INTRODUCTION

Under the Resource Management Act 1991, the Council is required to monitor and report upon the state of Northland's environment. Annual reports to this effect have been produced since 1999, with a comprehensive **State of the Environment** (SoE) report published in May 2002.

The **Annual Environmental Monitoring Report 2002-2003** details the environmental monitoring activities of the Northland Regional Council (NRC) from July 1, 2002 through until June 30, 2003. This is the fourth Annual Environmental Monitoring Report to be produced by the Council, deriving from the objectives and performance targets outlined in the NRC's 2002-2003 Annual Plan, which include:

To continue to develop and implement a prioritised State of the Environment monitoring programme based on the Regional Policy Statement and Regional Plans, by:

Providing an annual report to the Council on environmental monitoring activities carried out during the year within six months following the end of the year

Following on from previous reports, the following aspects of the environment will be described:

- > Air Quality
- ➢ Surface Water
- > Groundwater
- Coastal Monitoring
- ➤ Land Use
- ➢ Farm Dairy Effluent
- Environmental Incidents
- Ngawha Geothermal Monitoring
- Joint Iwi Monitoring Programmes
- Hazardous Substances and Contaminated Sites

At the beginning of each chapter, performance targets as laid out in the Annual Plan 2002-2003 are listed. The report is not concerned with consent monitoring and therefore individual resource consents are not discussed.

Monitoring Definitions

Monitoring undertaken by the NRC falls into two distinct categories:

- Compliance Monitoring
- State of the Environment (SOE) Monitoring

Compliance monitoring relates to the interaction between people and the environment. Therefore, compliance monitoring is tied into the enforcement of resource consents, regional plans and other statutory environmental standards. In essence, compliance monitoring is a tool to measure and thus indirectly help minimise the impact that people's actions can have upon the environment.

State of the Environment monitoring is primarily used to develop 'snapshots' of Northland's environment. It is impossible to monitor all the variables that make up our environment, so select 'indicators', such as particulate matter in air or nitrate levels in water are chosen as representative markers (for example, particulate matter in the air is linked with the combustion and emission of a number of different chemicals, as well as being an indicator of air clarity). Using a range of indicators, it is possible to determine the quality of our general (or background) environment. Upon the collation of a number of annual 'snapshots', it should also be possible to then analyse environmental trends, which can impact upon regional plans and thus resource consents. Generally, such trend analysis is not discussed in Annual Environmental Monitoring Reports, but will be detailed in later documents.

As well as indicators studied independently by the NRC, the Ministry for the Environment is developing a set of national environmental indicators through the Ministry's Environmental Reporting Programme. The adoption and implementation of these indicators, which is an ongoing process, will be used not only to help build a picture of Northland's environment, but to ensure consistency across the entire country when national trends are considered.

Northland Regional Monitoring Strategy

In August 2002, a draft of the **Regional Policy Statement Implementation and Monitoring Strategy** was released. In that draft, it was suggested that State of the Environment monitoring would become increasingly more important when attempting to gauge the success of the majority of implemented policies and methods (excluding such methods such as education initiatives, which are beyond the scope of SOE monitoring).

The **Northland Regional Monitoring Forum** allows the NRC to work alongside Ministry for the Environment, Northland's three district councils (Far North, Kaipara and Whangarei), and other agencies to develop and advance the measurement of environmental performance indicators. As well as providing all parties concerned with an expanded body of knowledge, it is hoped the forum will also enhance the development of the Regional Policy Statement.

Additional Information

Previous annual reports, as well as other environmental reports produced by the Northland Regional Council, can be found at:

www.nrc.govt.nz

Further information regarding national environmental programmes and strategies are detailed on the Ministry for the Environment website:

www.environment.govt.nz