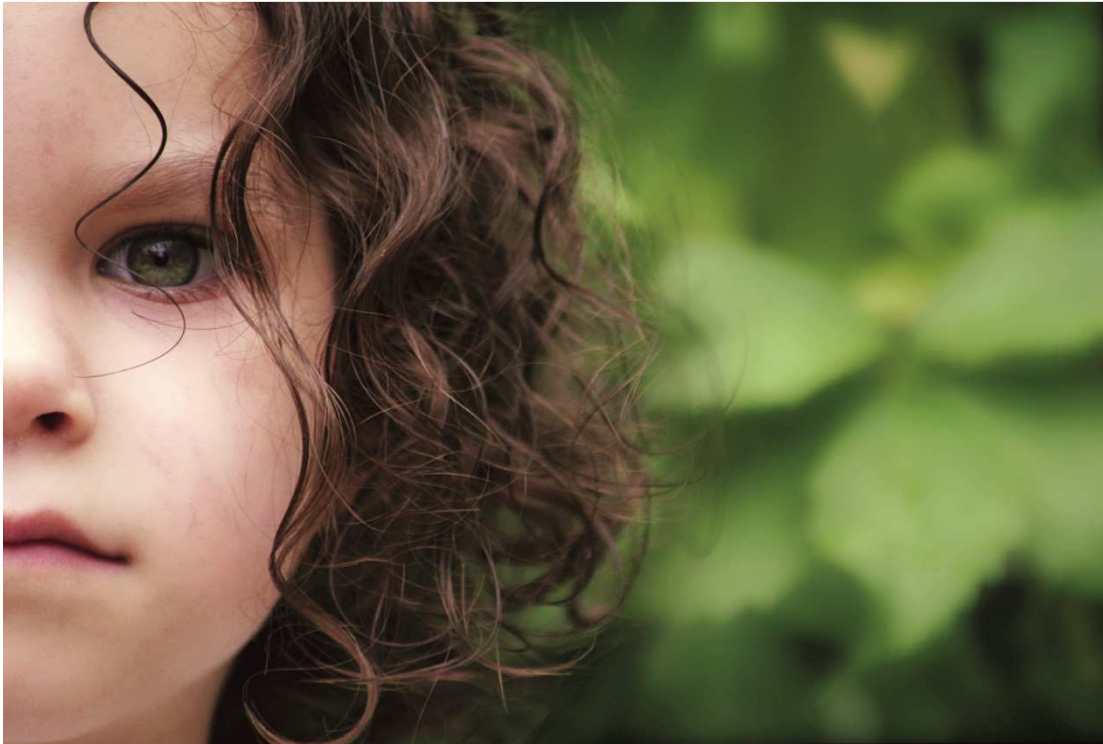


# Managing Growth – SmartGrowth



'Keeping an eye on the future'

## An Education Resource for Teachers

Geography Level 6-8 and Social Studies Level 5



**SmartGrowth**

Managing Growth in the Western Bay

First Edition – Published 2012 by Bay of Plenty Regional Council on behalf of SmartGrowth.

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# Acknowledgements

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# Introduction

This education resource looks at managing growth. The key focus of this resource is SmartGrowth and the western Bay of Plenty sub-region (see Figure 1) as a case study for managing growth. Global growth-related concepts and national growth related trends are also explored.

**Figure 1** – Map of the western Bay of Plenty sub-region (includes Tauranga City and Western Bay of Plenty District)



(Source: SmartGrowth at [www.smartgrowth.co.nz](http://www.smartgrowth.co.nz))

## Objectives of this education resource

The objectives of this education resource include investigating:

- The nature of population growth, in particular the western Bay of Plenty sub-region.
- Urban settlements and patterns (using the western Bay of Plenty as an example).
- The planning and decision making process.
- Population growth and sustainability-related issues, especially those relevant to the western Bay of Plenty sub-region.
- Mapping and spatial analysis using the western Bay of Plenty sub-region as the example.
- The potential role of youth and young people in the planning and decision-making process.

## Structure of this education resource

The kit is divided into six topic areas:

1. Population growth
2. Urban patterns and settlements
3. Mapping and spatial analysis
4. Planning and Decision Making
5. Current issues
6. Getting involved

## What's included in this education resource

- **Teaching and learning resources** – includes possible learning activities and student learning resources including eight PowerPoint slide shows (please note that further drop down teachers information are included in all slide shows), game cards, role play cards, worksheets, information sheets etc. A list of useful contact people is included as Appendix one. NOTE: An index of PowerPoint diagrams, figures and maps is provided – see Figure 3.
- **PDF files** – additional teacher resources such as SmartGrowth reports and maps.
- **GIS data files** – including demographic, topographic and land information. Due to the large size of these files we have not included them on the website, they are available on request from the Community Relations Administration Officer. Phone: 0800 884 880.
- **Giant SmartGrowth block and map floor game** – available within the Bay of Plenty from Bay of Plenty Regional Council, Regional House, Elizabeth St, Tauranga – contact: Community Relations Administration Officer. Phone: 0800 884 880.

