

# **Building Sustainable Communities:**

Kāpiti Coast's Greenest Street 2010-12

Increase resilience

**Build community** 

Reduce your environmental impact



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# Kāpiti Coast's Greenest Street 2010-12

Prepared for the Kāpiti Coast District Council

by Stacey Gasson, Sustainable Communities Coordinator.

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**Commonsense Organics** 

Edible Backyard

Falcon Plastics

The Hikurangi Foundation

Interislander

Jan Logie, MP

LovePlantLife.com

Nga Uruora Kapiti Project

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Paekakariki Xpressed

Paraoa Bakehouse Ltd

Robert Vale

RubbishFree.co.nz

Tauranga Environment Centre (now Envirohub BOP)

**Tree Crops Association** 

Unwined

Yealands Estate



### **Foreword**

I am proud to have been involved with *Kāpiti Coast's Greenest Street*. The initiative was brought about thanks to our Council's commitment to supporting environmental sustainability and improving social wellbeing, as set out in our Long Term Plan. I also had the honour of being a judge for both rounds of the competition and saw firsthand the marvellous journeys taken by each of the 'streets'.

'Greenest Street' (now called Greenest Neighbourhood) brings together an unusual but complementary combination of ingredients in a way that, to our knowledge, has not been done elsewhere.

Measuring our environmental footprint brings the effect of our lifestyles into sharp relief, and tells us which actions have the greatest impact. Furthermore, it enables comparisons that get participants thinking about the wider world and the global effort that is needed to share and use the Earth's resources fairly and sustainably.

Competing as neighbourhoods extends involvement to include people who would not usually take an interest in environmental issues, and provides strong practical and moral support to those

people seeking to make positive changes. It also brings the community together for a shared purpose, building connections between people: connections that improve the quality of daily life, whether it is a friendly wave, a chance for a good chat, or a helping hand when you really need it.

As connections are built, community resilience increases. Research into major disasters



Mayor Jenny Rowan (centre) with resident Janet and judge Joy Darke at Avion
Terrace's final tour.

has shown that communities with more trust, civic engagement, and stronger networks can recover better after a crisis than fragmented, isolated ones. When disaster strikes, it is local residents and neighbours with knowledge of their social and geographical communities who are first on the scene, not trained emergency personnel. And in the weeks and months that follow, variations between responses to the challenges of recovery aren't explained by the scale of damage or the amount of external aid provided, but the strength of the communities and their connectedness prior to the disaster. 1.

The competitive element adds another driver for people to get involved, provides structure, and creates interest for the general public. By promoting the activities and experiences of the streets and individuals participating, the effects may spread as other residents are inspired to take environment and community action of their own.

Finally, the Council's involvement, particularly via the Sustainable Neighbourhoods Co-ordinator, 'Green Team' experts and grants programmes, provides practical support to the streets. This ensures they have the best opportunities to reduce their footprint and make their great green ideas for their households, neighbourhoods and communities a reality.

This report shares the rationale, process and outcomes of the first two rounds of Kāpiti Coast's Greenest Street, and recounts some of the many stories and lessons gathered along the way. We hope it will be both inspiring and useful to you in a personal or professional capacity, and may even inform a template for a similar initiative of your own. The examples of each of the seven streets show us that we can all build more resilient, sustainable communities and be the kind of neighbours we'd all want to live next to.

Mayor Jenny Rowan QSO JP

Kāpiti Coast District Council

References:

<sup>&</sup>lt;sup>1.</sup>Aldrich, D. (June 2010), Fixing Recovery: Social Capital in Post-Crisis Resilience, forthcoming article for Journal of Homeland Security. Available at web.ics.purdue.edu/~daldrich/?page\_id=102



Kāpiti Coast's Greenest Street is a nine-month competition between groups of neighbours ('Streets') from across the Kāpiti District. They compete to be the 'Greenest' with the support and assistance of the Kāpiti Coast District Council.

The competition has been developed with a dual vision: encouraging Kāpiti residents to consider pressing local and global environmental problems, and supporting households and neighbourhoods to respond to those problems through increased resilience and shared resources. These two themes, the environment and social wellbeing, bolster each other.

Ecological footprinting is at the heart of the competition. Individuals participating in each Street measure their ecological impact at the beginning and end of the nine-month period to get a Street average. In between, participants are encouraged to make positive lifestyle changes aimed at lowering their environmental impact and increasing their resilience, by strengthening community ties.

Footprinting is coupled with qualitative measures of community to create a competition judging structure that encourages both individual and collective action.

The first round of the competition was launched in mid November 2010 and ran until late June 2011. Four Streets entered: 'Kakariki Street', Paekākāriki; Rainbow

"The Greenest Street competition continues to amaze. It gets under the skin of a street and brings out the best in people.

It turns out we can all be the neighbours we would want to live next to – those that care about each other and their impact on our shared planet."

Liana Stupples, 'Greenest Street' judge 2010-12,
Director at Aratika insights outdoors,
Former Chief Executive at The Hikurangi
Foundation.



Rainbow Court residents and competition judges at their launch event, November 2010.

Court, Raumati South; Avion Terrace, Raumati Beach; and Te Roto Road, Ōtaki.

The second round ran from early October 2011 to early June 2012, attracting three Streets: Wellington Road North, Paekākāriki; Grange Park Ave, Raumati South; and Alexander Road North, Raumati Beach.

The groups ranged in size from seven households (Alexander Road) to seventeen households (Avion Terrace), with a total of eighty-four households completing the competition over the two rounds. They represented a varied cross-section of the Kāpiti community: young families, retirees, rural, urban, commuters, long-term residents and new arrivals.

With just nine months to tackle the ambitious goals they set for themselves, all of the Streets excelled. Several projects were implemented beyond the scope of anything the organisers would have suggested. All seven achieved a significant reduction in their environmental footprint and stories abounded of new connections being made between neighbours, evolving into friendships.

This report explains the rationale for the initiative, both for the organisers at Council and the participants, in the first section titled 'Rationale'. How the competition worked is detailed in the next section, 'Process'. The experiences of the individual groups are recounted in 'Street Stories' and the overall outcomes are discussed in 'Outcomes and Effects'. Finally, what the Council learned from its experiences and participants' feedback, and plans to do differently in the future, is in the final section, 'Going Forward'.

### What is a Street?

For the purposes of the competition a Street is defined as: "Any grouping of ten or more households in the same locality (in a built up area this is defined as where no property is more than fifty metres from at least one other in the group, but can be further for rural communities)."

In practice, households can be (and have been) located on more than one physical street, provided they are within fifty metres of another participating household. Restricting the distance between households is designed to create groups which function as a neighbourhood due to regular and informal contact. These physically close groups are also likely to provide support in case of an emergency.

The minimum size requirement establishes groups with a breadth of skills, physical resources, and ideas. Larger groups are able to share competition-related tasks between members, can take on bigger projects, and are less impacted by attrition.

Groups which meet some, but not all, of these criteria may still be considered at the discretion of the organisers.

Interestingly, all seven 'streets' to date have been cul-de-sacs (i.e. dead end streets or the culminating end of a longer street).

# What is an Environmental Footprint?

An environmental footprint is a way of measuring how much of the Earth's resources we each take up. It considers different elements of our lives and expresses them as the land area (in global hectares) needed to support them. Footprints can also be expressed as 'Earths' - the number of Planet Earths that would be needed if all the world's seven billion people had the same ecological impact as the person being footprinted.



### 2.1 Motivation for the Council

### Commitment to Sustainability and Resilience

The Council has an ongoing commitment to increasing sustainability and resilience in the district. The *Long Term Plan 2012 - 2032* centres this commitment on the indisputable link between the state of the natural environment and community wellbeing.

The latest environmental indicators (globally, nationally and regionally) suggest that the quality and viability of the natural environment is declining in a number of ways. The community depends on the natural environment for its wellbeing, so an increasingly degraded environment threatens the very foundations of wellbeing.... These natural limits to community wellbeing can, at least partly, be forestalled if the community adopts more environmentally sustainable practices that place less burden on the natural environment. (LTP 2012-32, p.157)

Council activities to support environmental sustainability focus on providing advice, education, and practical assistance to encourage community action and behaviour change. Another focus is improving community resilience — the development of closer community ties through shared activities, improved community health, environmental sustainability and greater energy independence.

Funding community sustainability support programmes is one way the council works toward fulfilling its commitment to increased sustainability and resilience. These include a Waste Minimisation Officer and grants programme, the Green Gardener, the Green Plumber, Sustainable Neighbourhoods Co-ordinator, and Energise Ōtaki, as well as the Greenest Street competition itself (more information on the Council's sustainability commitment can be found in Appendix 2).

### Neighbourhood and Street Action for Change: Energy, Waste, Water, Gardens and Food

"The Council is committed to finding ways to encourage neighbourhood and street action around water consumption, water efficient gardening and waste minimisation, given the aspirations of the community around resource use and the direct effect of a range of Council services. Household energy efficiency is extremely important given the impact on household incomes and the implications of wider affordability for the District. There is also increasing interest in community gardens and food production which the Council has the opportunity to support.... Council will continue to encourage groups to take action, providing information, providing land for community gardens, planting fruit trees on Council roads and parks, and helping capture funding for projects."

Long Term Plan 2012 - 2032, Kāpiti Coast District Council, Part One, p.41

### Facilitating Change

The Greenest Street competition provided a new and effective mechanism for delivering the Council's wide range of existing community sustainability support programmes. Entry to the competition reinforced community identity and encouraged group action by forging social connections and delivering practical assistance. The competition identified interested households for service delivery, and their collective engagement facilitated social and practical support for implementing change.

For example, the Waste Reduction Grants are available to community groups engaged in waste reduction activities leading to long-term change. Five of the seven competing households took up the available funds.

As entrants in the competition, they had already established the necessary "group of five or more households" and were aware of the fund through the Sustainable Communities Coordinator (SCC).

The SCC provided support and, in the case of two Streets, engaged the assistance of the Waste Minimisation Officer for a group waste audit. The group audit gave them a good idea of where to best invest the funds and created gentle social pressure to implement and maintain waste reduction strategies.

Alexander Road posted this blog entry about one of their waste reduction projects:

Yesterday saw the building of our second biodigester ... Hannah, the Council's Green Gardener, came equipped with hers from home to show us the finished product.... We all had a hand in building the biodigester which will be used to turn our nasty weeds that don't go into the compost into a valuable liquid feed for our gardens. Once we receive our grant application monies from KCDC's Waste Minimisation Fund we will hold a production workshop to literally roll out our street barrels.<sup>1</sup>



Close supervision for Alexander Road's biodigester building.

Publicising participant experiences like this personalised the green 'story', and has been effective in encouraging others to access the fund and implement similar waste reduction methods. This was also

true on a broader level as other inspiring examples were shared with the public, normalising 'green' behaviours both within the groups and the wider community.

'Kakariki Street' explained it well:

The conversations with wider Paekakariki (and beyond) are very important because that's how a lot of change happens, through word of mouth. People are seeing that it's do-able, and fun. Rather than a 'greener-than-thou' sort of attitude which turns people off, it's seeing ordinary people doing ordinary things, practicing rather than preaching.<sup>2</sup>

### Providing Structure to Support Action

Willingness to participate indicated alignment with the values of the competition, but the formal elements introduced by the Council encouraged immediate action. These included group structure, a

fixed timeframe, measurement tools, support and advice, prize money and the prospect of being judged.

As Steve from 'Kakariki Street' said:

Over all, the green street experience has been helpful and beneficial in connecting with others and getting things done, which otherwise would have been put further down the 'to do' list or put off indefinitely.<sup>3</sup>



'Kakariki Street' launches.

The requirement to compete as a Street also increased the diversity of participants beyond those who were motivated by the environmental focus of the competition (the 'already converted') to draw in those enthused by competitive or social elements. Some participants joined in, either formally or on an ad hoc basis, purely to meet with their neighbours or support a community activity. However the discussion, role-modeling and normalisation of green behaviours that followed increased the likelihood that this 'unconverted' group would engage in behavioural change.

### 2.2 Benefits of Council Leadership

### **Publicity**

Council leadership increased the number of avenues available to publicise the competition. In addition to media releases to local, regional and national news media, the Council was able to purchase space for a regular Greenest Street newspaper column (in the second round), had a Greenest Street slot on local radio, made extensive use of *On To It* (its own sustainability-focused newsletter), and covered the competition in its 'Kapiti Update' feature in local newspapers.

### Staff Support

The most significant benefit of Council running the competition was staff support. The project was implemented by the Sustainable Communities Coordinator (SCC), and overseen by the Senior Advisor for Climate Change and Energy. The amount of time spent on the competition was demand-dependent, but at key times like the launch or finale it was the SCC's primary activity.

Dedicated staff provided participants with a direct contact within the

Council and an advocate when dealing with other agencies. Having someone aware of their activities and involved at a hands-on level also assisted with finding resources (such as supportive and skilled people, related other projects, networks, materials, suppliers and useful information). The SCC's role extended to compiling a list of useful online resources, finding prizes, helping with blogs, designing surveys, and publicising the competition in mainstream and in-house Council media.



Mike from 'Kakariki Street' shows his rainbarrels to judge Kevin Milne.

The value of direct support and encouragement was reflected in participants' final comments, with six of seventeen respondents in 2011 adding additional comments to note the value of staff support.

### Filling Gaps

Council support and advice broadened the range of activities and helped to fill knowledge and skill gaps. Being able to ask for help from someone 'whose job it is' could be the influencing factor in getting a project started.

In the second year of the competition, the range of community sustainability support programmes ('Green



Grange Park neighbours catch up at the final judges' tour.

Services') provided by the Council was emphasised in a list of workshops that staff (and supportive members of the community) could provide (Appendix XX). These were similar to what was available to the wider community, but presented in a summarised format.

### 2.3 Motivation for Individual Participants

### Diverse Motivations

Motivation for joining the competition over the two years, as ranked by the thirty-four participants who completed the final survey, was as follows (participants were able to tick as many answers as applied to them):

Table 1: Participants' motivations for joining the competition

	Yes, definitely	Yes, a bit	No, not me
It sounded like fun (2011/12 question only)	64.7% (11/17)	17.6% (3/17)	0.0% (0/17)
To get to know my neighbours better / build community	61.8% (21)	35.3% (12)	5.9% (2)
To reduce my impact on the environment	52.9% (18)	41.2% (14)	2.9% (1)
Because my neighbours were doing it	32.4% (11)	50% (17)	11.8% (4)
To get extra help/services from the Council	17.6% (6)	41.2% (14)	32.4% (11)
To win the 'Greenest Street' title for my Street	11.8% (4)	38.2% (13)	38.2% (13)
Others in my household had joined	8.8% (3)	14.7% (5)	64.7% (22)
To help win the \$3,000 prize	2.9% (1)	32.4% (11)	55.9% (19)

Other reasons participants offered were:

- a united group presented the opportunity to try some large communal projects
- desire for an adult perspective on how changes can be made

(from someone who works with children and environmental education)

- to build a street civil defence support network
- curiosity and the feeling that it was "a good thing to do"
- it seemed like a logical extension of their existing street's activities

### Environmental Concerns

Addressing environmental problems was a common aspiration for many participants. Approaches to reducing environmental impact (e.g. reducing power use, supporting clean energy, conserving water, reducing waste, using sustainable transport, preserving and enhancing biodiversity, reducing meat consumption, etc) are likely to bring additional benefits for households in the form of financial and lifestyle gains.

### Council Support

By working as a community group, the Streets were more able to access the services of the Council. For example, the Council's Waste Reduction Grants opened at about the same time as the competition commenced. Applying for and receiving support for their waste reduction projects enhanced group identity, gave Streets an early focus, and provided a tangible benefit from the competition. Other services available to groups included the range of workshops offered by Council experts and others.

From the perspective of Street organisers, having a formal structure and Council involvement often made it easier to approach their neighbours about the competition and related community projects. Council involvement (and the availability of funding) provided a sense of legitimacy, a defined purpose, and a competition end-date. The structure and its associated documentation and processes was felt to be overly formal by some participants, but volunteer theory would support the value of spelling it out (see box: 'Links with Volunteer Theory').

### 2.4 Benefits for Individuals and Communities

### Health and Wellbeing

Healthy lifestyle changes can have positive effects on the physical wellbeing of participants (e.g. warmer homes, homegrown food, and active modes of transport such as walking and cycling). There are also links between the health of the natural environment and human

### Links with volunteer theory

A volunteer is someone who gives their time, unpaid, to benefit those other than close family. Elements of volunteer theory can be applied to the Greenest Street Competition, particularly if participants are joining the competition to support their neighbours. The theory suggests that potential participants who feel uncertain may be encouraged by knowing more specifics about expectations - what it's for, what's involved, and the commitment timeframe.

