



Environment

Environment – we protect and enhance Wellington’s unique environment by providing gardens and beaches, green open spaces, water, wastewater services, waste reduction and energy conservation, environmental conservation attractions, and the quarry.



Environment

2.1 GARDENS AND BEACHES

Wellington has an abundance of natural play space.

From the South Coast to ridgeline walks, the city's parks, gardens and coastline are a natural playground. They provide locations for relaxation, recreation, enjoyment, and spaces for community gatherings and events.

Our aim is to enhance residents' enjoyment of these areas.

- We ensure that the city's beaches and coastline remain healthy, through a programme involving dune protection, planting, erosion control and maintenance of boating facilities.
- We look after the city's parks and gardens, including the Wellington Botanic Garden, Otari Wilton's Bush, Bolton Street Memorial Park, Truby King Park, and many other reserve areas.
- We grow approximately 80,000 native plants each year in our Berhampore Nursery, for use in parks, gardens and open spaces. We manage over 30 hectares of lawns on over 700 sites throughout the city.

We're enhancing the visitor experience on the South Coast.

We will also continue to implement the South Coast Management Plan, which seeks to enhance recreational opportunities while protecting the spectacular southern coastline. The improvements to Te Raekaihau Point – including improving restorative planting and access/parking that will be completed in 2010/11. Funding for this project will come from the Plimmer Trust.

And we'll complete the upgrade of the Botanic Garden Nursery.

We will also start planning work on projects identified in the Otari Landscape Development Plan. In the coming year we'll upgrade tracks and install new interpretation panels. We'll also complete designs for the upgrade of the Treehouse in the Botanic Gardens. The upgrade is scheduled for 2011/12.



MEASURING OUR PERFORMANCE

Our targets for 2010/11 are:

- 75% of residents have visited a local park at least once in the previous 12 months (25% use parks weekly), and 91% of residents are satisfied with the quality and maintenance of the parks.
- 74% of residents have visited the botanic gardens at least once in the previous 12 months (7% visit them weekly), and 90% of residents are satisfied with the quality and maintenance of the botanic gardens.
- 88% of residents have visited the city's beaches or coastal areas (32% visit them weekly), and 80% of residents are satisfied with the quality and maintenance of beaches and coastal areas.
- 90% of the botanic gardens' plant collection complies with Council defined quality performance standards (i.e. plant health).
- 90% of our beach areas comply with quality performance standards (i.e. maintenance).
- 90% of our city's mowing sites comply with quality performance standards (i.e. grass length and health).
- All reported hazards are made safe or secure within 24 hours.
- 90% of residents find it easy or very easy to access their local gardens and beach areas.
- 90% of residents agree that gardens and beach services provide good value for money.

WHAT IT WILL COST

	OPERATING EXPENDITURE 2010-2011			CAPITAL EXPENDITURE 2010-2011
	INCOME (\$000)	EXPENDITURE (\$000)	NET EXPENDITURE (\$000)	TOTAL (\$000)
2.1 GARDENS AND BEACHES				
2.1.1 Local parks and open spaces	(414)	7,563	7,149	901
2.1.2 Botanical gardens	(565)	4,409	3,844	1,081
2.1.3 Beaches and coast operations	(51)	1,019	968	175
2010/11 2.1 Total	(1,030)	12,991	11,961	2,157
2009/10 2.1 Total	(890)	13,195	12,305	2,141

Environment

“Each year, volunteers plant between 18,000 and 25,000 eco-sourced native plants throughout the city”.

2.2 GREEN OPEN SPACES

A large part of Wellington’s area is reserve land, much of it rugged and covered in bush.

This land, protected for generations, is a vital part of Wellington’s landscape, and also has great potential to support the city’s response to climate change by acting as carbon sinks.

Our long-term vision is to substantially improve natural biodiversity on the Town Belt, Outer Green Belt, and other reserve land – while also maintaining these areas to support recreation and keep the city attractive for residents and visitors.

