



“ Our growing population has brought many benefits; more work and business opportunities, a diverse and vibrant cultural scene and the potential for better services such as public transport. The Auckland region’s growth has been largely self-perpetuating: a healthy economy attracts more people, increasing the size of the economy still more.

Added attractions include the Auckland region’s mild climate, its northern location, ports and natural environment, all of which are likely to contribute to future growth.

The downside is the pressure that growth puts on services like roads, water supplies and wastewater treatment. Much of Auckland’s infrastructure is at capacity or the end of its life, or needs to meet higher environmental standards. Upgrading services is often expensive, but properly managed population growth can make better infrastructure more affordable.”

(State of the Auckland Region 1999, p.11)

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**Teacher
information**

Urban Growth and Environmental Education

Through the exploration and development of urban growth, and underlying issues within the Auckland region, it is hoped that students will develop:

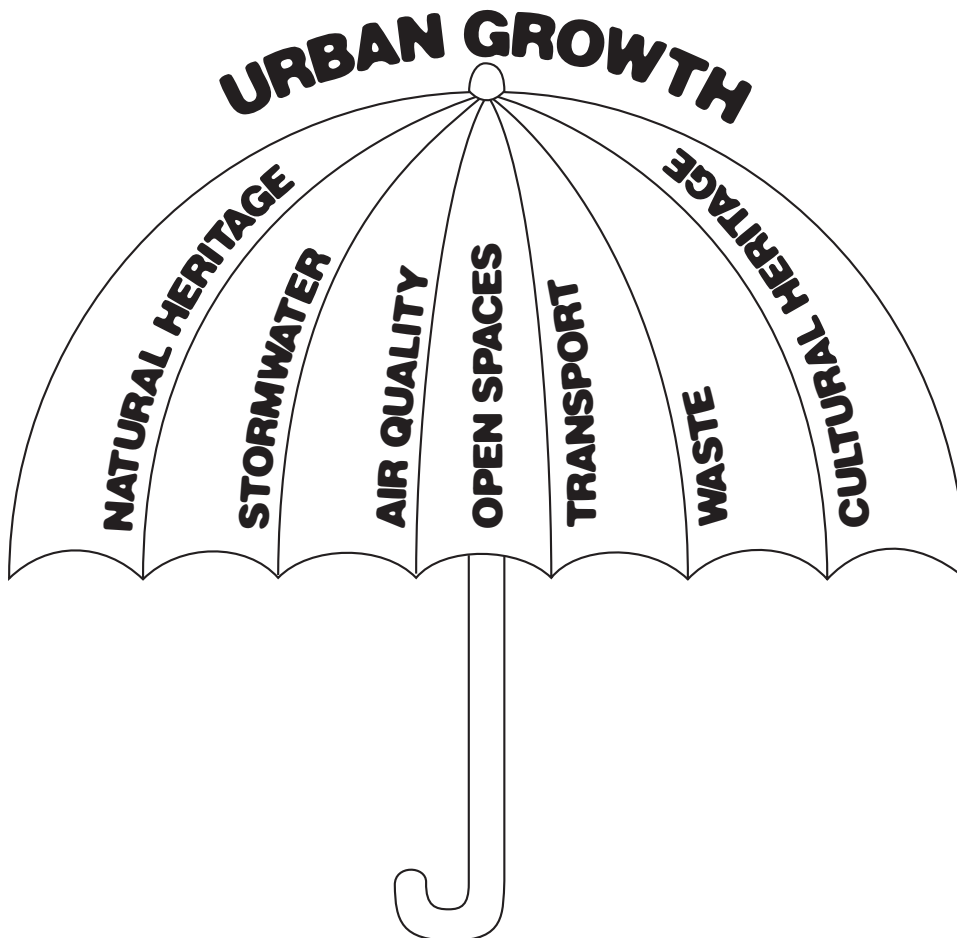
- **awareness and sensitivity** to Auckland's environment and related environmental issues
- **knowledge and understanding** of the impact that the growth in population has on the environment and of the links between dispersed land-use patterns and traffic congestion
- **attitudes and values** that reflect feelings of concern for Auckland's environment
- **skills** involved in identifying, investigating and problem solving associated with the issues related to Auckland
- a sense of responsibility through **participation and action** as individuals (and as members of a group) in addressing the issues related to Auckland.