A nation-wide survey of volunteering and charitable giving in the UK in 2006/07 found that volunteers reported a range of pragmatic and altruistic reasons for starting to volunteer (Low et al, 2007). Many were similar to those reported by Greenest Street participants. Just over half of the volunteers (53%) got involved because they wanted to improve things or help people. For 41%, it was because the cause was important to them. Social aspects of volunteering were also important, with 30% getting involved to meet people or to make new friends.

A report by the Canadian Centre for Philanthropy found that one barrier was constant among volunteers in all age, income, and employment-status groups: unwillingness to make a year-round commitment (McClintock, 2004). Other research found that organisations get the best effort from their volunteers when those volunteers "have clearly defined roles, understand those roles, and feel a sense of confidence in their ability to fulfill their roles." (Dorsch et al, 2002)

### References:

Low, N.; Butt, S.; Ellis Paine, A.; Davis Smith, J.; 2007. *Helping Out: A national survey of volunteering and charitable giving*. Prepared for the Office of the Third Sector in the Cabinet Office by the National Centre for Social Research and the Institute for Volunteering Research.

McClintock, N., 2004. Canadian Volunteers: Using the National Survey of Giving, Volunteering and Participating to Build Your Volunteer Program.

Canadian Centre for Philanthropy. http://www.givingandvolunteering.ca/files/giving/en/reports/understanding\_volunteers.pdf

Dorsch et al, K., 2002. What Determines a Volunteer's Effort. Canadian Centre for Philanthropy and Volunteer Canada.

health, such as air and water quality and having quality natural spaces for people to enjoy.

### Sharing Skills

By working collectively, participants expanded the range of skills and abilities available to them, made more efficient use of their resources (including time and tools), and provided each other with support and encouragement.

### Creating Community Resilience

While individuals and households may initially be motivated to reduce their impact for environmental or financial reasons, it can be difficult to persist when working in isolation. Hence, competition judging included an overt challenge to compete as a community. Getting to know the neighbours and working together for a common goal was key to the competition's second core focus - social cohesion and resilience.

Resilience can be hard to assess until things become difficult (see box: 'Resilience Versus Adaptability'). However, a study in Toronto, Canada found that neighbourhood characteristics have an important bearing on the mental wellbeing of its members:

Participants reported that some of the most important items for good mental wellbeing included friendliness of neighbours, sense of community, interaction between neighbours, neighbourhood governance, and residents being involved in neighbourhood change.<sup>4</sup>

Improved social networks and community involvement can lead to positive health benefits and increased trust within communities. Social connections can make a crucial difference to the ability to cope in a crisis situation and may be a literal lifesaver.

### Disaster Preparedness

Against the backdrop of the Christchurch earthquake, local examples of strong communities faring better in the aftermath of a disaster reinforced the benefits of well-functioning communities.

Rhys Taylor, Christchurch resident, national co-ordinator of the Sustainable Living Education Trust, and volunteer with the Greening the Rubble project, said,

In the 2010 to 2011 year, we tested a new component of our Sustainable Living classes which connected closely with civil defence. This was a session on community resilience which

### **Resilience Versus Adaptability**

The concepts of resilience and adaptability are sometimes used interchangeably, however, for the purposes of Greenest Street, adaptability is purely about reacting to change. This reaction may be positive or negative, and does not necessarily lead to resilience.

Walker et al. (2004) have defined resilience as the ability of people or systems to recover from disturbance and reorganize so as to retain their essential structure, function, and identity. In more practical terms, it is our ability to "remain optimistic in the face of adversity, stress, and pressure".

Adaptability is the ability to recognize change and adjust one's attitudes, beliefs and behaviors accordingly. Adaptation responses can either help to build resilience or undermine it (Walker et al., 2004).

Resilience can be hard to assess while things are going well, but it determines how quickly we get back to a 'steady state' when things go wrong (Buckwalter, 2011). Buckwalter says the core components needed to build resilience are strength, meaning, and pleasure. The Greenest Street competition seeks to nurture these components, and therefore build resilient neighbourhoods, by encouraging meaningful activities and positive relationships.

It is hoped that the information, education and skills available to participants will support a positive adaptation response when challenges occur in the shape of environmental, climate, and community change.

### References:

Walker, B., C. S. Holling, S. R. Carpenter, and A. Kinzig. 2004. 'Resilience, adaptability and transformability in social—ecological systems'. *Ecology and Society* **9**(2): 5. [online] URL: http://www.ecologyandsociety.org/vol9/iss2/art5/

Buckwalter, Dr. G. 2011. 'My Definition of Resilience'. [online] URL: http://www.headington-institute.org/Portals/32/Resources/resilience-definition-12-1-2011.pdf

explored how living in a more sustainable way prepared you for coping with natural disasters.

Two of the evening class groups who tried out this new topic...were based in Sumner and New Brighton. These suburbs were subsequently badly affected by the earthquakes and class participants told me later that their study sessions had left them well prepared.<sup>5</sup>

### Wider Community Benefits

While the competition focus was firmly on neighbourhoods and households, it offered a range of benefits for wider communities. Examples included Wellington Road's rat-trapping project and

community composting facility, Rainbow Court's community garden, and Kakariki Street's partnership with Chill-Ed, a local community education initiative.

Other direct benefits arose when projects created a new community resource or implemented a positive change on behalf of the district. For example, Alexander Road's bid to remove polystyrene trays from local supermarkets,



The legendary Nanny Pamela, a Rainbow Court gem, at the final tour.

Wellington Road's community composting facility, and Grange Park Ave and Kakariki Street's community mulchers.

Less directly, the types of activities the Streets engaged in, such as energy and water conservation, waste reduction and recycling, tree planting, composting, carpooling and food growing, had positive spill-over effects for the district. They reduced the demand for natural resources, reduced pollution, and enhanced biodiversity.

Publicising the achievements of the competitors to the wider community will spread the core messages of the competition: environmental sustainability and community resilience. Ideally, this will multiply direct and indirect community benefits by encouraging non-affiliated neighbourhoods and households to implement similar positive changes and projects.

By encouraging neighbours to get to know each other, learn new practical skills, lower their environmental impacts, and be more self sufficient, we are preparing them in the best way possible for the future. Natural disasters will inevitably happen and resources are likely to become constrained, so the need to conserve and protect the environment will only become more important.

### References:

- www.alexrdgreenfrogblog.wordpress.com/category/communityworkshops/ page/4
- <sup>2.</sup> 'Kakariki Street' final summary
- <sup>3.</sup> www.kakarikistreet.wordpress.com/2011/06/17/the-bright-household
- <sup>4</sup> Davis, A. (2012), 'Essential Evidence on a page: No 78 Neighbourhoods and mental well-being', Bristol City Council. Referencing O'Campo, P. Salmon, C., Burke, J., 2009, 'Neighbourhoods and mental well-being: What are the pathways?'. *Health and Place, 15: 56-68*.
- <sup>5.</sup> On To It: great ideas for a sustainable Kāpiti. Newsletter of the Kāpiti Coast District Council, December 2012, p. 1-2.



### 3.1 From Philosophy to Action

The philosophy underpinning the Greenest Street competition is encapsulated in the *Long Term Plan 2012 - 2032*: supporting environmental sustainability by providing advice, education, and practical assistance to encourage community action and behaviour change. This philosophy was translated into a basic template – groups of neighbours working together to reduce their environmental footprint – and refined through experience.

### 3.2 Existing Models

Although existing models were explored, it seems that this was an original concept at least within New Zealand. The closest models found to date are:

### British Gas, 'Green Streets'

A year-long competition in which eight green-themed streets across the UK competed to reduce their domestic energy consumption. Each household received a budget of £3,750 to spend on a selection of energy-efficiency measures.

### Sustainability Trust, Wellington, New Zealand<sup>2</sup>

A charitable trust offering a range of services, including free advice on waste, energy, water and edible gardening, as well as workshops on waste minimisation, green parenting and keeping your home warm and dry.

### Sustainable Living, New Zealand<sup>3</sup>

Eight-session evening class series on practical actions to take at home for a lower-impact lifestyle. However, following the loss of Government financial support to non-qualification community education courses in 2011, this is being redesigned for home study and small neighbourhood groups. It continues as evening classes in regions where it has local council support.

### Transition Towns, United Kingdom<sup>4, 5</sup>

A network of communities working to build local resilience in response to peak oil, climate change, and economic instability using varied methods to reduce reliance on fossil fuels and work toward a lower carbon footprint. Transition Towns has spread globally from the U.K., including to forty-eight New Zealand towns and suburbs.

### 'Sustainability Street', Australia<sup>6</sup>

A community program for groups of neighbours to learn about sustainable living and create community projects. The program was developed by the environmental education company Vox Bandicoot Pty Ltd in 2001 and has been run in over 200 communities in Victoria, New South Wales, Adelaide and Perth.

### 'Eco-My-Flat' Competition, Christchurch<sup>7</sup>

Run annually since 2007, Canterbury University students competed to 'green up their flat'. More recently, participants said the competition aspect was not as important as building a sense of community with other interested students, so the competition was dropped in favour of a free workshop programme with sponsored goods and vouchers.

### 'Green and Clean' Competition, Surabaya, Indonesia<sup>8</sup>

An example of a 'green streets' competition in a developing country, one of several instigated by the Surabaya City government in 2005 to popularise and extend community education programs focussed on waste management. Participants worked as a kampung (urban settlement organised around a shared street) to 'better manage their living environment' through waste management, recycling, cleanliness, greenery, and hygiene. Participants received cash and tools to assist them, and prize money for further kampung improvements.

### 3.3 What Makes Greenest Street Unique

Kāpiti Coast's Greenest Street shares characteristics with all of these, but combines them to create something distinctive.

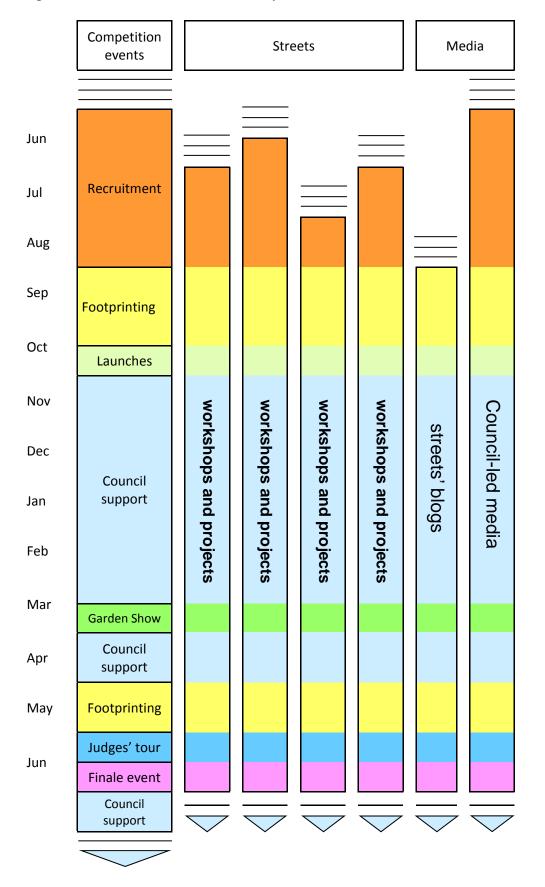
### **Key Features:**

- competitive element
- attention to environmental impact, not just carbon
- use of qualitative and quantitative tools to measure progress
- emphasis on action over education
- focus on behavioural change as much, if not more, than technological fixes
- working with neighbourhoods rather than individuals, households or larger communities
- an open brief for becoming 'greener'

### 3.4 Competition Structure

The following discussion looks at the operational aspects of the competition to date. The diagram below summarises the process. Some proposed changes are discussed in the 'Going Forward' section.

Figure: Structure of the Greenest Street competition 2010 - 2012



### 3.5 Recruitment by Council

### **Publicity**

The Council began advertising for interested Streets for the first round in early August 2010, including:

- a quarter-page ad in local newspapers (Appendix 4)
- extensive coverage in On To It the Council's sustainability newsletter (Appendix 5)
- interviews with the Sustainable Communities Coordinator (SCC) on local radio (Beach FM)
- promotion on the Council website
- a presentation to each of the district's community boards
- contacting all streets who had had a Green Gardener visit
- notices in school newsletters
- · fliers at district libraries and service centres
- items on the Council's in-house news system
- columns in the *Kapiti Observer* (Appendix 6)
- press releases to local newspapers and radio
- · directly contacting individuals in our networks
- use of community networks (e.g. Transition Towns, Neighbourhood Support, Raumati South Residents' Association, Te Wānanga o Raukawa, community boards)

### Streets for 2010/2011

The original intent was to commence the competition at the start of October with five Streets representing the major communities in the district (Paekākāriki, Raumati, Paraparaumu, Waikanae, and Ōtaki). However, registrations of interest were slower than expected, with only four received by early September.

The deadline was extended in the hope that a Waikanae Street could be found (Appendix 7), but none came forward. The competition proceeded with four Streets in early November. While the registered Streets used the delayed start to organise themselves, it did mean the competition actually only ran for eight months.

The competing Streets for 2010/11 were Kakariki St, Paekākāriki; Avion Tce, Paraparaumu Beach; Te Roto Rd, Ōtaki; and Rainbow Court, Raumati South.

### Changes to Recruitment for 2011/12

Key changes to the recruitment process for the second round in 2011/12 were to start earlier (in mid July 2011), set the launch date

prior to recruitment, reduce the newspaper advertising, and trial prerecorded ads on major local radio stations (More FM and Solid Gold).

Previous participants also promoted the competition to their personal contacts, Terena from Te Roto Road spoke to her local Rotary club to encourage another Ōtaki entry, and a stall was held at Rainbow Court's Spring Fair. The second round was also promoted at the district's Sustainable Home and Garden Show in March 2011, where the Greenest Street participants had a display.

### Streets for 2011/2012

Two registrations had been received by late August when further press releases were issued looking for a third Street. The registered Streets were keen to proceed regardless, but a third entry came forward a week before the scheduled launch in early October. Unfortunately, the three competing Streets were all located within a relatively narrow portion of the district.

Competing streets for 2011/12 were Alexander Road North, Raumati Beach; Grange Park Ave, Raumati South; and Wellington Road North, Paekākāriki.

### 3.6 Recruitment Within Streets

Within the Streets themselves, neighbours were canvassed either by doorknocking or a flier drop, inviting them to an initial street meeting to gauge interest.

### 3.7 Entering the Competition

In the first year Streets entered the process relatively 'cold'. Promotional material highlighted the key components of the competition, with details communicated by the Council through the 'Competition Rules and Entry Form' document (Appendix 8) and via street organisers. Of the four streets, Avion Terrace and Te Roto Road met as a group with Council staff prior to the competition commencing.

For the other streets, the first meeting with Council organisers was to complete the footprinting quiz. In retrospect, this was an intense introduction to the competition, which made the first meeting very busy. Many attendees were unable to complete the quiz on the day as they hadn't been primed to bring the necessary information about their homes and lifestyle and there were lots of general questions about the format of the competition.

### In the Beginning...

It all began one late spring morning when my car died. It was 8.30am, I had two kids to get to school, another two kids and a friend's kid to get to preschool, and a baby in tow. I phoned the friend to explain I wouldn't be able to pick up her daughter, popped two kids on pedal bikes, one on a balance bike, and two in the stroller, and headed out to do the drop-off the old-fashioned way.

Three hours later, baby and I crawled wearily up our driveway. It was then that I realised that in a few hours time I needed to get all the children (and two bikes) back home again. I also knew that with the best will in the world I wasn't going to be able to manage the school pickup and the preschool pickup on foot since they were too far away from each other to make it within the times they finished – and I didn't rate the four year old's ability to do a 5km bike ride after a busy day at school even if the six year olds were up to a 7km round trip.

Miles away from family and with no friends available I sat looking down from my study window at our neat suburban cul de sac and realised there wasn't a single neighbour I knew well enough to call on in this situation. It seemed ridiculous.

After phoning everyone I could think of and still turning up no options I got desperate enough to wake the baby and head down the road to knock on the door of a home where I thought I'd seen some people who picked up a child from the same preschool as my sons. It was a long shot but to my immense relief they were going to the preschool that afternoon and graciously agreed to bring my sons home with their grandson. Only minutes before school finished I finally got through to a teacher aide at the twins' school who was able to take her own children home and then bring mine and their bikes back to our house.

With all the crew safely home I was exhausted but determined to make some changes to my isolated life. That same day an email arrived in my Inbox announcing the Greenest Street Competition. The glimmer of an idea began to form.

A few days later the little boys and I set off down the street to knock on doors. I introduced us, handed out an information sheet about the competition and invited everyone to our place for coffee a few days later. It took about three rounds of door knocking to make contact with everyone, but by the time it was finished I felt like I lived in a whole different street. I had no idea what was going to happen with the competition but for the first time I could put names and faces to each letterbox and manicured front lawn.

Blog entry by Kylie, Rainbow Court, 2010.

