Environmental Wellbeing

A sustainable environment means that the self-sustaining and life-supporting capacities of the environment, its natural resources and processes are not compromised or damaged by human impacts.

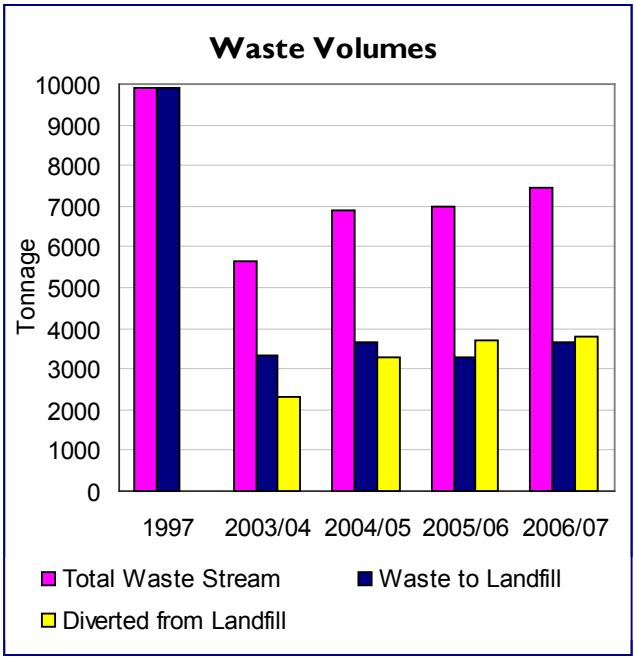
Our abundant natural resources and world-renowned scenery are defining characteristics of the District. The National Parks and other varied reserves provide recreational opportunities that enhance the quality of life for our residents and draw visitors to the District. The rural landscape sustains our large farming and forestry industries. As a result maintaining environmental wellbeing is essential to economic wellbeing in the District as well as to ensure that the needs of our present and future residents are met. In the Community Outcomes process of 2005 a clean, unspoilt and beautiful environment was identified by a large number of residents as the next major strength after the people of the District.

> *"The achievement of a sustainable environment"*

Indicator	State	Trend
Waste Volumes	☺	↑

Ruapehu District has a very special environment and its people enjoy a unique lifestyle. We value clean mountains and streams, and we want to live up to our 'clean green' image. As waste from our increased resource use creates negative environmental impacts, every effort must be made to reduce the amount of waste going into landfill. The residents of the District produce a significant quantity of waste and the uncontrolled dumping or poor management of this waste would have serious adverse effects on the environment and the quality of life of the community.

The District has been making significant gains toward achieving our strategic goal of having a zero waste environment by 2015. Since 2005-06 the amount of waste being diverted from landfill to recycling has outstripped the waste entering landfill. In addition to this achievement, the total waste stream for the District is now a quarter less that ten years ago, but the amount of waste we produce has started to increase again from a historic low in 2003.



Indicator	State	Trend
Biodiversity Management	😐	↑

Biodiversity refers the natural variety of all biological life: species of plants, animals and other organisms, as well as the habitats and ecosystems they live in. The decline of native biodiversity is one of the most pressing environmental threats identified at both national and regional level, in particular the loss of native forest and the impacts of exotic pests on biodiversity.

In comparison to most parts of the country, Ruapehu District has a relatively large area of natural habitat remaining under conservation management. The large Department of Conservation (DoC) estate encompasses 348 individual protected areas of 14 different types. In total this amounts to 136,210 hectares of DoC protected land in the District, or 20% of the total District land area.

There are also a number of schemes with contestable funds allowing private landowners to voluntarily conserve biodiversity with covenants. The District currently has around 86 covenants from Nga Whenua Rahui protecting approximately 4,724 hectares of biodiversity on Maori land. In 2007 there were also 43 registered covenants under the Queen Elizabeth II Trust, an increase of 86% from 23 in 2000. These covenants currently cover 1,682 hectares and include over 20 different habitats of forest, shrub and wetland. There are a further nine new QEII covenants currently approved and awaiting registration.

