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## **Environmental Health Indicators for New Zealand**

## LIVESTOCK BY REGION AND TERRITORIAL AUTHORITY (TA), 2010

In New Zealand, livestock (ie, animals such as cattle, sheep, and deer which are farmed for agricultural purposes) has long played a very important role in the economy. However, agricultural use of the land can have a major effect on the environment, particularly from the run-off of effluent into water sources, which can affect water quality (Cromar and Fallowfield 2004). Dairy cows may also have additional effects on the environment. For example, the conversion of land to dairy farming requires a large amount of water for irrigation.

It is estimated that dairy farms require 420 litres of water per day per hectare, as compared to 95 litres for intensive livestock and dairy support, 60 litres for lifestyle land use, and 21 litres for non-irrigated hill country (Morgan et al 2002).

As a result of dairy farming, irrigation and the run-off of nitrates used to fertilise the grass may affect water supply levels and quality. Furthermore, dairy cows produce methane (CH4), a greenhouse gas that is thought to contribute to climate change.

Figure 1 shows that there are large numbers of livestock (primarily sheep) in the Manawatu-Wanganui, Canterbury, Otago and Southland Regional Councils. The Waikato Regional Council has the largest number of dairy cattle.

Figure 2 shows that the highest numbers of livestock are located in the TA's of the central North Island, Canterbury and Southland areas.

Figure 1: NUMBER OF LIVESTOCK BY REGIONAL COUNCIL, 2010

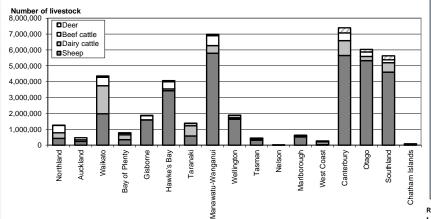
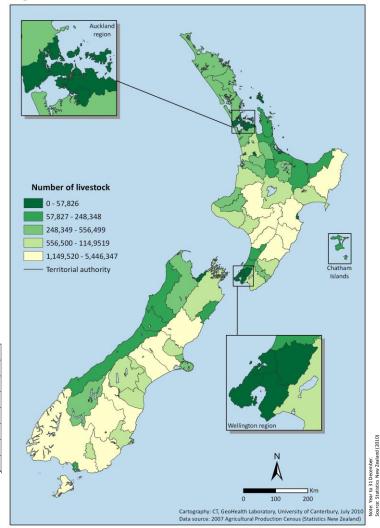


Figure 2: NUMBER OF LIVESTOCK, BY TA. 2007



Statistics New Zealand 2010b. Annual Agricultural Production Surveys, and five-yearly Agricultural Production Census.