(Ref. Guidelines for Environmental Education in New Zealand Schools. p. 9)

Urban Growth

Significant issues for the Auckland region covered in this resource include:

- Transport
- Stormwater
- Air Quality
- Open Spaces
- Cultural Heritage
- Natural Heritage and Biodiversity
- Waste
- **Urban growth** is the 'umbrella' term for all these issues. Many of these issues are interconnected and should not be considered in isolation.



How is the Auckland region going to manage a doubling in population over the next 50 years? Can we keep the best of what we have now and improve the things that are not so good?

Background information

Growth - The 50 year challenge

The Auckland region is at a crossroad.

- Auckland has over a million people - nearly 30% of New Zealand's population live on 2% of the land area
- Auckland could have 2 million people in 50 years - 40% of the country's population
- Expressed a different way, the Auckland region has been growing at one person every 29 minutes, or 50 people a day
- Auckland is New Zealand's fastest growing region
- There are more people living in the Auckland region than the whole of the south island
- Births account for 60% of Auckland's growth, migrants from overseas for 30% and migrants from other parts of New Zealand for 10%
- 13% of the population are Maori, 12% Pacific Island people and 9% Asian
- There are nearly 32,000 speakers of Maori in the region, and nearly 47,000 speak Samoan
- 77% of the Auckland region's private houses are detached dwellings
- Approximately 7% of the region's housing stock is sold each year
- Auckland's built-up area covers about 55,000 hectares
- 85% more people now live in the Auckland region than when the Growth Forum was formed in 1966, a 7.7% increase in that time.

More people and more growth means:

- greater variety of jobs, lifestyles and housing
- opportunities for better public transport and access to home, work and leisure pursuits
- a bigger work force and skills base
- a better environment for business
- more opportunities for our children.

But it also means more pressure on the region's:

- water supply, sewage, stormwater and other major infrastructure
- transport systems, in particular roading capacity
- valued environments, open space and heritage sites
- social services
- communities, as more people spend longer in their cars getting to and from work and neighbourhoods are disrupted by traffic.

The vision for Auckland

Auckland Regional Growth Strategy: 2050, a document produced by the Regional Growth Forum (a standing committee of the Auckland Regional Council), outlines a vision for the future of Auckland. Consultation with the regional community resulted in four key points.

These are to sustain:

- strong, supportive communities
- a high-quality living environment
- a region that is easy to get around
- protection of our coast and surrounding natural environment.

What we like and what we want

Surveys of Aucklanders indicate that they want better public transport, a clean environment and a community that is safe, co-operative and caring. Among the things Aucklanders want preserved and enhanced as the region's population grows are:

- safe, healthy communities
- a range of employment and business opportunities
- choices in different kinds of housing
- pleasant urban environments
- protection of the natural environment
- sustainable use and protection of natural and physical resources
- efficient access to work, home, leisure pursuits and social services.

How will we get what we want?

The Regional Growth Forum has developed a “Growth Strategy”. One of the key features of the strategy is that growth will be managed by promoting quality, compact urban environments.

Other features include:

- most growth will take place within the existing urban areas focussed around town centres and key transport corridors to create higher density communities
- less emphasis on adhoc infill housing in existing urban areas
- some expansion outside the suburbs, creating future urban greenfield areas, e.g. Takanini, Albany
- rural and coastal towns to double in size e.g. Helensville, Kumeu and Pukekohe
- urban development is avoided in the most highly valued and sensitive catchment areas eg. Waitakare and Hunua Ranges, Mahurangi and Whitford.

Housing

To accommodate the growth in population and to achieve a more compact urban environment, there will need to be a wider choice in housing and a move away from the single house on its own section. New dwellings may include low and high rise apartments, town houses, terraces, semi-detached and cluster housing.

The Growth Strategy proposes that many of the new dwellings will be in new urban “villages” where it will be easy to walk and cycle, and public transport is quick and convenient for longer trips.

Transport

Traffic congestion, and its associated problems with air and water quality, is the most visible and unpopular indicator of growth. Many feel that traffic congestion, not growth itself, is Auckland's greatest problem.

However, Auckland's traffic problems are a consequence of growth - in particular Auckland's sprawling pattern of growth in the past 50 years. As people have gone to live further from the central city suburbs, it has become more difficult and expensive to provide them with an effective public transport service, as well as with other infrastructure and community services. The consequences of decades of suburban sprawl and car dependence are:

- traffic congestion
- loss of natural resource land
- vanishing open spaces
- and water pollution
- deterioration of inner city suburbs
- the increasing cost of public services.