Indicator	State	Trend
Drinking Water Standards	😐	↑

Maintaining good drinking water quality is critical for human health and quality of life outcomes. This indicator shows the proportion of the District population whose water complies with the 2000 Drinking Water Standards of New Zealand relating to two of the main micro-organisms carrying water-borne diseases, E.Coli (measured at the point of use) and Cryptosporidium (measured at the treatment plant). There is a trend across New Zealand that many small communities in outlying regions are supplied with non-compliant drinking water. However, a significant reason for non-compliance is inadequate monitoring, rather than actual contamination of water supplies. The drinking water monitoring programmes are very rigorous and demanding with much scope for discrepancies that can result in inadequacies in standards.

Since 2003 the District's water supplies have improved significantly in Cryptosporidium compliance, while compliance for E.coli has declined. Council is continuously working towards improving the standards of the District's water supplies. Several asset upgrades are scheduled or are already in progress and the monitoring programme has increased since 2006 to accommodate the implementation of the NZ Drinking Water Standards 2005.

	Manawatu-Wanganui Region		**Ruapehu District**	
(Percentage of supply compliant with drinking water standards)				
Year	E. coli (%)	Cryptosporidium (%)	E. coli (%)	Cryptosporidium (%)
2003	80.0	50.2	47.5	19.7
2004	67.7	40.0	3.9	0.0
2005	81.1	58.7	6.3	38.0

Source: The Social Report 2007

Water Supply	**Condition**	**Comments**
Ohura	😐	Improvement options under investigation
Taumarunui	☺	Upgraded in 2006/07
Piriaka	☹	Improvements options under consideration
Owhango	☹	Future project
National Park	😐	Upgrade being investigated
Ohakune	☹	Upgrade scheduled for 2007/08
Raetihi	☹	Water source under investigation

Source: Ruapehu District Council 2008

☺ - Good 😐 - Average ☹ - Unsatisfactory

Indicator	State	Trend
Fresh Water Quality	😐	↓

The good condition of local rivers is a key environmental outcome. It provides a drinking water and food source, but water is also valued for its support of wildlife and habitats, spiritual and cultural values, recreation activities and for purely aesthetic properties. Water quality is influenced by a number of natural factors such as climate, soils and land cover, as well as by human activities including waste disposal, road networks and recreation.

For most of the District's rivers the water quality upstream of sewerage outfalls is good. However, the Whanganui, Mangawhero, Makotuku and Whangaehu are all to varying extents affected by sewerage and industrial discharges and land-use practices.

Many upper Whanganui catchments have very good aquatic health based on invertebrate communities. Water quality declines in the middle to lower reaches of many rivers due to the human impacts mentioned above.

The Manganui o te Ao River is protected by a National Water Conservation Order and is an important sanctuary for blue ducks (Whio), as well as having flourishing trout and native fish populations. The Whangaehu River also deserves a special mention as it is a unique ecosystem due to its volcanic origin. Its high natural acidity and turbidity can be mistaken for degradation and it is affected by industrial discharges but this does not detract from its distinct ecological value.

Condition of Rivers* in Ruapehu District

Catchment	Contact recreation	Nutrient enrichment	Life-supporting capacity	Turbidity
Upper Whanganui (upstream of Cherry Grove)	Excellent/Good	Excellent/Good	Excellent/Good	Fair
Ohura	Poor	Excellent/Good	Excellent/Good	Very poor
Ongarue	Fair	Fair	Excellent/Good	Fair
Whakapapa	Excellent/Good	Excellent/Good	Excellent/Good	Excellent/Good
Middle Whanganui (to Pipiriki)	Fair	Excellent/Good	Fair	Poor
Mangawhero	Excellent/Good	Fair	Excellent/Good	Excellent/Good
Whangaehu	Very poor	Fair	Very poor	Very poor

