

Memo

Date	30 October 2017
To	OTOP Zone Committee
CC	Peter Constantine, Lyn Carmichael
From	Craig Davison, Julia Forsyth

Protection of Indigenous Biodiversity in the Orari, Temuka, Opihi and Pareora Zones

PURPOSE:

The purpose of this paper is to:

- a. Inform the Orari, Temuka, Opihi, Pareora (OTOP) Zone Committee (ZC) on the roles and responsibilities of district and regional councils for protecting indigenous biodiversity;
- b. Inform the OTOP ZC on how indigenous biodiversity is currently protected by the district and regional councils;
- c. Outline the National Environmental Standards for Plantation Forestry, and what it enables;
- d. Provide options to the ZC for recommending strengthening the protection of indigenous biodiversity in the OTOP Zone from forestry and land use activities;
- e. Provide options to the ZC for recommending non-statutory measures to protect indigenous biodiversity in the OTOP Zone.

ROLES AND RESPONSIBILITIES OF DISTRICT AND REGIONAL COUNCILS

The Resource Management Act 1991 (RMA) makes the protection of significant indigenous vegetation a matter of national importance. In meeting this obligation, the protection of indigenous biodiversity is a dual function of district and regional councils. This is reflected in the content of the Canterbury Regional Policy Statement (CRPS). The CRPS contains a set of criteria for determining if indigenous vegetation is significant¹ or not, and defines the responsibilities for district and regional councils.

In summary:

- a. Regional councils are responsible for controlling the use of land and its effects on significant indigenous biodiversity inside the coastal marine area, the beds of lakes and rivers, and in wetlands. Regional councils must identify areas of significant indigenous biodiversity in these areas, such as High Naturalness Waterbodies. High Naturalness Waterbodies currently in

¹ Significance is determined by assessing areas and habitats taking account of representativeness, rarity or distinctive features, diversity and pattern, ecological context in accordance with Appendix 3 of the CRPS.

OTOP, and options for identifying further High Naturalness Waterbodies are provided in an accompanying paper.

- b. District councils are responsible for controlling the use of land and its effects on significant indigenous biodiversity on all land that is outside of wetlands, the coastal marine area, and the beds of lakes and rivers. The identification of significant indigenous biodiversity in these areas falls within the responsibility of the district council.

Timaru District Council and Mackenzie District Council are currently undertaking district plan reviews, which presents an opportunity for district and regional planning provisions to be aligned with respect to the protection and enhancement of indigenous biodiversity. However, it is important that any such recommendations made are within the responsibilities of the district councils and Environment Canterbury.

CURRENT PROTECTION OF INDIGENOUS BIODIVERSITY FROM LAND USE AND FORESTRY

District Councils

District councils take different approaches to protecting indigenous vegetation in District Plans. District Councils can focus their planning regulation on mapped and defined areas of significant indigenous vegetation. These mapped areas are often called “Significant Natural Areas”. The CRPS requires there to be no net loss of indigenous biodiversity in these areas from land use activities.

District Councils can also use more general vegetation clearance rules, and assess significance as part of the resource consent process. Rules protecting indigenous vegetation that does not meet the threshold of significance can also be included in District Plans.

Other rules in plans can assist in protecting indigenous vegetation, for example rules controlling clearance of riparian vegetation, and controls on earthworks and forestry, particularly in areas identified as outstanding natural landscape.

Most councils also use other non-regulatory methods to encourage landowners to protect valuable indigenous vegetation, for example advice, rates remission, and contestable biodiversity funds. In addition, there are QEII covenants that arise from an application to the QEII Trust by the landowner.

The OTO Zone falls within the jurisdiction of the Timaru, Mackenzie, and Waimate District Councils. A summary of each of the respective district plans, and how they protect areas of significant indigenous biodiversity in the OTO Zone is provided below.

Timaru District Plan

Operative Timaru District Plan

Clearance of any significant indigenous vegetation or significant habitats of indigenous fauna is a non-complying activity. A non-complying activity status signals that any such clearance will be subject to more scrutiny, and indicates that it is likely to be inappropriate. The current plan does not map sites of significant indigenous vegetation. Instead, significance is assessed on a case-by-case basis. If the vegetation does not meet the threshold of significance, no consent is required for clearance.

