela* sp.), and several noctuids (*Graphania*, *Andesia* and *Homohadena* spp.).	High Plains

SNA031	**Rockford Bottom Flax Swamp**	Rockford Bottom Flax Swamp is a wetland dominated by lowland flax. Notable flora on site include lowland flax/harakeke (*Phormium tenax*) and cabbage tree/tī kōuka (*Cordyline australis*). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*).	High Plains
SNA032	**Waimakariri Gorge Kōwhai and Kānuka Treeland**	Waimakariri Gorge Kōwhai and Kānuka Treeland is a shrubland representative of what was once common along the margins of the Waimakariri River. Notable flora include matagouri/tūmatakuru (*Discaria toumatou*) (at risk-declining), and kānuka (*Kunzea robusta* or *K. serotina*) (threatened-nationally vulnerable).	High Plains
SNA033	**Waimakariri Gorge Terrace Shrubland**	Waimakariri Gorge Terrace Shrubland is a shrubland at the toe of a large terrace. Notable flora include matagouri/tūmatakuru (*Discaria toumatou*) (at risk-declining), and several indigenous plant species that are considered to be uncommon in the High Plains Ecological District including silver tussock (*Poa cita*), porcupine shrub (*Melicytus alpinus*), *Clematis* spp and native bindweed (*Calystegia tuguriorum*). Notable fauna on site include pied stilt (*Himantopus himantopus leucocephalus*) and pūkeko (*Porphyrio melanotus melanotus*).	High Plains
SNA034	**Manor Park Bush**	Manor Park Bush is an area of remnant forest with some regenerating forest on the upper edge of the high plains. In total, 48 indigenous plant species were recorded at this site. Main plant species include black beech (*Fuscospora solandri*), kōhūhū (*Pittosporum tenuifolium*), five-finger/whauwhaupaku (*Pseudopanax arboreus*), wineberry/makomako (*Aristotelia serrata*), cabbage tree/tī kōuka (*Cordyline australis*), shining karamū (*Coprosma lucida*), pūkio (*Carex secta*), harakeke (*Phormium tenax*), broadleaf/kāpuka (*Griselinia littoralis*), matai (*Prumnopitys taxifolia*), kahikatea	High Plains

		(*Dacrycarpus dacrydioides*), and pōkākā (*Elaeocarpus hookerianus*). This site contains New Zealand myrtle/rōhutu (*Lophomyrtus obcordata*) (threatened-nationally critical), and various indigenous plant species that are uncommon in the High Plains Ecological District including swamp kiokio (*Blechnum discolor*), yellow-wood (*Coprosma linariifolia*), rimu (*Dacrydium cupressinum*), kahikatea (*Dacrycarpus dacrydioides*), rough tree fern/whekī (*Dicksonia squarrosa*), pōkākā (*Elaeocarpus hookerianus*), tree fuschia/kōtukutuku (*Fuchsia excorticata*), akiraho (*Olearia paniculata*), lowland tōtara (*Podocarpus tōtara*), mataī (*Prumnopitys taxifolia*), pepper tree/horopito (*Pseudowintera colorata*) and seven-finger/patē (*Schefflera digitata*). Fauna identified on this site include South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*), bellbird/korimako (*Anthornis melanura melanura*), grey warbler (*Gerygone igata*), morepork/ruru (*Ninox novaeseelandiae*), paradise shelduck (*Tadorna variegata*), silvereye/tauhou (*Zosterops lateralis lateralis*) and tūī (*Prosthemadera novaeseelandiae*).	
SNA035	**Hayland Wooded Gully Treeland**	Hayland Wooded Gully Treeland is a black beech forest/treeland with mixed indigenous-exotic scrub. Notable flora include black beech *(Fuscospora solandri)*, whiteywood/māhoe *(Melicytus ramiflorus)*, broadleaf/kāpuka (*Griselinia littoralis*), wineberry/makomako (*Aristotelia serrata*) and mountain five-finger/whauwhaupaku (*Pseudopanax colensoi*). Notable fauna includes bellbird/korimako (*Anthornis melanura melanura)* and New Zealand wood pigeon/kererū (*Hemiphaga novaeseelandiae*).	Partly located within High Plains and partly located within Oxford. Refer to planning map.
SNA036	**House Terraces Beech and Podocarp Forest**	Beech and podocarp forest. Notable flora include lowland tōtara (*Podocarpus tōtara*), matai (*Prumnopitys taxifolia*), kahikatea (*Dacrycarpus*	High Plains

		dacridioides), black beech (*Fuscospora solandri*), native broom (*Carmichaelia australis*), pōkākā (*Elaeocarpus hookerianus*) and prostrate kōwhai *(Sophora prostrata)*. A rich diversity of indigenous shrubs and grasses are also present.	
SNA037	**Rockford Road Dry Shrubland**	Rockford Road Dry Shrubland is a coprosma dominated shrubland remnant on a small volcanic rock outcrop. Notable flora include necklace fern (*Asplenium flabellifolium*), native broom (*Carmichaelia australis*), matagouri/tūmatakuru (*Discaria toumatou*) (at risk-declining), porcupine shrub (*Melicytus alpinus*), creeping pōhuehue (*Muehlenbeckia axillaris*), silver tussock (*Poa cita*) and NZ harebell (*Wahlenbergia albomarginata*).	High Plains
SNA038	**Hills Bush Beech Forest**	Hills Bush Beech Forest is a mosaic of remnant black beech forest and secondary growth indigenous hardwood and kānuka forest. In total, 106 indigenous plant species have been recorded on site. Main plant species include black beech (*Fuscospora solandri*), kānuka (*Kunzea robusta*) (threatened-nationally vulnerable), whiteywood/māhoe (*Melicytus ramiflorus*), broadleaf/kāpuka (*Griselinia littoralis*), kōhūhū (*Pittosporum tenuifolium*), wineberry/makomako (*Aristotelia serrata*), five-finger/whauwhaupaku (*Pseudopanax arboreus*), prickly mikimiki (*Leptecophylla juniperina subsp. juniperina*) and large-leaved pōhuehue (*Muehlenbeckia australis*). Other rase flora include dwarf mistletoe (*Korthalsella salicornioides)* (threatened-nationally critical), mānuka (*Leptospermum scoparium*) (at risk-declining), and filmy fern (*Hymenophyllum cupressiforme*) (at risk-naturally uncommon).	Oxford
SNA039	**Whiterock Limestone Vegetation**	Whiterock Limestone Vegetation contains indigenous grassland, shrubland, and indigenous limestone rock outcrop vegetation. Notable flora on site includes at risk-declining	Oxford

		species such as speargrass *(Aciphylla subflabellata),* matagouri/tūmatakuru *(Discaria toumatou)* and New Zealand linen flax (*Linum monogynum).* It also contains threatened-nationally endangered species such as *Gingidia enysii var. enysii* and Weka Pass sun hebe *(Heliohebe maccaskillii),* kānuka *(Kunzea serotina)* (threatened-nationally vulnerable), and Waipara gentian *(Gentianella calcis subsp. waipara)* (threatened-nationally critical).	
SNA040	**Okuku River Kānuka Forest**	Okuku River Kānuka Forest is an area of secondary growth kānuka scrub, forest and woodland on badland and incised gullies over several hectares. In total, 23 indigenous species have been recorded at this site. Notable flora on site includes kōhūhū (*Pittosporum tenuifolium*), cabbage tree/tī kōuka (*Cordyline australis*), kānuka (*Kunzea robusta*) (threatened-nationally vulnerable), mikimiki (*Coprosma propinqua*), lowland flax/harakeke (*Phormium tenax*) and large-leaved pōhuehue (*Muehlenbeckia australis*). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*) and grey warbler (*Gerygone igata igata*).	Oxford
SNA041	**Okuku River Beech-Kānuka Forest**	Okuku River Beech-Kānuka Forest is an incised valley in downland-steepland interface. In total, 55 indigenous plant species were recorded at the site. Notable flora include kānuka (*Kunzea robusta*) (threatened-nationally vulnerable), mānuka (*Leptospermum scoparium*) (at risk-declining), and black beech (*Fuscopora solandri*).	Oxford
SNA042	**Blowhard Track Beech Forest**	Blowhard Track Beech Forest is a mature black beech forest. In total, 36 indigenous plant species have been identified on site. None of the species are classified as threatened or at risk, or are known to be uncommon in the Oxford Ecological District.	Oxford

		Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*), South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*) and tūī (*Prosthemadera novaeseelandiae*). The site also contains the New Zealand Falcon/kārearea (*Falco novaeseelandiae novaeseelandiae*) (at risk-recovering).	
SNA043	**Bald Hills Eastern Beech Forest**	Bald Hills Eastern Beech Forest is a black beech forest with secondary growth indigenous hardwood forest/scrub. Notable flora on this site includes black beech *(Fuscospora solandri).*	Oxford
SNA044	**Bald Hills Middle Beech Forest**	Bald Hills Middle Beech Forest is a black beech forest with secondary growth indigenous hardwood forest/scrub. Notable flora on this site includes black beech (*Fuscospora solandri*).	Oxford
SNA045	**Bald Hills Western Beech Forest**	Bald Hills Western Beech Forest is a black beech forest with secondary growth indigenous hardwood forest/scrub. Notable flora on this site includes black beech (*Fuscospora solandri*). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*).	Oxford
SNA046	**Westering Downs Beech Forest**	Westering Downs Beech Forest is a black beech forest with small areas of broadleaf-five-finger. In total, 66 indigenous plant species have been recorded at this site. Notable flora includes mānuka (*Leptospermum scoparium*) (at risk-declining), and threatened-nationally critical species New Zealand Myrtle/rōhutu (*Lophomyrtus obcordata),* and myrtle/rōhutu *(Neomyrtus pedunculata).* Fauna identified on this site include bellbird/korimako, (*Anthornis melanura melanura*), brown creeper (*Mohoua novaeseelandiae*), grey warbler (*Gerygone igata*), New Zealand wood pigeon/kererū (*Hemiphaga novaeseelandiae*), paradise shelduck (*Tadorna variegata*), shining cuckoo	Oxford