### Households Dropping Out

In some cases, the footprinting was the last time a household formally engaged with the competition. Sometimes this was due to life changes but, for others, being introduced to the competition by a set of rules and somewhat technical quiz was intimidating and gave a skewed impression of what lay ahead.

These households often continued their involvement on a community level, as did a number of households who were active in their Street throughout the competition but never registered or completed either quiz. Rainbow Court was notable for finishing with twenty-one registered competitors but thirty-three participants, as defined by the Street organisers

### Changes to Entry for the Second Round

In the second round, to improve understanding of the competition process and intent, and ease participants in more gently, all interested streets had an initial meeting with organisers prior to the competition start. This also allowed Council staff to explain what information participants needed to bring in order to complete the footprint quiz. A FAQ sheet was created to present information from the competition rules in a more accessible format and to address common questions (Appendix 9). This was emailed to street organisers for distribution to their neighbours.

Interestingly, with 24% of surveyed participants in 2010/11 saying the competition was something other than what they expected, the changes to the introductory process instigated in 2011/12 reduced this figure by just 6%, to 16%. There was no repeat of the person who thought they had entered a garden competition, but it would suggest that either there is a very relaxed attitude toward the details of what they are signing up for or heavy reliance on word-of-mouth explanations.

### 3.8 Recruitment Challenges

Anecdotally, a range of reasons have been proposed for entries being lower and slower than hoped. Most commonly:

- the challenge of approaching your neighbours if you don't already know them well;
- the feeling that you have inadequate time to organise an entry, especially if you've become aware of the competition very recently;
- being keen but not wanting to be the organiser for your street;

- the short gap between rounds one and two meant people weren't always aware it was a new round;
- holding a stereotype of 'greenies' that didn't fit with your view of yourself and your neighbours; and
- the feeling that you're "not green/good enough" to enter.

The last two have been the most controversial among participants, with discussion typically focussing on the pros and cons of a name-change for the competition and whether it should be a competition at all:

...the description of the Competition as "Greenest Street" probably put a lot of people off entering the Competition. Perhaps it should be re-named 'Most Sustainable Street', or something similar." (Peter, Te Roto Rd, 2011)

I don't think it should be a 'competition' as I think that puts people off. They don't like the idea that they might not be 'good enough'." (Terena, Te Roto Road, 2011)

### Pros and Cons of Competition

Presenting the competition as an opportunity to engage with environmental issues in a fun, social, and supported context is an ongoing challenge for the competition organisers. At the end of round one, a key Street organiser commented,

...I think, speaking for our street, that we lost a few participants due to the relative passivity of the Council side at the initial meeting with the street and at our street launch. People were already a bit worried about the work involved and I think the impression given was that it was a serious, judged event in which we'd have to work hard to succeed.... (Kylie, Rainbow Court, 2011)

Other participants have also noted that the competition was more involved than they thought it would be, however this discovery wasn't always experienced as a negative: "It exceeded my expectations – it was more complex than I had initially thought and was well supported by Council" (Terena, Te Roto Rd, 2011).

With the same material available to them, some people will seize the concept and be enthused by it and others will find it intimidating. It does help if you have a green bent, given the overt environmental focus, but experience suggests that perhaps the key factor is having a vision for your neighbourhood and recognising the potential for the competition to advance it.

### What Do We Hope To Achieve?

You might ask why anyone would want to make the potentially considerable effort to be greener. I'm asking what being greener actually means.

We all want to get to know our neighbours better, and develop a sense of community and belonging. It's funny how closely we all live in our communities, without really knowing the people around us. The knowledge our neighbours have, the experience they bring and the differences that we may have to celebrate will make our community closer and more cohesive.

So what is being green all about? Kermit said it wasn't easy. For some of us, it's about making a choice to do without. For others, it's about doing things in a different way. We all consume resources and produce waste. Using fewer resources is a goal, and reducing the amount of waste we produce will be a benefit. We'll save money in not having to put as many bags of rubbish out, and potentially save money by not using as much energy in our homes and vehicles.

We're all fairly normal people on our street. We don't (all) wear sandals or go barefoot, keep chooks or grow our own veggies. We have cars and bikes, work, watch TV and eat food that may not be the healthiest. But we do want to see if we can make a difference and try to reduce our environmental footprint.

Blog entry by Robert, Grange Park Ave, 2011.

### 3.9 Footprinting

### Choosing the Quiz

Kāpiti Coast's Greenest Street used the online 'Ecological Footprint Quiz' developed by the Centre for Sustainable Economy<sup>9</sup>. While there are many quizzes available, this one was chosen because it included the broadest range of environmental issues, including energy and water use, consumption, diet, and waste.

The calculation provides the respondent with a total personal footprint, split into the areas of carbon, food, housing, and goods and services, and compares this to the averages for their country of residence. This was the only quiz found that allowed respondents to measure their footprint both in terms of the Earth's biological carrying capacity (global hectares), and in relation to other New Zealanders.

### Quiz Shortcomings and Adjustments

It is accepted that this quiz has its shortcomings in a New Zealand context, and doesn't recognise all of the positive actions that competition participants engaged in. Examples include the lack of recognition given to beekeeping, hunting, biodiversity activities, and keeping animals for meat and/or eggs. The footprinting also gives little weight to large home vegetable gardens and doesn't ask about orchards. To address these issues, 10% of the judging criteria was set aside for 'green' activities not covered by the footprint questionnaire.

While both the footprint measurement and inclusion of a discretionary 10% are less than perfect methods, the inaccuracies were considered acceptable for the intent of the competition - to encourage change, rather than conduct a scientific experiment. The fact that all Streets were affected equally, and the relative nature of the final judging (i.e. Streets were compared to each other, not an independent standard) was taken into account.

Participants measured their ecological footprint at the start and end of the competition by completing paper copies of the quiz (Appendix 10). While this version replicated the online questions closely (as found at <a href="https://www.myfootprint.org">www.myfootprint.org</a>), some edits were made to translate US terms into NZ equivalents (e.g. storm doors and windows = draft-proofing, power strips = turning off appliances). Standardising criteria was also added to create consistency between participants' responses (e.g. the online version asks if participants have compact fluorescent bulbs, but doesn't specify how many light fittings; a list of

### **Less Than One?**

Ecological footprinting measures the natural resources required by our consumption and lifestyles and checks that against the planet's capacity to produce these resources and absorb pollution. The result gives us an idea of our personal ecological footprint relative to other people in our country, to a sustainable footprint, and over time. It also allows us to compare the average footprint of nations.

New Zealand average		3.7 Earths	
United States average	0000 001	6.4 Earths	
Republic of China average	<b>(3)</b>	1.1 Earths	
Ethiopia average		0.2 Earths	

In 2007, the global average footprint was 1.5 Earths. What does this mean, given one Earth is all we have? Essentially, it means instead of living off the 'interest' generated by the natural world, which we could do indefinitely, as a species we are spending the 'capital'. This cannot be sustained.

Living beyond one's means for too long will result in bankruptcy. Driving the natural world to 'bankruptcy' means undermining the Earth's capacity to support us, until it cannot support us anymore. A sustainable global average ecological footprint is less than one Earth, with a healthy safety margin.

The huge differences between nations' footprints must also be part of the equation. These disparities highlight the inequities in resource consumption, yet negative environmental impacts are often felt most by those least responsible for them.

Reducing your personal ecological footprint to less than one Earth is a real challenge in New Zealand, where the national average is 3.7 (according to the Centre for Sustainable Economy). Some Greenest Street competitors have come close, but even those determined to reduce their personal footprint are ultimately constrained by the options available to them where they live and the choices made by government and others on their behalf — for example, availability of public transport.

Ecological footprinting helps us understand our personal and collective responsibilities to other people living now and in the future. local energy providers and the percentage of their energy generation drawn from renewable resources was compiled from the companies' annual reports to replace the national average given in the quiz). Supporting information and a list of the amendments was provided in a set of guide notes (Appendix 11).

### Gathering Quiz Data

Quizzes were generally completed at a Street gathering with Council staff attending, however there were several participants who were unable to attend a session or needed to take the quiz away to obtain additional information. A gathering tended to take an hour and each Street had one or two sessions. The face-to-face process was found to be the ideal as participants generally had the same questions. Quizzes completed outside of these sessions tended to have a higher error rate and slow return.

Council staff then entered participants' answers into the online calculator, checking for errors or anomalies (e.g. members of the same household entering different house sizes). Copies were made of each quiz and held until the end of the competition, to allow comparison, identify where major gains were made, and ensure that answers were consistent (e.g. participants sometimes estimated the floor area of their house and chose a different figure each time).

### Tracking Results

Tracking results in a spreadsheet made the job of calculating each Street's average footprint and proportional reduction much easier, especially when adjustments needed to be made at the end for withdrawn households, late entries and amended quiz results. Individual quiz results were kept confidential, except for the smallest final footprints and greatest proportional reductions, but there did seem to be quite a bit of conferring over results within Streets.

### Footprinting Tool for New Zealand

The Council is currently working with The New Zealand Footprint Project (NZFP), a joint initiative between Otago Polytechnic and Victoria University, to better understand the ecological footprint of New Zealand communities. A major part of their work is the creation of a New Zealand-specific footprinting tool.

It was hoped that the NZFP's calculator would be available for the second round. Indications were that it was almost ready but, as insurance, their questions were combined with the Redefining Progress (RP) quiz used in round one. This made for a lengthy quiz

but, as it turned out, the NZFP calculator wasn't available in time so the RP questions were able to be picked out and calculated online again.

### 3.10 Judging

The judging entailed both qualitative and quantitative elements. The former was calculated by Council staff comparing the Street's footprints — absolute sizes, proportional reduction, and the 'wild card' component. The latter was the domain of the judging panel, who considered how the Streets had grown their resilience and community spirit.

Both rounds of the competition were judged by Mayor Jenny Rowan, with a group of four others. Full profiles can be found in Appendix 12.

### *Judges for 2010/11*

- Joy Darke, NZ Gardener of the Year for the Wellington Region, 2010.
- Kevin Milne, one of New Zealand television's longest-serving reporters and co-host of 'Fair Go'.
- Caleb Royal, Director of Environmental Science and Management at Te Wānanga-O-Raukawa in Ōtaki.
- Liana Stupples, Executive Director of the Hikurangi Foundation, an environmental not-for-profit.

### *Judges for 2011/12*

- Robert Glensor, founder and managing director of Paraoa Bakehouse Ltd, New Zealand's first and only BioGro-certified organic bakery and National Sustainable Business of the Year 2008.
- Professor Brenda Vale, Research Fellow at Victoria University with a background in sustainable architecture and currently working on environmental footprinting.
- Joy Darke.
- Liana Stupples.

### Judge Involvement

Judges were approached by Council staff with an eye to



L to R: Mayor Jenny Rowan, Councillor Gurunathan, Judges Joy Darke, Brenda Vale & Robert Glensor at Grange Park Ave launch, 2011.

reflecting a range of sustainability interests, and asked to gift their

time to the project. Responses were unanimously positive. At a minimum, judging involved attending the Streets' launch events, following their blogs throughout the competition, looking over the final presentations, taking part in the final tour, and attending the prizegiving. Judges were also encouraged to visit the Streets in their tent at the Sustainable Home and Garden Show.

# Judging Criteria

The judging criteria and weighting in 2011/12 was as follows:

- 20% for proportional reduction of average environmental footprint, determined from the quiz results at the start and the end of the competition. The streets got marks on a scale set by the leading Street at one end attracting 100% of the marks and a 0% improvement attracting no marks at the other end.
- 30% for the absolute size of their average footprint at the end of the competition, as determined by the end quiz results. The streets got marks on a scale set by the leading Street at one end attracting 100% of the marks and a final average street footprint equal to the NZ average footprint (3.7 Earths) attracting no marks.
- 40% for community achievement, determined by the judges with the help of a rating scale describing different levels of achievement in each of three areas: working together, involving people, and making the most of skills and resources.
- 10% for 'green' actions within individual households that are not covered by the footprint questionnaire, determined by competition organisers from a 'write in' section at the end of the footprint quiz (in 2011/12, the NZFP questions were used instead).

The weighting was amended from 2010/11 when proportional reduction, absolute footprint size and community involvement each made up 30% of the final score. The changes were made to reflect the greater environmental importance of a small footprint compared to a large proportional reduction, and to put greater emphasis on community achievements.

# 3.11 Competition Launch

## Launch Format

The format for the launch event was largely the same for both rounds, although there were some changes to the scheduling. Each Street's launch was a gathering of participants, judges, and Council staff. Invitations were also sent to Elected Members (i.e. Councillors

and Community Board members) and media. One launch was also attended by the Green and National Party candidates for the electorate.

Each event started with a round of introductions, followed by a short speech from the Mayor. Then the Senior Advisor for Climate Change and Energy congratulated participants on their entry into the competition, announced the Streets' starting footprint, and provided a brief overview of the competition format. Street representatives also spoke, setting out their group's plans and aspirations. This was followed by a cup of tea and a tour of participating households' existing activities and sites for intended projects.

# Launch Objectives

The intention of the launch was to provide a tangible starting point for the Streets and an opportunity for participants and judges to

meet each other in person and 'put a face to the name'. As much of their contact over the course of the competition was the Streets' blogs, provided the judges with a mental picture of the neighbourhood a n d personalised the stories. The launch was also a good time to take a photo of each group with their Street sign.



Avion Terrace, residents with their sign created by resident Grahame Harris.

# Street Signs

In the weeks prior to the launch, each group was asked to design a Street sign, which was printed onto corflute with the Council branding and mounted at an appropriate spot. Designs have varied greatly over the two rounds, including three unprinted versions - one professionally sign-written by a resident and the other two hand-painted onto wood. Another sign was a collage created by the Street's children, and two used photographs taken by residents as their central image.

In the first round the signs were  $1400 \times 800$ mm, however an error in the ordering for the second round meant they were  $2000 \times 800$  mm. The former is far preferable. Framing for mounting the signs was loaned to the Competition by the Mayor from her election hoardings.

## Launch Dates

In the first round the launch events were held over two weekends, with two hours scheduled for each Street (Appendix 13 - 'Blast Off for Green Streets'). The split was partly due to the length of time assigned to each launch (two hours each, plus travel time) and partly because the Streets were given a range of dates to choose from. The intent was for as many participants as possible to attend, however the choice ultimately just made scheduling difficult for them and the judges. None of the launches were attended by all of the judges, which necessitated either judges making other times to meet the Streets or not meeting them until the Sustainable Home & Garden Show, part-way through the competition.

For the second round the launch date was set as part of the calendar determined prior to recruitment, and the Streets were offered four one-hour time slots to choose from. The longer advance warning meant all judges were able to attend, especially as the commitment was limited to one day.

Feedback from participants has indicated that the launch format left some competitors a little bemused about giving a tour before the competition had begun. Meeting in person was appreciated by both participants and judges, but knowing what to show the judges when things were still in the planning stage was a challenge. The Streets were also still just getting to know each other at that stage.

## 3.12 Timing and Length

The competition was meant to run for nine months, from early October to the end of June, although the first year was reduced to eight months due to the delayed start. Experience and participant comments have indicated that those Streets who already knew each other had a head-start, as they were established enough to get straight into group activities. Other Streets were building momentum when they ran into the Christmas holidays two months after starting:

Since our street started without knowing each other we probably needed the first 4-6 months (especially since it included the summer holidays) to get to know each other before being able to focus on our green goals. (Kylie, Rainbow Court, 2011)

This was addressed with a longer lead-in for the second round and participants were encouraged to use the time to get to know each other so they could 'hit the ground running' when the competition commenced.

With regard to timing, slow starts also meant that Streets keen on gardening found themselves trying to establish or expand gardens as they went into summer. They also ended up hosting final tours for the judges in winter when their gardens were past their prime despite the popularity of food growing in all of the Streets, leading some participants to suggest "[it] would be good if it finished in summer/autumn when the garden is in full swing" (unknown, 2011).

When asked about the length of the competition, the majority of respondents were happy with nine months. The 12% who thought it should be shorter were the minority, while the 24% who advocated for longer were generally in favour of twelve months to encompass a full growing year and better seasonal comparison of things like power consumption. The concern with a shorter timeframe was that it wouldn't be adequate to put plans into action:

This gave us time to put some more ambitious plans into place and allowed new ideas to feed off original ones and the course of time meant that new habits were bedded down and are now the norm. (Terena, Te Roto Rd, 2011)

A year would have been good, but knowing human nature it will still be a last minute rush. (Hannah, 'Kakariki St', 2011)

# 3.13 Council Support

Council support was developed, promoted, and managed by the Sustainable Communities Coordinator (SCC) and the Senior Advisor for Climate Change and Energy. The Council also supplied the \$3,000 prize money, canvassed businesses for additional prizes for the finale, and funded hall hire and refreshments.

# Supporting Information

Prior to the first round, the SCC developed a list of useful online 'Ideas and Resources' relating to each of the areas covered by the footprinting quiz and competition: environmental footprinting, waste, transport, energy and housing, garden, water, environment, food, goods and services, and community (Appendix 14).