Forestry is generally a controlled activity in the Rural 5 zone, which covers much of the hill and high country. A controlled activity means that consent must be granted. Part of this zone is also identified as outstanding natural landscape. Forestry is a discretionary activity in the outstanding landscape areas. It is non-complying above 900m.

District Plan Review

Timaru District Council has carried out a comprehensive process to identify sites of significant indigenous vegetation within the District. This information is not available to the public yet. But the significant sites are likely to be listed for protection in the reviewed District Plan, which is expected to be notified in early 2019. Timaru District will also be commissioning technical work to reassess the areas of outstanding landscape which are currently mapped in the plan, taking account of the regional landscape study.

Mackenzie District Plan

Operative Mackenzie District Plan

The Mackenzie District Plan maps sites of significant indigenous vegetation and has rules to protect them. The Plan also has rules requiring consent to clear more than 100m² of tall tussock, and 500 m² of other indigenous vegetation with a canopy height of more than 3m. Clearance of indigenous vegetation above 900m is also controlled.

Forestry is permitted up to 2 ha, and a controlled activity for areas above 2 ha.

The Plan does not map areas of outstanding landscape.

District Plan Review

Mackenzie District Council is preparing for its district plan review, and has undertaken further work on sites of significant vegetation in the OTOP zone. This information has been discussed with landowners, and the work is ongoing. It is not yet available to the public. Work has also been done to map the outstanding natural landscapes outside of the Mackenzie basin.

While the full review of the Plan is not expected to be notified until 2019, new rules controlling the clearance of indigenous vegetation are expected to be notified before December 2017, following public and targeted consultation.

Waimate District Plan

Waimate District Plan

The Waimate District Plan lists and protects sites of significant indigenous vegetation. It also has rules limiting the clearance of tall tussock, and other indigenous vegetation and shrubland over a set height. In addition, the Plan has a rule limiting the clearance of other indigenous vegetation to 0.1 ha per 5 years for each certificate of title. There are limits on vegetation clearance in the Water Supply Protection Areas, including in the Pareora catchment. The Plan maps areas of outstanding landscape.

Forestry is a discretionary activity in the Hill and High-Country subzone.

Plan Review

The Waimate Plan has been fully reviewed and became operative in 2014. It won't be due for review until 2024.

NATIONAL ENVIRONMENTAL STANDARDS FOR PLANTATION FORESTRY

This new NES will come into force in May 2018. It is relevant to the OTOP zone, because in most cases it will replace any district plan rules controlling forestry. In general, it makes new forestry (afforestation) a permitted activity, subject to a range of standards. Forestry in an outstanding landscape or significant natural area is a restricted discretionary activity requiring resource consent.

However:

- a. A district council may have more restrictive rules for forestry to protect outstanding natural landscapes or significant natural areas.
- b. The NES does not permit vegetation clearance prior to planting. This is still covered by the relevant district plan rules, where these exist.

Mackenzie District and Waimate District Plans already identify and protect areas of significant indigenous vegetation in the OTOP Zone, and the Timaru District Plan has good information about its significant vegetation, and is likely to identify these sites in its new plan. Provided the plans are implemented, monitored and enforced, significant indigenous biodiversity in the OTOP zone will be protected. However, sites of significant indigenous vegetation are generally discrete areas. Together, they do not provide protection over wider areas of indigenous vegetation in the OTOP catchments.

OPTIONS FOR STRENGTHENING THE PROTECTION OF INDIGENOUS BIODIVERSITY

As is demonstrated by the Waimate rules, there is scope for district councils to have more general controls on the clearance of indigenous vegetation over wider areas. Whether these rules prevent removal of large areas of indigenous vegetation depends on the strength of the associated objectives and policies, and how well the provisions are understood and enforced. Councils need to demonstrate that the benefits of this type of regulation outweigh the costs, and there needs to be a level of community acceptance for the rules to be successful.