# How to use this education resource

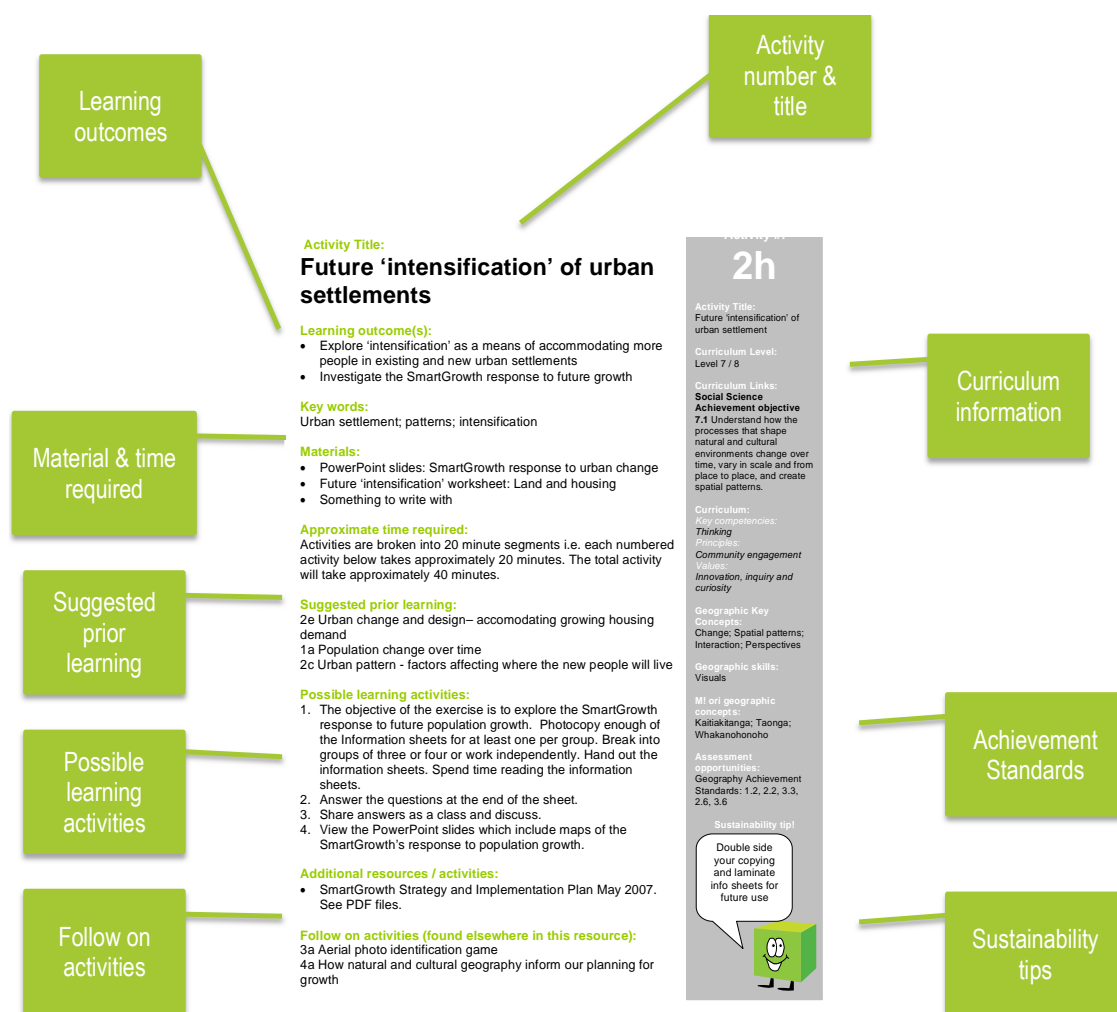
## Where does the kit fit into the curriculum?

This education resource is designed for use in Level 6-8 Geography and Level 5 Social Studies. A panel on the side of each activity sheet describes links with the curriculum (see figure 2).