		(*Chrysococcyx lucidus lucidus*), silvereye/tauhou (*Zosterops lateralis lateralis),* and South Island fantail/pīwakawaka *(Rhipidura fuliginosa subsp. fuliginosa*).	
SNA047	**Tawhai Bush**	Tawhai Bush is a mosaic of hill-slope black beech forest with occasional podocarps, hill-top mānuka with succession towards beech forest and a valley-floor sedge wetland plus a stream. In total, 175 indigenous plant species have been recorded at this site between 1977 and 2005. The most recent survey in 2005 recorded 90 indigenous plant species. Notable flora on site includes species with a conservation status of at risk-declining such as speargrass *(Aciphylla subflabellata),* yellow mistletoe (*Alepis flavida*), *Coprosma pedicellata*, dwarf mistletoe *(Korthalsella clavata,* mānuka *(Leptospermum scoparium)*, and New Zealand mint *(Mentha cunninghamii).* This site contains threatened-nationally vulnerable species such as *Carmichaelia kirkii, Coprosma obconica*, and threatened-nationally critical species such as New Zealand myrtle/rōhutu (*Lophomyrtus obcordata*) and myrtle (*Neomyrtus pedunculata).*	Oxford
SNA048	**Island Road Beech Remnant**	Island Road Beech Remnant is a remnant of black beech forest, with regenerating indigenous trees, shrubs and vines. Notable flora on site includes black beech *(Fuscospora solandri)* and mānuka *(Leptospermum scoparium)* (at risk-declining). Fauna identified on site includes New Zealand wood pigeon/kererū *(Hemiphaga novaeseelandiae)*.	Oxford
SNA049	**Miro Downs Trig Shrubland**	Miro Downs Trig Shrubland is a mosaic of secondary growth indigenous shrubland. In total 56 indigenous plant species were recorded at the site. This includes at risk-	Oxford

		declining species such as matagouri/tūmatakuru (*Discaria toumatou*) and mānuka (*Leptospermum scoparium*). This site also contains kānuka (*Kunzea robusta*) (threatened-nationally vulnerable), and wīwī (*Juncus distegus*) (at-risk naturally uncommon). Notable fauna on site includes bellbird/korimako (*Anthornis melanura melanura*), grey warbler (*Gerygone igata*), paradise shelduck (*Tadorna variegata*) and shining cuckoo (*Chrysococcyx lucidus*).	
SNA050	**Middle Bridge Flax Wetland**	Middle Bridge Flax Wetland is a palustrine wetland situated on a high river terrace. In total, 28 indigenous plant species were recorded on site. Notable flora include wīwī (*Juncus distegus*) (at risk-naturally uncommon), kānuka (*Kunzea robusta*) (threatened-nationally vulnerable), and mānuka (*Leptospermum scoparium*) (at risk-declining). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*) and South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*).	Oxford
SNA051	**Taylors Bush**	Taylors Bush is a rare remnant of toeslope and fertile floodplain beech-podocarp forest, scrub and wetland shrubland. Notable flora on site include black beech (*Fuscospora solandri*), myrtle (*Neomyrtus pedunculata*) (threatened-nationally critical), kahikatea (*Dacrycarpus dacrydioides*) and pōkākā (E*laeocarpus hookerianus*). Notable fauna include bellbird/korimako (*Anthornis melanura melanura*), New Zealand pigeon/kererū (*Hemiphaga novaeseelandiae*), Australasian harrier/kahu (*Circus approximans*), South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*), shining cuckoo (*Chrysococcyx lucidus*), silvereye/tauhou (*Zosterops lateralis lateralis*) and grey warbler (*Gerygone igata igata*).	Partly located within Oxford and partly located within High Plains. Refer to planning map.

SNA052	**Ashley Gorge Road Beech and Hardwood Remnants**	A collection of hardwood remnants in the Oxford Ecological District. These sites contain a diverse range of indigenous flora, with 60 indigenous plant species recorded across all sites. This includes a variety of trees, shrubs, sedges, ferns, vines, grasses, rushes and herbs. Rare and threatened flora identified include kānuka (*Kunzea robusta*) and white climbing rātā (*Metrosideros diffusa*) which have a conservation status of threatened-nationally vulnerable. Mānuka (*Leptospermum scoparium*) (at risk-declining) was also identified on site. Fauna identified on site included five indigenous bird species bellbird/korimako (*Anthornis melanura melanura*), grey warbler (*Gerygone igata*), silvereye/tauhou (*Zosterops lateralis lateralis*), South Island Fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*), and spur-winged plover (*Vanellus miles*).	Oxford
SNA053	**Okuku Shrub and Flax Wetland**	Okuku Shrub and Flax Wetland is an area of shrubland surrounding a wetland. This site contains 27 indigenous plant species. Notable indigenous flora include mikimiki (*Coprosma propinqua*), lowland flax/harakeke (*Phormium tenax*), mānuka (*Leptospermum scoparium*) (at risk-declining), and kānuka (*Kunzea robusta*) (threatened-nationally vulnerable). Indigenous fauna identified on site include the Australasian harrier/kahu (*Circus approximans)*, grey warbler *(Gerygone igata),* and South Island fantail/pīwakawaka *(Rhipidura fuliginosa subsp. fuliginosa).*	Oxford
SNA054	**Okuku Hardwood Scrub**	Okuku Hardwood Scrub is an area of hardwood scrub adjacent to a wetland in a narrow gully. This site contains 27 indigenous plant species. Notable indigenous flora include marbleleaf/putaputawētā *(Carpodetus serratus),* five-finger/whauwhaupaku *(Pseudopanax arboreus)*, mānuka	Oxford

		(Leptospermum scoparium) (at risk-declining), large-leaved pōhuehue *(Muehlenbeckia australis)* and wineberry/makomako *(Aristotelia serrata).* Indigenous fauna identified on site include bellbird/korimako *(Anthornis melanura melanura)*, silvereye/tauhou *(Zosterops lateralis lateralis)* and South Island fantail/pīwakawaka *(Rhipidura fuliginosa subsp. fuliginosa)*.	
SNA055	**Okuku Mānuka Gully Shrubland**	Okuku Mānuka Gully Shrubland is an area of shrubland on the edge of a small, shallow gully. This site contains 20 indigenous plant species. Notable indigenous flora include marbleleaf/putaputawētā *(Carpodetus serratus)*, five-finger/whauwhaupaku *(Pseudopanax arboreus)*, mānuka *(Leptospermum scoparium)* (at risk-declining), large-leaved pōhuehue *(Muehlenbeckia australis)* and wineberry/makomako *(Aristotelia serrata).* Indigenous fauna identified on site include bellbird/korimako (*Anthornis melanura melanura*), silvereye/tauhou (*Zosterops lateralis lateralis*) and South Island fantail/pīwakawaka (*Rhipidura fuliginosa subps. fuliginosa*).	Oxford
SNA056	**Okuku Flaxland**	Okuku Flaxland is a lowland flax wetland on a shallow gully floor. This site contains four indigenous plant species. Notable indigenous flora include lowland flax/harakeke (*Phormium tenax*), mānuka (*Leptospermum scoparium*) (at risk-declining), mikimiki (*Coprosma propinqua*) and pūkio (*Carex secta*).	Oxford
SNA057	**Boundary Road Scrub**	Boundary Road Scrub occupies a narrow, incised gully with a small stream. The vegetation consists of secondary growth scrub and vineland. In total, 18 indigenous plant species were recorded on site. Main plant species include large-leaved pōhuehue (*Muehlenbeckia australis*), cabbage tree/tī kōuka (*Cordyline*	Oxford

		australis), and kōhūhū (*Pittosporum tenuifolium*). Notable fauna identified on site include Australasian harrier/kahu (*Circus approximans*), grey warbler (*Gerygone igata*), sacred kingfisher (*Todiramphus sanctus*), silvereye/tauhou (*Zosterops lateralis lateralis*) and South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa*).	
SNA058	**Woodburn Kānuka Forest**	Woodburn Kānuka Forest consists of secondary growth kānuka forest on a south facing hillslope and terrace. 36 indigenous plant species have been recorded at this site. This matagouri/tūmatakuru (*Discaria toumatou)* (at risk-declining), wīwī (*Juncus distegus)* (at risk-naturally uncommon), and kānuka (*Kunzea robusta)* (threatened-nationally vulnerable). Notable fauna identified on site include Australiasian harrier/kahu *(Circus approximans),* bellbird/korimako *(Anthornis melanura melanura),* grey warbler *(Gerygone igata igata),* and South Island fantail/pīwakawaka (*Rhipidura fuliginosa subsp. fuliginosa).*	Oxford
SNA059	**Woodburn Kānuka Dryland**	Woodburn Kānuka Dryland is a series of small secondary growth kānuka forests and treeland in narrow gullies and on hillslopes. Notable flora include cabbage tree/tī kōuka (*Cordyline australis*), whiteywood/māhoe (*Melicytus ramiflorus*), kōhūhū (*Pittosporum tenuifolium*), lancewood (*Pseudopanax crassifolius*), and five-finger/whauwhaupaku (*Pseudopanax arboreus*). These sites also contain shrub species such as niniao (*Helichrysum lanceolatum*), mikimiki (*Coprosma propinqua* and *C. rhamnoides*) and poroporo (*Solanum laciniatum*). Site OX052a contains a high diversity of ground cover with species such as pennywort (*Hydrocotyle heteromeria, H. moschata*), grass lily (*Arthropodium candidum*), willowherb (*Epilobium nummulariifolium*),	Oxford

