

KMR Fencing Guidelines

June 2023



The Kaipara Moana Remediation (KMR) programme aims to restore the health and mauri of Kaipara Moana, with a focus on halving sediment loss from land to sea. Landowners will work with a KMR Field Advisor to develop a Sediment Reduction Plan that will identify a range of remediation actions including fencing.

This document briefly notes the KMR fencing criteria and fencing types and provides examples of good and poor fences.

KMR funding criteria – fences

KMR's contribution of up to 50% towards fencing is linked to slope of the land, stocking class and ground conditions e.g. terrain and accessibility to the fencing site.

The fencing of streams, wetlands and eroding riparian areas within the Kaipara Catchment are eligible to apply for funding. **The minimum fencing setback is three metres or five metres if the landowner is intending to plant woody trees** (e.g. pūriri, kahikatea etc). This applies to natural and straightened waterways and should be measured from the bankfull (definition: at high peak flow, before the water tips over the bank) discharge as per RMA. The minimum setback of three metres for fences in the KMR programme meets the National and Regional stock exclusion rules.

Wetlands can also be fenced with a minimum fenced area of 500 m² (which aligns with NPSFM and NESFW requirements). Small wetlands under 500 m² can be funded for fencing and planting if they are incorporated into a wider KMR riparian waterway fencing and/or planting project.

KMR can contribute to the fencing of drains as long as there is **a minimum one metre setback with reduced fencing choices**. Fencing natural waterways are prioritised over drain fencing.

A contribution to the fencing of coastal marine areas can also be requested as long as there is a **minimum 10 metre setback from mean high water spring mark** is required and no contribution to water reticulation costs.

KMR can also now fund fencing and planting on eroding hillsides. In the future, KMR will be able to fund wider soil conservation projects in future, once Soil Conservation policy settings are finalised.



Fencing and planting

If landowners are applying for plants through KMR, Field Advisors should keep in mind that minimum setbacks from a riparian edge will need to be five metres to allow for the growth and spread of woody vegetation.

If fences are placed three metres from the stream bank, then only grasses and sedges will be funded.

Field Advisors should ensure the fencing is suitable for the stock class and land use. Fences should be well-constructed around the entire area to be planted as animals can decimate planted areas very quickly if they find their way in, and neighbours' fencing standards should also be considered.

Fencing types

KMR funds a variety of fences which are linked to ground conditions (e.g. easy, moderate or difficult) terrain and stocking class:

- 1-3 wire dairy;
- 3-4 wire beef;
- 5-7 wire sheep/ mixed age stock.

KMR will consider funding the same type of fence that already exists on the land e.g. if 7-wire fences already exist due to the land use (e.g. sheep), KMR may fund a 7-wire fence.

NOTE: If KMR will only fund a certain type of fence (eg 3-4 wire) and the landowner wants a 7-wire then they can upgrade to a 7-wire at their own cost.

See the KMR Schedule of Prices (for fencing, site preparation and maintenance, planting and freight) on the KMR website. Note that KMR's funding criteria is evolving and subject to annual pricing reviews.