District councils will no longer be able to control new forestry plantings in rural zones, unless it is in an outstanding landscape or a significant natural area, or there are general rules controlling clearance of indigenous vegetation

KEY DECISION AREAS (STATUTORY)

The OTOP ZC could recommend to district councils:

- a. **That they provide information to landowners about the existing rules controlling indigenous vegetation clearance, and monitor the outcomes.**

- b. That when reviewing their plans, they:**
- i. Introduce provisions which avoid forestry in areas of outstanding natural landscape, and significant natural areas, as provided for in the NES PF;**
 - ii. Consider the role of indigenous vegetation plays in the health of the catchments, even where it may not meet the criteria for significance;**
 - iii. Consider controlling general clearance of indigenous vegetation**
 - iv. Consider controlling large scale earthworks in rural zones, particularly in the upper catchments.**
 - v. Ensure that provisions relating to identified areas of significant indigenous biodiversity effectively protect them from clearance.**
 - vi. Consider provisions for identified areas of significant indigenous biodiversity that control other land use activities, to manage any actual or potential effects on these areas.**

Environment Canterbury

Land and Water Regional Plan

The LWRP protects significant indigenous biodiversity by regulating activities relating to the damming of waterbodies, activities in the beds of lakes and rivers, including vegetation clearance in the beds of lakes and rivers and in the hill and high country, and gravel extraction. If any of these activities are likely to have more than a minimal adverse effect on areas of significant indigenous biodiversity, resource consent is required to mitigate any potential adverse effects. The LWRP has a clear direction that areas of significant indigenous biodiversity are to be preserved and maintained.

The LWRP also relies on areas of significant indigenous biodiversity that are mapped by district councils and directs the effects of forestry, animal effluent and fertiliser discharges, and the use of water for irrigation, to be considered on areas of significant indigenous biodiversity. The LWRP also requires all areas of significant indigenous biodiversity identified in district plans to be identified in Farm Environment Plans.

OPTIONS FOR STRENGTHENING THE PROTECTION OF SIGNIFICANT INDIGENOUS BIODIVERSITY

Farm Environment Plans and Management Plans

Farm Environment Plans (FEPs) contain a suite of Management Areas for on farm management practices² with objectives and targets to be met. The objectives are the overall outcome sought for each of these Management Areas, and the Targets are measurable statements that contribute to the achievement of the Objectives. FEPs are also required to identify the risks associated with the farming activity, and how these risks will be managed.

Currently, the Farm Environment Plan (FEP) only requires areas of significant indigenous biodiversity listed in a district plan to be identified. While it is likely that the applicable district plan provisions will

² Nutrients, Irrigation, Cultivation and Soil Structure, Animal Effluent and Solid Animal Waste, Waterbodies, Point Sources – Offal Pits, Farm Rubbish Pits, Silage Pits, and Water Use

protect any areas of significant indigenous biodiversity from clearance, FEPs could be strengthened so that compliance with any relevant district plan rules is demonstrated in the FEP.

Management Plans (MP) are a condensed version of an FEP not subject to the audit process, and are required for permitted farming activities greater than 10 hectares. There are currently no requirements of a MP to identify any areas of significant indigenous biodiversity on farm. MPs could similarly be strengthened in the same way as FEPs with regard to identifying significant indigenous biodiversity on farm.

KEY DECISION AREA (FARM ENVIRONMENT PLANS AND MANAGEMENT PLANS)

The OTOP ZC recommend that Farm Environment Plans and Management Plans in OTOP identify any areas of significant indigenous biodiversity mapped in a district plan, and detail how compliance with any relevant district plan rules is being achieved.

WATERBODY REALIGNMENT

There are a number of adverse effects associated with waterbody realignments, including, habitat loss and the erosion of the bed of a waterway, which can adversely affect the biodiversity and hydrology of a waterway. Hayward (2017) explains that channel straightening is a common exacerbator of poor ecological health in spring fed streams. The LWRP does not define what a water body realignment is per se, but it generally involves disturbance of the bed of a surface waterbody, and the clearance of vegetation. The LWRP is enabling of small scale waterbody realignments provided that they are part of:

- a. Establishing, maintaining, or repairing infrastructure;
- b. Flood control or erosion control;
- c. Removing gravel or other earthworks;
- d. Emergency rural fire fighting purposes;
- e. Maintaining intakes for animal drinking water

Where a waterbody realignment is not for the purposes of (a) to (e) above, it can still occur through a resource consent. In both of these circumstances, any potential adverse effects on sites and areas of significant indigenous biodiversity and habitat are required to be taken into consideration. There is however scope to strengthen the policy framework for waterbody realignments in the OTOP Zone, so that:

- a. Re-alignment of waterways may only be appropriate when it is part of clauses (a) to (e) above, and provided there is no net loss of significant indigenous biodiversity in that waterway.
- b. Where a re-alignment of a waterway is not for the purposes of (a) – (e) above and/or will result in a net loss in significant indigenous biodiversity, it is inappropriate in the OTOP Zone.