		Lagenophora pumila, *Geranium aff. microphyllum*, and *Viola cunninghamii*. All parts of the site contain kānuka (*Kunzea robusta*) (threatened-nationally vulnerable). Across these sites a number of indigenous fauna was identified. This includes the Australasian harrier/kahu *(Circus approximans),* bellbird/korimako *(Anthornis melanura melanura)*, grey warbler *(Gerygone igata igata),* South Island fantail/pīwakawaka *(Rhipidura fuliginosa subsp. fuliginosa),* chirping cicada (*Amphipsalta strepitans),* and yellow admiral butterfly *(Vanessa itea).*	
SNA060	**Forestdale Wetland**	Forestdale Wetland is an area of rush sedgeland. Notable vegetation on site includes flax (*Phormium tenax*), mānuka (*Leptospermum scoparium*) (at risk-declining), and *carex*.	Oxford
SNA061	**Miro Downs Beech Forest**	Miro Downs Beech Forest is a ridge with shallow gullies dominated by beech forest. Notable flora include black beech (*Fuscospora solandri*).	Oxford
SNA062	**The Gully Cabbage Trees**	The Gully Cabbage Trees is a small area of vegetation at the base of a terrace. Notable flora on site include cabbage tree/tī kōuka (*Cordyline australis*) and pūkio (*Carex secta*).	Oxford
SNA063	**Upper Karetu River Limestone Ridge**	Upper Karetu River Limestone Ridge is an area of low canopy mixed forest, shrubs and grassland on a limestone ridge. Notable flora includes broadleaf/kāpuka (*Griselinia littoralis*), coprosma and silver tussock (*Poa cita*). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*) and bush robin.	Oxford
SNA064	**Glentui River Beech and Podocarp Forest**	An area of beech and podocarp forest. Notable flora include beech (unknown sp.). Notable fauna on site include	Partly located within Oxford and partly located within High Plains.

		bellbird/korimako (*Anthornis melanura melanura*), New Zealand pigeon/kererū (*Hemiphaga novaeseelandiae*) and sacred kingfisher (*Todiramphus sanctus*)	Refer to planning map.
SNA065	**Māori Reserve Road Tussock Strips**	Māori Reserve Road Tussock Strips is an area of tussock grassland along fencelines. Notable vegetation includes silver tussock (*Poa cita*).	High Plains
SNA066	**Corner Block Beech Forest**	Corner Block Beech Forest is an area of beech forest in steep slopes and shallow gullies. Notable vegetation include beech and cabbage tree/tī kōuka (*Cordyline australis*).	Oxford
SNA067	**Ashley Gorge Bush Strips**	Ashley Gorge Bush Strips is an area of forest, treeland scrub and rush sedgeland. Notable flora include lowland flax/harakeke (*Phormium tenax*) and cabbage tree/tī kōuka (*Cordyline australis*).	Oxford
SNA068	**Doctors Rock Beech Remnant**	Doctors Rock Beech Remnant is a beech forest remnant. Notable flora on site include beech (unknown sp.). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*)	Oxford
SNA069	**Mears Bush Beech Forest**	Forest of black beech.	Oxford
SNA070	**Gammons Creek Beech Forest**	Gammons Creek Beech Forest consists of mature scattered beech remnants. Notable flora on site include black beech (*Fuscospora solandri*). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*).	Oxford
SNA071	**Sladdens Bush Beech Forest**	Sladdens Bush Beech Forest is a mosaic of ridges and small stream systems with beech remnant. This site contains a range of native flora including trees such as broadleaf/kāpuka	Oxford

		(*Griselinia littoralis*), pōkākā (*Elaeocarpus hookerianus*), marbleleaf/putaputawētā (*Carpodetus serratus*), pepper tree/horopito (*Pseudowintera colorata*), wineberry/makomako (*Aristotelia serrata*), tree fuchsia (*Fuchsia excorticata*) and kānuka (*Kunzea ericoides*) (threatened-nationally vulnerable). Native shrubs on site include include mikimiki (*Coprosma propinqua, C. linariifolia, C. rhamnoides*), *Coprosma robusta x linariifolia* and weeping mapou (*Myrsine divaricata*). Native climbers on site include large leaved muehlenbeckia (*Muehlenbeckia australis*), native jasmine (*Parsonsia capsularis*), bush lawyer (*Rubus cissoides*) and clematis (*Clematis paniculata*). Native herbs on site include red bidibid/piripiri (*Acaena novae-zelandiae*). Native ferns include prickly shield fern (*Polystichum vestitum*), small kiokio (*Blechnum procerum*) and creek fern/kiwikiwi (*Blechnum fluviatile*). Native sedges, grasses and rushes on site include giant rush (*Juncus pallidus*), wīwī (*Juncus distegus*) (at risk-naturally uncommon), bastard grass (*Uncinia uncinata*), *Uncinia distans* and pūkio (*Carex secta*). Notable fauna on site include bellbird/korimako (*Anthornis melanura melanura*).	
SNA072	**Washpen Road Shrubland**	Washpen Road Shrubland is an area of beech shrub on the true left of the Eyre River. Notable flora include beech.	Oxford
SNA073	**Upper Karetu River Wetland**	A wetland area consisting of rush and sedgeland. Notable flora include pūkio (*Carex secta).*	Oxford
SNA074	**Thongcaster Road Kānuka Dryland**	Large area of dryland kānuka. Notable flora include kānuka (*Kunzea*	Partly located within Low Plains and

		robusta) (threatened-nationally vulnerable), mānuka (*Leptospermum scoparium*) (at risk-declining), grass orchid (unknown sp.) and native daisy (unknown sp.).	partly located within High Plains. Refer to planning map.
SNA075	**Lundy Kānuka Dryland**	Area of dryland kānuka. Notable flora include kānuka (unknown sp.), *Coprosma intertexta* (at risk-declining), and *Leptinella*.	High Plains
SNA076	**Carleton Road Kānuka Dryland**	Dryland kānuka remnant. Notable flora include kānuka (*Kunzea robusta*) (threatened-nationally vulnerable), mikimiki (*Coprosma propinqua, C. rhamnoides*) and *Clematis marata*.	Low Plains
SNA077	**Langstone Kānuka Dryland**	Kānuka and native grassland. Notable flora on site include kānuka (*Kunzea robusta*) (threatened-nationally vulnerable).	Low Plains
SNA078	**Main Race Road Kānuka Dryland**	Dryland kānuka remnant. Notable flora on site include kānuka (*Kunzea robusta*) (threatened-nationally vulnerable).	Low Plains
SNA079	**Poyntzs Road Kānuka Dryland**	Dryland kānuka remnant. Notable flora include kānuka (*Kunzea robusta*) (threatened-nationally vulnerable).	Low Plains
SNA080	**Heatherton Road Kānuka Dryland**	Dryland kānuka remnant. Notable flora include kānuka (*Kunzea robusta*) (threatened-nationally vulnerable).	Low Plains
SNA081	**Pesters Road Kānuka Dryland**	Dryland kānuka remnant. Notable flora include kānuka (unknown sp.) and mikimiki (*Coprosma propinqua*). A number of other herbs and shrubs are also present.	Low Plains
SNA082	**Point Paddock Kōwhai**	Area of indigenous trees and shrubs. Notable flora includes prostrate kōwhai (*Sophora prostrata)*.	High Plains
SNA083	**Oxford Conservation Area Forest**	Beech and podocarp forest. Significant dry mixed hardwood forest.	Partly located within Oxford and partly located within Torlesse. Refer

			to planning map.
SNA084	**Mount Thomas Forest**	Lowland to montane beech forest, podocarp mixed beech forest with lowland shrub and subalpine shrubland.	Oxford
SNA085	**Puketeraki Forest Conservation Area**	Mountain beech forest with snow tussock. Notable flora includes mountain beech (*Nothofagus solandri)* and snow tussock *(Chionochloa macra*).	Torlesse
SNA086	**Lower Gorge Forest**	Mixed podocarp and mānuka (*Leptospermum scoparium*) (at risk-declining).	Oxford
SNA087	**Mid Gorge Forest**	Beech forest and mānuka gullies (*Leptospermum scoparium*) (at risk-declining).	Oxford
SNA088	**Lower Bridge Forest**	Beech forest and mānuka (*Leptospermum scoparium*) (at risk-declining).	Oxford
SNA089	**Top Gorge Forest**	Beech forest and mānuka (*Leptospermum scoparium*) (at risk-declining).	Oxford
SNA090	**Ashley River Gorge Riverbed & Banks Shrubland**	An area of shrubland along the length of the Ashley River Gorge.	Oxford
SNA091	**Lees Valley Road Shrubland**	Lees Valley Road Shrubland is a steep sided ridge and rock outcrop gully with shrubland. Notable flora on site includes silver tussock (*Poa cita*).	Oxford
SNA092	**Break Neck Gully Forest**	Break Neck Gully Forest is a mixed beech, hardwood and podocarp forest with scrub, riparian vegetation and rock bluffs. Notable flora on site include black beech (*Fuscospora solandri*), mountain beech (*Fuscospora cliffortioides*), five-finger/whauwhaupaku (*Pseudopanax arboreus*), ribbonwood (*Hoheria*), fuchsia, broadleaf/kāpuka (*Griselinia littoralis*), matipo (*Myrsine australis*), kōwhai (*Sophora sp*.) lancewood (*Pseudopanax crassifolius*), tree daisy (*Oleari* sp.) and mātai (*Prumnopitys taxifolia*).	Oxford

ECO-SCHED2 - Schedule of significant indigenous vegetation or significant habitat of indigenous fauna types comprising unmapped SNAs