To achieve this, we:

- Look after the city’s 34.7 square kilometres of Wellington Town Belt, Outer Green Belt and other reserve land – protecting these areas from development, restoring key native ecosystems, removing weeds and pests and providing recreation opportunities that do not compromise environmental values.
- Look after more than 300km of tracks extending throughout the city’s open space areas – including walking tracks, mountain bike tracks, four-wheel-drive tracks, and dual use tracks.
- Maintain roadside verges and clean city and residential streets, keeping them safe and attractive, through litter collection, planting, mowing, and controlling pest plants and other weeds.
- Carry out stream and riparian strip works, and protect native ecosystems by controlling pest plant and animals on open space and reserve land.

It is important that Wellington’s residents feel a sense of ownership and kaitiakitanga over these spaces. We enable this through the sharing of information and the support of volunteer/community initiatives. Each year, volunteers plant between 18,000 and 25,000 eco-sourced native plants throughout the city.



We're developing plans for open space areas, and upgrading several walking tracks.

The Town Belt dominates Wellington's skyline, making a vital contribution to the city's character. Our reserves planning activity for the year will focus on:

- taking the first steps towards a review of Capital Spaces, our 1998 strategy for Wellington's open spaces
- preparing a management plan for Point Dorset Reserve
- preparing master plans for Wakefield Park and Alex Moore Park
- scoping an overall plan for the Miramar Peninsula.

We will implement existing management and development plans, including initiatives at Te Ahumairangi Hill and Grasslees Reserve, as well as upgrading several walking tracks including:

- Eastern walkway – Tarakena Bay to Ataturk Memorial
- Te Kopahau and Karori Sanctuary Fenceline
- Tawatawa Reserve Tracks
- Prince of Wales Park
- Kekerenga to Tukanāe Reserve.

As outlined in our 2009 long-term plan, we will defer the creation of any new tracks except those built by volunteers.

Environment

MEASURING OUR PERFORMANCE

Our targets for 2010/11 are:

- 80% of residents are satisfied with the quality and maintenance of roadside vegetation and street cleaning; 83% of residents are satisfied with Town Belts; and 87% of residents are satisfied with walkways.
- 97% of sites comply with street cleaning quality performance standards (i.e. the streets are free of litter).
- Undertake 4.5 ha of restorative planting on Wellington Town Belts.
- 29 key native eco-systems have operational pest management plans.
- All primary walkways and tracks comply with national standards (i.e. assessing integrity of structures, track maintenance, etc).
- All reported hazards are made safe or secured within 24 hours.
- 90% of residents find it easy or very easy to access green open spaces.
- 53% of residents have used the Town Belt at least once in the last 12 months, and 13% use it weekly.
- 70% of residents have used walkways at least once within the last 12 months, and 25% use them weekly.
- Community groups participate in WCC supported planting activities (22,000 volunteers' hours and 28,000 plantings).
- 90% of residents agree that green open spaces services provide good value for money.



We also monitor the number of environmental grant applications we receive, the number of successful grants, and the total budget allocation. We aim to support initiatives that contribute to the environmental well-being of Wellington city and its people in accordance with eligibility criteria.

WHAT IT WILL COST

2.2 GREEN OPEN SPACES (TOWN BELTS)	OPERATING EXPENDITURE 2010–2011			CAPITAL EXPENDITURE 2010–2011
	INCOME (\$000)	EXPENDITURE (\$000)	NET EXPENDITURE (\$000)	TOTAL (\$000)
2.2.1 Road open spaces	(577)	9,150	8,573	-
2.2.2 Town belts	(209)	4,471	4,262	267
2.2.3 Community environmental initiatives	-	448	448	-
2.2.4 Walkways	-	461	461	335
2.2.5 Pest plant and animal management	-	942	942	-
2010/11 2.2 Total	(786)	15,472	14,686	602
2009/10 2.2 Total	(798)	14,286	13,488	603

Environment

2.3 WATER

Water is crucial for people's health and for quality of life.

A city cannot survive without a steady supply of clean, safe, drinkable water. It's also a resource that's in limited supply. Before it can be supplied to Wellington households, it has to be gathered in rainwater catchments, stored, and treated to ensure it is free of contamination. It is then piped to Wellington city.