This list was emailed to the Streets for distribution, and posted on the Council website. A hardcopy was later created for Sustainable Home and Garden Show attendees to take away. Each household also received a folder with a variety of brochures that weren't available electronically.

At the end of the first round, 71% of survey respondents rated the

folder as very or somewhat useful, however the remaining 29% admitted they didn't look at it and one respondent commented, "The organisers use FAR too much paper!!!!!!!! Not good role models."

For the second round, the number of folders, including a hardcopy of the 'Ideas and Resources', was reduced to two or three per Street for sharing around. This time 100% of survey respondents rated the contents as very or somewhat useful.

## Support from Council's 'Green Services'

When Streets met with Council staff at the start of the first competition, a range of free Council support services was promoted. In particular, the Council offered the following:

- Green Gardener advice for making your garden bloom with less impact. The Green Gardener offers free general visits or low-cost workshops on specialist topics for residents, community groups and schools.
- Eco Design Advisor free home visits for all residents providing independent impartial information on sustainable, intelligent, and sensible residential building practices. Advice is available for existing homes, proposed alterations, or new home plans.
- Green Plumber a free helping hand with small leaks and professional advice on water conservation. This role ceased during the second round of the competition and has now been reinstated as the Water Conservation Advisor.

The Council also employed a Biodiversity Advisor and Water Use Advisor.

In practice however, while Streets made good use of the Green Gardener, other services were somewhat undersubscribed. This could be due to Streets being unclear about what was being offered or forgetting what was available due to information overload at the outset. Another possibility was that people 'don't know what they don't know' and were unsure of the possibilities in areas that were new to them. The exception to this was 'Kakariki Street' who designed a number of sustainable living workshops, including several utilising Council staff, and ran these as part of an existing community education programme, Chill-Ed (Appendix 15).

A Waste Minimisation Officer had also been appointed prior to the second round and provided waste audits and advice for two of the three Streets' Waste Reduction Grant applications.

# **Workshops**

For the second round, a list of workshops was compiled drawing on both Council staff and skilled members of the community (Appendix 3). Having a workshop description and contact details increased uptake – the Eco Design Advisor visits, Green Gardener visits, and electricity monitor workshop were available both years, but the

percentage of survey respondents who used these services jumped by 12%, 12% and 70% respectively.

From the Council perspective, providing a description was a good way to define the boundaries of availability and workshop content for those staff who don't usually present structured workshops (e.g. agreeing to talk about 'Enhancing biodiversity at your place' for up to five sessions, rather than 'being available to talk about biodiversity').



Hands-on learning with 'Chill-Ed' in 'Kakariki Street.

# Other Support from the Council

# **Energy-Efficient Lightbulbs**

In 2010 the Council purchased 49,000 compact fluorescent lights (CFLs) of various types to distribute across the district. Using 80% less energy than standard incandescent bulbs, it was estimated that they would save Kapiti residents more than \$5m. The majority had been distributed by the time the competition got underway, but there were still enough to offer competition participants two CFLs each.

The downlight replacements posed more of a challenge to distribute. Given that homes tend to have multiple downlights installed, the savings to be made with CFLs are marked. But unlike the other bulbs, the downlights came as a complete fitting that is wired in and clips into the ceiling cavity, and the box stated that they should only be installed by a qualified electrician.

Having checked the legal requirements, it was discovered that homeowners were able to install these bulbs themselves in their own home. The solution was to invite a local electrician to demonstrate how these bulbs could be safely and easily fitted. If people were still unsure, they were encouraged to engage an electrician. The Council provided up to six replacement downlights per home.

## **Electricity Monitors**

Liana Stupples, a judge in both rounds, was the Executive Director of The Hikurangi Foundation. A not-for-profit seeking to catalyse high-impact solutions for climate change, resource limits, and ecosystems destruction, the Foundation supports social entrepreneurs and communities in the areas of energy, buildings, transport, land-use, and consumption and waste.

One of their early projects had been the purchase of a dozen electricity monitors in conjunction with the Tauranga Environment Centre. These were available for Tauranga residents to borrow through their libraries. However, the project ended and they were kindly made available to the competition.

Ten monitors were borrowed, which were then loaned out to each of the Streets as a set for a fortnight. All Streets met with Jake Roos for a brief demonstration of monitor installation and use. Information sheets were also created for participants in the second round (Appendix 16).

Participants' experiences of using the monitors were mixed. Of the thirty-four survey respondents over both years, twenty borrowed a monitor. Of these, 65% found it useful. Comments

indicated that five people had trouble installing it – one because they couldn't access their meter box. However, one resolved the issue by getting help from neighbours and another admitted they knew there was help available but didn't access it. The monitors didn't measure the power consumption of individual appliances. While this was easily done by switching items off and on again and calculating the change, some people would have liked this function to be built-in.

The main difficulty with the monitors was that a report couldn't be downloaded to track usage over time and there was limited understanding of how to reprogramme the monitors to show recent use. Instead, people tended to look at their electricity usage in the moment, reducing the monitors' utility in identifying high energy-use appliances.

Of those who did install the monitor but didn't find it useful, the main reason seems to have been that they didn't feel that there were ways they could reduce their power consumption:



Stuart gets his electricity monitor up and running.

We just didn't use it as we found that there was nothing really that we would stop using. (Sue, Grange Park Ave, 2012)

When you are already trying to be as economical as possible, it doesn't really make a lot of difference! We already had a rough idea of what gobbled up the electricity. (unknown, 2011)

### **Waste Reduction Grants**

The Council has an annual round of Waste Reduction Grants, funded from the waste levy monies received from the Ministry for the Environment for waste minimisation projects. The Grants are available in two categories — the Waste Levy Fund for Community Projects and the Waste Levy Fund for New Technologies and Seed Funding. A full description of the grants can be found in Appendix 17.

All of the Streets made an application to the fund under the Community Projects category as a group of 'five or more households engaging in a project which will lead to long term waste reduction actions by participants'. Maximum funds available per project were \$5,000 in 2010/11 and \$3,200 in 2011/12. Grant applications closed in late October, so for most Streets this was their first major initiative. A range of projects were developed and are discussed in the Outcomes chapter.

## 3.14 Street Activities

## Choosing Activities

One of the perceived strengths of the competition was the lack of prescription about how the Streets should seek to reduce their environmental footprint. Yet some participants seemed to struggle with the competition's open brief. For example, Peter from Te Roto Road (2011) said, "The parameters of the Competition were quite blurry, we didn't fit the criteria of 'Greenies', and [it] took us a while to get to grips with the whole concept".

However, this was balanced by other respondents who welcomed the broad scope:

It was great to be left on our own to do what worked for us in our street. (Terena, Te Roto Rd, 2011)

...[L]ike any competition you don't expect to be hand held, and the enormity and options you have within this competition are endless.... (Racquel, Alexander Road, 2012)

Given the wide range of activities encompassed by the footprinting quiz and the varying weights these carried, in theory, if a Street were "With the council funding I got a tumbling compost to go with my other two. Had a good afternoon here with the 'Street', making a very large compost heap on the vegetable garden, and I have started to do one on the other side. Plus my daughter has seen it and got one going at her place now."

Shirley, Alexander Rd, 2012

running to win, it would be wise to look at the weightings when deciding where to focus their energy (this is effectively what Te Roto Road did in instigating car-less days).

In practice however, participants' interests within a broad spectrum of 'green' activities guided them strongly. Even activities that had minimal or nil impact on the quiz results were common, but these did often have a strong community focus. This approach is to be expected in light of participants' mix of environmental and social motivations for entering the competition.

The availability of free Council services also influenced activities, e.g. Green Gardener workshops, Waste Reduction Grants, waste audits, electricity monitors and CFLs. The initiatives undertaken by the Streets are described in the following chapter, 'Street Stories'.

### Sustainable Home and Garden Show

Streets were asked to organise a display and presence at the Sustainable Home and Garden Show, held at the end of March each year. Grouped together in a dedicated tent, this was the first time most of the participants had met other Streets. Anecdotally, the Streets enjoyed attending the Show, both for the opportunity to

meet each other and the chance to talk with interested members of the public. As noted previously, the competitive element of Greenest Street didn't feature strongly for many participants, so they made the most of the chance to socialise and have a look at each other's activities.

By interacting with Show attendees and showing enthusiasm for their activities, participants provided another



John and Jason of Alexander Road bring biodigesters to the masses at the Show.

avenue to promote and normalise behaviour change among the wider community. As one participant said at the 2012 post-competition roundtable, the competitors are the best Greenest Street advertisement the Council has.

Displays were as varied as the Streets themselves and each brought their own flavour to the event: 'Kakariki Street' used wireless internet to help Show attendees measure their own environmental footprint and brought along a 3D model of their street created by their children. Te Roto Road displayed their produce harvest and offered preserve tasting.

Other highlights included examples of potted edibles for smaller gardens, a rat-proof compost bin cage, buckets of Street-made compost sieved for a variety of purposes, a display of rubbish found during a beach clean, and a bike maintenance demonstration.



Piripi of Alexander Rd with the results of a Sea Week beach clean.

The effort put in by the Streets was evident and Te Roto Road posted about their experience on their blog:

Our street had put in a concerted effort over the previous 3-4 weeks to assemble a display of what we have been achieving as part of the Competition. We presented photographs depicting our Glass Recycling idea, showing how the bottles are ground down for use on driveways, plus bottles of samples of the various grades. This display caught the interest of many people over the two days, as did our trays of Native Tree Seedlings which included 16 different varieties. We gave these seedlings away over the two days with a 'Guess the Plant and You Can Have It' contest. Over 50 trees were given to community people this way, as well as pots of impatiens flowers donated by Watson's Nursery, Otaki, where we buy our vegetable seedlings.

Our photograph display showed examples of our vegetable gardens, composting, our home grown pigs, and the making of preserves. Our table display included eggs, apples, citrus, nuts, fresh herbs and vegetables, Monica's delicious apple shortcake, which she supplied for the two days, and tasting of preserves with crackers and cheese. The tasting was extremely popular and a total of 14 different varieties of pickles and preserves were presented.

All of the produce on display was provided by members of our street. Including a huge pumpkin which was given away as part of a 'Guess the Weight' contest. (Peter, Te Roto Rd blog, 30/03/11)

# 3.15 Public Profile

The competition was publicised by the Council using a range of channels. The primary goal was to encourage behaviour change in the wider community by creating awareness of the Streets' activities, and highlighting the benefits of working collectively and the accessibility of 'green' lifestyle



Flo from 'Kakariki Street' discusses ecological footprinting with a Show attendee.

choices. A secondary objective was to encourage the Streets by publicly praising their activities and creating a gentle competitive nudge.

### Tools Used to Raise Profile

### **Council Website**

The key tool for providing public information about the competition was the Council website. A 'Greenest Street' page was set up with links to competition resources, press releases, and a page for each Street. The Street pages had a group photo taken at the launch, a self-description, a summary of their competition goals, and a link to the street's blog.

## **Newspapers**

Media releases were written by competition support staff and issued regularly through the Council's communications department. These were often, but not always, carried by local newspapers, which was sometimes disappointing for featured Streets.

In round one The *Kapiti Observer* began their own series of articles profiling each of the Streets. This didn't develop past the first installment ('Kakariki Street') however. An article was also written by the Kāpiti reporter with The *Dominion Post* (the daily paper for the

Wellington region) and carried by their 'Greenzone' section (Appendix 18). All of the competing Streets were interviewed, but the article focussed heavily on Te Roto Road.

For the second round, to increase the frequency of media articles and balance coverage of the Streets, column space was purchased in The *Kapiti Observer*. The columns were written by the SCC and printed every two or three weeks. Each column was a summary of a longer article with a link to the Council website for the full version (Appendix 19). The Council website lacked the facility to count visits to individual pages, so the number of people who sought out the full article is unknown.

### **Online Media**

In round one the SCC wrote a series of twelve articles for the 'good news' website,  $Happyzine^{10}$ . After an initial introduction to the competition, each article focussed on a different household and one of their projects (Appendices 20a—20j).

Information, particularly on the competition launch and finale, was sometimes picked up and reposted by other online media including Good magazine, Ecobob, Voxy and Allvoices.

### Radio

A free fortnightly live radio slot on local radio station, Beach FM, provided participants with a chance to talk about their Streets. Slots were shared between the Streets with interviews taking place at the station or by phone.

As the radio host, Nigel Hopkins took an interest in the competition, reading Streets' blogs and press releases beforehand and attending the



Rachel from Rainbow Court takes to the airwaves.

finale for both rounds. He was able to ask informed questions, and interviews would last between five and fifteen minutes.

Guest speakers were occasionally also introduced to provide their perspective on the competition: Jan Logie from the New Zealand Centre for Sustainable Cities; Robert Vale from Victoria University; Liana Stupples; Robert Glensor.

The SCC attended each interview as a support person and to provide short general updates on the competition.

### 'On To It' Newsletter

The Council also produces a monthly newsletter – *On To It: Great Ideas for a Sustainable Kāpiti* – which was emailed to about 1,200 subscribers, posted onto the Council website, and distributed as a hardcopy through libraries and at fairs. Edited by the SCC, the newsletter was a core mechanism for promoting the competition through longer articles and photos.

### **Blogs**

All of the Streets were asked to set up a blog at the start of the competition as a means of communicating their activities with the judges and the public. Survey comments indicate that participants also looked at each other's blogs for ideas and interest. Some Streets also drew heavily on their blogs at the end of the competition when they were putting together their final presentations, both as an aid to their memories and a source of material. Links to each blog were posted on each Street's page on the Council website.

## **Blogging Tools and Challenges**

The choice of host was left to the Streets, so over the two rounds Wordpress, Blogspot and Google Groups were all used. Participants grappled with the technology to varying degrees of success. Most Streets had one person set up and manage the blog. In some cases this person continued as the core blogger, while other Streets shared postings amongst themselves. The exception was Avion Terrace, who were assisted to set up their blog by the SCC who then sometimes posted their Word documents as blogs on their behalf.

Participants' feelings about blogging were mixed. On one hand, Terena from Te Roto Rd said:

This blogsite has been a lot of fun too. It was a novel experience for us all and it's been read by people around the world. And there's been no shortage of people making contributions. I've rushed home from an evening with my neighbours to write it on the blogsite only to find someone else has beaten me to it! It's been a great way to document our journey and share our experiences. And we've enjoyed reading the other Greenest Street blogs too.<sup>11</sup>

Diane from Alexander Road echoed this when she said, "It has been fun and empowering to learn new media skills, blogging and Powerpoint". But Sue from Grange Park Ave said, "...The blogging is not a good way to judge the competition.... Some of our street did not do computer and the blogging page was hard to use". Her comment about the technical challenge certainly seems fair in light of the number of blog posts in all of the Streets made by participants on behalf of their neighbours.

While the SCC was available to assist Streets with their blogs, her skills in this area were basic. The risk was that those Streets unable to blog effectively could feel disadvantaged, as identified by Barbra from Wellington Rd, "The blog is the main way the judges got to know us, so the streets need to really understand that if winning is their thing. We did not blog about lots of things we did."

### Public Awareness

When surveyed about their impressions of wider public awareness of the competition, participants tended to rate it as being moderate or low (85.3%).

## Racquel of Alexander Rd said:

I think the council had advertised enough – but like anything if you are interested you see and follow it – but if not interested it does not register on the radar. I think a lot of issues have/are happening in our community...and this effects the community as a whole supporting things.

However Kylie of Rainbow Court suggested that more visible cheerleading on the part of high profile Council representatives would have raised awareness and interest, particularly among 'less green' members of the community.

# **3.16** Finale

The last month of the competition was very busy for both participants and support staff. Both rounds concluded with a prizegiving and a wrap party for all participants at a community hall.

The previous day saw the judges touring all of the Streets again and making their final decisions. Final presentations had been received from the Streets and passed to the judges a week and a half prior. Final footprints were measured and calculated in the final fortnight.

### Final Presentations

Each of the Streets was asked to create a final presentation for the

judges in a format of their choosing. This was due to the SCC approximately two and a half weeks before the end of the competition and passed to the judges a week and a half prior to their final tour. The intervening week was to allow for late submissions, glitches with presentation (e.g. Powerpoint presentations that wouldn't play), and in order that copies could be made for each judge.

The brief for the presentation was to sum up their journey as they

had experienced it and provide the judges with any information that they felt needed emphasising. While much thought and effort went into them all, unfortunately the variety of formats has made it difficult to find a way of sharing them with the wider public.

### Formats were as follows:

- Avion Terrace, 2011 Powerpoint slideshow of captioned photos.
- Alexander Rd North, 2012 –
   written description of each household's experience in their own words and Powerpoint slideshow of photos and notes.
- Grange Park Ave, 2012 written summary and quotes from participants.
- 'Kakariki Street', 2011 collective written summary.
- Rainbow Court, 2011 collective written summary and a social street map highlighting stories for each household.
- Te Roto Rd, 2011 Booklet entitled *Recipes for a Greenest Street* and DVD with commentary/soundtrack.
- Wellington Rd North, 2012 online video with commentary/ soundtrack.