Geographic Area (Ecological)	Ecological District	Vegetation / Habitat Type	Occupying a minimum contiguous area of	Naturally occurring indigenous plant species (common and/or notable) that may be present, including but not limited to:
Coastal	Low Plains	Coastal sand dunes	0.1ha	• *Discaria toumatou* • *Pteridium esculentum* • *Ficinia nodosa* • *Poa billardierei* • *Carex pumila*
	Low Plains	Saline wetlands, including lagoons, estuaries, saltmarshes	0.1ha	• *Plagianthus divaricatus* • *Apodasmia similis* • *Ficinia nodosa* • *Juncus kraussii subsp. australiensis* • *Lepidosperma australe* • *Schoenoplectus pungens* • *Cotula coronopifolia* • *Thyridia repens* • *Samolus repens* • *Sarcocornia quinqueflora subsp. quinqueflora* • *Selliera radicans*
	Low Plains	Freshwater wetlands	0.1ha	• *Cordyline australis* • *Phormium tenax* • *Leptospermum scoparium* • *Coprosma propinqua, C. robusta* • *Typha orientalis* • *Bolboschoenus caldwellii* • *Carex coriacea, C. maorica, C. secta* • *Urtica perconfusa*

				~~• *Blechnum minus*~~ ~~• *Juncus edgariae, J. pallidus*~~ ~~• *Eleocharis acuta*~~
	~~Low Plains~~	~~An area of vegetation which provides habitat for an indigenous fauna species that has a conservation status of Threatened - Nationally Critical or Threatened - Nationally Endangered~~	~~N/A~~	
~~Plains~~	~~Low Plains~~ ~~High Plains~~	~~Kānuka forest/ treeland/ shrubland (including narrow and sparse roadside 'threads')~~	~~0.1ha~~	~~• *Kunzea serotine, K. robusta*~~ ~~• *Carmichaelia australis*~~ ~~• *Clematis spp.*~~ ~~• *Coprosma intertexta, C. rhamnoides*~~ ~~• *Discaria toumatou*~~ ~~• *Helichrysum lanceolatum*~~ ~~• *Leptecophylla juniperina subsp. juniperina*~~ ~~• *Leptospermum scoparium*~~ ~~• *Pomaderris amoena*~~ ~~• *Leptinella serrulata, L. squalida*~~ ~~• *Rytidosperma clavatum*~~ ~~• *Senecio glomeratus, S. aff. quadridentatus*~~
	~~Low Plains~~ ~~High Plains~~	~~Indigenous small-leaved~~	~~0.2ha~~	~~• *Sophora microphylla*~~ ~~• *Discaria toumatou*~~

		~~shrubland-grassland~~		~~• Coprosma crassifolia, C. propinqua~~ ~~• Leucopogon fasciculatus~~ ~~• Sophora prostrata~~ ~~• Carmichaelia australis, C. corrugata~~ ~~• Muehlenbeckia axillaris, M. complexa, M. ephedroides~~ ~~• Melicytus alpinus~~ ~~• Aciphylla subflabellata~~ ~~• Poa cita~~ ~~• Rytidosperma clavatum~~ ~~• Senecio spp.~~ ~~• Thelymitra spp.~~ ~~• Racomitrium spp., Triquetrella papillata~~
	~~Low Plains~~ ~~High Plains~~	~~Indigenous mossfield-herbfield-stonefield~~	~~0.2ha~~	~~• Carmichaelia corrugata~~ ~~• Coprosma brunnea, C. petriei~~ ~~• Leucopogon fraseri~~ ~~• Muehlenbeckia axillaris, M. ephedroides~~ ~~• Mosses and lichens, e.g. Bryum spp., Racomitrium spp., Triquetrella papillata~~
	~~Low Plains~~ ~~High Plains~~	~~Uncultivated dryland soils, including riverbanks and terraces~~	~~0.2ha~~	~~• Carmichaelia australis~~ ~~• Rytidosperma clavatum~~ ~~• Leucopogon fraseri~~ ~~• Muehlenbeckia axillaris~~ ~~• Pteridium esculentum~~ ~~• Thelymitra spp.~~ ~~• Dichondra repens~~

				~~• *Triquetrella papillata*~~ ~~• *Hypnum cuppressiforme*~~
	~~Low Plains~~ ~~High Plains~~	~~Freshwater wetlands (e.g. swamp, marsh, fen, bog)~~	~~0.1ha~~	~~• *Cordyline australis*~~ ~~• *Phormium tenax*~~ ~~• *Typha orientalis*~~ ~~• *Coprosma propinqua*~~ ~~• *Blechnum minus*~~ ~~• *Carex coriacea, C. secta*~~ ~~• *Eleocharis acuta*~~
	~~High Plains~~	~~Beech forest~~	~~0.3ha~~	~~• *Fuscospora solandri, F. cliffortioides*~~
	~~High Plains~~	~~Podocarp-hardwood forest~~	~~0.3ha~~	~~• *Dacrycarpus dacrydioides*~~ ~~• *Prumnopitys taxifolia*~~ ~~• *Podocarpus totara*~~ ~~• *Elaeocarpus hookerianus*~~ ~~• *Fuchsia excorticata*~~ ~~• *Griselinia littoralis*~~ ~~• *Hoheria angustifolia*~~ ~~• *Lophomyrtus obcordata*~~ ~~• *Melicytus ramiflorus*~~ ~~• *Myrsine divaricata*~~ ~~• *Pennantia corymbosa*~~ ~~• *Pittosporum tenuifolium*~~ ~~• *Pseudopanax arboreus, P. crassifolius*~~ ~~• *Schefflera digitata*~~ ~~• *Hebe salicifolia*~~ ~~• *Coprosma linariifolia, C. pedicellata*~~ ~~• *Neomyrtus pedunculata*~~

	~~High Plains~~	~~An area of vegetation which provides habitat for an indigenous fauna species that has a conservation status of Threatened - Nationally Critical or Threatened - Nationally Endangered~~	~~N/A~~	
~~Lees Valley~~	~~Oxford Torlesse~~	~~Indigenous short tussock grassland-herbfield-mossfield-stonefield~~	~~0.2ha~~	~~• *Discaria toumatou*~~ ~~• *Festuca novae-zelandiae*~~ ~~• *Aciphylla subflabellata*~~ ~~• *Carmichaelia monroi*~~ ~~• *Leucopogon fraseri, L. nanum*~~ ~~• *Melicytus alpinus*~~ ~~• *Plantago spathulata*~~ ~~• *Rytidosperma clavatum, R. merum*~~ ~~• *Brachyscome pinnata*~~ ~~• *Sonchus novae-zelandiae*~~
	~~Oxford Torlesse~~	~~Uncultivated dryland soils, including riverbanks, terraces, screes, and fans~~	~~0.2ha~~	~~• *Discaria toumatou*~~ ~~• *Melicytus alpinus*~~ ~~• *Carmichaelia monroi*~~ ~~• *Leucopogon fraseri, L. nanum*~~
	~~Oxford Torlesse~~	~~Indigenous shrubland/scrub in riparian habitats and on screes/fans and rock outcrops (*does not include recently*~~	~~0.2ha~~	~~• *Aristotelia fruticosa*~~ ~~• *Coprosma intertexta, other Coprosma spp.*~~ ~~• *Corokia cotoneaster*~~ ~~• *Discaria toumatou*~~ ~~• *Dracophyllum spp.*~~

		~~*induced matagouri shrubland (scattered, low stature shrubs) over exotic grassland)*~~		~~• *Leptospermum scoparium*~~ ~~• *Melicytus alpinus*~~ ~~• *Olearia avicenniifolia, O. bullata*~~
	~~Oxford Torlesse~~	~~Indigenous forest (beech, kānuka, podocarp)~~	~~0.3ha~~	~~• *Fuscospora cliffortioides, F. solandri*~~ ~~• *Griselinia littoralis*~~ ~~• *Hoheria lyallii*~~ ~~• *Kunzea robusta, K. serotina*~~ ~~• *Sophora microphylla*~~
	~~Oxford Torlesse~~	~~Snow tussock grassland~~	~~0.2ha~~	~~• *Chionochloa macra, C. rubra*~~
	~~Oxford Torlesse~~	~~Valley floor and toeslope wetlands (e.g. swamps, marsh, bogs, fens, seepages)~~	~~0.1ha~~	~~• *Leptospermum scoparium*~~ ~~• *Carmichaelia torulosa*~~ ~~• *Austroderia richardii*~~ ~~• *Phormium tenax*~~ ~~• *Typha orientalis*~~ ~~• *Coprosma propinqua*~~ ~~• *Chionochloa rubra*~~ ~~• *Carex secta, C. tenuiculmis*~~ ~~• *Drosera arcturi*~~ ~~• *Eleocharis acuta*~~ ~~• *Juncus spp.*~~ ~~• *Oreobolus spp.*~~ ~~• *Schoenus pauciflorus*~~
	~~Oxford Torlesse~~	~~An area of vegetation which provides habitat for an indigenous fauna species that has a conservation status of Threatened - Nationally~~	~~N/A~~	

		~~Critical or Threatened - Nationally Endangered~~		
~~Foothills~~	~~Oxford Torlesse Ashley~~	~~Beech forest~~	~~0.3ha~~	~~• *Fuscospora solandri, F. cliffortioides*~~
	~~Oxford Torlesse Ashley~~	~~Podocarp-hardwood forest~~	~~0.3ha~~	~~• *Dacrycarpus dacrydioides* • *Podocarpus totara, P. laetus* • *Prumnopitys taxifolia* • *Fuscospora solandri* • *Aristotelia serrata* • *Carpodetus serratus* • *Griselinia littoralis* • *Hebe salicifolia* • *Hoheria lyallii* • *Melicytus ramiflorus* • *Myrsine australis* • *Olearia paniculata* • *Pennantia corymbosa* • *Pittosporum eugenioides, P. tenuifolium* • *Pseudopanax arboreus, P. colensoi,* • *P. crassifolius* • *Pseudowintera colorata* • *Schefflera digitata*~~
	~~Oxford Torlesse Ashley~~	~~Kānuka forest/scrub (*height threshold - kānuka >4m in height and lower stature kānuka adjoining taller indigenous forest - provides buffering*)~~	~~0.1ha~~	~~• *Kunzea robusta, K. serotina* • *Coprosma spp.* • *Leptospermum scoparium*~~

