

Waterway management

Fresh clean water is essential to life

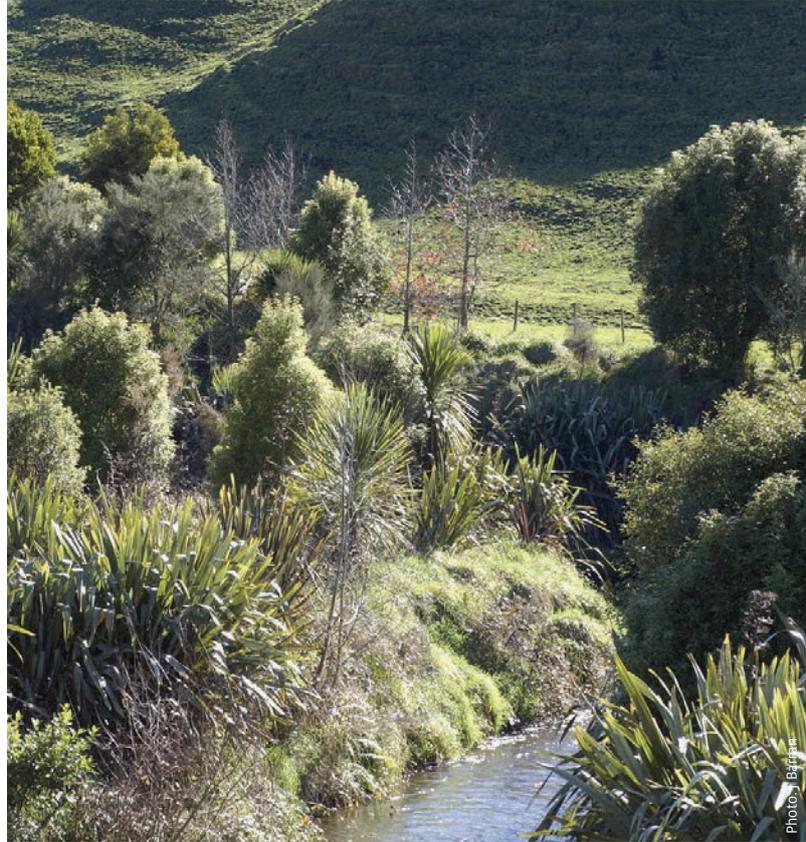
Fresh clean water is essential to life. This is one resource we take as a given because we have a good supply of rain in the Waikato throughout most of the year. With intensification of dairy farming in the region, water quality of our streams is coming under increasing pressure. The region's freshwater resources are used extensively for water supply on-farm and in our communities, electricity generation and recreational activities. However, studies show that our region's water quality is declining and this is a major concern to all water users. Steps can be taken to ensure the water quality leaving the farm is as good as it can be in terms of nutrient content, sediment load, temperature and faecal bacteria.

GENERAL INFORMATION

Waikato Regional Council is implementing a number of initiatives to help improve water quality.

The Healthy Farms, Healthy Rivers project has been one such initiative among the farming community in two catchments. It has empowered farmers to make changes on the farm to minimise the effects of farming activity on water quality. Other initiatives include Dairy NZ's Upper Waikato Sustainable Milk Project, the dairy industry's Sustainable Dairying: Water Accord, and Supply Fonterra's Nitrogen Management programme.

Waikato Regional Council is working proactively with farmers and industry to create solutions which work on-farm and within farming systems. This is by organising field days, workshops and educational programmes and providing one-on-one advice.



Riparian planting

The Waikato Regional Plan is designed to ensure people don't pollute our region's water. Under the regional plan, livestock entering or crossing any water body must not reduce the water clarity or increase its suspended solids concentration by more than 10 per cent (rule number 4.3.5.4). Generally, this means livestock must be prevented from accessing water bodies. The easiest way to do this is to fence them out.

Preventing stock from accessing water bodies reduces:

- the amount of faecal matter, nitrogen and phosphorus directly entering the water, leading to improvements in water quality
- build-up of sediment, meaning lower drain maintenance costs and better habitat for fish and insects
- trampling and erosion damage, leaving banks and stream beds more stable.

The main on-farm benefits are:

- easier stock management and reduced stock losses
- improved stock health through reticulated water.



RECOMMENDED ACTIONS AND BEST MANAGEMENT PRACTICES

- Move effluent irrigators frequently to prevent ponding of effluent and run off into waterways.
- Provide effluent storage so that dairy shed effluent can be applied at optimal times.
- Maintain a safe distance between waterways and effluent system.
- Avoid irrigating effluent over subsurface drained land.
- Avoid break-feeding stock close to waterways, especially in wet weather.
- Fence off streams, rivers, swamps, wetlands and seeps to prevent stock access.
- Plant the banks of waterways with a selection of native plants to help stabilise the bank and trap nutrients.
- Fence and retire wetland areas and ponds. They act as filters and help denitrify excess nitrogen leaving the farm.
- Maintain fences around waterways with a margin between the waterways/ drains and the paddock.
- Control weeds, including willow regrowth, along the stream margins.
- Design and maintain tracks and races to direct run off onto grassed areas.
- Use bridges or culverts for stream crossings.
- Leave a buffer zone between streams and cultivated areas.
- In winter, break feed towards a waterway rather than away from it.

Move effluent irrigators frequently to prevent ponding of effluent and run off into waterways.

MORE INFORMATION

Contact

- Waikato Regional Council
Freephone 0800 800 401

Publications

Download or order other factsheets in this series at www.waikatoregion.govt.nz/publications or freephone 0800 800 401:

- Efficient use of phosphorus
- Effluent management
- Environmental hotspots
- Managing soil fertility
- Nitrogen
- Nitrogen leaching
- Nutrient management
- Soil management

Web

- www.waikatoregion.govt.nz/ForFarmers
- www.dairynz.co.nz