Based on the existing practice of teachers, this resource has been designed for potential use when teaching the following achievement standards:

- Level 1: 1.2, 1.6 and 1.8
- Level 2: 2.2, 2.5 and 2.8
- Level 3: 3.2, 3.3, 3.5, 3.6 and 3.8

**Figure 2 – Sample activity sheet**



**Figure 3: Index of PowerPoint graphs, figures and maps**

<b>GRAPHS</b>		
<b>Graph name</b>	<b>PowerPoint name</b>	<b>Slide number</b>
Age-sex population structure for New Zealand	Age-sex structure	6
Age-sex population structure for the western Bay of Plenty sub-region	Age-sex structure	6, 7, 8 and 9
Estimated net migration Tauranga District 1996 -2001	Growth drivers and population migration	9
Estimated net migration western Bay of Plenty 1996 -2001	Growth drivers and population migration	10
Age group of in-migrants for the western Bay of Plenty sub-region	Growth drivers and population migration	15
Age group of out-migrants for the western Bay of Plenty sub-region	Growth drivers and population migration	17
New dwelling consents issued western Bay of Plenty sub-region	Growth trends – economics of growth	7 and 15
Dwellings completed western Bay of Plenty sub-region	Growth trends – economics of growth	8 and 10
Dwellings completed Tauranga City	Growth trends – economics of growth	9, 11 and 12
Dwellings completed Tauranga City – by zone	Growth trends – economics of growth	13
New dwelling consents issued Western Bay of Plenty sub-region – all zones	Growth trends – economics of growth	14
New dwelling consents issued Tauranga City	Growth trends – economics of growth	16
Development compared to SmartGrowth projections 2006 - 2009 western Bay of Plenty sub-region	Growth trends – economics of growth	18
Development compared to SmartGrowth projections 2006 - 2009 western Bay of Plenty	Growth trends – economics of growth	19
Development compared to SmartGrowth projections 2006 - 2009 Tauranga City	Growth trends – economics of growth	20 and 22
Western Bay of Plenty urban growth areas compared to SmartGrowth projections 2006 – 2009	Growth trends – economics of growth	21

<b>FIGURES</b>		
<b>Figure name</b>	<b>PowerPoint name</b>	<b>Slide number</b>
Future growth estimates	Population Growth and Trends	6
Population distribution in Tauranga City	Population distribution and density	20
Population distribution in Western Bay of Plenty District	Population distribution and density	21
Comparative percentage increase total population 1996 -2001	Growth drivers and population migration	5
Total net migration gain 1996—2001 Tauranga District	Growth drivers and population migration	7
Total net migration gain 1996—2001 Western Bay of Plenty	Growth drivers and population migration	8
Western Bay of Plenty sub-region growth 1996 – 2001	Growth drivers and population migration	11
Total growth from migration Western Bay sub-region	Growth drivers and population migration	12
Sources of in-migrants from other parts of NZ	Growth drivers and population migration	14
Destinations of out-migrants to other parts of NZ	Growth drivers and population migration	16
Age and gender of in/out migrants for Western Bay of Plenty sub-region	Growth drivers and population migration	19
Reasons for moving to western Bay of Plenty sub-region by District (%)	Growth drivers and population migration	21
Reasons why people moved away from the western Bay of Plenty sub-region by District (%)	Growth drivers and population migration	23
Aging and changes in household composition	Population Growth and Trends	8
Aging Population	Population Growth and Trends	9
Household structures	Population Growth and Trends	10
Growth trend 2008 – 2009 summary Tauranga City	Growth trends – economics of growth	5
Growth trend 2008 – 2009 summary western Bay of Plenty	Growth trends – economics of growth	6
Growth compared to SmartGrowth projections	Growth trends – economics of growth	17
Applying for a resource consent overview	RMA Basics	12
Getting involved in the consent process	RMA Basics	15



<b>MAPS</b>		
<b>Map name</b>	<b>PowerPoint name</b>	<b>Slide number</b>
Western Bay of Plenty sub-region	Population growth and trends	3
	Population distribution and density	11
	Age-sex structure	3
	Growth drivers and population migration	3
	Growth trends – economics of growth	3
	SmartGrowth response to urban change	3
Population density – NZ-wide	Population growth and trends	7
	Population distribution and density	17
Population density – world map	Population distribution and density	6
Historical population density 1994 – world map	Population distribution and density	9
Western Bay of Plenty sub-region settlement pattern	SmartGrowth response to urban change	5
Western Bay of Plenty sub-region main urban areas	SmartGrowth response to urban change	6
Business land staging plan	SmartGrowth response to urban change	7
SmartGrowth Corridors	SmartGrowth response to urban change	8

## Curriculum Level

This resource targets curriculum Levels 5-8

## Copying and adapting information to meet your own needs

Teaching and learning activities are saved as PDF files. Should you wish to use the text and adapt this for your own teaching, you can extract the text and paste into a Word document. To do this, simply select the text you wish to copy and paste into a Word document. Please remember however, that the information contained in this resource is subject to copyright and can be used for education purposes only.