	~~Oxford Torlesse Ashley~~	~~Indigenous shrubland/scrub in riparian habitats and on screes/fans and rock outcrops~~[1]	~~0.2ha~~	~~• *Discaria toumatou*~~ ~~• *Aristotelia fruticosa*~~ ~~• *Carmichaelia australis*~~ ~~• *Coprosma brunnea, C. intertexta and other small-leaved Coprosma spp.*~~ ~~• *Corokia cotoneaster*~~ ~~• *Dracophyllum spp.*~~ ~~• *Hebe spp.*~~ ~~• *Leptospermum scoparium*~~ ~~• *Melicytus alpinus*~~ ~~• *Olearia avicenniifolia, O. cymbifolia*~~ ~~• *Ozothamnus leptophyllus*~~
	~~Oxford Torlesse Ashley~~	~~Tall tussock grassland~~	~~0.2ha~~	~~• *Chionochloa macra, C. rigida*~~ ~~• *Aciphylla spp.*~~ ~~• *Celmisia spp.*~~
	~~Oxford Torlesse Ashley~~	~~Short tussock grassland on dry ridges, rock outcrops, slips, and valley floors (*does not include recently induced silver tussock grassland in sites that historically supported indigenous forest*)~~	~~0.2ha~~	~~• *Discaria toumatou*~~ ~~• *Festuca novae-zelandiae*~~ ~~• *Poa cita*~~ ~~• *Aciphylla subflabellata*~~
	~~Oxford Torlesse Ashley~~	~~Wetlands (e.g. swamps, marshes, fens, bogs)~~	~~0.1ha~~	~~• *Cordyline australis*~~ ~~• *Phormium tenax*~~ ~~• *Coprosma propinqua*~~ ~~• *Carex coriacea, C. secta*~~ ~~• *Juncus spp.*~~

	~~Oxford Torlesse Ashley~~	~~An area of vegetation which provides habitat for an indigenous fauna species that has a conservation status of Threatened - Nationally Critical or Threatened - Nationally Endangered~~	~~N/A~~	

~~**Advisory Note**~~

- ~~The New Zealand Plant Conservation Network https://www.nzpcn.org.nz/flora/ provides photos and details about these species.~~[140]

ECO-SCHED~~3~~2[141] **- Schedule of naturally uncommon ecosystems, and species that are threatened, at risk, or reach their national or regional distribution limits in the District**

Table ECO-1: Naturally uncommon ecosystem types in the District

Naturally uncommon ecosystem type
Ephemeral wetlands
Active sand dunes
Braided riverbeds
Coastal lagoons
Dune slacks
Seepages and flushes
Basic cliffs, scarps, and tors
Calcareous cliffs, scarps and tors
Estuaries
Snow banks

[140] Federated Farmers [414.123], Department of Conservation [419.92], Christchurch City Council [360.18], Judith Roper-Lindsay [120.2 & 120.14], and Environment Canterbury [316.108]
[141] Consequential renumbering

Advisory Note: https://www.landcareresearch.co.nz/publications/naturally-uncommon-ecosystems/ provides an outline of these ecosystems.

Table ECO-2: Threatened and at risk species recorded or likely to be present in the District (naturally occurring species only)

Scientific Name	Common Name	Conservation Status
Brachyscome pinnata		Threatened-Nationally Critical
Carmichaelia torulosa	Canterbury pink broom	Threatened-Nationally Critical
Gentianella calcis subsp. *waipara*	Native gentian	Threatened-Nationally Critical
Korthalsella salicornioides	Dwarf mistletoe	Threatened-Nationally Critical
Lophomyrtus obcordata	Rōhutu, NZ myrtle	Threatened-Nationally Critical[1]
Neomyrtus pedunculata	Rōhutu, myrtle	Threatened-Nationally Critical[1]
Sebaea ovata	Sebaea	Threatened-Nationally Critical
Heliohebe maccaskillii / *Veronica maccaskillii*	Weka Pass sun hebe	Threatened-Nationally Endangered
Carex inopinata	Grassy mat sedge, unexpected sedge	Threatened-Nationally Vulnerable
Carmichaelia corrugata	Dwarf broom	Threatened-Nationally Vulnerable
Carmichaelia kirkii	Climbing broom	Threatened-Nationally Vulnerable
Coprosma obconica		Threatened-Nationally Vulnerable
Geranium retrorsum	Turnip-rooted geranium	Threatened-Nationally Vulnerable
Kunzea robusta	Kānuka, rawirinui	Threatened-Nationally Vulnerable[1]
Kunzea serotina	Kānuka, makahikatoa	Threatened-Nationally Vulnerable[1]
Melicytus flexuosus		Threatened-Nationally Vulnerable

Metrosideros diffusa	Climbing rātā	Threatened-Nationally Vulnerable[1]
Muehlenbeckia ephedroides	Leafless pōhuehue	Threatened-Nationally Vulnerable
Olearia fimbriata		Threatened-Nationally Vulnerable
Ranunculus ternatifolius		Threatened-Nationally Vulnerable
Raoulia monroi	Fan-leaved mat daisy	Threatened-Nationally Vulnerable
Solanum aviculare subsp. *aviculare*	Poroporo	Threatened-Nationally Vulnerable
Sonchus novae-zelandiae	Kirkianella	Threatened-Nationally Vulnerable
Acaena buchananii	Bidibidi, piripiri	At Risk-Declining
Aciphylla subflabellata	Grassland speargrass, grassland spaniard, kurikuri	At Risk-Declining
Alepis flavida	Yellow mistletoe, pirita	At Risk-Declining
Carex buchananii	Cutty grass, matirewa	At Risk-Declining
Carex litorosa	Salt sedge	At Risk-Declining
Carex tenuiculmis		At Risk-Declining
Carmichaelia monroi	Stout dwarf broom	At Risk-Declining
Coprosma brunnea / Coprosma acerosa		At Risk-Declining
Coprosma intertexta		At Risk-Declining
Coprosma pedicellata		At Risk-Declining
Coprosma virescens	Mikimiki	At Risk-Declining
Coprosma wallii	Bloodwood	At Risk-Declining
Daucus glochidiatus	Dwarf carrot	At Risk-Declining
Discaria toumatou	Matagouri, tūmatakuru	At Risk-Declining
Eleocharis neozelandica	Sand spike sedge	At Risk-Declining
Ficinia spiralis	Pīngao, pīkao, golden sand sedge	At Risk-Declining
Geranium solanderi	Native geranium	At Risk-Declining
Hypericum involutum	Grassland hypericum	At Risk-Declining
Juncus caespiticius		At Risk-Declining

Korthalsella clavata	Dwarf mistletoe	At Risk-Declining
Leptinella serrulata	Dryland button daisy	At Risk-Declining
Leptospermum scoparium	Mānuka, tea tree	At Risk-Declining[1]
Leucopogon nanum		At Risk-Declining
Linum monogynum	NZ linen flax	At Risk-Declining
Mentha cunninghamii	NZ mint	At Risk-Declining
Olearia lineata	Narrow-leaved tree daisy	At Risk-Declining
Poa billardierei	Sand tussock, hinarepe	At Risk-Declining
Raoulia australis	Common mat daisy	At Risk-Declining
Rytidosperma exiguum	Danthonia, bristle grass	At Risk-Declining
Rytidosperma merum	Danthonia, bristle grass	At Risk-Declining
Tupeia antarctica	White mistletoe, pirita, tupia	At Risk-Declining
Urtica perconfusa	Swamp nettle	At Risk-Declining
Zoysia minima	Native twitch	At Risk-Declining
Xanthoparmelia semiviridis	Resurrection lichen	At Risk-Declining
Centipeda aotearoana	New Zealand sneezewort	At Risk-Naturally Uncommon
Chenopodium allanii		At Risk-Naturally Uncommon
Hymenophyllum cupressiforme	Filmy fern	At Risk-Naturally Uncommon
Juncus distegus	Wīwī	At Risk-Naturally Uncommon
Pimelea pseudolyallii	Pimelea	At Risk-Naturally Uncommon
Pseudopanax ferox	Fierce lancewood	At Risk-Naturally Uncommon
Thyridia repens	Native musk	At Risk-Naturally Uncommon
Mosses		
Ceratodon purpureus		Threatened – Nationally Critical
Tortula viridipila		Threatened – Nationally Endangered
Bryum pallescens		At Risk – Naturally Uncommon
Liverworts		
Ricciocarpos natans		At Risk - Declining

Chiloscyphus erosus		At Risk – Naturally Uncommon
Lichens		
Cladia inflata		At Risk – Declining
Xanthoparmelia semiviridis		At Risk – Declining
Badimiella pteridophila		At Risk – Naturally Uncommon
Menegazzia aeneofusca		At Risk – Naturally Uncommon
Menegazzia globulifera		At Risk – Naturally Uncommon
Parmeliella gymnocheila		At Risk – Naturally Uncommon
Podostictina ardesiaca		At Risk – Naturally Uncommon
Pseudocyphellaria gretae		At Risk – Naturally Uncommon
Pseudocyphellaria intricata		At Risk – Naturally Uncommon
Pseudocyphellaria lividofusca		At Risk – Naturally Uncommon[142]
All species of Myrtaceae in New Zealand, including kānuka (*Kunzea robusta* and *K. serotina*), mānuka (*Leptospermum scoparium*), and rātā (*Metrosideros* spp.), have been classified as Threatened or At Risk nationally due to the potential threat posed by myrtle rust (*Austropuccinia psidii).* However, this fungus has not yet been recorded in the wild in Canterbury, and kānuka, mānuka and rātā are still relatively common and widespread in the Canterbury Region.		
Advisory Note • The New Zealand Plant Conservation Network https://www.nzpcn.org.nz/flora/ provides photos and details about these species.		