## Final Environmental Footprinting

The final footprinting was conducted in a similar way to the initial footprinting. Each returned quiz was calculated with the respondent's initial quiz alongside to check for anomalies. These were found in a few cases and the SCC contacted the respondent as necessary to ascertain where the error was. Occasionally this meant that the



Ex-battery chickens get a new lease on life in 'Kakariki Street'.

respondent's initial footprint changed slightly and in these cases a note was made on the quiz and a copy of the amended calculation returned along with the final result.

As with the initial footprinting, some participants were unable to attend the group sessions with the SCC and collecting all of the quizzes took some time. A cut-off point was instigated a few days before the final weekend to allow calculations to be completed and the very small number of participants with unreturned quizzes were determined to have withdrawn.

Once the competition was complete, quizzes were returned to participants and copies held by the Council destroyed.

# Judges' Tour

The final weekend saw judges touring the Streets for the last time on the Saturday prior to the Sunday prizegiving. The tour format was similar to the initial visit, but notable for the amount of things the participants had to show the judges and the familiarity that had developed between neighbours over the preceding months. Having received the Streets' final presentations beforehand, judges had the chance to ask clarifying questions and discuss the Greenest Street experience with them firsthand after following their blogs.

Participants noted that holding the tour in winter wasn't ideal as their gardens were past their prime. It was also a difficult time of year to be outside for most of the day. The tour was scheduled to go ahead rain or shine due to the prizegiving being booked for the following day, so it was lucky that the weather was reasonable both years. Extra coats and hot drinks were required to keep judges comfortable at times.

For the tour itself, the judges spent the day visiting each Street in turn. They were provided with a copy of the community criteria at the start of the day and discussed the streets already visited over lunch. The same discussion was had at the end of the day. Once the judges had assigned their marks to each of the Streets, they were added together,



Judge Robert Glensor with Grange Park Ave residents.

averaged and ranked. A 'sense check' was then conducted, checking whether the ranking sat well with judges' impressions.

## Additional Prizes

Consideration was also given to additional prize categories recognising notable achievements by individuals or Streets. Some of these were determined beforehand, such as smallest individual footprint, but others were decided based on what the judges saw and heard over the course of the competition. Prizes were allocated from the pool of goods and services donated by supportive businesses.

# Prizegiving and Wrap Party

The prizegiving and wrap party were held the following day at a local community hall. In 2011, this was in Waikanae as it was an in-

between location for all the Streets and close to the railway station. In 2012 it was held in Raumati, close to all of the Streets and with an adjoining playground.

The first year it started at 3pm. Prizes were announced, and then participants were provided with drinks and snacks while they mingled. Participants also brought a plate of food. The following year it started at 2pm



Terena from Te Roto Rd meets Brian from Grange Park Ave and Sam from Wellington Rd.

to better accommodate families with young children and a local caterer was employed to provide all of the finger food.

Several surveyed participants noted that they especially enjoyed meeting the other participants at the wrap event. While they had met previously, in light of other comments, this is likely due to the busy wind-up period ending, having the chance to socialise with their neighbours and new friends, and the event being 'put on' for them as a celebration.

# **Announcing the Winners**

The winning Street was publicly announced the following day in a press release, posted on the Council website, and written up into a longer competition profile for 'Kapiti Update' (the Council's monthly double-page spread in local newspapers - see appendices 21a and 21b). A representative from the winning Street also spoke to Beach

FM that week.

Temporary signage announcing their win was created for the 'Kāpiti

Coast's Greenest Street 2011' at the end of the first round. It was intended that this would be followed up with a permanent sign to be added alongside their street name blade, however the details of complying with the applicable legislation took much longer than expected. Eventually a second sign was created for 'Kāpiti Coast's



Te Roto Road residents are winners!

Greenest Street 2012' at the end of round two and both signs were presented at the 2012 prizegiving.

Participants from the winning Street received a cash prize of \$3000 to split evenly between a school, a charity and a communal street project of their choice. In both rounds, the winning Street opted to divide the prize money between more than one school and charity.

# Post-Competition Wash-Up

## **Challenges with Prize Allocation**

Allocating the prize money in 2011 turned out to be a more complex

process than expected for the winning Street. While the Street soon agreed that they didn't want the street portion of the money and wished to distribute it between the other two categories, choosing a school and charity was impossible. After lengthy discussion between participants, thev chose to take a vote with each participant able to allocate a proportional share of the funds to a school or charity of their

choice. This resulted in eleven



Alexander Rd takes the title of 'Kāpiti Coast's Greenest Street 2012'.

groups receiving varying amounts of the prize money. 12

The following year, the winning Street – Alexander Road - also took

some time to allocate the funds and agreed to divide it between several groups. The \$1000 for schools was shared amongst all of the public schools attended by the Greenest Street children, not just Alexander Road's. The \$1000 for charity went to four groups, with local business Spectrum Panel and Paint matching the donation to the food bank. The final third, for the Street project, may be used to set up communal Street beehives.

# **Reviewing the Competition**

Three methods have been employed to review the Greenest Street competition: an electronic survey sent to all participants, a roundtable discussion in September 2012 for a dozen participants who had indicated an interest , and a general review of material relating to similar projects.

The online survey was created using SurveyMonkey and the link emailed to all participants via their Street coordinators. Of the 136 individuals who formally participated over two rounds, thirty-four completed the survey, seventeen in each year. Fatigue from the intensity of the final fortnight of the competition is likely to have contributed to this relatively low response rate.

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Looking at the experiences of the Streets offers a glimpse of the wide variety of backgrounds, motivations, and projects participants brought to the competition. Every Street made significant progress toward the Competition's goals of improving sustainability and community resilience, inspiring onlookers with their enthusiasm and obvious enjoyment.

# 4.1 Alexander Road North, Raumati Beach, 2011/12

www.alexrdgreenfrogblog.wordpress.com

### Street Overview

Alexander Road North started as a group of fifteen households at the northern end of the street, ending in a cul-de-sac bordering the airport. They described themselves as "a mixed demographic of retired, middle-aged, and young families. Most of the men commute – some carpool, and the women mostly work locally – preferring to use a car and sometimes biking for transport". They all owned their houses, bar one family, and had lived in the Street for periods ranging from thirteen years to six months. Most households already

had vegetable gardens and some had fruit trees; two households had tank and bore water; some had chickens; and one household had solar power.

The Street entered the competition in response to advertising. Householders said their primary motivation for entering was "to get to know their neighbours, and become more self-sufficient"<sup>2</sup>.



Nothing bonds neighbours like sorting rubbish: Alexander Road audit their waste.

## Roles

Over the course of the competition, a core group of residents formed, sharing key roles between them – spokesperson, contacting Street members, applying for the Waste Reduction Grant, maintaining the blog – and driving their projects. They were active bloggers, with various people contributing posts on their particular interests: Gwen with her garden/preserves, Diane and John on their home and garden eco-improvements, Diane's 'Sea Week' beach clean and polystyrene tray project, Catherine on her re-upholstery, Donna on her frogs, garden and disappearing lawn.

## **Projects**

# **Waste Reduction and Bio-Digesters**

Starting with a waste audit, waste reduction became a strong theme for this Street. Several participants reported a greater awareness of what could be recycled and actively sought ways to reduce waste though recycling organic matter, joining co-ops or bulk buying, and making their own preserves with reused jars.

Having applied for a Waste Reduction Grant for a mulcher, they decided against managing this as a community asset and repurposed the grant for a variety of other initiatives, including timber compost bins, worm farms, a compost tumbler, Bokashi systems, a paper shredder, and materials for building bio-digesters.

The bio-digesters (recycled drums for converting pernicious weeds into mineral-rich liquid fertilizer) were particularly popular.

I love my biodigester and could do with a couple more. I also have two worm farms now and am super-excited about the worm and biodigester wee I am collecting....I don't purchase any fertilizer or plant food from the garden centre any more. I make my own!!! (Gwen, Alexander Rd, 2012)

After being shown how to build a bio-digester by the Council's Green Gardener, they held two Street working bees to build more, including a community demonstration workshop at a local panelbeaters and a further two demonstrations at the Sustainable Home and Garden Show.

Their biggest project was encouraging local supermarket, Pak n'Save, to stop using polystyrene trays as they can't be recycled in Kapiti (see box: 'Public Appetite for Polystyrene?').

# **Public Appetite for Polystyrene?**

When Alexander Rd neighbours were brainstorming ideas for Greenest Street projects, they discovered an opportunity to benefit the whole of Kāpiti.

Having found a shared dislike of polystyrene trays when they did a 'waste audit', their goal was to try and persuade local supermarkets to replace the trays with compostable/recyclable, less toxic options.

The trays are being used more and more to package not only meat but even fruits and vegetables, but they can't be recycled in Kapiti, despite having a recycling code on them. Their porous nature allows them to be contaminated by food, including blood from meat. Unable to tell which are clean, the recycler sends them all to the landfill. Residents also discovered the process of making polystyrene trays is hazardous to the environment and human health.

To demonstrate public appetite for change, the group surveyed 404 Kapiti residents online, at the Sustainable Home & Garden Show, and at Coastlands. Respondents almost unanimously supported change and were willing to pay a little more to get it.

Happily, URS New Zealand had already been engaged by Foodstuffs to look at ways of reducing their supermarkets' environmental impact. Alexander Rd were invited to submit their results as part of the URS report.

URS New Zealand have since said, "The results of the survey have helped inform the development of a 'Sustainable Packaging Strategy' for Foodstuffs which we are hopeful will be adopted in the near future.

"A major 'driver' in persuading large retailers to adopt more sustainable approaches is documenting changing public attitudes towards environmental matters and this is exactly what your survey has helped achieve".

URS have linked up with Pak'nSave Kapiti and they hope to work together over the coming months to deliver packaging with lower associated environmental impacts.

## **Other Street Projects and Events**

Alexander Road were the only group to host the Council's Biodiversity Advisor for a workshop on 'Encouraging biodiversity in your backyard'. Several residents remarked on their learnings and actions from this in the blog and the Street's final summary: removing weed trees, incorporating more natives, providing safe havens for lizards and food for birds, and being aware of the impact of cats.

Within the Street, sustainable gardening was very popular. Residents extended their plots, made their own compost and fertilizers (including collecting other households' garden waste), visited the garden of judge Joy Darke to learn about the 'art of mulch', shared mulch from trees felled in the street, and replaced insecticides with non-toxic alternatives. Preserving also featured as a means of using the harvest and reducing packaging waste.

The Street held several social events — a Christmas BBQ; a 'ladies fishing trip'; outings to a local lavender farm and the Waikanae Garden Trail; a clothes swap; workshops on making their own cleaning products, composting, greywater, electricity meters and ecobulbs, biodigesters and biodiversity; and a potluck dinner. A social highlight was Jason and Gwen's "green-ish" wedding (see box: 'Natural Nuptials for Greenest Streeters').

### **Outcomes**

Finishing with seven households, Alexander Road lost several people due to households shifting, getting busy, or opting out. For those who continued, however, the community aspect featured strongly. In the final summary, Donna, a long-term resident, concluded by saying, "The best part for us is the heightened sense of community we now have. That is an invaluable gift".

Alexander Road North won the title of Kapiti Coast's Greenest Street 2012. They entered the competition with an average environmental footprint of 3.3 Earths and finished with 2.7 Earths – a reduction of 18%.

Residents Gwen Ryan and Jason Capp shared the award for 'Biggest proportional reduction in an individual's environmental footprint', each having reduced their personal footprint by 29%.

Piripi Whaanga attained the 'Smallest environmental footprint' with 1.6 Earths.

# Natural Nuptials for Greenest Streeters

We've all heard of white weddings, but how about a green one?

Such an event was inspired by Council's Greenest Street competition. Alexander Road residents Gwen Ryan and Jason Capp decided to tie the knot during the competition – sustainably of course.

"It began with us thinking about how we could save money on the event," says Gwen. "Then we found that low cost solutions also turned out to be green ones, so the idea just took hold. It helped that we were in the middle of the Greenest Street competition."

Gwen and Jason's friends and neighbours got into the spirit. The wedding was held at a friend's house in Nikau Valley, guests dined on donated homegrown vegies, all the food was cooked by family and friends, and Gwen's wedding bouquet was made of leuchadendrons and ferns.

Gwen explained, "For the name place settings, I used small brown envelopes with seeds inside, saved from mine and other Green Streeter gardens. The idea was for the guests to take them home and plant them so when they grew they'd remember the occasion. The marquee was decorated with white tulle balls and bows, tealight candles and mirrors donated by friends from previous weddings. It looked amazing."

The green team effort included having a relative take the photos, a friend make the cake, and another friend act as event organiser. To cap it off, Gwen's shoes, dress, and necklace were purchased locally – the only brand new items of clothing Gwen purchased over the last year.

"It was better than I even imagined," says Gwen. "A truly awesome day." The group's polystyrene tray project was awarded the category of 'Project with the Greatest Reach'.

# 4.2 Avion Terrace, Paraparaumu Beach, 2010/11

## www.avionterrace.wordpress.com

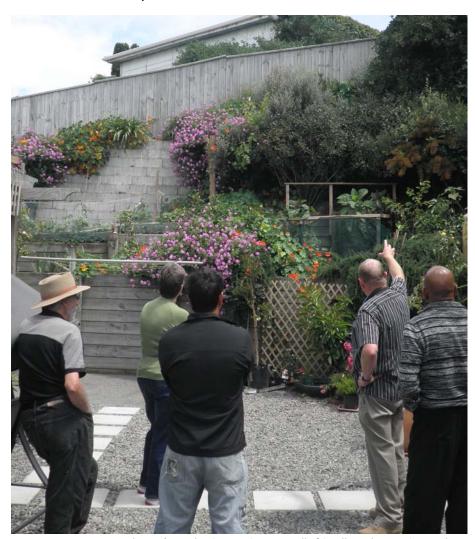
### Street Overview

Avion Terrace is "a quiet cul-de-sac redeveloped in 2000 and now consisting of twenty-three homes that are adjacent to fields that are part of Paraparaumu Airport. There are a variety of households including ten retired couples, five families with young children, plus a mixture of professional and business people"<sup>3</sup>. This group were the largest in either round of the competition with seventeen competing households.

Householders had a wide range of community interests and volunteer activities, including involvement with the Kapiti Aero Club

and the Herb Society, orchestras, choirs, sports clubs, hospice, the library, Paekākāriki Railway Museum and Civil Defence.

Prior to the competition, there was an active group of retirees who socialised together regularly and held street parties over the previous three years. The street berms had recently been planted with olive trees as result of an approach residents made to the Council. and some households had hosted a visit from the Council's Green Gardener. Council staff made direct contact with the Green Gardener's clients to discuss the competition, leading to their entry. For this Street, the competition was seen as an opportunity to work together



 $\label{thm:condition} \textbf{Ken and Janet's productive, environmentally friendly and attractive garden.}$ 

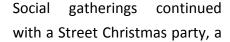
on a project which would enhance their street community, socially and environmentally.

## Street Activities

Over the course of the competition, residents held several workshops: installing rain barrels, electricity monitors, and ecobulbs. Although their sections were about half the size of most others in the competition, some residents produced (and preserved) an amazing amount of food. Several new garden beds were installed with the help and advice of neighbours.

While this Street didn't undertake a major project, there was strong

support between residents, especially the retiree group, who helped each other erect a tank stand, lay paths, extend gardens, line a fishpond and harvest olives. Residents also helped one household shift house within the Street and collected egg cartons for a young resident drummer to sound-proof his practise room.





Avion Terrace's Christmas party.

'Potluck Palace Pudding Party' and morning tea with judge Joy Darke.

Unfortunately blogging proved challenging for this Street, so the blog didn't provide a true reflection of the extent of their activities. However an effective Street email list kept everyone up to date during and since the competition.

### **Outcomes**

Avion Terrace entered the competition with an average environmental footprint of 3.6 Earths and finished with 3.1 Earths, an improvement of 15%. The award for 'Best Garden - productive, environmentally friendly, and attractive' went to Ken and Janet Milne.

Avion Terrace has continued to build their community with a street garage sale, BBQ on 'The Green', winter solstice drinks, a potluck, and a welcome basket for new residents.

# 4.3 Grange Park Ave, Raumati South, 2011/12

### www.grangeparkave.blogspot.co.nz

### Street Overview

Grange Park Avenue is a quiet cul-de-sac with a mixture of long-term and recent residents, including "a lot of children". They organised quickly to enter the competition a week before the launch of round two, after a keen resident discussed it with the SCC at Rainbow Court's Spring Fair. Nine households started and completed the competition.