All of this requires extensive and costly infrastructure – reservoirs, pipes, treatment stations and so on. Water consumption per person has been decreasing. If a one-in-50 year drought occurs anytime from this year, the region's water supply may not be able to meet demand.

Our goal is to provide safe, drinkable water to all households and businesses – while also moving the city towards a more sustainable approach in which water is used wisely and without waste. To achieve this, we:

- Own a water supply network that includes 75 reservoirs, 34 pumping stations and about 1,000km of underground pipes.
- Contract Capacity, a company that we own jointly with the Hutt City Council, to manage, maintain, monitor and operate the network and carry out upgrades and renewals.
- Buy around 29,000 million litres of water per year from the Greater Wellington Regional Council and supply the water to Wellington properties.
- Monitor drinking water quality to ensure it complies with New Zealand Standards.
- Encourage efficient, responsible use of water by providing information to residents and businesses, and through restrictions on sprinklers and garden hoses.

During 2010/11, we will continue our extensive programme to renew and upgrade water mains, pipes, pumping stations, and reservoirs. We prioritise this work by considering the type and age of the infrastructure, risks to public health, and other infrastructure development in the area.

We will also continue working with all local authorities in the region including the Greater Wellington Regional Council on a strategy for how we can best provide for the region's water needs in the future.

FEES AND CHARGES

Due to inflation, we are revising our fees associated with this activity. Further detail on fees and charges can be found in the appendices.



MEASURING OUR PERFORMANCE

Our targets for 2010/11 are:

- All water delivered to Wellington properties complies with Drinking Water Standards for New Zealand (2005).
- The water distribution network receives an 'a' to 'b' grading from the Ministry of Health ('a' = completely satisfactory, very low level of risk, and 'b' = satisfactory, very low level of risk).
- The number of complaints regarding water quality (taste and odour) is less than 80 per year.
- 85% of customers are satisfied with the water network service.
- 98% of properties receive appropriate water pressure (a minimum of 250kPa).
- 95% of fire hydrants tested meet New Zealand Fire Service Code of Practice for fire fighting water supply requirements.
- 97% of service requests relating to the water network are responded to within one hour of notification.
- No more than 16% of water in the network is unaccounted for.
- Residential water consumption per person per day is 345 litres (residential water consumption is based on bulk water supplied less the metered commercial consumption divided by resident population).
- 90% of residents agree that water services provide good value for money.

WHAT IT WILL COST

	OPERATING EXPENDITURE 2010–2011			CAPITAL EXPENDITURE
	INCOME (\$000)	EXPENDITURE (\$000)	NET EXPENDITURE (\$000)	2010–2011 TOTAL (\$000)
2.3 WATER				
2.3.1 Water network	(31)	20,903	20,872	9,949
2.3.2 Water collection and treatment	-	12,818	12,818	-
2010/11 2.3 Total	(31)	33,721	33,690	9,949
2009/10 2.3 Total	(31)	33,449	33,418	10,762

Environment

“We work with other local authorities to inform residents about the importance of keeping pollutants out of stormwater drains”.

2.4 WASTEWATER AND STORMWATER

We want to safeguard public health and safety, and protect the city’s waterways from pollution.

Wellington’s stormwater network keeps residents and property safe from flooding. Each year, the network carries about 80 million cubic metres of runoff from roofs, paths, kerbs and channels and drains to streams and the harbour.

The sewage network, which carries about 29 million cubic metres of wastewater a year, protects human health and the environment by removing wastewater from homes and treating it to make it safe for disposal.

Our key aims are safety and sustainability: wastewater should be disposed of in ways that protect public health and don’t compromise ecosystems.

To achieve these aims, we:

- Provide the city’s stormwater and wastewater network, including thousands of kilometres of pipelines, as well as pumping stations and treatment plants which treat sewage before disposal into waterways.
- Contract Capacity, a company that we own jointly with the Hutt City Council, to manage, maintain, monitor and operate these networks and carry out upgrades and renewals.
- Monitor sewage and stormwater outfalls to ensure that threats to public health and the environment are minimised.
- Work with other local authorities to inform residents about the importance of keeping pollutants out of stormwater drains.

