Agriculture

Methane-emitting cows

One cow produces the same amount of greenhouses gases as a family car, so it's not surprising that agriculture alone makes up for nearly half (49%) of New Zealand's greenhouse gases. And dairy cows are some of the worst gas gurglers. Their burps contain a combination of methane and nitrous oxide, which are far more potent gases than carbon dioxide.

As well as creating greenhouse gas emissions, intensive farming practices have had a devastating effect on our wild rivers and freshwater species.

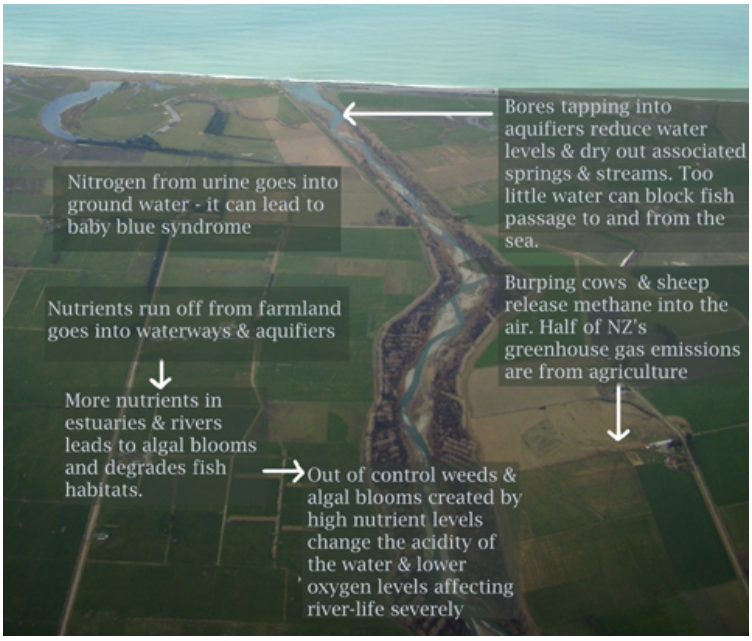
Many of our wetlands have been drained and our forests cleared to make way for agriculture.

This widespread habitat loss contributed to numerous extinctions of native species and forced those that remained to eke out their existence in much reduced numbers in the remnants of native habitat.

With increasing demand for dairy products from India and China this decade, many farmers have converted beef, sheep and forestry land to the more intensive practice of dairying to cash in on booming milk prices.

Over the past 25 years, the number of dairy cows in New Zealand has nearly doubled, topping 5.22 million in 2006, placing significant strain on our environment.

Diagram: The Impact of Dairying



(click image to enlarge)

The price of milk

Dairying requires lush pasture to maintain high milk production, and in order to achieve this result, some farmers use high levels of chemical fertilizers. From 1990 - 2007, fertilizer use increased by 617%.

Effluent produced by dairy cows is rich in phosphorus and nitrogen - much of these nutrients are leaching or running off into our waterways, or are directly spread into water catchments by dairy cows in unfenced waterways.

As a result, many of our waterways have turned into nutrient-rich soups, giving rise to algal blooms and starving our rivers of oxygen.

Thirsty business

River water is used to irrigate dairy pastures and clean milking sheds, leaving our rivers increasingly depleted. It is estimated that it takes 900 litres of water to produce just one litre of milk.

As well as drying up crucial water passages for fish, and reducing the habitat of our freshwater species, excessive taking of water leaves our rivers with less water to dilute the effects of chemical fertilizers and effluent.

To utilize river water or aquifers, farmers must apply for resource consent, which means they are obligated to protect their waterway's environmental values. However, many farmers have not met these obligations and local councils have failed to prosecute.

Freshwater species in freefall

Algal blooms, depleted water systems and poor oxygenation are all factors that are making our rivers uninhabitable for our freshwater species, such as our threatened long-finned eel and native freshwater fish. Twenty nine freshwater fish species are now on the threatened species list - that's around 90% of all native freshwater fish in New Zealand. These fish serve as "miners' canaries," a

warning sign that we are pushing freshwater ecosystems beyond their limits.

To reverse the situation, Forest & Bird has been a key stakeholder in the Land and Water Forum which brought farmers, industry, iwi and conservationists together to agree on how to improve the state of the country's lakes and rivers.

A framework has been developed following the work of the Land and Water Forum, and recently the government has adopted a set of draft national standards.

If the proposed bottom lines are set at the right levels this will help to improve water quality nationwide however there are some obvious omissions, such an index of freshwater insects, which is a key indicator of river-health. Forest & Bird strongly believes this index should be included in the final framework.

More Information

More Information

- Press Release: Freshwater policy won't stop pollution (May 2011)
- Press Release: Dairy industry keeps on polluting (March, 2011)
- Clean streams snapshot out of focus
- Clean streams accord
- Blog: Our rivers are not wastewater systems