Their entry documents spoke of a desire to get to know each other better:

We all want to get to know our neighbours better, and develop а sense of community and belonging. It's funny how closely we all live in our communities, without really knowing the people around us. knowledge our neighbours have, the experience they bring and the differences that we may have to celebrate will make our community closer and more cohesive.4



Grange Park neighbours make compost with the Green Gardener.

Describing themselves at the outset they said,

We're all fairly normal people on our street. We don't (all) wear sandals or go barefoot, keep chooks or grow our own veggies. We have cars and bikes, work, watch TV and eat food that may not be the healthiest. But we do want to see if we can make a difference and try to reduce our environmental footprint.<sup>5</sup>

### Street Activities

Along the way the Street had a series of social gatherings (potlucks, an afternoon tea for Oxfam and a Street BBQ), and workshops on electricity monitors, composting, mulching, and raintanks.

Households implemented a range of sustainable living initiatives. Having a family of passionate gardeners encouraged others to put in vegetable gardens for the first time, and pelmets have been installed in one house and compost bins erected at several.

This competition has provoked our thinking on a daily basis as to what we throw away in our rubbish bins, what we recycle, and how we can improve on that. One neighbour now recycles cardboard, another gives cooked scraps to the household with chickens, while all of us stop to think about lights staying on unnecessarily, electronics being left on stand-by, and how efficiently we're heating our homes.<sup>6</sup>

### Waste Reduction Grant

The biggest project for this Street was the purchase of a mulcher with Waste Reduction Grant from the Council. 'The Mulcher Club' is managed by Grange Park Ave residents, but is also open to Raumati South, including the kindergarten, providing them with mulch and saving trips to the greenwaste drop-off. Two training sessions with a local arborist, followed by a potluck lunch, were attended by Street



Getting to grips with the mulcher.

residents and wider community, including Rainbow Court residents.

After the training, almost everyone came back to our place for a pot-luck lunch and a chance to catch up and meet people not on the street. It was so good to talk to others in the local community who have a similar desire to see a reduction of waste, more composting and more community interaction.<sup>7</sup>

Grant funds were also used to upgrade one household's compost to a three-bin model:

One couple thought they'd never be without their waste disposal unit; but because it broke during this competition, they challenged their thinking and, instead of replacing the unit, decided to give composting a real go! This was supported by not only funding from the Council for compost bin materials, but Grange Park residents willing to build the bins.<sup>8</sup>

### **Outcomes**

This Street has an ongoing project resurrecting old in-ground rainwater tanks that were built under some of these houses (at their final tour the judges were told an entertaining tale of neighbours helping to dig out one sand-filled tank under a patio. They dug and dug before discovering that it was just a patio with a hatch in it!).

Getting to know each other was a huge bonus for this Street – from the new neighbours who called the competition camaraderie a "godsend" to Amanda and Mike who said, "The best part for us…was getting to know our neighbours and realising how lucky we are…"<sup>9</sup>.

A sense of community was highlighted on the night of a house fire in Matai Road, which backed on to homes in Grange Park Ave. Brian said, "Neighbours immediately connected...and checked that other folk in the street were safe and sound"<sup>10</sup>. The award for 'Daring to Share' was awarded to Grange Park Ave in recognition of their increased community connection.

An award for 'Best Use of Chooks' went to Carolyn Tristram for her use of chickens in the garden to clear garden weeds, compost and turn the soil.

Grange Park Ave started with an initial average environmental footprint of 3.6 Earths and reduced this by 6% to reach 3.4 Earths.

# 4.4 Kakariki Street, Paekākāriki, 2010/11

# www.kakarikistreet.wordpress.com

### Street Overview

'Kakariki Street' was an alliance of three streets at the far North end of the village: the cul-desacs of Haumia Street and the north end of Tilley Road, linked by a portion of Te Miti Street. Residents are mostly mediumsized families and retirees. Some households were wellestablished and knew many of their neighbours through their community activities and children, while others were new arrivals.



'Kakariki St' make flags to mark participating houses.

In their entry document they said, "This is an artistic community that is actively interested in environmental issues and community building"<sup>11</sup>. Thirteen households entered the competition after a direct approach from competition organisers who were aware of their existing green interests.

# Village Outreach

The Street was clear from the outset that they wanted to include other members of their village as much as possible, so they added their eleven sustainable living workshops to a local community education programme, Chill-Ed, effectively inviting the whole village (Appendix 15).

These were provided by both Street members and Council staff, but organised by the Street. It should be noted that the Council's Green Gardener lived in this Street, but was not involved in Street organisation.

## Street Activities

### **Mulcher Club**

Council's Waste Reduction grants were started the same year as Greenest Street and 'Kakariki Street' can be credited with developing the community mulcher model. The mulcher was available to the households in the Street for the life of the

Garden waste and food scraps are sort after by the edible gardener Closing the Loop Closing the loop, means producing as much food and consumables on your own property as possible and processing your waste there too. Most waste can be turned into gold for your garden. It's a bonus when you can make use of other's too. Making new out of old

Kakariki Street's poster explaining their waste reduction initiatives – 'Closing the Loop'

competition, then opened up to the wider community via 'The Mulcher Club'.

In addition to enabling Paekākāriki residents to mulch their gardens without travelling the 40km required to hire a machine or purchase mulch from the greenwaste station, training sessions and club membership have increased contact between households. Other

groups in the district have since adopted this model with the benefit of Kakariki Street's experienced advice, and the use of their Memorandum of Understanding for club members.

### Other activities

Other community activities included setting up a polystyrene collection point after Christmas to deliver a communal load to the recyclers. Several members were already part of district co-ops for organic meat, dry goods and eco-cleaners and a local organic fruit and vegetable co-op. Membership increased over the course of the competition. A 'Stitchin and Bitchin' group met to get some sewing and mending done, and to help each other make insulating curtains. There was also a clothing swap and a 'Street' garage sale held by three households.

# A Theme of Sharing

Sharing was a big theme for this group, starting with a list of who lived where, how to reach them and what they were willing to lend out. This began with tools (and often their operators), cars, and a well-used trailer, and worked up to one participant offering her car as a permanent communal resource, persuading two households

that they could manage without a second car.

Weekly gardening bees were established to share labour - "a community building hit" that always ended with a potluck dinner and encouraged participants to take on more ambitious gardening goals. A variation was Steve's hands-on raised bed building workshop that left him with a newly completed garden (Appendix 20e). Since the competition ended, gardening bees have



Working up an appetite at a 'Kakariki Street' gardening bee.

become fortnightly fixtures that have extended to include other households in the village.

To further benefit their gardens, the group ordered a bulk delivery of 96 bales of peastraw mulch for the neighbourhood.

Activities were well-documented on their blog, almost entirely managed by Florence. An active Street email list operated behind the scenes.

### **Outcomes**

As demonstrated by the fact that they were able to reduce an already-below-average environmental footprint of 2.9 Earths by 21% to 2.3 Earths, this was one of the strongest entries across both rounds of the competition. One strength was that many residents already knew each other well and possessed a common sustainability ethos. While other Streets entered the competition as a way to get to know their neighbours, for this Street it was licence to extend the scope of their sharing and add a collective element to their sustainability activities.

An award went to 'Kakariki Street' resident Sue Pegler for 'Smallest Final Environmental Footprint' with 1.18 Earths, and another to Florence McNeill for 'Biggest Individual Reduction in an Environmental Footprint', with a 45% reduction.

# 4.5 Rainbow Court, Raumati South, 2010/11

## www.rainbowcourt.wordpress.com

### Street Overview

Rainbow Court is a cul-de-sac of twenty-four homes adjacent to

Queen Elizabeth Park (QEP). In their entry document they explained that most of the street was built ten to fifteen years ago and is lined with established trees and fruit trees, but more recently the north end was subdivided, creating a mix of new homes and empty sections.

In recent years, residents held an annual tree-planting at the entrance to QEP leading from their street. Longer-term residents remembered when a street Christmas party was also



Santa comes to Rainbow Court.

an annual event and part of the subdivision was used for a community garden.

They described their community as "small but diverse with Maori, pakeha and immigrant households' representing a wide demographic range" <sup>13.</sup> But the presence of large numbers of small children and teenagers, adult students, commuters and self-employed business people did mean "many were dubious about the time they'd be able to commit to anything extra on top of our busy lives" <sup>14</sup>.

# Motivated to Create Community

The full story of their entry can be found in the 'In the beginning' box in the Process chapter, but was sparked by the fortuitous arrival of competition advertising at a time when Kylie, the Street organiser, was grappling with her sense of social isolation.

At their initial meeting, most of the residents were meeting each other for the first time. So while "the key challenge for us...was how to incorporate green initiatives into lives that were already too busy, in a community of individuals for whom ecological awareness is still of marginal – though growing – importance", they were united in their desire for "greater connection as a street community" <sup>15</sup>.

### Street Activities

The Street's final summary, clearly reporting key activities, can be found in Appendix 22. Their blog, written by Kylie, also keeps an inspiring record, but peters out before the end of the competition, almost certainly due to organiser overload. However, in summary, Rainbow Court's central group initiatives centred on waste recycling,

a community garden, reducing car travel, edible gardening, and community spirit.

## **Waste Recycling**

The Street set a goal of keeping all their organic waste in the Street. As many of the households didn't have organic recycling systems at home, they applied for a Waste Reduction Grant to equip each household with either a bokashi system, worm farm or compost bin.



Rainbow Court's community garden rises from the sand.

Two households also worked together to set themselves up with chickens. Once the community

garden was established they erected compost bins, a worm farm and storage bays for carbon material. Residents without composting systems were encouraged to add their household waste to the communal bins, as were walkers using the park accessway.

## **Community Garden**

Residents were unanimously supportive of the idea of a community garden. With permission from the owners of one vacant lot, they worked together to make it happen. An application for help was made to the BNZ's 'Closed For Good' programme, but the disruption of the Christchurch earthquake meant they got only one week's notice that help was coming.

Combined with a change of site in the same week, collecting the materials and building the garden was an impressive example of a community coming together in a very short timeframe for a common goal. Local businesses provided a large amount of useful waste including forty pallets, four trailer loads of carpet, horse manure, hair, coffee grounds, prunings and mulch.

The community garden continues to flourish almost two years after the competition's end, hosting an annual Spring Fair and attracting interest from across the district. Regular weekend working bees and a small management committee ensure a steady harvest. Ongoing arrangements with landscaping contractors provide a regular supply of mulch for compost, pathways, and garden beds in the communal garden and residents' own homes.

### **Travel**

An idea to establish a walking school bus ran into problems due to a shortage of home-based adults to escort it. Creativity came to the fore, however, as parents implemented other solutions: up to five families got together to take turns supervising kids on bikes instead of driving them, and another household found an older child nearby to walk their children to school.

An increased sense of community has seen more parents taking their kids out to learn to ride their bikes in the street, beginning the process of building a culture of bike use. Commuting residents have found it easier to develop lift-sharing arrangements.

Recognition of the impact of car travel also encouraged some commuters to work from home more, and others have made efforts to use bikes, buses or foot for local journeys.

### What a Difference a Week Makes

Last week this time I was in an advanced state of panic. The kids were sickening, I was tired, work was ramping up, the house was in its usual state of chaos, and I was weeks behind with my studies. Fun and all as this whole Greenest Street thing is, I needed a few weeks off to hide behind my suburban picket fence and crochet, or watch the baby sleep, or do housework (not).

But as the Kapiti Council's Green Gardener Hannah reminded me, "There's nothing like a deadline to make things happen".

And thanks to that inspiring synergistic thing that happens when the too-busy, overloaded, pre-occupied members of a suburban street reach beyond their picket fences and each take that small and otherwise insignificant step they can do, our community garden is now a great leap forward! ...

As I staggered upstairs at the end of the day it was hard to believe what we'd achieved. So many little pieces all came together somehow. For some of you this might be everyday stuff, but for me it bordered on miraculous. I'd had the privilege of being on the inside as it looked like it wasn't going to happen time and time again, and yet it did. But more than that, what was so amazing to me was how each person somehow came forward and contributed their bit at just the critical moment. That – I reckon – is community.

I never lose sight of how new this all is to us. We're wired for community but suburbia has somehow bred it out of our day-to-day lives. It's no easy thing to shuffle our comfy routines on a moment's notice and give priority to something that will take a little time to show benefits to those immediately within our own four walls.

It's just the beginning, but what a beginning it is. I am truly proud to be a Rainbow Courtier.

From Kylie's blog entry at

www.rainbowcourt.wordpress.com/2011/0 3/10/what-a-difference-a-week-makes/

## Gardening

Beginning with a tour of each other's gardens, residents discovered a wealth of skills and produce in some households, inspiring most participants to develop at least some sort of vegetable patch. Extra assistance was provided by Angie's son, Joe, who converted her backyard to a series of raised beds made from recycled pallets. He then made similar beds for two other households. Joe is profiled in Appendix 20h.

### **Other Activities**

The Street held several shared afternoon teas and suppers, and a Street Christmas party complete with a 'green' Santa distributing recycled gifts. A Street email list was also created to allow sharing of surplus items, community notices, skills and tools.

Other projects have included several men of the Street getting together to obtain their gun licences for future pest animal eradication and meat provision trips, families sharing resources on fishing trips and distributing their catch among neighbours, and Kylie running a workshop at the Sustainable Home and Garden Show with the eco-cleaner recipes she and Steve fine-tuned (Appendix 20d).

### **Outcomes**

Kylie, the Street's key organiser, commented in the final survey that the Street probably needed the first few months just to get to know each other before focussing on their green goals. She went on to say, "On the other hand, our core shared goal, the community garden, has really only taken off since the competition ended so maybe the competition has served its purpose in getting us together around a green goal".

Having said this, the participants' primary goal was in fact to nurture their Street community, and they certainly achieved this. While they officially finished with twenty registered adults, when the Council organisers asked Kylie to check the list of participant certificates to make sure no one had been missed, she expanded this out to thirty-three, encompassing nearly every household in the Street.

In their final summary, Kylie said:

Without exception, residents have commented on how good it is to know everyone on the street beyond just waving at each other. We know each other's names, something of our circumstances, and have been able to support each other

#### Dom's Walk

The afternoon had ticked along like most. I picked the kids up from school, gave everyone afternoon tea, and then the younger ones went to bed while the older children had "quiet time". A bit later in the afternoon my older son asked if he could go and visit our chicken, Lily, who has been adopted out to Shona and Paora's palatial new chook digs, and I said yes. It was all pretty peaceful until just before 5pm.

My son came running back in, "Mum! Mum! A lady's here. Dom got out and walked all the way to Jeep Road by himself!"

I jumped up. As far as I was aware, my 2 year old was fast asleep in bed downstairs and couldn't get out because all the doors were closed. "Where is he?" I asked my son, getting ready to run downstairs. "How did he get out?"

Almost immediately a woman's voice called out, "It's ok, he's with me." A stranger was walking round to our back door with a very subdued-looking 2 year old who was kitted out for a walk with shoes, hat and what was now a very grubby blanket. I thanked her as much as I could in my shocked state but all I wanted to do was hold my little boy so tight that he could never wander off again. ....

But he's safe. And the reason I think our story belongs on this blog is that if this had happened a few months ago I don't think he would have found his way home so quickly. The woman who found him didn't know us, or him, but Charity and Shanon from our street saw them. They didn't recognise him either, but had the presence of mind to check his hat for a name, and they recognised the name on the hat from our street mailing list and knew where we lived.

Sometimes, despite our best efforts, things go wrong. It's at times like these that com-

go wrong. It's at times like these that community can make the difference between a nightmare and a miraculous tale of hope. Thank you so much, Charity and Shannon, and the unsung hero who brought my son home. If this were all that came out of our efforts to green our street, it would be enough for me!

From Kylie's blog entry at www.rainbowcourt.wordpress.com/2011/0
3/22/community-matters

through life events like providing meals after the birth of a baby, caring for each other's children, checking mail and watering gardens for absent neighbours, making a joint response to an attempt by vandals to break into cars on the street, and even finding a toddler who wandered away from home.<sup>16</sup>

Rainbow Court entered the competition with an average environmental footprint of 3.5 Earths (adjusted from 3.7 to accommodate withdrawals). They finished with 2.8 Earths, an improvement of 20%.

Kylie Jurgensen received the award for 'Extraordinary Community Spirit' and their community garden won the award for 'Single Best Initiative' in 2011.

# 4.6 Te Roto Road, Otaki, 2010/11

# www.terotootaki.blogspot.co.nz

### Street Overview

Te Roto Road is a peaceful rural cul de sac located a ten minute walk east of the Ōtaki township. The Street is a mix of lifestyle blocks ranging from two to fifty acres and smaller residential sections. It

has no street lighting or footpaths, but is home to the Ōtaki Maori Race Club. A blog entry describing their location refers to the stands of indigenous native trees, "beautiful alluvial soil" and "abundance of land on which to grow produce and raise animals generally" 17.