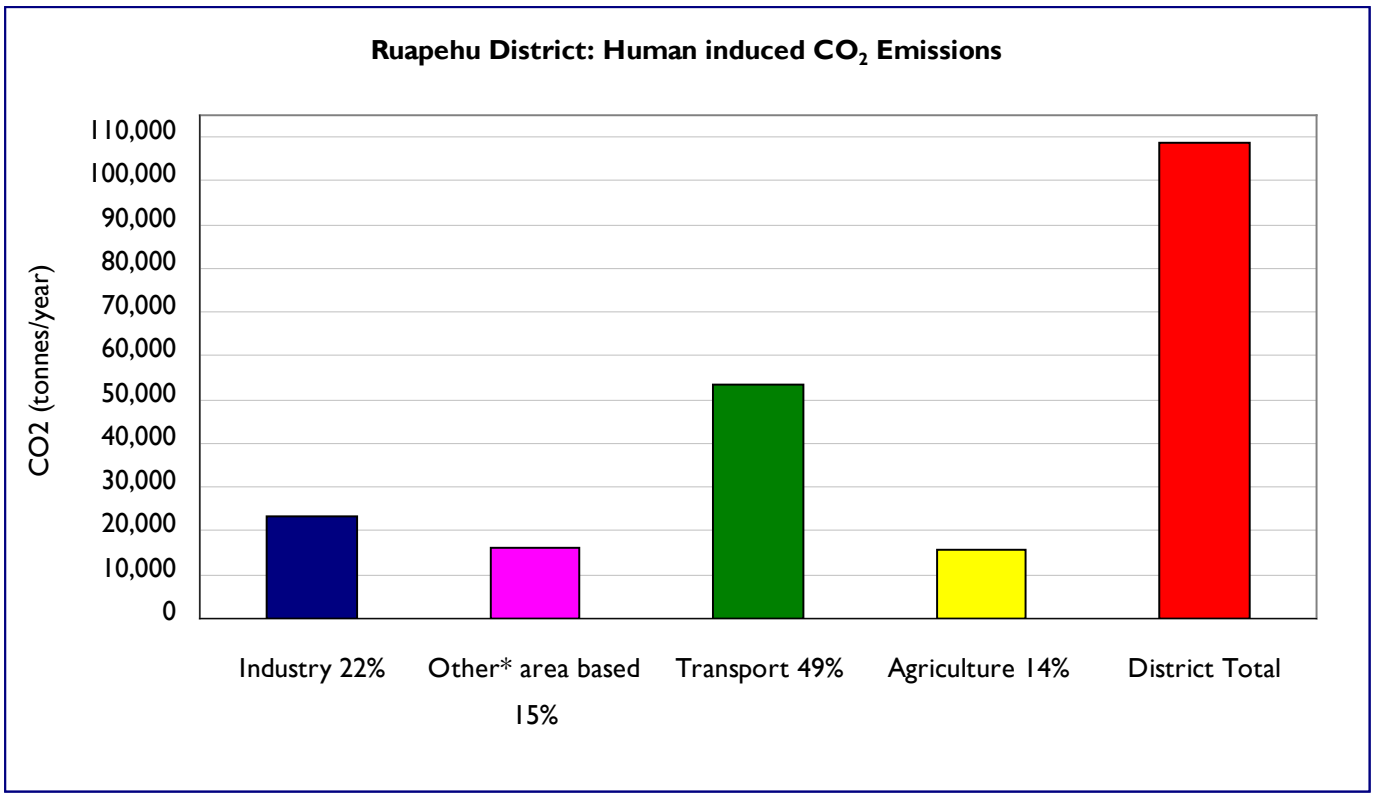
Source: Horizons Regional Council, State of the Environment Report 2005

The rivers rated are based on the availability of comparable data.

Indicator	State	Trend
Carbon Dioxide Emissions per Capita	😐	?

The impact of human-induced greenhouse gas emissions on the climate is a growing concern presenting tremendous challenges to communities. The most prevalent greenhouse gas is carbon dioxide (CO_2), mainly released into the atmosphere by the burning of fossil fuel from transport and activities generating and using energy. In 2001 the total emissions equated to over 8 tonnes of CO_2 per person in the usually resident population of the District for that year. Transport related emissions account for half of all CO_2 emissions in the District. This is unlikely to change in the near future since the large, rural area of the District places a heavy reliance on transport and makes the use of public transport extremely difficult.

Central Government has recently launched its program of climate change solutions, aiming to make New Zealand the world's first sustainable, carbon-neutral country and which includes a continuing focus on waste minimisation activities and improving the efficiency of energy use.



Source: NIWA Science, Centre for Climate-Energy Solutions, 2001

*Other area-based emissions include those arising from open burning, wastewater, domestic and commercial fuel combustion, landfill and recreational vehicle use.