We’re making improvements to the Moa Point wastewater plant.

The Moa Point wastewater plant inlet pump station will be upgraded to better manage the flows of wastewater into the plant and reduce the opportunity for surges to create unwanted overflows. We will also complete a pilot trial of ultraviolet treatment for wastewater bypass flows, to reduce harmful pollutants to the environment.

We’re also introducing grit traps in CBD stormwater culverts to minimise the effects of stormwater on the environment, and will continue to monitor the impact of stormwater on Wellington Harbour and the Taputeranga Marine Reserve.



MEASURING OUR PERFORMANCE

Our targets for 2010/11 are:

- Bathing beaches comply with Ministry for the Environment guidelines (achieve 'green status' on 93% of sampling occasions).
- 90% of freshwater sites are within acceptable faecal coliform counts.
- 85% of customers are satisfied with the wastewater and stormwater network service.
- 97% of service requests relating to the wastewater and stormwater network are responded to within one hour of notification.
- No properties (buildings) are flooded as a result of a one-in-50-year rain event.
- Stormwater and sewage networks comply with resource consents.
- 90% of residents agree that wastewater and stormwater services provide good value for money.

WHAT IT WILL COST

2.4 WASTEWATER AND STORMWATER	OPERATING EXPENDITURE 2010-2011			CAPITAL EXPENDITURE
	INCOME (\$000)	EXPENDITURE (\$000)	NET EXPENDITURE (\$000)	2010-2011 TOTAL (\$000)
2.4.1 Stormwater management	(8)	14,187	14,179	3,579
2.4.2 Sewage collection and disposal network	(568)	14,658	14,090	7,957
2.4.3 Sewage treatment	(730)	19,503	18,773	-
2010/11 2.4 Total	(1,306)	48,348	47,042	11,536
2009/10 2.4 Total	(1,406)	48,622	47,216	12,863

Environment

2.5 WASTE REDUCTION AND ENERGY CONSERVATION

Sustainability is about having the ability to meet our needs now and into the future.

A truly sustainable city meets its energy needs from renewable supplies. It uses resources efficiently, and it finds ways to re-use or recycle instead of adding to the amount of rubbish sent to landfills.

As Wellington continues to grow it is important that the waste management actions that we take today does not have a negative impact on future generations. We already take a number of steps to ensure Wellington is a sustainable city. These steps include:

- Developing a 2010 climate change action plan with a dual focus on reducing emissions and preparing for the impacts of climate change.
- Providing household recycling collections in suburban areas and the CBD.
- Providing weekly rubbish collections from households and daily collections in the CBD.
- Operating the Southern Landfill, including a transfer station, a Second Treasure Shop where second-hand items can be dropped off, and facilities for collection and disposal of hazardous waste.
- Managing the city's 30+ closed landfills to reduce any environmental impacts.
- Providing residents with information about waste reduction, and carrying out research about the impact of waste on the city.
- Operating a Kai to Compost programme in which food waste from restaurants and cafes is composted.
- Enforcing waste bylaws (which can include fines for disposing of waste in inappropriate ways).
- Promoting energy and efficiency in our own operations and city-wide, including encouraging use of renewable energy sources.
- Developing more accurate systems for monitoring and reporting on greenhouse gas emissions systems.
- Offering \$300 grants to households for installation of sustainable energy solutions (such as solar water heating). In 2009 we amended the District Plan to remove barriers to the installation of solar water heating systems.



We're making changes to the way we collect recycling.

Last year we reviewed options around kerbside recycling services. As a result of the review we are changing our recycling and collection service to meet more robust health and safety, and environmental standards.

Later this year we're moving to fortnightly kerbside collection of recycling materials in wheelie bins. Residents will get a free 140 litre wheelie bin and will be able to mix together: clean paper and cardboard; washed and squashed plastics; tin and aluminium cans. On alternate weeks, we'll collect glass in the existing green recycling bins. These changes should significantly reduce worker injuries and the amount of recyclable materials going to landfills.