Development of effective public transport, in conjunction with land-use policies that encourage higher density living close to public transport services, is a key component of the Growth Strategy.

The concentration of more people in an urban area will give opportunities for better passenger transport:

- more choice of modes of travel, e.g. bus, train, ferry, park and ride, and rapid transit
- more choice of routes and higher frequencies
- a shift in land-use patterns - to support passenger transport, in particular rapid transit

(Refer to the Transport booklet for further information).

Infrastructure - the shape of things to come?

Infrastructure includes water supply, waste water treatment, refuse disposal, transport, power, phone, gas and open spaces.

Much of the region's infrastructure is reaching design capacities and needs upgrading to meet increasing demand and higher environmental standards;

- investment in public transport infrastructure needs to be increased and the motorway system needs completing
- wastewater facilities need upgrading
- we will need more and better parks, reserves and open spaces.

Reference

Auckland's Size to Double in 50 Years, Regional Growth Forum, ARC, 1998

Growth - The 50-year Challenge, Regional Growth Forum, ARC, November 2000

Resources

Included in City Issues - Urban Growth pack

No.	Type	Resource
1	Poster	Auckland's a great place
2	Poster	How is our region growing
3	Booklet	Growth the 50 year challenge
4	Booklet	Horizons
5	Booklet	Auckland Profile - a demographic profile

Further copies of ARC resources are available from:

Enviroline 09 366 2070

(for callers outside the toll free area please phone 0800 80 60 40)

Website www.arc.govt.nz

School journals

How we came to have town belts by Hardwicke Knight 1983 3:1

Through the foresight of Edward Gibbon Wakefield and members of the New Zealand Company, the cities of Wellington and Dunedin are surrounded by belts of parkland which are not to be built upon but reserved for the use of public.

The motorway debate by Pat Quinn 1992 4:1

The arguments for and against completing the Wellington City motorway, about moving traffic in and out of a city, and what other cities have done about the problem.