Table ECO-3: Indigenous plant species that reach their national or regional distribution limits in the District (naturally occurring species only)

Scientific Name	Common Name	Distribution limit
Astelia grandis	Swamp astelia	Southern regional limit
Cardamine cubita	Bittercress	Only known from the Lees Valley

[142] Environment Canterbury [316.109]

Carex dipsacea	Teasel sedge	Eastern distribution limit
Gratiola sexdentata	Gratiola	Possible northern regional limit
Hebe leiophylla / *Veronica leiophylla*		Southern national limit
Leucogenes grandiceps	South Island eidelweiss	Possible eastern national limit
Pomaderris amoena	Pomaderris	Southern national limit
Advisory Note • The New Zealand Plant Conservation Network https://www.nzpcn.org.nz/flora/ provides photos and details about these species.		

Appendices

ECO-APP1 - Criteria for determining significant indigenous vegetation and significant habitat of indigenous fauna

Representativeness	• Indigenous vegetation or habitat of indigenous fauna that is representative, typical or characteristic of the natural diversity of the relevant ecological district. This can include degraded examples where they are some of the best remaining examples of their type, or represent all that remains of indigenous biodiversity in some areas. • Indigenous vegetation or habitat of indigenous fauna that is a relatively large example of its type within the relevant ecological district.
Rarity/Distinctiveness	• Indigenous vegetation or habitat of indigenous fauna that has been reduced to less than 20% of its former extent in the region, or relevant land environment, ecological district, or freshwater environment. • Indigenous vegetation or habitat of indigenous fauna that supports an indigenous species that is threatened, at risk, or uncommon, nationally or within the relevant ecological district. • The site contains indigenous vegetation or an indigenous species at its distribution limit within the Canterbury Region or nationally. • Indigenous vegetation or an association of indigenous species that is distinctive, of restricted occurrence, occurs within an originally rare ecosystem, or has developed as a result of an unusual environmental factor or combinations of factors.
Diversity and Pattern	• Indigenous vegetation or habitat of indigenous fauna that contains a high diversity of indigenous ecosystem or habitat types, indigenous taxa, or has changes in species composition reflecting the existence of diverse natural features or ecological gradients.

Ecological Context	• Vegetation or habitat of indigenous fauna that provides or contributes to an important ecological linkage or network, or provides an important buffering function. • A wetland which plays an important hydrological, biological or ecological role in the natural functioning of a river or coastal system. • Indigenous vegetation or habitat of indigenous fauna that provides important habitat (including refuges from predation, or key habitat for feeding, breeding, or resting) for indigenous species, either seasonally or permanently.

ECO-APP2 - Principles for biodiversity offsetting

Adherence to mitigation hierarchy	A biodiversity offset is a commitment to redress more than minor residual adverse impacts. It should only be contemplated after steps to avoid, remedy and mitigate adverse effects have been demonstrated to have been sequentially exhausted and thus applies only to residual indigenous biodiversity impacts.
Limits to offsetting	Many biodiversity values cannot be offset and if they are adversely affected then they will be permanently lost. These situations include where: a. residual adverse effects cannot be offset because of the irreplaceability or vulnerability of the indigenous biodiversity affected; b. there are no technically feasible or socially acceptable options by which to secure gains within acceptable timeframes; and c. effects on indigenous biodiversity are uncertain, unknown or little understood, but potential effects are significantly adverse. In these situations, an offset would be inappropriate. This principle reflects a standard of acceptability for offsetting and a proposed offset must provide an assessment of these limits that supports its success.
No net loss and preferably a net gain	The values to be lost through the activity to which the offset applies are counterbalanced by the proposed offsetting activity which is at least commensurate with the adverse effects on indigenous biodiversity so that the overall result is no net loss and preferably a net gain in biodiversity. No net loss and net gain are measured by type, amount and condition at the impact and offset site and require an explicit loss and gain calculation.
Additionality	A biodiversity offset must achieve gains in indigenous biodiversity above and beyond gains that would have occurred in the absence of the offset, including that gains are additional to any remediation and mitigation undertaken in relation to the adverse effects of the activity. Offset design and implementation

	must avoid displacing activities harmful to indigenous biodiversity to other locations.
Like-for-like	The ecological values being gained at the offset site are the same as those being lost at the impact site across types of indigenous biodiversity, amount of indigenous biodiversity (including condition), over time and spatial context.
Landscape context	Biodiversity offset actions must be undertaken where this will result in the best ecological outcome, preferably close to the location of development or within the same ecological district, and must consider the landscape context of both the impact site and the offset site, taking into account interactions between species, habitats and ecosystems, spatial connections and ecosystem function.
Long-term outcomes	The biodiversity offset must be managed to secure outcomes of the activity that last as least as long as the impacts, and preferably in perpetuity.
Time lags	The delay between loss of indigenous biodiversity at the impact site and gain or maturity of indigenous biodiversity at the offset site must be minimised so that gains are achieved within the consent period.
Trading up	When trading up forms part of an offset, the proposal must demonstrate that the indigenous biodiversity values gained are demonstrably of higher value than those lost, and the values lost are not indigenous taxa that are listed as Threatened, At-risk or Data deficient in the New Zealand Threat Classification System lists, or considered vulnerable or irreplaceable.
Offsets in advance	A biodiversity offset developed in advance of an application for resource consent must provide a clear link between the offset and the future effect. That is, the offset can be shown to have been created or commenced in anticipation of the specific effect and would not have occurred if that effect were not anticipated.
Proposing a biodiversity offset	A proposed biodiversity offset must include a specific biodiversity offset management plan.
Science and matauranga Māori	The design and implementation of a biodiversity offset must be a documented process informed by science, including an appropriate consideration of matauranga Māori.
Stakeholder participation	Opportunity for the effective participation of stakeholders should be demonstrated when planning for biodiversity offsets, including their evaluation, selection, design, implementation and monitoring. Stakeholders are best engaged early in the offset consideration process.
Transparency	The design and implementation of a biodiversity offset and communication of its results to the public should be undertaken in a transparent and timely manner. This includes transparency

	of the loss and gain calculation and the data that informs a biodiversity offset.

ECO-APP3 - Principles for biodiversity compensation

These principles apply to the use of biodiversity compensation for adverse effects on indigenous biodiversity:

(1) **Adherence to effects management hierarchy:** Biodiversity compensation is a commitment to redress more than minor residual adverse effects, and should be contemplated only after steps to avoid, minimise, remedy, and offset adverse effects are demonstrated to have been sequentially exhausted.

(2) **When biodiversity compensation is not appropriate:** Biodiversity compensation is not appropriate where indigenous biodiversity values are not able to be compensated for. Examples of biodiversity compensation not being appropriate include where: (a) the indigenous biodiversity affected is irreplaceable or vulnerable;

(b) effects on indigenous biodiversity are uncertain, unknown, or little understood, but potential effects are significantly adverse or irreversible;

(c) there are no technically feasible options by which to secure a proposed net gain within acceptable timeframes.

(3) **Scale of biodiversity compensation:** The indigenous biodiversity values lost through the activity to which the biodiversity compensation applies are addressed by positive effects to indigenous biodiversity (including when indigenous species depend on introduced species for their persistence), that outweigh the adverse effects.

(4) **Additionality:** Biodiversity compensation achieves gains in indigenous biodiversity above and beyond gains that would have occurred in the absence of the compensation, such as gains that are additional to any minimisation and remediation or offsetting undertaken in relation to the adverse effects of the activity.

(5) **Leakage:** Biodiversity compensation design and implementation avoids displacing harm to other indigenous biodiversity in the same or any other location.

(6) **Long-term outcomes:** Biodiversity compensation is managed to secure outcomes of the activity that last as least as long as the impacts, and preferably in perpetuity. Consideration must be given to long-term issues around funding, location, management, and monitoring.

(7) **Landscape context:** Biodiversity compensation is undertaken where this will result in the best ecological outcome, preferably close to the impact site or within the same ecological district. The action considers the landscape context of both the impact site and the compensation site, taking into account interactions between species, habitats and ecosystems, spatial connections, and ecosystem function.

(8) **Time lags:** The delay between loss of, or effects on, indigenous biodiversity values at the impact site and the gain or maturity of indigenous biodiversity at the compensation site is

minimised so that the calculated gains are achieved within the consent period or, as appropriate, a longer period (but not more than 35 years).

(9) **Trading up:** When trading up forms part of biodiversity compensation, the proposal demonstrates that the indigenous biodiversity gains are demonstrably greater or higher than those lost. The proposal also shows the values lost are not to Threatened or At Risk (declining) species or to species considered vulnerable or irreplaceable.

(10) **Financial contributions:** A financial contribution is only considered if: (a) there is no effective option available for delivering biodiversity gains on the ground; and

(b) it directly funds an intended biodiversity gain or benefit that complies with the rest of these principles.

(11) **Science and mātauranga Māori:** The design and implementation of biodiversity compensation is a documented process informed by science, and mātauranga Māori.

(12) **Tangata whenua and stakeholder participation:** Opportunity for the effective and early participation of tangata whenua and stakeholders is demonstrated when planning for biodiversity compensation, including its evaluation, selection, design, implementation, and monitoring.