We estimate that 12,000 of the city's 57,000 households won't be able to use the wheelie bins because of steep or difficult access, so they'll be given a see-through recyclable bag for their plastics, paper and metals.

Note there is no budget impact resulting from this change.

We're planning several new projects as part of our Climate Change Action Plan.

The Climate Change Action Plan – in addition to the initiatives referred to previously – includes five additional projects:

- Climate change vulnerability assessment – we'll gather information about the potential impacts of climate change on Wellington, so we can take a strategic approach to preparing for and responding to those impacts.
- Electric vehicles – we plan to work with funding partners on a pilot programme aimed at facilitating uptake of electric vehicles in the city.
- Council Energy Management Programme – since 2007 we have saved about \$50,000 annually through a programme of energy efficiency initiatives in Council operations; we are planning to continue and expand on this programme (existing funding runs out in 2010/11).
- Business energy programme – eMission – we're supporting a programme encouraging businesses to reduce energy consumption and associated emissions.
- Home energy saver programme – we're planning to provide incentives to households for low-cost energy retrofits targeting energy efficient lighting, low flow shower heads and hot water cylinder wraps. This project will begin in 2011/12. In 2010/11 we'll participate in the 'Commonwealth Climate Challenge' project as a lead-in to the Home Energy Saver Programme. The project – run by the Royal Commonwealth Society – involves 12 households in 12 cities in 12 commonwealth countries monitoring and reducing energy and greenhouse gas emissions.

A copy of our Climate Change Action Plan is available on our website www.Wellington.govt.nz.



Environment

We're also planning to support sustainable schools as part of the Enviroschools Programme.

We have budgeted for a one-off funding contribution to support a local facilitator to work on the Enviroschools programme. The programme aims to engage young people to create sustainable schools and communities. Under the programme, students and teachers work with an Enviroschools facilitator as they plan and take action to move towards sustainability. Examples of the types of projects undertaken by Enviroschools students include planting/restoration projects, waste and energy audits, and learning programmes.

The funding is one-off while we work with Enviroschools on funding options for the next three years.

In addition, during 2010/11 we will continue to expand our waste minimisation programme with the funding we receive from the waste minimisation levy administered by the Ministry for the Environment, and work with other local authorities and the private sector on the development of technology to process biosolids to divert this waste being landfilled.



MEASURING OUR PERFORMANCE

Our targets for 2010/11 are:

- 85% of residents use recycling collection services weekly and 85% of users are satisfied with the service.
- Collect 12,500 tonnes of kerbside recycling and 12,000 tonnes of kerbside waste.
- 50% of residents use waste collection services weekly, and 85% of users are satisfied with the service.
- Achieve landfill resource consent compliance.
- No more than 84,000 tonnes of waste is sent to landfill.
- 16,500 tonnes of recyclable material is diverted from the landfill.
- 8GWh of energy is generated by burning gas from the Southern Landfill.
- The Council's corporate energy use (electricity and natural gas combined) is no more than the following: Civic Complex 7,319,700 kWh; pools and recreation facilities 15,858,500 kWh; and Convention Centre 4,110,900 kWh.
- 90% of residents agree that waste management services provide good value for money.

We have agreed an interim target of reducing the city's greenhouse gas emissions by 3 percent by 2013. We have also set a longer-term target to reduce the city's greenhouse gas emissions to 30% below 2001 levels (1,178,794 tonnes) by 2020. We also aim to reduce our corporate gas emissions to 40% below 2003 levels (22,959 tonnes) by 2020.

WHAT IT WILL COST

2.5 WASTE REDUCTION AND ENERGY CONSERVATION	OPERATING EXPENDITURE 2010-2011			CAPITAL EXPENDITURE 2010-2011
	INCOME (\$000)	EXPENDITURE (\$000)	NET EXPENDITURE (\$000)	TOTAL (\$000)
2.5.1 Energy efficiency and conservation	-	201	201	181
2.5.2 Waste minimisation, disposal and recycling management	(9,232)	8,483	(749)	510
2.5.3 Closed Landfills Aftercare	-	704	704	-
2010/11 2.5 Total	(9,232)	9,388	156	691
2009/10 2.5 Total	(9,238)	9,657	419	512

Environment

2.6 ENVIRONMENTAL CONSERVATION ATTRACTIONS

Nature is part of the visitor experience in Wellington.

