

Introduction

Christchurch City covers a land area of 45,240 hectares. The City is bounded by the Waimakariri River to the north, the Pacific Ocean to the east and the Port Hills to the south (Figure 2.1).

Two distinct landforms define the topography of the City. The Port Hills, which extend for 16 kilometres and rise to a height of approximately 500 metres, dominate the landscape to the south. In contrast, the remainder of the City is characterised by relatively flat outwash plains derived from the Waimakariri River. Meandering across these outwash plains are several spring-fed waterways including the Avon, Heathcote and Styx Rivers. Much of the urban and agricultural activity occurs on the plains, while the Port Hills, coastline and waterways have high recreational, amenity and cultural value.

Approximately 17,000 hectares of the City are in some form of urban use. The built-up part of the City is the source of many pressures on the natural and physical environment. As described in Part 1: The City's People, continued population growth and changing life styles will increase these pressures.

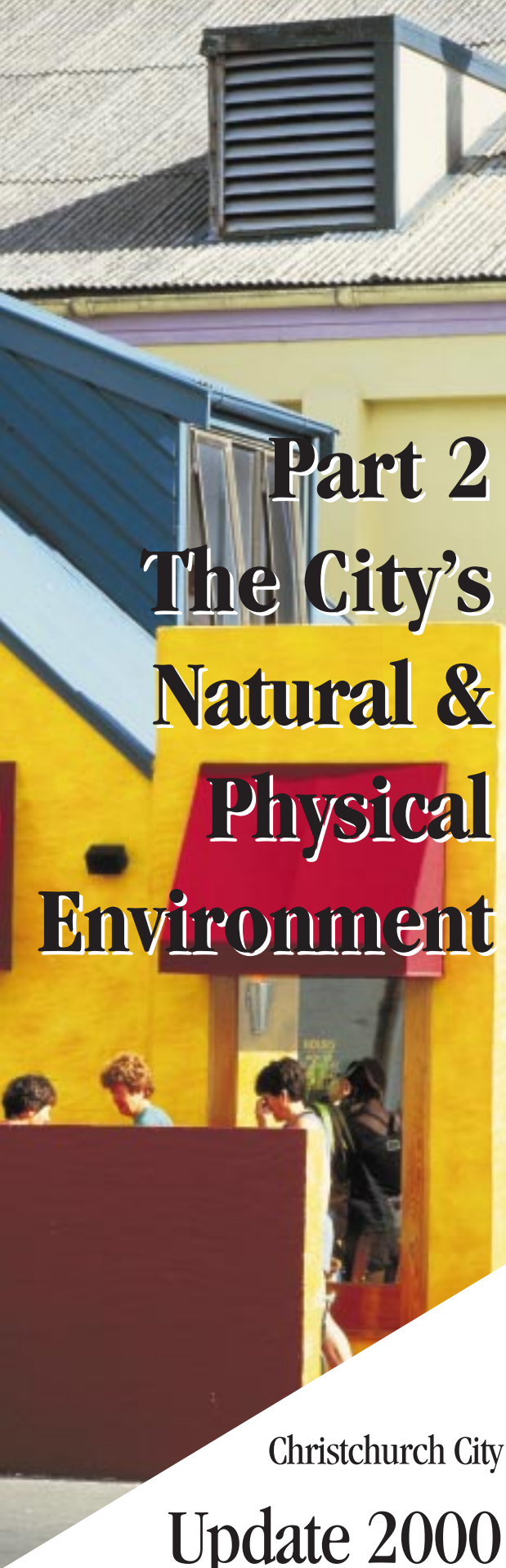
Environmental impacts range from the detrimental effects of urban activities on the natural environment to changes in the built environment to meet the diverse needs of individuals and the community.

In addition to these urban pressures, the natural environment is not passive and can have a positive or negative impact on the state of natural resources. An example of this is the climatic phenomenon of the El Nino southern oscillation, which can cause increased demand for water or above average rainfall in the City. Natural phenomena such as severe storms and earthquakes can also affect the natural, physical and human environments in potentially catastrophic ways.

Air pollution is a factor in the degradation of the City's natural environment. Winter air contaminants regularly exceed local and international guidelines as a consequence of domestic fires used for heating.

While winter air pollution is a visible example of environmental degradation, other impacts are not as obvious until the level of contamination is extreme. The quality of the rivers, streams and other surface waterways for recreational activities, amenity and ecological values can only to be determined by scientific monitoring.

At present Christchurch is fortunate to have a large, very clean supply of groundwater to provide drinking water. It is important that the integrity of such supplies is retained for future generations and not degraded by overuse or contamination.



Part 2 The City's Natural & Physical Environment

Christchurch City
Update 2000