(13) **Transparency:** The design and implementation of biodiversity compensation, and communication of its results to the public, is undertaken in a transparent and timely manner.[143]

ECO-APP3 – Biodiversity Management Plan (BMP) contents

a. BMP assessors' details and qualifications and details about the timing of the initial and subsequent evaluations;

b. site details including area, topography, ecological district and habitat description, habitat modification, fence conditions;

c. biodiversity values including ecosystem type, composition, presence of rare/threatened species/habitats, condition;

d. threats to biodiversity values such as presence of pests/weeds, edge effects from adjacent activities, erosion, fire risk, climate change risks;

e. recommended management, conservation and restoration actions with associated timeframes;

f. monitoring and reporting conditions; and

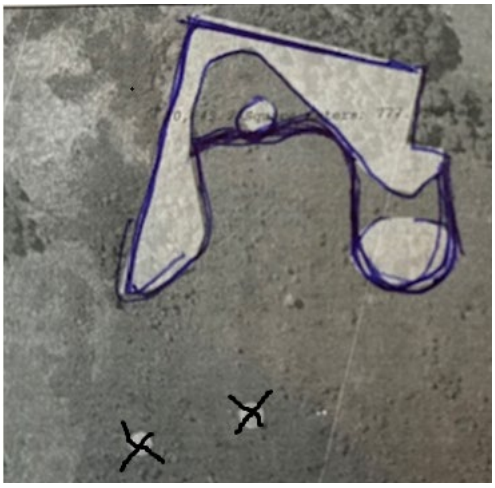
g. review clause.[144]

Related planning map amendments

[143] Forest and Bird [192.2] and Department of Conservation [419.14]
[144] Environment Canterbury [316.105]

Delete ‘Geographic Areas (Ecological)' overlay.

Amend the portion of SNA048 located on 670 Island Road by removing the two southern circles, and merging the rest as shown below.



Amend the boundary of portion of SNA051 located on 117 Mounseys Road, View Hill as shown below.

Related definition amendments

BIODIVERSITY COMPENSATION	means a conservation outcome that meets the requirements in ECO-APP3 and results from actions that are intended to compensate for any more than minor residual adverse effects on indigenous biodiversity after all appropriate avoidance, minimisation, remediation, and biodiversity offsetting measures have been sequentially applied.[145]
BIODIVERSITY OFFSET	means a measurable conservation outcome that meets the requirements ~~resulting from actions that comply with the principles~~ in ECO-APP2 and results from actions that are intended ~~designed~~ to: a. ~~compensate~~ redress any ~~for~~ more than minor residual adverse ~~biodiversity~~ effects on indigenous biodiversity ~~arising from subdivision, use or development~~ after all appropriate avoidance, minimisation, and remediation ~~and mitigation~~ measures have been sequentially applied; and b. achieve a net gain in type, amount, and condition of ~~no net loss of and preferably a net gain to,~~ indigenous biodiversity compared to that lost ~~values~~.[146]
~~ECOLOGICAL~~ ECOSYSTEM[147] SERVICES	the benefits people obtain from ecosystems that support us by providing services on which our health, livelihoods, and well-being depend, ~~i.e.~~ e.g.[148], water purification and regulation; provision of food, medicine, ~~fiber~~ fibre[149], and energy; and places for physical, cultural, spiritual and recreation.
EDGE EFFECTS[150]	means effects on ecosystems caused by adjacent or surrounding land uses.[151]
INDIGENOUS BIODIVERSITY	means all plants, fungi[152] and animals that occur naturally in New Zealand and have evolved without any assistance from humans and includes the variability among these organisms and the ecological complexes of which they are part. It includes diversity within species, between species, and of ecosystems, and includes their related indigenous biodiversity values.
~~INDIGENOUS BIODIVERSITY OFFSET~~	~~means a measurable conservation outcome resulting from actions designed to compensate for residual adverse biodiversity effects arising from development after all appropriate avoidance, remediation and mitigation measures have been taken. The goal of a biodiversity offset is to achieve no net loss.~~[153]

[145] Forest and Bird [192.2] and Department of Conservation [419.14].
[146] Forest and Bird [192.2].
[147] Department of Conservation [419.10].
[148] Judith Roper-Lindsay [120.1].
[149] RMA Schedule 1 Clause 16(2)
[150] Forest and Bird [192.7].
[151] Forest and Bird [192.7].
[152] Department of Conservation [419.16].
[153] Department of Conservation [419.15], Fulton Hogan [41.6], and Forest and Bird [192.15].

INDIGENOUS VEGETATION CLEARANCE	means the felling, clearing, removal,[154] damage or disturbance of indigenous vegetation by activities including[155] cutting, mob stocking, crushing, cultivation, irrigation, earthworks, chemical application, artificial drainage, stop banking, burning, over sowing, trampling[156] or any other activity in or directly adjacent to an area of indigenous vegetation that destroys or directly results in extensive failure of an area of indigenous vegetation.
~~MAPPED SNA~~	~~means an area of significant indigenous vegetation and/or significant habitat of indigenous fauna shown on the planning map and listed in ECO-SCHED1 that meets one or more of the ecological significance criteria listed in ECO-APP1.~~[157]
~~NATURAL SYSTEMS~~	~~means the interaction of the ecosystem, natural resources and physical processes within the natural environment, where there is an exchange of matter, energy or information.~~[158]
~~NO NET LOSS~~	~~in relation to indigenous biodiversity, means no reasonably measurable overall reduction in:~~ ~~a. the diversity of indigenous species or recognised taxonomic units; and~~ ~~b. indigenous species' population sizes (taking into account natural fluctuations) and long term viability; and~~ ~~c. the natural range inhabited by indigenous species; and~~ ~~d. the range and ecological health and functioning of assemblages of indigenous species, community types and ecosystems.~~[159]
SIGNIFICANT NATURAL AREA (SNA)[160]	means an area of significant indigenous vegetation and/or significant habitat of indigenous fauna listed in ECO-SCHED1 and shown on the planning map, or any other area of significant indigenous vegetation and or significant habitat of indigenous fauna[161] that meets one or more of the ecological significance criteria listed in ECO-APP1. ~~A SNA can be either a mapped SNA or unmapped SNA. Refer to the individual definitions for these terms.~~[162]
~~UNMAPPED SNA~~	~~means an area of significant indigenous vegetation and/or significant habitat of indigenous fauna listed in ECO-SCHED2 that occupies at least the specified minimum contiguous area, and is not a mapped SNA shown on the planning map and listed in ECO-SCHED1.~~[163]

[154] Forest and Bird [192.18] and Fulton Hogan [41.7].
[155] Fulton Hogan [41.7].
[156] Department of Conservation [419.17].
[157] Federated Farmers [414.19] and Department of Conservation [419.92].
[158] Forest and Bird [192.22].
[159] Forest and Bird [192.23].
[160] Department of Conservation [419.26].
[161] Federated Farmers [414.19] and Department of Conservation [419.92].
[162] Federated Farmers [414.19] and Department of Conservation [419.92].
[163] Federated Farmers [414.20] and MainPower [249.41].

APP2 - Standards for creation of any bonus allotment and establishment of any bonus residential unit

In order to encourage the legal protection, physical protection and restoration of SNAs ~~listed in ECO-SCHED1~~[1], the District Council shall consider providing the following development rights if the relevant standards outlined below are met:

- **Bonus allotment** - means a new allotment of between 1ha to 2ha, created as a result of subdivision that provides protection and restoration of a SNA ~~listed in ECO-SCHED1~~[2] located on the balance site. Refer to Figure APP2-1 below. A bonus allotment can have one residential unit as a permitted activity.
- **Bonus residential unit** - means an additional residential unit on a site that already has one residential unit where protection and restoration of a SNA ~~listed in ECO-SCHED1~~[3] which is located on the same site has been provided. Refer to Figure APP2-2 below.

Figure APP2-1: Creation of a bonus allotment

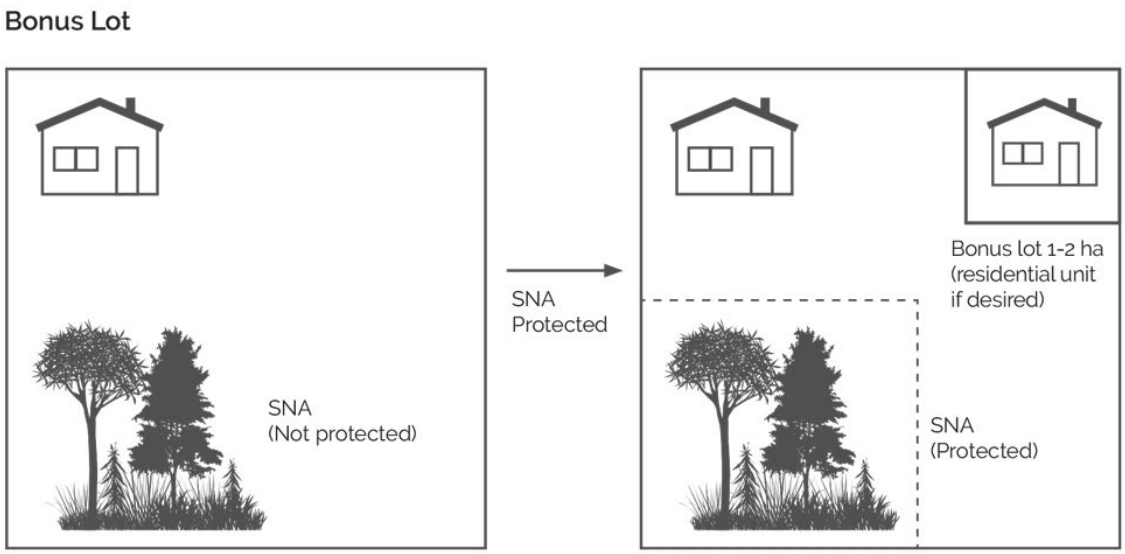
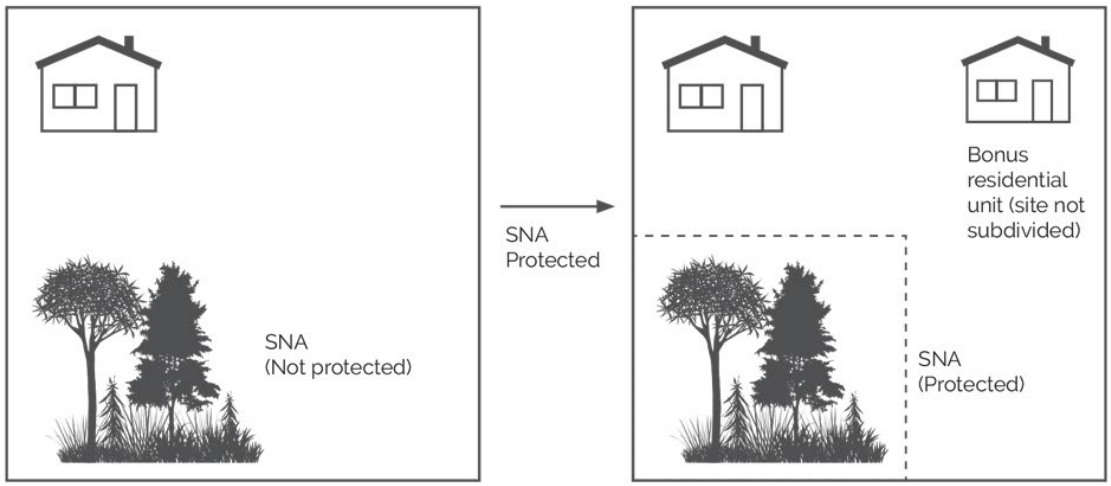