KEY DECISION AREA (WATERBODY REALIGNMENT):

The OTOZ ZC recommend that waterbody realignments in the OTOZ Zone:

- a. **May be appropriate for the purposes of (a) – (e) above, and provided there is no net loss of significant indigenous biodiversity;**
- b. **Are not appropriate if they are not for the purposes of (a) to (e) above, and/or, would result in net loss of significant indigenous biodiversity.**

Long Tailed Bat Habitat

The Long-Tailed Bat is an endangered species which is unique to South Canterbury. One of the key drivers for their decline is habitat is caused by vegetation clearance. Both district and regional councils are responsible for controlling vegetation clearance (terrestrial and in the beds of lakes and rivers), particularly for irrigation infrastructure. Therefore, there is scope for recommendations to be made to further protect the habitat of the Long-Tailed Bat in the OTOZ Zone.

KEY DECISION AREA (LONG TAILED BAT HABITAT)

The OTOZ ZC recommend that:

- a. **The district councils and Environment Canterbury consider the importance of Long Tailed Bat habitat in their vegetation clearance provisions;**
- b. **Environment Canterbury consider the effects of the use of water for irrigation on Long Tailed Bat habitat in the OTOZ Zone.**

WETLANDS, HĀPUA, COASTAL LAKES AND LAGOONS, AND HIGH NATURALNESS WATERBODIES

Wetlands, Hāpua, Coastal Lakes and Lagoons, and High Naturalness Waterbodies are considered to have high biological diversity and mahinga kai values. The LWRP affords a high level of protection to these waterbodies, particularly from water take and use activities, and encroachment of activities into the riparian margins of these water bodies.

An accompanying paper provided to the ZC lists these waterbodies in OTOZ, and provides options for identifying additional waterbodies in OTOZ.

KEY DECISION AREA (NON-STATUTORY)

Some options are included below for recommendations that the ZC can make, which focus on regional and district councils working together to enhance biodiversity in the OTOZ Zone. Further options being explored for improving biodiversity and habitat outcomes in the non-statutory work programme include:

- a. Improved physical habitat monitoring - monitoring is an important to ensuring the efficient (time and investment) and effective (targeting most vulnerable and influential areas) rehabilitation of stream habitat.

- b. Improved riparian planting - can provide for habitat provision, stream shading, bank stabilisation and reduced erosion, reduced sediment inputs, improved organic food matter, increased instream woody debris, interception and filtering of land-based contaminants.
- c. Wetland restoration – protecting and restoring existing wetlands is valuable for habitat provision, interception of contaminants and maintenance of base flows. Creation of wetlands is more challenging, but well-constructed wetlands can provide significant biodiversity and water quality values
- d. Reduce fine sediment inputs to stream beds – sediment sources need to be controlled in both hill fed and spring fed streams. Stock exclusion and riparian management are the most effective strategies. Channel and bank stabilisation by contouring and battering may be applicable in some areas and sediment traps, while not preventing the input of sediment, can be used with careful consideration of instream values.
- e. Integrated weed and riverbed management – targeting invasive species, managed drain clearance and macrophyte removal, weed management in braided beds to improve bird habitat and planting with native species should be implemented to improve stream habitat and invertebrate, fish and bird biodiversity values.

The OTOP ZC recommend that:

- a. District and regional councils work together in prioritising biodiversity initiatives for Significant Natural Areas in OTOP;**
- b. District and regional councils work together in identifying and prioritising further areas for biodiversity enhancement projects and remediation**

REFERENCES

Canterbury Land and Water Regional Plan (2017)

The Resource Management Act (1991)

Hayward, S. (2017). *Pathways to Achieving LWRP Water Quality Outcomes*. Paper to the OTOP ZC dated 30 October 2017).