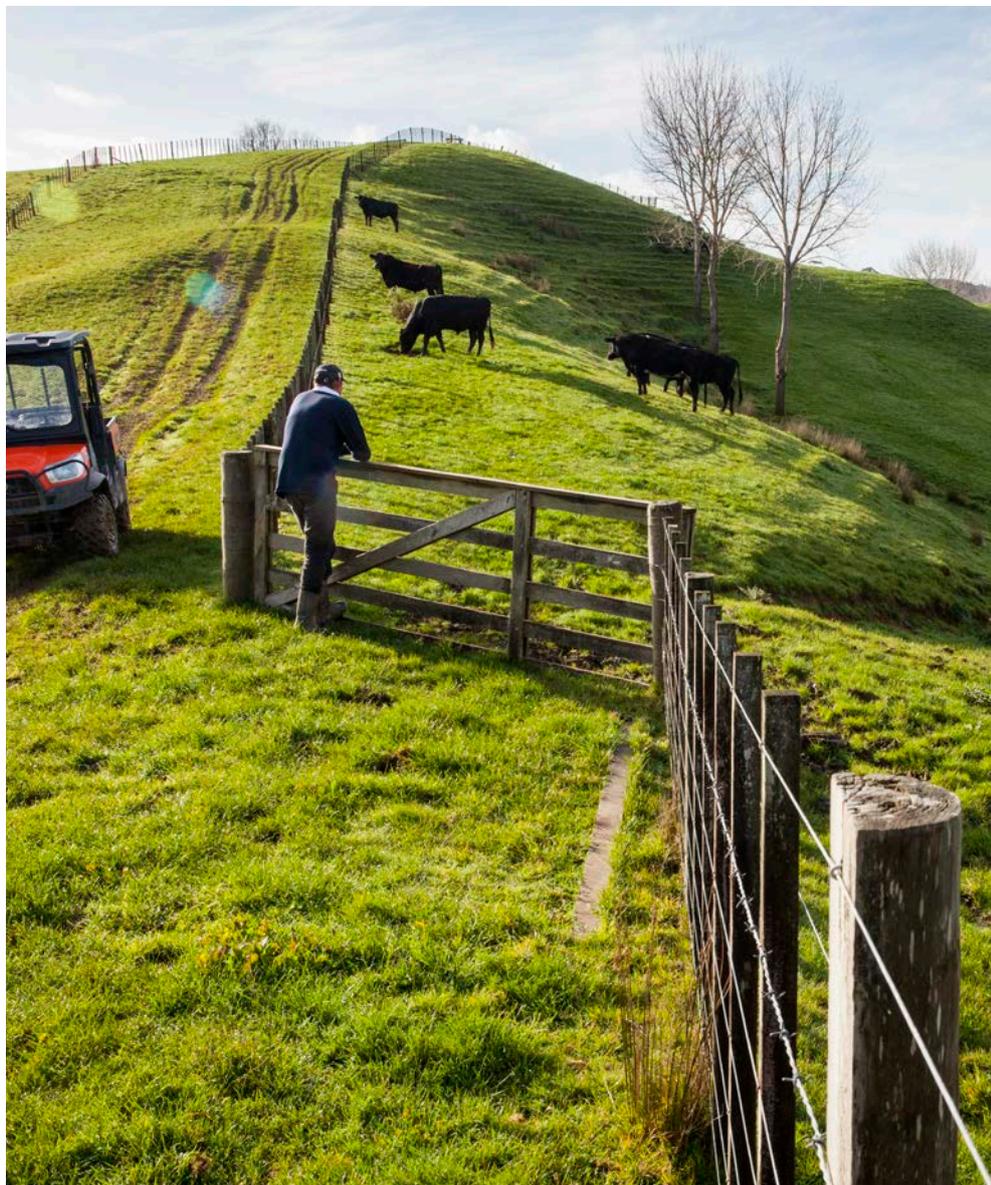


Troughs

The most difficult aspect of many stock exclusion projects is the loss of access to stock water if reticulation is not available. Funding is not available for water reticulation, however in certain situations, limited funding for troughs (one trough per paddock immediately adjacent to a new KMR funded fence) may be available, up to a limit of five troughs per project.

Gates

KMR can fund a gate every 300 metres, if required. Gates are only funded for KMR fencing or planting projects to allow animals to be removed from the fenced riparian area if they get in there by accident. Where possible, gates should be positioned to ensure the fewest possible passages into a riparian area.



Common mistakes or learnings for landowners

Timing

- Leaving the fencing project to the last minute and the weather turns before the fencing can begin or be completed. Fences should only be signed off once completed by a KMR Field Advisor.
- Difficulty engaging with fencers – book them in early or risk missing the optimum fencing conditions of summer and early autumn.
- The general rule of thumb is that planting should not occur much after August unless in the wet area of a wetland. KMR does not fund plants in areas that aren't fenced.

Access to water

- Consider the stock water supply before erecting the fence - if this cuts off the only source. Landowners should have considered this as part of their application (see above regarding troughs).
- Situate troughs away from waterbodies to avoid high pugging and sediment close to waterbodies.

Fencing and planting

- There needs to be enough space between the fence and the plants (about one metre) to reduce the chance that plants will be eaten by stock and allowing space for the plants to grow. If plants are planted too close to a fence, it can lead to shorting of electric wires.
- Allow enough space below the bottom wire of an electric fence for stock to graze. This will reduce weeds and grasses growing up and shorting out electricity supply.
- Fencing is cheaper if you go in straight lines rather than following every corner of the river – however ensure the minimum of three metres is always allowed for.
- Do the fencing in stages and ensure each stage is fully stockproof. Field Advisors should suggest to a landowner that they prioritise areas with the greatest streambank erosion or stock access damage.
- Consider engaging a fencer that is a Certified FCANZ fencer off the KMR list of Approved Suppliers.

Animals

- It is also important to ensure the fencing is suitable and well constructed around the entire area to be planted as animals can decimate planted areas very quickly if they find their way in.
- If planting on a boundary – consider access from neighbouring block. Your fence may protect your new plants from your animals, however can your neighbour's animals get in?



Examples of good fencing



A good example of utilising a small length of rails at a gateway to minimise damage to the main fence as animals pass through. A good idea for high use gateways.



This is an example of a well built fence. Tight, straight and following the contour. This one has incorporated predator netting to keep small animals out.



An example of a five-wire fence with two hot wires. It is recommended that a stay is fitted to a strainer with four wires or more.



Terminal ties fitted correctly and all electric components fitted so cattle can't play and break. Wires clamped or crimped to achieve high quality connections.



Examples of good fencing



This fence will keep stock out of the mangroves and allow a good vegetation buffer to help prevent land and nutrient runoff into the Kaipara.



This is an example of a double horizontal stay at the head of a waterway.



Good example of a corner setup. It can make more sense to minimise the number of corners on a strain length - strain the fence on a suitable corner, then fit another stay in the new direction and tie on the next section.



When possible, new fencing should be placed outside the drip line of the trees. In this example, the old fence can be seen against the trees and the new fence has been moved out to minimise damage to the bush line and some trimming has also taken place.



Examples of poor fencing



Incorrectly cut and fitted stay. This could fail and fall out which will affect the fence foundation.



Poorly tied terminal knots are unlikely to last. Using staples to tie knots is also poor practice as the potential injury to animals and people is high.



This is an example of permanent strainers not tied in correctly. A terminal tie should be used then tied through the end of the strainer with a minimum of five twists around the wire or crimped to achieve high quality connections.



This is an example showing poor use of a crimp. It should be crimped properly, then the ends wrapped around the main wire on each side of the crimp at least twice, then snapped off leaving no sharp ends. This also shows poor knot tying - the correct knot would be a figure 8 or crimp to join the wires.



Examples of poor fencing



If wire crossing other wires, it will rust and fail or break.



It is not a good idea to attach a new fence to an old one. When the strainer breaks, the new fence will fall over.



This is an example of a fix up job gone wrong. This will short circuit the electric fence, reducing the available current.



No caption needed.



KMR would like to acknowledge and thank Shane Beets (A1 FenceworX) for his contribution to these Guidelines and permission to re-use some images.