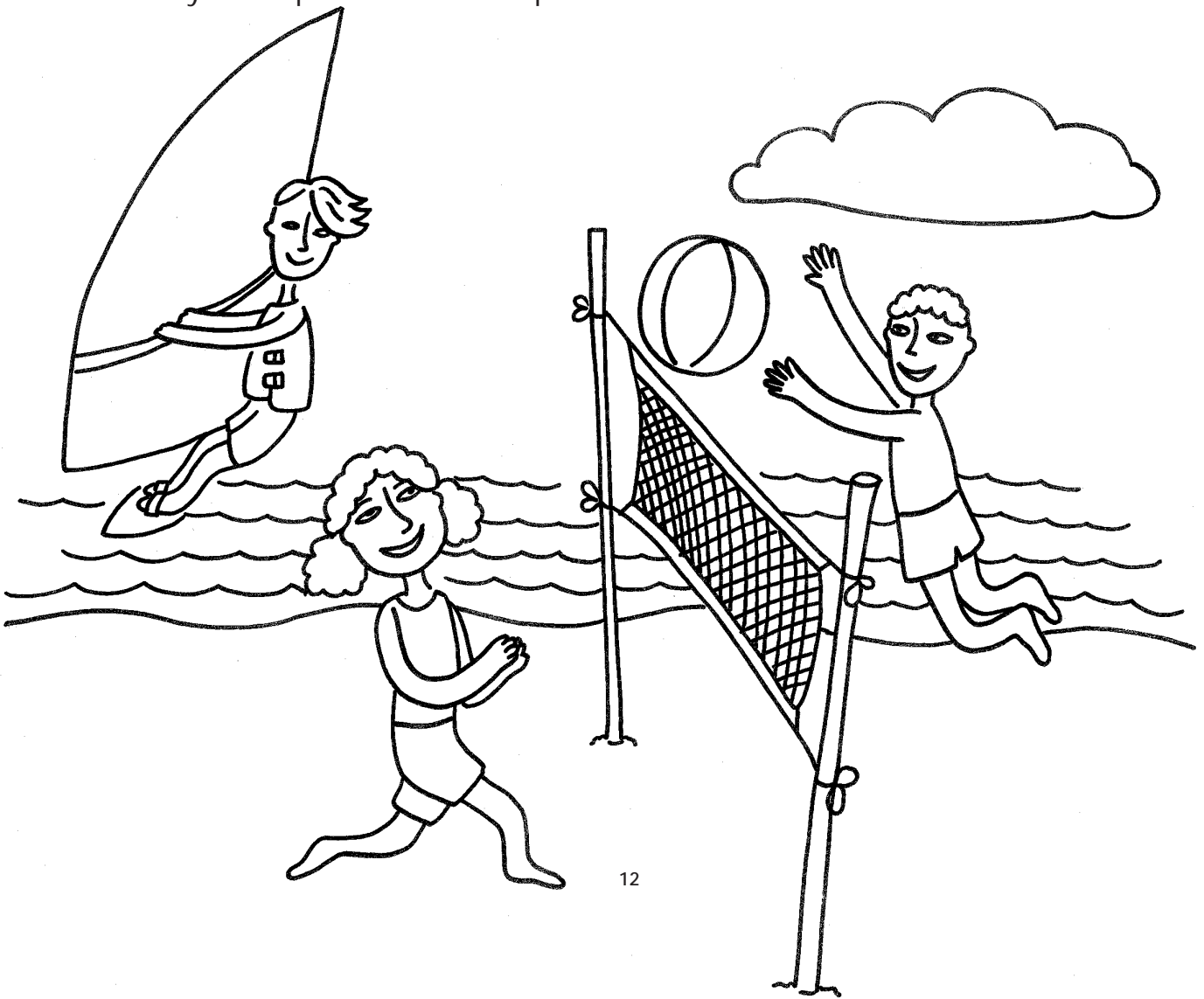


**Student
activities**

Auckland's a great place

HERE'S WHAT YOU HAVE TO DO >

- 1 Read "Auckland's a Great Place" (included in City Issues).
- 2 Read it again (and again and again if you need to!) and complete the following
 - a. **List the problems** caused by a growing population
 - b. **List the solutions**, the things that could be done to make Auckland's future a happier one!
- 3 You will need these lists to help you complete the following projects, so make sure you keep them in a safe place!



Project one

Room for improvement - redesigning where we live

- Redesign a part of your neighbourhood, community or city so that it will be better for the increasing number of people living there.

OR

- Choose a section of road that is causing traffic and / or safety problems and needs to be redesigned.

You will need to use the **Environmental Action Planner** to help you to work through this problem solving process.

PLEASE NOTE:



It is important that you work together to identify a real neighbourhood / community problem and that you present your ideas / proposals / plans to the people who have the power to make things happen e.g. Local Councils, Community Boards, Regional Councils.

You need to understand that YOU can make a difference.

You CAN influence what happens in and around your community and city.



Project two

Design an ideal city or a community

(Here's a challenge designed to blow the cobwebs away, and your socks off at the same time!)

YOU WILL NEED

- A group to work with
- Information from City Issues. You may find the Problems / Solutions lists from the activity on "Auckland's a Great Place" very useful for this task
- Materials to work with
- Ideas, ideas and more ideas!

Your city / community will need:

- Houses / apartments for a population of 50,000 - 100,000
1 house = 3 people
1 small apartment block = 30 people
1 large apartment block = 50 people
- Open spaces for recreation activities that will cater for all ages of the population. On your map show how these open spaces will be used e.g. playground, playing sport, dog walking, sitting and enjoying the view!
- Schools / kindergartens (don't forget to make good use of the schools open spaces)
- Shops / malls
- Office buildings, industrial sites