Figure APP2-2: Establishment of bonus residential unit

[1] DoC [419.75] and Forest and Bird [192.44]
[2] DoC [419.75] and Forest and Bird [192.44]
[3] DoC [419.75] and Forest and Bird [192.44]

Bonus Residential Unit



Where the following standards are met, a bonus allotment may be created or a bonus residential unit may be established:	
1. SNA eligibility	
• The SNA shall be listed in ECO-SCHED1, or shall be determined by a suitably qualified ecologist to meet one or more of the SNA criterion listed in ECO-APP1 and a peer review by an ecologist commissioned by Council confirms this[4] • The minimum applicable SNA size requirements and buffer requirements in Table APP2-1 shall be met.	
2. Legal protection in perpetuity	
The SNA and buffer area shall be subject to legal protection in perpetuity including enforcement and penalty provisions and the requirement to implement the Management Plan. For the avoidance of doubt, this shall include any SNA that is already legally protected in perpetuity including enforcement and penalty provisions and the requirement to implement the Management Plan.	
3. Management Plan	
Any application shall include a Management Plan that is prepared by a suitably qualified and experienced ecologist in the protection and restoration of New Zealand biodiversity, which includes all of the following matters:	
Ecological report	outlining the ecological values of the SNA that meet one or more of the criterion listed in ECO-APP1. This can either be via a report provided by the District Council if an existing report is available or, if the District Council does not have such a report, the landowner shall commission one from a suitably qualified and experienced ecologist. The report must have been prepared a maximum of three months prior to the date of the application.

[4] DoC [419.75] and Forest and Bird [192.44]

Site plan	showing to scale the location and size of proposed bonus allotment or location of proposed bonus residential unit, SNA to be protected, any other SNAs, or any other areas 0.25ha or greater of indigenous vegetation, any wetlands or water bodies, and existing structures.
Legal protection in perpetuity	outline of legal protection proposed to ensure the SNA and buffer area will remain protected in perpetuity including enforcement and penalty provisions and the requirement to implement the Management Plan.
Buffer	the establishment of a buffer as required by Table APP2-1: 1. where restoration planting is required by Table APP2-1, an outline of the type, location and ecological district of the plants to be planted and how the plantings will be maintained to ensure a 90% survival rate. 2. where natural regeneration facilitation is required by Table APP2-1, an outline of the ~~scraping~~[5] methodology, how the regenerating plants will be maintained to ensure a 90% survival rate. 3. an outline of potential adverse effects on the buffer area from activities, including but not limited to indigenous vegetation clearance, chemical spraying, nutrient spraying, drainage, irrigation, livestock, earthworks, or planting, and how these adverse effects will be avoided, remedied or mitigated through preliminary and/or ongoing measures.
Pest management	the management of both animal pests and plants pests that are likely to threaten the SNA long term through: 1. preliminary animal pest and plant pest management activities. 2. on-going animal pest and plant pest management activities at a minimum frequency of annually for the first three years then at a minimum frequency of every three years for the following 12 years (thus an overall total of 15 years).
Monitoring	ongoing annual monitoring programme by landowner or any other party via the use of photo prints for a period of 15 years. These photo prints, along with an outline of whether any plants have been lost, and any relevant on-going pest management response proposed, shall be submitted to Council annually.

4. Implementation of Management Plan

Prior to the issue of Section 224(c) certificate in the case of a bonus allotment, or prior to the issue of land use consent in the case of a bonus residential unit, the following parts of the Management Plan must be implemented, and signed off to be satisfactory by a suitably qualified and experienced ecologist:

1. legal protection in perpetuity shall be in place;
2. buffer requirements:
    a. any restoration planting must have been completed a minimum of two years ago resulting in at least 90% of restoration plants deemed to be established; and/or
    b. any natural regeneration facilitation must have been completed a minimum of two years ago resulting in 90% of regeneration plants deemed to be established; and

[5] DoC [419.152]

c. any preliminary avoidance, remedying or mitigation of any identified potential adverse effects on the buffer area have been completed as proposed, and any on-going measures are planned; and

3. preliminary pest management and plant pest management activities completed.

5. Limitations and exclusions

1. A bonus allotment or bonus residential unit cannot be established where the SNA is on land that has been sold subject to Overseas Investment Office jurisdiction.
2. There shall be a limit of one bonus allotment per balance allotment regardless of the number of SNAs located on the site. There shall be a limit of one bonus residential unit per site, regardless of the number of SNAs located on the site.
3. For SNAs covering multiple sites under different ownership, each site(s) under each separate ownership is eligible for a bonus allotment or bonus residential unit provided the requirements of these standards are met.
4. There shall only be a bonus allotment or bonus residential unit per site, not both.
5. The SNA, or part of the SNA, to be protected as part of the proposed bonus allotment or bonus residential unit, shall not have already been used to support a bonus allotment or bonus residential unit.
6. Any bonus residential unit and associated structures shall be setback a minimum of 20m from the buffer area and no buildings shall be established within the buffer area.
7. A bonus allotment can include the buffer area, or part of the buffer area, provided this buffer area is not built on.

Table APP2-1 - Ecosystem size and buffer requirements for bonus allotment and bonus residential unit eligibility*

Where restoration of the subject SNA was required by the District Council as a condition of an existing resource consent or development contribution the buffer width shall be double that specified in this table.

***** An additional bonus allotment or bonus residential unit may be considered where the mapped SNA area to be protected and restored is at least twice the minimum area required by Appendix APP2, if the protection and restoration would provide significant additional long-term benefits to the mapped SNA; or support further ongoing indigenous biodiversity restoration and enhancement activities elsewhere on the site; as set out in ECO-P3.*** [6]

Ecosystem type & size	Buffer requirements*	Development right**
Wetland 0.5ha – 0.99ha	A minimum buffer width of 20m around the perimeter of the SNA on the site that is either planted with indigenous vegetation that is endemic to the ecological district, or comprises existing vegetation that is naturally regenerating, as recommended by a suitably qualified and experienced ecologist.	1 bonus allotment or 1 bonus residential unit
Wetland 1ha +	A minimum buffer width of 15m around the perimeter of the SNA on the site that is either	1 bonus allotment or

[6] Forest and Bird [192.44]

	planted with indigenous vegetation that is endemic to the ecological district, or comprises existing vegetation that is naturally regenerating, as recommended by a suitably qualified and experienced ecologist.	1 bonus residential unit
Kānuka dryland vegetation or any other dryland site 0.5ha - 0.99ha with a minimum width of 20m	A minimum buffer width of 20m around the perimeter of the SNA on the site that is~~:~~ ~~1. In the first instance, undergoing natural regeneration via implementation of the regeneration inducing scraping technique as recommended by a suitably qualified and experienced ecologist; or~~[7] ~~2.~~W~~w~~here natural regeneration is not ecologically appropriate, subject to restoration planting of indigenous vegetation that is endemic to the ecological district and ecologically appropriate, as recommended by a suitably qualified and experienced ecologist.	1 bonus allotment or 1 bonus residential unit
Kānuka dryland vegetation or any other dryland site 1ha +	A minimum buffer width of 15m around the perimeter of the SNA on the site that is~~:~~ ~~1. In the first instance, undergoing natural regeneration via implementation of the regeneration inducing scraping technique as recommended by a suitably qualified and experienced ecologist; or~~[8] ~~2.~~W~~w~~here natural regeneration is not ecologically appropriate, subject to restoration planting of indigenous vegetation that is endemic to the ecological district and ecologically appropriate, as recommended by a suitably qualified and experienced ecologist.	1 bonus allotment or 1 bonus residential unit
Any other SNA listed in ECO-SCHED1 that is not covered above 2ha +	A minimum buffer width of 10m and an average buffer width of 20m around the perimeter of the SNA on the site that is planted in indigenous vegetation that is endemic to the ecological district, as recommended by a suitably qualified and experienced ecologist.	1 bonus allotment or 1 bonus residential unit

Advisory Notes

1. It is advised that applicants undertake a pre-application meeting with the District Council before lodging any application for a bonus allotment or bonus residential unit.

2. ~~A new SNA may be added to ECO-SCHED1 by RMA process provided there is a supporting ecological report prepared by a suitably qualified and experienced ecologist that assesses it to meet one or more of the criterion listed in ECO-APP1. Please discuss this further with the District Council.~~ New SNAs that are not listed in ECO-SCHED1 but

[7] DoC [419.152]
[8] DoC [419.152]

earn a bonus allotment or bonus residential unit will be listed in ECO-SCHED1 by Council via a Schedule 1 process at an appropriate time.[9]

[9] DoC [419.75] and Forest and Bird [192.44]