This Street had already been a Neighbourhood Support Group for several years and met irregularly at each other's



Sheila, Denis and Campbell in the potting shed.

homes (Appendix 20g). They also had an email list to keep in regular contact. Introduced to the competition by a resident who also worked at the Council, the Street weren't necessarily looking for social connection as they were already able to refer to their "warm community spirit" 18.

Comments by both Peter and Terena drew a distinction between the residents and "greenie" stereotypes: "Sure, we grow herbs - but

we're talking about the thyme and rosemary variety. And rather than being active environmentalists our commonality is that we know we are living the 'good life'."<sup>19</sup>

# Coming Together to Compete

The challenge, as identified by Terena for this group of ten households, was to become green enough to win:

Fortunately we're up for the challenge and there's nothing like a street BBQ to get the ideas flowing. Already we're fired up by the sense of community spirit that's developed and the generosity that is pouring out from everyone involved. So now we have to bottle it up into a plan so we can capitalise on the quick wins and have the sustenance required for our more ambitious ideas.<sup>20</sup>

Taking a strategic approach, the group met early on to plan: "We quickly identified a couple of projects that everyone could get involved in and the surprising thing was discovering the simple things that we could do to reduce our environmental footprint"<sup>21</sup>.

### Street Activities

Initial key projects were seedlings, sustainable food and lightbulbs. This expanded to include firewood, recycling, eco-cleaners and carless days.

## **Project Seedling**

Project Seedling saw residents potting up self-seeded native plants from their gardens and woodlands. With stands of native bush on many of the



Terena and Bobby of Te Roto Road share their produce with judge Liana Stupples.

larger properties, these were common and generally weeded out for the compost. Over a period of three or four months Street working bees were held to collect and care for them before the bulk were gifted to local restoration group, Friends of the Ōtaki River. Another fifty were given away to visitors at the Sustainable Home and Garden Show.

### **Project Sustainable Food**

Project Sustainable Food stemmed from the abundance of fruit trees and vegetable plots within the Street. The aim was to be as selfsufficient as possible by sharing produce and recycling waste (and sharing advice on composting, fertilising and pest control through the blog). Several residents also pooled their resources to purchase and raise some piglets. The list of fruit and vegetables that residents exchanged was lengthy and augmented by a market gardener on the Road, Steve Yung, gifting his excess vegetables to residents. Residents also helped each other harvest their crops, including a full Street effort to pick Terena's macadamias. A pruning workshop with the Green Gardener was enjoyed by much of the Street.

## **Preserving**

With such a wealth of produce, preserving became a major Street initiative. In one Happyzine Terena post discussed how she had numerous gardens and fruit trees, but little knowledge of what to do with the excess, whereas some of her neighbours had always had extensive vegetable gardens and raised large families on their produce (Appendix 20j).



If life gives you lemons, make limoncello with your neighbours!

Street discussion of their favourite recipes led to a series of in-house workshops on making jam, jellies, pickles and bottled fruit (with the best recipes being posted on the blog). Less formal tuition was also common.

Sheila kindly opened her home to show those not familiar to preserving how it is done. We had a good turnout there with workers and onlookers. While the recycled jars were sterilising in the oven we proceeded to peel and chop up the pears (collected the previous day from Sheila's pear tree, with the help of neighbour Heather) and other ingredients, and all was put in the preserving pan to cook. Once cooked, jars were filled and sealed, and satisfaction all round that a good job was done. We then ended up with coffee and nibbles, and a good old chat around the table.<sup>22</sup>

A particular highlight was figuring out a way to use all the lemons they were growing. Most of the Street got together one evening to bottle limoncello and left looking forward to a future tasting.

### **Project Light Bulb**

The Street also took up the Council offer to supply households with some compact fluorescent lightbulbs each. Project Light Bulb was a Street commitment to replace all expired light bulbs with ecofriendly versions, even though these were not always the preference "for cosmetic reasons".

### According to Terena,

Our resident engineer [Denis] so impressed us with the facts and figures as to why this was a far more sustainable option that we've made the commitment to do it. I counted over 70 lightbulbs in my house alone (thanks to the many ridiculous multi-bulb fittings - which all seem to require a different type of light bulb to the ones I usually have on hand!) so I'm going to get Denis to calculate how much of an energy saving this will be once they've all been converted.<sup>23</sup>

### **Recycling Projects**

Andy's glass driveway was part of the Recycling Project, which involved residents looking for other ways to dispose of their recycling. The Street did have curbside collection, but was concerned that material may be going into landfill. Having seen a crushed glass driveway elsewhere in the district, residents collected their empty bottles over several months then borrowed a crusher from a local business, Silica Glass Crushers, to reduce it to fill.

Residents also pooled their metal waste, collecting 35kg of tin cans and 27kg of aluminium between them. They sold it direct to a recycler, securing \$71 for future Street initiatives.

#### **Carless Days**

A later project, which turned out to be their most successful with regard to their collective environmental footprint, was the instigation of carless days. With the fuel used in New Zealand's vehicle fleet accounting for over half of the total energy used annually, Denis suggested this ratio probably applies to most New Zealand homes: "If they are spending two to three hundred dollars a month on their power bill you can bet they are spending a similar amount to run their cars, if not more with the recent price increases!" <sup>24</sup>

Having taken various steps to reduce energy used in their homes, residents decided to introduce an old fuel-reduction method tried in the 1970's - carless days – but this time it was voluntary.

#### **A Crushing Success**

Going into their fourth month of Kāpiti Coast's Greenest Street Competition, participants are really hitting their stride. On Saturday I went to see one of Andy Fraser's pet projects come to fruition. With the know-how and ingenuity of Te Horo local Barry Lucinsky, Andy and his neighbours spent a morning converting four months of empty wine and beer bottles into fill for the potholes in his metalled driveway.

Barry's business, Silica Glass Crushers, crushes bottles for roading surfaces around the country using a portable 13-horse power machine he designed himself. Recently he crushed five tonnes of mussel shell to filter heavy metals from stormwater.

Barry's a bit of a local legend for his environmental creativity, which includes reviving Keep New Zealand Beautiful (from which he retired at 75) and inventing the KiwiLoo (a portable toilet often seen along New Zealand roadsides). Andy tells me Barry's been taking an interest in Te Roto Road's activities and has come out today in exchange for a few bags of chook pellets.

Having amassed two woolsacks of bottles from his street since the start of the competition (assuring me that none of it's his), Andy's keen to "give it a go and see how far it goes". After just 45 minutes of mechanical roaring, both sacks have been reduced to 5mm chip. There are still some bigger bits in there, but Andy explains they'll screen it and re-crush the larger pieces later at their leisure. Like his crusher, Barry's screening process is refreshingly lowtech – the crushings are shovelled into a sieve over a 40-gallon drum then rocked until the fines have fallen through, leaving the larger pieces behind.

I've seen the finished product in use on a local café's driveway and it's very pretty – pale green and sparkly – but I'm curious to find out how much work is involved in making a usable product from 'broken' bottles. Very little, as it turns out.

While I thought it may have some sharpness to it, the grinding process has effectively taken the edges off. This is demonstrated by the containers of 1mm crushings that are being passed around – I rub it between my fingers and get a slightly prickly sensation. I'm told the degree of sharpness also depends on the quality of glass used, with wine bottles being the best. As an added benefit, it sets like concrete once it's spread.

All in all, the morning is rated a success. Not only has their collective effort yielded a few barrows of fill, but they've "given a good excuse for a drink".

Each resident committed to one carless day a week, increasing the incidence of walking to the shops, carpooling, working from home and forward planning their vehicle use. They kept a log of their travel, and Denis Harnett used his analytical skills to convert these figures to carbon savings. An impressive 13,022kg, or 13 metric tones, of carbon were saved collectively over the course of the competition. At an average fuel price of \$2/L, this equated to a combined saving of \$11,333.<sup>25</sup>

#### **Other Projects**

formal One less project involved banding together to purchase a bulk order of dry firewood. Each households' share was delivered to their property where their neighbours helped to stack it away. Another initiative was the proliferation of homemade ecocleaners as various participants shared their recipes through the blog.



Four months of glass recycled in just a few hours.

#### **Outcomes**

Although the Street started the competition with a degree of familiarity, members discovered a deeper connection with their neighbours. A good example was their 'Royal Wedding Party'. Aside from the novelty of their transformation, Terena explained how much they enjoyed socialising together:

We have been partial to the odd social gathering, but this was something special. It really showed how much we have come together as a community since the Competition started. I couldn't have wished for better company than my street buddies and throughout the night I caught snippets of conversation as we proudly told our wider neighbours about the Greenest Street Competition and what we had been up to!<sup>26</sup>

Te Roto Road was declared to be 'Kāpiti Coast's Greenest Street 2011'. Their average environmental footprint was reduced from 3.6 Earths to 2.6, a reduction of 29%.

They also won the award for 'Best Blog', a joint effort between most of the Street members, and Denis Harnett's analytical skills saw him receive the 'Cunning Calculator' Award.

### 4.7 Wellington Road North, Paekākāriki, 2011/12

https://sites.google.com/site/wellingtonroadnorth

#### Street Overview

Wellington Road is Paekākāriki's longest street, and this entry was located at the far north end by Queen Elizabeth Park. A group of thirteen households, they were joined by the Paekakariki Holiday

Park (PHP). While the nature of the PHP meant competition organisers couldn't measure their footprint, participants were committed to supporting the Park to reduce waste and were able to draw on the Park as a resource.

Their entry into the competition came as a result of encouragement from 'Kakariki Street' and the initial energy of a resident Council staff member.



The community composting area, complete with the Trojan Horse.

Their aspirations were to reduce their ecological footprint and build community:

With the support of a wide range of experts who are keen to share their knowledge and tips with us, we hope to make some little and maybe big changes to the way we live, so that we take a more equal share of the planet's resources. We want to reduce consumerism and share resources and skills. We have some fantastic skills and a lot of enthusiasm to share with each other. Kakariki Street (the 2010/11 Paekakariki entrant) have offered their support and the two streets, with others who are interested, will increase the network in Paekakariki of people who are focused on living sustainably – our contribution towards a Sustainable Paekakariki. <sup>27</sup>

Self-described as "a very diverse group" encompassing a wide range of ages and stages, their intent was to build on the existing community spirit in their village "for a good cause" and learn new skills.

## Street Strategy and Activities

This Street adopted a focussed work plan from the outset, concentrating their energy on two core projects during the competition: waste minimisation and pest animal control. These were both staged projects, planned to complement each other in light of the attraction kitchen waste poses for rodents. Documentation in their blog was detailed, with an eye to allowing other groups to replicate the process. Both projects have continued after the competition and become activities for the wider Paekākāriki community. Other activities included monthly gardening bees and making eco-cleaners.

#### **Waste Minimisation Project**

The Waste Minimisation Project kicked off with a waste audit assisted by the Council's Waste Minimisation Officer. Organic matter from kitchens and gardens comprised 53% of the surveyed waste. Resolving to make better use of this material, they followed up with a composting and biodigester workshop with the Green Gardener. After determining the best solutions for each household, they made an application to the Waste Reduction Grant to fund them.

Worm farms, bokashi systems, and black plastic bins enclosed in 'No Food for Ratty' compost cages<sup>28</sup> were chosen by those starting out or needing to secure their system against rats and mice. The cages were the brain-child of Barbra and Geoff, designed to keep a conventional compost bin safe from rats.

Those who already had a rodent-proof way of dealing with kitchen waste chose systems to process garden waste on site – biodigesters for pernicious garden weeds and wooden bins for storing carbon material (autumn leaves, wood chips, shredded paper etc.). They also purchased a large second hand paper shredder to share. Some participants used it to add carbon to their compost, while others created a 'weed mat' around shrubs.

#### Composting

Home nutrient recycling was supported by the establishment of large-scale communal composting in cooperation with the PHP. This enabled the collection of large amounts of greenwaste, creating temperatures hot enough to kill regenerating and noxious plant material and seeds, and dramatically decrease the composting time. And having a local facility removes the financial and environmental costs of driving to drop off waste and collect compost.

#### The Trojan Horse

When the judges take their final tour of the Streets, there's always the chance that someone will 'pull one out of the bag'. In the case of Wellington Road, though, it was under a tarpaulin. Impressive in its size and solid engineering, the Trojan Horse is one more ingenious initiative in this Street's fascination with compost.

Starting with an application for the Council's Waste Reduction Grant to extend their onsite composting of household organic waste, spin-off activities have included community-scale composting to deal with large volumes of garden waste.

Team member Geoff Osgood works at the Paekakariki Holiday Park, where they also produce plenty of garden waste from their four hectares. With Geoff as the conduit, the two groups cooperated to create a dedicated composting area at the Park.

The final product is valuable as mulch, but by sieving it residents are able to use it in gardens or as potting and seed raising mix. An initial sieve prototype involved the wire base from an old bed, but the muscles and stamina required made this a job for the strongest group members only. So it was back to the drawing board.

Geoff tells me the Trojan Horse was an idea he'd been percolating for a few years, "but the police don't like to see that kind of thing being towed behind a Bedford". Here was his chance! With a few sturdy lengths of timber, some wheels, a central spindle, a lot of fine mesh wire, and a liberal dose of DIY ingenuity, the Trojan Horse was born.

The basic principle is that users can shovel compost in at the top end, then easily turn the drum to sieve the compost along the length before the largest chunks fall out the end to be returned to the heap. It's so easy the judges even took it for a spin!

Using old tyres for a retaining wall, a level area was created for residents, PHP staff, and some local landscaping contractors to drop off their greenwaste. This was chipped as necessary then formed into a series of windrows. Turned from one pile to the next each week by rostered groups of participants, piles of greenwaste were transformed into compost in just four weeks, providing the PHP and residents with a steady supply of unbagged, quality mulch and soil conditioner for their expanding gardens.

Three months after the competition's end 'The Compost Club' opened up to the wider community and now has twenty member households. It recently doubled production and takes up to 8m³ of greenwaste a week from local residents and contractors, including problem weeds like agapanthus, kikuyu and tradescantia, turning it into 3m³ of 'black gold'.

Another compost-related development was 'The Trojan Horse' (see box). By sieving the compost, participants were able to put it to a variety of uses from mulch to potting mix.

### **Pest Reduction Project**

Composting material is a significant food source for Paekākāriki's rat population, and participants were keen to do their bit to address the problem. Support from trap makers and building suppliers, and some careful design, enabled them to produce trap tunnels for just \$11 each.

A second rat trap assembly session held a month after the competition's end was well-attended. Of those present, only three were from the original Greenest Street team. Thirty-three tunnels were completed to add to the project and the group caught its first mustelid in September. They have also been providing advice on design and best practice, in person and via their online manual<sup>29</sup>, to other groups in the district. This included helping Grange Park Ave build twenty traps in July 2012.

### Gardening

Following an initial tour of each other's gardens, which revealed some inspiring gems, monthly garden bees (followed by a shared meal) were a boon for participants. Whether help was needed due to health limitations or being new to gardening, participants were assisted to expand their gardens and fill them with locally made compost.

#### **Rats can be Cunning**

Rats may have met their match in Wellington Road. Composting has been a major theme in this Street's bid to live more sustainably, reducing the waste they were sending to landfill and improving their sandy soils for expanded vegetable gardening. But what about the rodents composting can attract?

Processing food scraps on-site offers an increased food source for pests, but 'The Paekakariki Rat Pack' decided to address the problem with a vengeance. With an eye to both cost and community building, the street got together in November to construct 50 rat trap boxes and 24 tracking tunnels. Expertise and drive for the project were provided by Geoff Osgood, a worker at the Paekakariki Holiday Park.

The working bee provided two timber trap units for eighteen Greenest Street households, and some for the Holiday Park, Surf Club, and six other local properties. These were each supplemented with five mouse traps and a tracking tunnel. The tunnels monitor and identify animal activity in the area. Kill data from trap stations and activity detected in tracking tunnels were collected to identify seasonal trends and help target future programs.

Just 31 weeks later, their blog records that 61 rats and 140 mice have been eliminated from the area. Graphing shows mouse kills rising in autumn, possibly due to seasonal changes, and a fairly steady rat kill rate.

To add poetic justice, most of the rats killed have been fed to threatened native eels in Wainui Stream, bordering the Holiday Park. Aaron Richardson, one of the Green Street team, started feeding them after seeing it done elsewhere. Holiday Park management embraced the idea as an alternative to catching the eels. It was certainly popular with a local scout group who came along to find out more about this group's environmental activities.

Paekakariki already sits between pest control projects conducted by Greater Wellington and conservation group Nga Uruora. With 'Paekakariki Ratpack' filling in the gap and attracting interest from other local Greenest Street groups, past and present, conservation can look forward to a boost here in the near future.

A gardening bee also transformed the berm surrounding their competition sign, creating a garden of natives and edibles to replace the agapanthus. And, as Johannes told the judges at the final tour, you don't need to become an expert gardener when you've got skilled neighbours to ask for advice and gardening bees to keep you

#### **Homemade Eco Products**

on the right track.