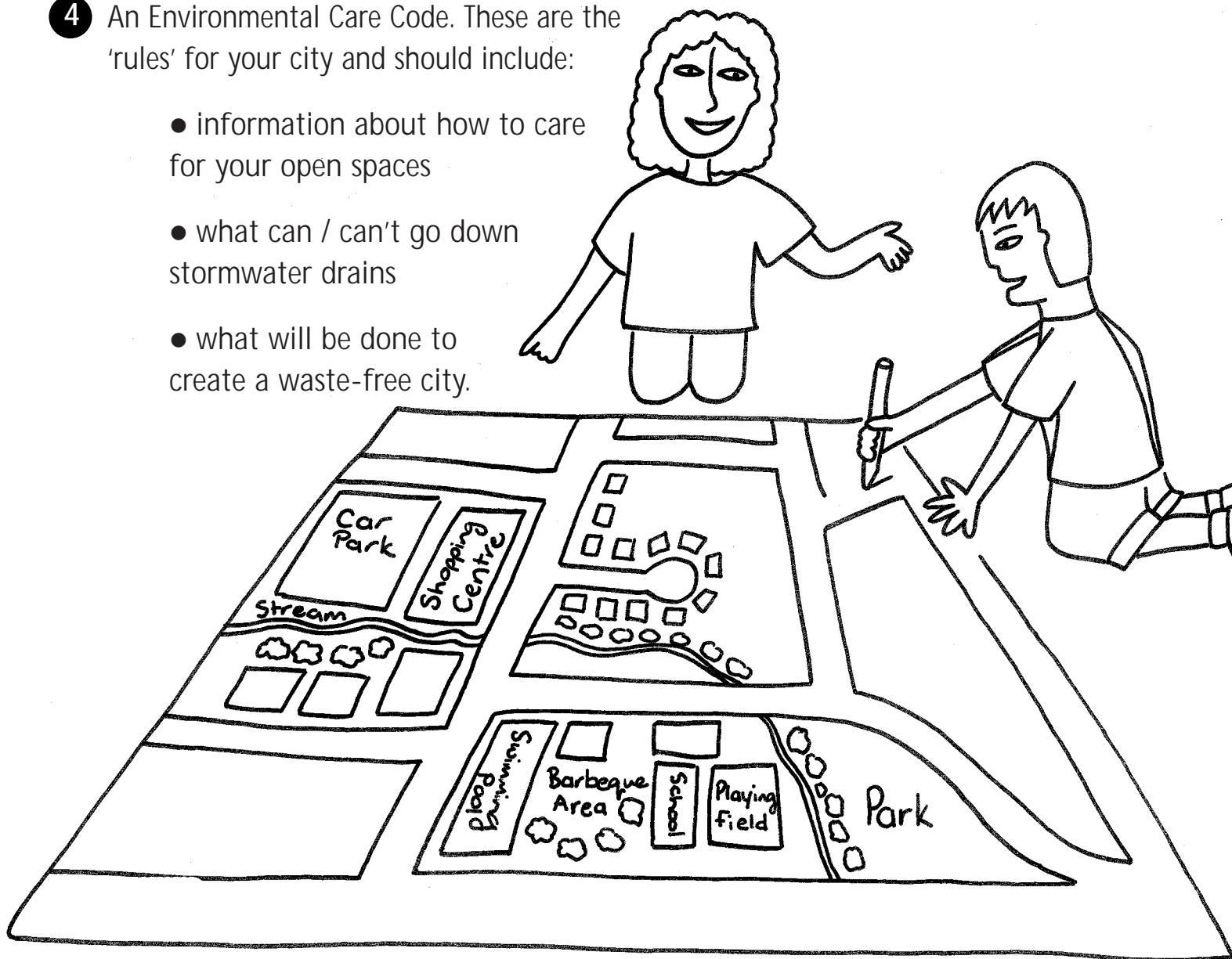


- Entertainment centres / cafes
- Transport routes / systems that may include roads, bus-ways, rail, ferry, cycle paths, walkways
- Anything else your heart desires!

You will need to provide the following:

- 1 A map of your ideal city / community.
- 2 You may wish to make a model of this when you have completed your planning.
- 3 Notes / models describing your transport options.
- 4 An Environmental Care Code. These are the 'rules' for your city and should include:

- information about how to care for your open spaces
- what can / can't go down stormwater drains
- what will be done to create a waste-free city.



Food for thought

In well designed cities:

- people can get around on well connected public transport
- park and ride facilities are provided e.g. at railway and bus stations
- it is easy to walk or cycle to the nearest public transport
- railway / bus stations have storage for bicycles
- roads have special bus lanes to so that buses don't get caught up in other traffic
- shops, offices, entertainment and public transport are close to each other
- major housing developments are situated near public transport corridors
- employment opportunities are available close to where people live
- parks and open spaces are small but close to where people live
- people like to live in cities

In poorly designed cities:

- people's workplaces are not on public transport routes
- people live a long way from where they work
- people have to drive long distances to large shopping centres
- it takes a long time to walk to the nearest bus stop, train or ferry station
- schools are built next to busy roads

- shops, offices and entertainment aren't close to each other, which creates difficulties for people using public transport
- insufficient open spaces for recreation
- roads get "jammed" with too many cars