## Learning strategies used in this resource

A variety of learning strategies are promoted through this resource. All are student-centred learning approaches – where the teacher acts as the facilitator of learning. Students are encouraged to actively participate in their own learning. The following teaching and learning methods are those that meet the requirements of the New Zealand National Curriculum and have been effective in environmental education.

**Inquiry learning** – A teaching practice that involves exploration, question asking, discovering, testing and understanding of new learning developing new skills such as observation, reasoning, critical thinking and the ability to justify or negate existing knowledge.

**Action learning** – A teaching practice that employs inquiry-learning strategies with an emphasis on students taking action and reflecting on the resulting changes.

**Co-operative learning** – A teaching approach that encourages students to work together in groups developing interpersonal skills and shared responsibility for learning.

**Experiential learning** – Where students are actively involved in activities designed to offer an experience from which new learning can emerge.

**Reflection and reflective learning** – Reflection is an important part of the learning process in all of the models described above.

# What is SmartGrowth

The following screen shot from the SmartGrowth website is an excellent summary of what SmartGrowth is all about.

Source: [www.smartgrowthbop.org.nz](http://www.smartgrowthbop.org.nz)

The screenshot shows the SmartGrowth website interface. On the left, there are three navigation buttons: 'Strategy' (green), 'Studies / Research' (blue), and 'News / Community' (purple). Each button has a right-pointing arrow. To the right of these buttons is a large landscape photograph of the Western Bay of Plenty. Below the navigation is a dark search bar with the word 'Search' and a right-pointing arrow. The main content area is titled 'What is SmartGrowth?' and contains several sections of text and lists. On the right side of the main content area, there is a 'Latest News' section with two news items and a 'SmartGrowth Implementation Committee Minutes - August 2010' link. At the bottom of the page, there is a footer with the text: 'An action plan for managing growth in the Western Bay of Plenty Tauranga City Council - Western Bay of Plenty District Council - Environment Bay of Plenty - Tangata whenua'.

## Strategy

Outlining key SmartGrowth strategies going forward

## Studies / Research

Summaries of key growth management research

## News / Community

News and updates concerning your community

## What is SmartGrowth?

SmartGrowth is a programme aimed at implementing a plan for managing growth in the western Bay of Plenty to ensure that as the area grows, it will continue to be a great place to live, work and play.

The programme is being led by Environment Bay of Plenty, Tauranga City Council, Western Bay of Plenty District Council, and Tangata Whenua who work with community groups and government agencies such as the NZ Transport Agency.

*"The context for the Strategy is a sub-region facing long-term growth pressure while at the same time, many sectors of the community, are demanding greater consideration of quality of life issues and protection of the core values that make the sub-region such a desirable place to live."*

SmartGrowth grew out of community concerns about continued rapid population growth, and a lack of effective planning to manage this growth.

### "Managing Growth in the Western Bay"

The three-block logo and strapline "Managing Growth in the Western Bay" are designed to represent:

- Integrated and cost effective growth management
- Relationships between key organisations and the community
- Being part of a much bigger picture, nationally and internationally
- Promoting awareness and understanding of core issues
- Phased development of the strategy
- A simple, but robust approach
- Land, water, and air - the three primary resources
- The core concept of "live, work and play"

### Why SmartGrowth?

The western Bay of Plenty sub-region has had a history of rapid population growth since the 1950s. Management of urban and rural development in a sustainable manner is one of the most fundamental challenges facing the western Bay of Plenty sub-region.

The area is growing at an extraordinary rate.

#### Every week:

- 135 people arrive from other places
- 66 people leave the area
- 30 new houses are built
- 60 more vehicles go on the road, and
- 51 new jobs are created

The population of the western Bay of Plenty in 2001 was 130,000. This is predicted to increase to 198,000 by 2021 and 286,000 by 2051.

But the population increase won't be just "more of the same". Household structures are changing, while traditional families are likely to double in number by 2051, single and two-person households will treble, and our population is aging. In 2001, 5000 people in the area were 80 years of age or older. By 2051, this will increase to 35,000 (a 7 fold increase).

