

35 Mangawhero catchment

Use these insights to develop a farm environment plan that reduces impacts on fresh water and protects what matters in your catchment. For more details or support, call 0800 800 401 or visit waikatoregion.govt.nz/farm-environment-planning.

Prioritise these actions in your farm plan to improve water quality:

- Manage livestock and run off around **critical source areas**.
- Manage periods of **exposed soil between crops** and re-grassing.
- Stabilise stream banks and gullies through planting.
- Keep stock away from waterbodies.
- Match timing and amount of fertiliser applications to plant requirements.

 **Actions to include in a farm environment plan**

 **Farm menus**

Flat to undulating land makes up more than 80 per cent of the Mangawhero catchment. The catchment is home to a range of community and natural features, including Cambridge town and Moanatuatua Peat Reserve, which is the best remaining example of a restiad rushland in the Hamilton Ecological District and hosts the rare giant cane rush (*Sporadanthus*).

The Mangawhero catchment and its surrounding environments hold deep cultural and spiritual significance for Ngāti Hauā, the primary iwi for this area. Ngāti Hauā considers all natural resources to have qualities of wairua (spirituality) and mauri (life force or life supporting capacity). They are considered living and interconnected. Hapū and marae act as kaitiaki (guardians) at a local level and apply traditional safeguard mechanisms to sustain resources for current and future generations. While the catchment is shaped by past and present diverse land use and pest fish (such as koi carp), it continues to provide important ecological, recreational, community and cultural values. Protecting and enhancing the health of its waterways is therefore essential for both people and the environment.

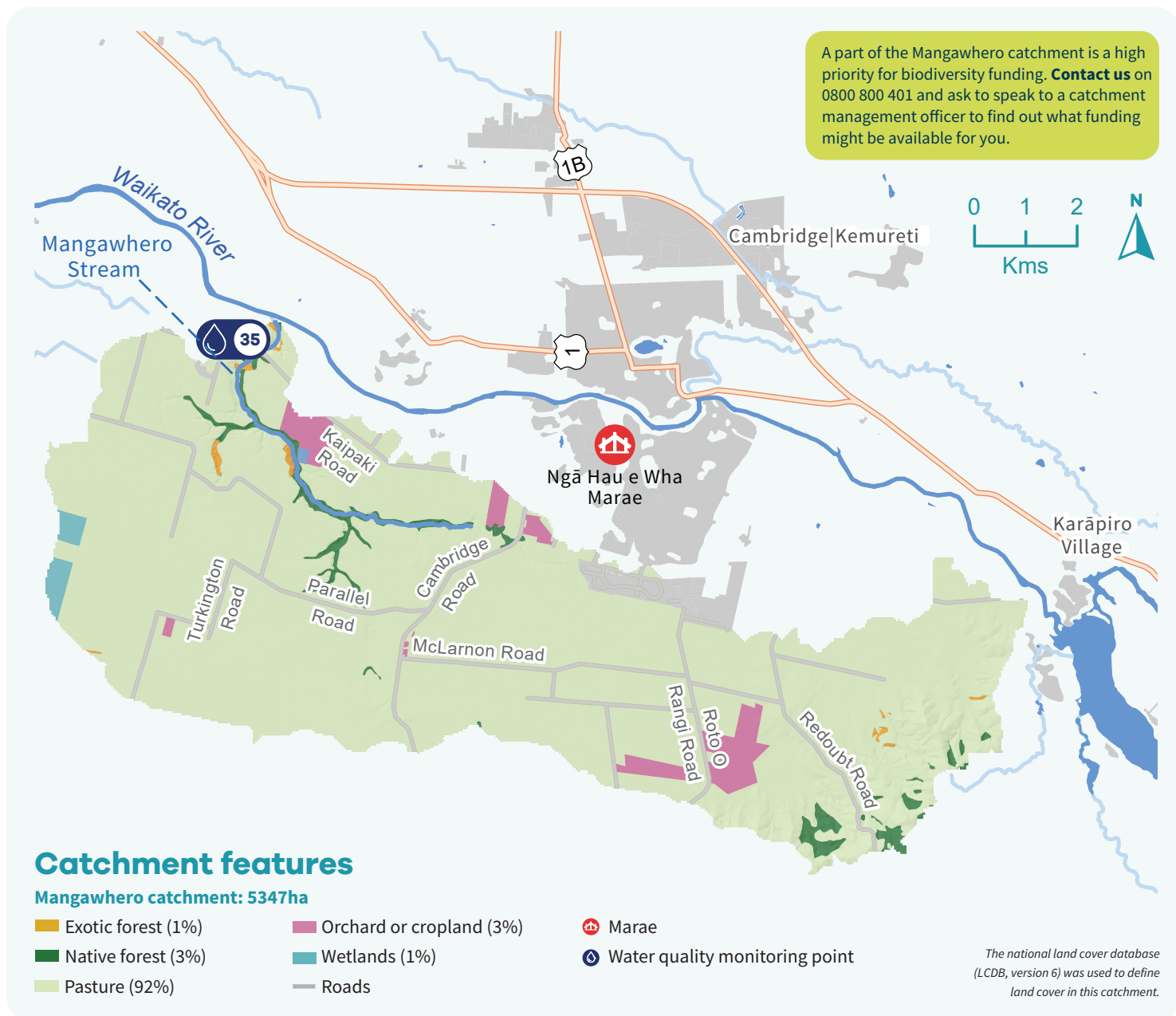
Taonga (treasured) species found in the Mangawhero catchment



Consider your farm's location in the catchment

The table shows how landform and soil characteristics shape primary risks and contaminant losses specific to the Mangawhero catchment.

Landform	Main soils + properties	Primary risks	Primary contaminant loss
Flat to undulating land (0-7 degrees) 84% of catchment	Organic: Very poorly drained peat.	Unstable surface, drainage contributes to shrinkage which lowers the land surface. Flooding occurs if drainage is not maintained. Pugging when wet.	<i>E. coli</i> Phosphorus
	Brown: Imperfectly to moderately drained.	Pugging and soil compaction when wet if poorly drained.	<i>E. coli</i> Sediment
	Gley: Poorly drained silt over clay or loam over sand.		
	Allophanic: Well drained loam over sand or imperfectly drained clay.	Well drained soils are prone to leaching.	Nitrogen
Rolling land (8-20 degrees) 9% of catchment	Allophanic: Well drained clay.	Moderate to severe sheet erosion if cultivated.	Nitrogen Sediment (if cultivated)
Steep land (>20 degrees) 7% of catchment	Recent: Poorly drained clay or well drained silt and sand.	Steep to very steep sided gullies in unconsolidated gravely sands. Severe slip and gully erosion.	Sediment Phosphorus
	Brown: Well drained clay or moderately drained silt.	Slight to moderate sheet and soil slip erosion and slight gully erosion.	



Water quality improvement for the four contaminants

This diagram shows the level of collective effort needed to positively impact water quality in the Mangawhero catchment and further downstream. Focus on best practices within your farm and catchment, while keeping your downstream neighbours in mind.