Wellington Zoo and Zealandia (the Karori Sanctuary) play crucial roles in attracting visitors to Wellington. The popularity of both of these attractions is based upon their wildlife conservation and educational programmes.

Zealandia has a 500-year vision for the restoration of pristine native forest and bird life, and is visited by about 65,000 people a year, while the Zoo has an extensive programme of breeding and rearing endangered species from New Zealand and abroad.

We support these attractions by:

- providing Zealandia with land and loans to develop new visitor facilities
- funding Wellington Zoo (which attracts more than 160,000 visitors each year).

We will also work with the Wellington Marine Conservation Trust to determine whether it is feasible to establish a new marine centre at the former 'Maranui Depot' site in Lyall Bay.

In 2010/11:

- We will continue to redevelop the Wellington Zoo into an interactive, unique, dynamic, and accessible visitor experience. We will start construction on the "Meet the Locals" project that exposes visitors to native wildlife and conservation values, start planning for a new sun bear exhibit, and start the 'Hub Project'. The 'Hub Project' will create a recreation and relaxation area in the centre of the Zoo, which will allow visitors to orientate and relax as they continue their Zoo visit.

Other smaller projects such as the redevelopment of the lion dens will allow for better animal management and breeding potential.

We're also increasing our funding support to the Wellington Zoo Trust to maintain market rates for staff salaries.

- Zealandia – the Karori Sanctuary Experience has opened its interactive visitor centre – the first facility fully dedicated to showcasing New Zealand's natural history. The centre is expected to attract more visitors, contributing to the sanctuary's goal of becoming self-funding.



MEASURING OUR PERFORMANCE

Our targets for 2010/11 are:

- At least 187,810 visitors to the Zoo and 144,201 visitors to Zealandia – the Karori Sanctuary Experience.
- At least 6,000 school students visit Zealandia – the Karori Sanctuary Experience (including ‘Outreach’).
- At least 9,000 school students participating in the Zoo’s ‘Learning Experiences Outside the Classroom’ sessions.

Performance targets for the Zoo are included in the council controlled organisation section of this plan – see the appendix.

WHAT IT WILL COST

2.6 ENVIRONMENTAL CONSERVATION ATTRACTIONS	OPERATING EXPENDITURE 2010–2011			CAPITAL EXPENDITURE 2010–2011
	INCOME (\$000)	EXPENDITURE (\$000)	NET EXPENDITURE (\$000)	TOTAL (\$000)
2.6.1 Zoo	-	3,921	3,921	2,147
2.6.2 Karori Sanctuary	-	1,416	1,416	-
2010/11 2.6 Total	-	5,337	5,337	2,147
2009/10 2.6 Total	-	5,892	5,892	2,809

Environment

2.7 QUARRY

The Kiwi Point Quarry provides a building block for Wellington's infrastructure.

Growing cities need a reliable source of reasonably priced aggregate for infrastructure needs such as road construction.

We own the Kiwi Point Quarry located in Ngauranga Gorge. Every year around 250,000 tonnes of rock are extracted. By owning the quarry we can secure direct access to a constant supply of product and retain a degree of influence over the price of that product in the local market. It also means that we can control use of the site. Long-term, we aim to restore the quarry's environment.

MEASURING OUR PERFORMANCE

Our targets for 2010/11 are:

- Achieve compliance with all District Plan, resource consent and quarry licence requirements.
- Achieve the commercial objectives of the Quarry.

WHAT IT WILL COST

2.7 QUARRY	OPERATING EXPENDITURE 2010-2011			CAPITAL EXPENDITURE 2010-2011
	INCOME (\$000)	EXPENDITURE (\$000)	NET EXPENDITURE (\$000)	TOTAL (\$000)
2.7.1 Quarry operations	(398)	220	(178)	-
2010/11 2.7 Total	(398)	220	(178)	-
2009/10 2.7 Total	(398)	285	(113)	-