All of this leads to a need for:

- more residential accommodation
- new forms of housing
- additional business land
- more community, cultural and educational facilities
- new and different health care services
- better roads
- more efficient public transport
- greater opportunities for safe walking and cycling
- high-quality water to more than twice as many people as at present
- adequate wastewater and stormwater services.

At the same time, we need to preserve the environment, cultural heritage and open space that draw people to the area and make the western Bay such a special place to live.

This is a tall order - and the very reason why SmartGrowth was launched in the first place.

## Latest News

### November 2010 Newsletter Updates on...

Forest & Bird Partner Profile, China visit brings real benefits, water sustainability, update on Tauranga Eastern Link and more

### September 2010 Newsletter Updates on...

Tauranga Eastern Link, harbour sediment study, tsunami mapping, housing development, broadband initiatives and more

### SmartGrowth Implementation Committee Minutes - August 2010

An action plan for managing growth in the Western Bay of Plenty  
Tauranga City Council - Western Bay of Plenty District Council - Environment Bay of Plenty - Tangata whenua

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# 1 – Population Growth



'Keeping an eye on the future'

Population Growth covers concepts and statistics related to population growth and the demographics of the western Bay of Plenty sub-region.

## Matrix of Activities – Topic 1

Population Growth covers concepts and statistics related to population growth and the demographics of the western Bay of Plenty subregion.

Activity #	Activity Title:	Activity Suggestions:	Assessment Opportunities	Curriculum Level	Geographic concepts	Geographic skills	Māori geographic concepts
1a	Western Bay of Plenty sub-region – Population change over time	Existing knowledge brainstorm PowerPoint slides and activity Inquiry chart Quiz and discussion	1.2, 2.2, 3.2, 1.6, 2.6, 3.6, 2.5, 3.5	5, 6	Change Patterns	Resource interpretation	
1b	Population growth issues – why SmartGrowth?	Group brainstorm activity Discussion	1.2, 2.2, 3.2, 1.6, 2.6, 3.6, 2.5, 3.5	5, 6, 7, 8	Change	Social skills Communication skills	
1c	Population distribution and density	Fishbone activity PowerPoint slides discussion and activity Google Earth activity Figure comparison Quiz and Discussion	1.2, 2.2, 3.2, 1.6, 2.6, 3.6, 2.5, 3.5	5, 6	Change Environments Patterns	Patterns Map & table interpretation	Whakanohonoho
1d	Age-sex pyramid	PowerPoint slides and group discussion Reading and quiz T Chart activity	1.2, 2.2, 3.2, 1.6, 2.6, 3.6, 2.5, 3.5	5, 6, 7, 8	Change Patterns	Graph interpretation	

<b>Activity #</b>	<b>Activity Title:</b>	<b>Activity Suggestions:</b>	<b>Assessment Opportunities</b>	<b>Curriculum Level</b>	<b>Geographic concepts</b>	<b>Geographic skills</b>	<b>Māori geographic concepts</b>
1e	Growth drivers and population migration	Inquiry chart PowerPoint presentation and discussion Discussion and quiz PowerPoint group activity OPV (other points of view) activity	1.2, 2.2, 3.2, 1.6, 2.6, 3.6, 2.5, 3.5	5, 6, 7, 8	Change Patterns	Graph & table interpretation Communication skills	Tūrangawaewae Whakapapa Hekenga
1f	Economics of (Smart)Growth	Discussion PowerPoint presentation Discussion and group brainstorm Become the expert activity Learning circles activity	1.2, 2.2, 3.2, 1.6, 2.6, 3.6, 2.5, 3.5	5, 6, 7, 8	Change Perspectives	Graph & table interpretation Communication skills Social skills	
1g	Looking back and looking forward	Card activity and discussion	2.2, 3.2, 3.3, 1.6, 2.6, 3.6, 2.5, 3.5	6, 7, 8	Change	Social skills Communication skills	Taonga
1h	Ecological sustainability, ecological footprinting and household consumption	Individual or small group information sheet activity	1.2, 2.2, 3.2, 1.6, 2.6, 3.6, 2.5, 3.5	6, 7, 8	Environments Change	Graph & table interpretation Social skills Communication skills	

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1i	Population concepts matching game	Small group easy vocab matching game	1.2	5, 6	Processes	Communication skills	Tūrangawaewae Whakapapa Hekenga Whakanohonoho Taonga
1j	Western Bay of Plenty sub-region population growth – Crossword	Summary crossword puzzle	Various	5, 6, 7 8	Processes	Change	