When it came to making their own household cleaners and cosmetics this Street took the experimental group approach. Provided with a copy of Kylie's eco-cleaner recipes, they set up a lab with three groups each "a different undertaking experiment". A general cleaner, dishwasher powder, and a skincare product were made, with recipes and reviews posted on the blog.



Discussing the finer points of eco-friendly housework

It is amazing how many of the products you buy (and often pay a hefty sum for) can be made in your own home using some very simple ingredients. Making your own products means you can ensure they contain no nasty chemicals, cuts out the need for excessive packaging and of course saves you money. It seems that in order to make a positive change to the planet we need to reduce and therefore simplify the way we do things. This was the idea with making our own products — as this was our first dabble however things were much more exciting than simple.... (Julia, blog entry)<sup>30</sup>

Having enjoyed themselves the first time, a second lab group later made laundry powder, laundry liquid, general cleaner and dishwashing liquid, providing a cost analysis for each.

#### **Building Community**

Thanks to strong leadership and organisation within the group, this Street had a strong focus on communal activities. Geoff, a major figure in both the composting and trapping projects, cites the opportunity to try some large scale communal projects as one of his motivations for entering the competition<sup>31</sup>. Different people took

the lead at different times, but project leadership and group roles were well-defined.

Despite being new-comers to Paekākāriki, Peter and Theresa hosted the launch, where Peter said the competition was already proving to be a great way to fast-track getting to know the neighbours. Speaking again at the prizegiving, he told the gathering that, despite being in his 70s, he had never experienced community like this before.

#### Outcomes

Wellington Road North entered the competition with an average environmental footprint of 3.3 Earths and finished with 3.0 Earths, a 9% reduction.

Resident Barbra Chalmers received the award for 'Best Edible Landscaping' and Geoff Osgood received the 'No. 8 Wire' award for creating the Trojan Horse. The Street's pest trapping project was named 'Single Best Initiative'.

Sadly, a member of the Street, Lee Hatherley, died during the course of the competition. In a blog, Geoff says,

Lee was...a very enthusiastic and involved member of our team. She was proud of her recycling efforts and keen to find out what else she could do to live more sustainably. In a very neighbourly fashion, Lee had invited us all to come and use her pool anytime. During a working bee at Lee's home we levelled her drive so it was easier to drive along in her mobility scooter, weeded her garden, removed debris, buried compost in the garden and repaired broken hinges. There was a great turn out to help her, and in return Lee organised a great supper for us afterwards.<sup>32</sup>

#### References:

- <sup>1.</sup> Alexander Road entry document
- <sup>2.</sup> Alexander Road entry document
- <sup>3.</sup> Avion Terrace entry document
- <sup>4, 5.</sup> Grange Park Ave entry document
- <sup>6.</sup> Grange Park Ave final summary
- <sup>7.</sup> www.grangeparkave.blogspot.co.nz/2012/04/mulcher
- 8, 9, 10. Grange Park Ave final summary
- <sup>11.</sup> 'Kakariki Street' entry document
- <sup>12.</sup> 'Kakakriki Street' final summary
- <sup>13.</sup> Rainbow Court entry document
- <sup>14, 15, 16.</sup> Rainbow Court final summary
- <sup>17, 18, 19, 20, 21.</sup> www.terotootaki.blogspot.co.nz/2010/12/sparking-our-interest
- www.terotootaki.blogspot.co.nz/2011/03/lesson-on-how-to-make-pear-date-chutney
- <sup>23.</sup> www.terotootaki.blogspot.co.nz/2010/12/sparking-our-interest
- <sup>24, 25.</sup> www.terotootaki.blogspot.co.nz/2011/06/car-less-days-te-roto-fleet-by-denis
- <sup>26.</sup> Te Roto Road final summary: recipes for a Greenest Street
- <sup>27.</sup> Wellington Rd north entry document
- 28. www.sites.google.com/site/wellingtonroadnorth/announcements/ nofoodforratty
- <sup>29.</sup> www.sites.google.com/site/wellingtonroadnorth/rodentcontrol/rat-trapmanual
- ${\color{red}^{30.}} \underline{www.sites.google.com/site/wellington road north/announcements/the labat 165}$
- <sup>31.</sup> Kapiti Coast's Greenest Street 2012 participant survey
- www.sites.google.com/site/wellingtonroadnorth/announcements/asadlossforourgreenstreetteam



The effects of the Greenest Street competition have been consistently positive and are apparent in both the participants' reflections on their experiences and their reduced ecological footprints.

## 5.1 Personal Benefits

When participants were asked what the main benefits of being part of the competition were for them, responses were evenly spread across the options.

For some participants, a new-found sense of community was the biggest gain. Increased friendship, resilience, and sharing of resources and skills were all cited as welcome developments in their neighbourhood.

For others, a richer community and a greener life rank on par with each other. There is a recurring recognition of the symbiotic nature of the environmental goals and social benefits, each supporting and nurturing the other.

Table 2: The proportion of the thirty-four survey respondents who ranked the listed outcomes as being 'very beneficial' or 'beneficial' for them.

Got to know my neighbours better	97%
Strengthened our community - 2012 option only - % of 17 respondents	94%
Reduced my impact on the environment	94%
Got extra help/services from the Council	85%
Helped win the \$3,000 prize – % of winner respondents	85%
Won the 'Greenest Street' title for my street – % of winner respondents	77%
Discussing/doings things with others in my household	88%
Learnt more about my ecological footprint	91%
Learnt some useful skills	82%
Saved money - 2012 option only - % of 17 respondents	59%
Increased awareness of my choices & the impact of my lifestyle - 2012	94%
option only - % of 17 respondents	

The Greenest Street competition
has brought our corner of
Paekākāriki closer together, and
we see the potential for this
spreading across the village. In
so many ways this has already
begun.

Closer together is about enriching our lives and doing better by the environment at the same time. We share more, talk more, grow more and as a consequence have to travel and spend less. This leads to a diminishing carbon footprint. So we treasure the stronger friendships we have, the food we grow and share and that we receive in return.

Our lives are richer. And warmer: Greenest Street gave us a kick in the pants to finish insulation, get some proper curtains, or finish off that draft-proofing. Importantly we got to share information along the way about the best and most economical ways to do these things because we were meeting together, sharing dinner, skills and information. 1

## 5.2 Ecological Footprint Results

2010/2011

'Kakariki' Street

The average ecological footprint results for both rounds of the competition can be found below. In summary, the average improvement for an individual's ecological footprint was 21% across all participants for the 2011 competition and 12% for the 2012 competition.

Table 3: Average ecological footprints by Street for 2010/11 and 2011/12

Footprint in 'Earths' Street October 2010 June 2011 % improvement **Avion Terrace** 3.1 3.6 15% **Rainbow Court** 3.5 2.8 20% Te Roto Road 3.6 2.6 29%

2.3

21%

2011/2012 Footprint in 'Earths'

2.9

Street	October 2011	June 2012	% improvement
Alexander Rd	3.3	2.7	18%
Wellington Rd	3.3	3.0	9%
Grange Park Ave	3.6	3.4	6%

The New Zealand average footprint was 3.7 Earths for 2010/11 & 2011/12

The difference in the percentage improvement between the two rounds is marked. Streets in the second round were engaged with the competition, however there is some evidence that there was more focus on the community aspects of environmental action and less on the individual/household activities reflected in the ecological footprint.

### Keeping Community in Mind

All three Streets in the second round - Alexander Road, Grange Park Ave and Wellington Road - put a lot of their energy into communityfocussed projects that had environmental benefits but didn't register strongly in the footprinting, if at all (i.e. polystyrene trays, community mulching, and pest control.)

It is important to remember the twin goals of the competition: reduction in ecological footprint and a strengthening of community. The footprints above are just half the story. This is supported by the fact that Alexander Road's blog showed the greatest emphasis on household footprint reduction, e.g. reusable bags, recycling, water conservation, reduced consumption via clothes swaps, reupholstery, use of Freecycle etc, and their final proportional reduction is closest to those attained by the Streets in round one.

At our house, we have experienced a real shift in our lifestyle which somehow we didn't anticipate. It's an unexpected bonus and, in many ways, it's one of the best parts. Flo & Mike, 'Kakariki' Street.

We loved being part of it. We loved meeting all of our lovely neighbours. We loved the changes that we incorporated into our life during this time. And we loved all the things we learned. Anja, Kristin & Kailash, 'Kakariki' Street.

It has been hard for us to meet people since moving here so the camaraderie that this competition has supplied, through shared meals and get-togethers to learn new things, has been a godsend to us. Sue & Tom, Grange Park Ave.

I've always wanted to have a compost, and now we have one. The next goal is the vege garden – a small step to living off the land! John, Grange Park Ave

Gordon and I have really enjoyed being part of the Green Streets initiative - we've learned heaps and connected with our amazing neighbours. We are really proud of our new vege garden - our previous attempts had been a bit dismal. The encouragement and knowledge shared by our neighbours has made all the difference in fact we are in the process of doubling its size! Sam, Wellington Road.

I think, overall, the sense of community gained and the getting to know our neighbours have been the highlight of the competition. We have learnt so much and what we don't know we just ask the neighbours....I feel I can ask my neighbours for help and advice with pretty much anything. Gwen & Jason, Alexander Road

[Another thing] we are doing in our household that is new is the connection we now have with our neighbours/friends. It's great, we get together and have a shared project to talk about - a lot of the time we just chat and that's really nice - but there is a sense of shared values and learning new things together, helping each other and kindness which is nice to be part of.... Piripi has built 2 recycled sheds.... Recycling feels resourceful and creates a sense of achievement and, dare I say it, "happiness". Catherine, Alexander Road.

### Footprint Reduction

The biggest proportional improvement in either round was achieved by Te Roto Road - a result largely attributable to their instigation of carless days. As a rural neighbourhood in Ōtaki, transport comprised a large part of their footprint.

However, 'Kakariki Street's' 21% improvement is also notable considering their starting point of 2.9 Earths, giving them the smallest starting and ending footprints of any street to date. For this suburban group, insulation, energy-efficiency, rainwater catchment, consumption and waste reduction, resource sharing, carpooling, and gardening were recurring themes in their footprint reductions.

Interestingly, this gain was made despite a less-than-competitive approach to the competition:

One of the first things we did was forget that the catalyst for this was a 'competition'. It never really felt like one as we have all gained so much from the experience as individuals, and as a group we have really become 'greater than the sum of our parts'.<sup>2</sup>

Prize categories were also introduced to recognise the individuals with the greatest proportional footprint reduction (Table 4) and those with the smallest final footprint (Table 5). The results attained by these participants — and the seventeen others who attained footprints of less than two 'Earths' — provide a powerful illustration of how a more sustainable life can be created in very normal circumstances

Table 4: Biggest proportional reduction in an individual's ecological footprint

Year	Award	Footprint in 'Earths'
2010/11	Sue Pegler, 'Kakariki' Street	1.18
2011/12	Piripi Whaanga, Alexander Rd	1.6

Table 5: Smallest final individual ecological footprint

Year	Award	Proportional reduction
2010/11	Florence McNeill, Kakariki Street	45%
2011/12	Joint winners: Jason Capp and Gwen Ryan,	29%
	Alexander Rd	

#### 5.3 Changing Behaviour

Personal behavioural changes made by competition participants included growing food, joining organic cooperatives or purchasing more organic food from conventional sources, composting,

It has definitely been more about the journey than the competition itself, although having a common goal was the ideal catalyst to put some sustainable living concepts into action. It also gave us permission to break down some social barriers and before we knew it we were welcoming one another into our kitchens (and toolsheds) and the momentum gathered from there! Over the course of nine months we reduced our environmental footprint by one whole Earth and, in the process, learned to live together more as a community.

Terena, Te Roto Road.

rainwater collection, greywater recycling, pest eradication, making 'greener' choices when replacing (or not replacing) household appliances, making household cleaners, sharing tools and equipment, and generally trying to reduce car use.

### Behavioural Survey Results

As part of the final survey, respondents were asked 'What areas of your lifestyle did you change over the course of the competition?' A lengthy list of behaviours followed with the options of 'yes, and expect the changes to last a year or more', 'yes, but do not expect the changes to last', 'no, but plan to do this in the future', 'no, and won't be doing this', and 'was already doing this'.

#### Several patterns can be noted:

- A very low rate of 'yes, but do not expect changes to last' suggests that participants were sincere in their behavioural changes, rather than 'faking it' to win. It also backs up participants' statements that the nine month competition length was sufficient for changes to become habits.
- Behaviours with a high rate of 'was already doing this' tell us where the 'green' message is already getting through. This is especially useful for the Council in assessing the efficacy of public awareness campaigns (as is a high rate of 'no' responses for behaviours aligned with these campaigns).
- Several behaviours have even splits between 'yes, and expect the changes to last a year or more' and 'was already doing this'. This indicates that these behaviours are palatable to participants and could be considered 'low-hanging fruit' for promoting to future competition participants and the general public.
- Behaviours with high rates of 'no, but plan to do this in the future' indicate areas where support from the Council may be useful to encourage action. This could be in the form of workshops and financial assistance, or as public information and press releases.

A summary of responses across both years can be found in Appendix 23.

# **5.4 Competing Competitively**

Despite the prospect of being judged and a prize being awarded, when it came to deciding where to focus their energy only a few participants seemed to approach the competition in a highly analytical way. For example, growing food and preserving was a popular activity across all groups, despite having a low direct impact on their footprint. Alexander Road's biodiversity enhancements didn't even register in the footprinting quiz.

It could certainly be argued that these examples highlight flaws in the quiz – and it was for cases like these that the 'wild card' point category was instigated – however, it could also be that a gap existed between quiz results and translating these into effective action.

When survey respondents were asked how useful they found the ecological footprinting, they rated it highly for understanding environmental impact and understanding which lifestyle aspects have the greatest effect. However it ranked less highly as a means of identifying actions to reduce environmental impact.

Table 6: 'How useful did you find ecological footprinting?'

	Very useful	Somewhat	Not at all
		useful	useful
For understanding my overall impact on the	62%	35%	3%
environment			
For understanding what parts of lifestyle	48.5%	48.5%	3%
have the greatest impact on the environment			
As a means of identifying actions to reduce	39%	52%	9%
my impact on the environment			
As a way of measuring the change that oc-	33%	56%	9%
curred over the course of the competition			

### Factors Influencing Focus

It could be that some participants lacked understanding of how to effectively reduce their ecological impact, and used the competition as motivation to tackle projects with a general green flavour. Some of these projects certainly contributed to reducing their personal footprints, but the energy spent on them wasn't always in direct proportion to their effect as measured by the quiz.

On the other hand, while only 33% of respondents found the footprinting useful for measuring change over the course of the competition, other participants did exactly this and blogged in depth about it (this is discussed later in this chapter).

Participants' decisions about where to focus their energies appear to have been influenced by a range of other factors in addition to the quiz:

- Social interests a desire to build community, socialise and support the group.
- Leadership responding to enthusiastic and skilled individuals
- Personal interest and passion.
- Instinct or media influencing 'commonsense' perceptions of valuable activities, e.g. water conservation.
- Visible/tangible benefits, e.g. vegetable growing.
- Limitations of time, finances, or other resources excluding some actions.

The strength of this approach is that Streets felt able to pursue those activities that mattered most to them, in a way that was sustainable for their group:

The key challenge for us then was how to incorporate green initiatives into lives that were already too busy, in a community of individuals for whom ecological awareness is still of marginal – though growing – importance.

One thing that all of us were overwhelmingly supportive of was our desire for greater connection as a street community. The Greenest Street competition provided a framework for our self-styled quest to 'build a sustainable street community'. (Rainbow Court, 2011)<sup>3</sup>

drawbacks Two to this approach were firstly, judges needed to rely heavily on the community and 'wild card' components of the judging (and on participants' blogging and final presentations to ensure judges were aware of these activities), and secondly, there was sometimes confusion when the impact of actions, as rated by the quiz, did not align with participant expectations.



Kylie receives her award for 'Extraordinary Community Spirit' from judge Joy Darke.

For example with regard to the

latter, there was some resistance to the idea that a higher household income generally equates to greater expenditure on goods and services, and therefore greater impact on energy and resources, and thus a larger footprint. This was balanced within the quiz by a question about spending habits, but some participants still struggled to accept that an income reduction, even when externally forced, could cause dramatic footprint reduction.

### Engagement with Footprinting

There were some notable exceptions to the broad approach, which show what can happen when participants really engage with the footprinting tool. Kylie of Rainbow Court spent "one of the hottest afternoons in living memory" working her way through the online quiz, altering one variable at a time to see what the effects were and to "get a bit of an idea of the types of changes we could make to reduce our score"<sup>5</sup>.

Kylie wrote a blog entry on her findings for the benefit of her street, ranking them in order of effectiveness (and equating their global hectare impact to the land areas of different countries). For example, she says,

Don't, whatever you do, get a job that requires you to drive into the city. Adding a daily car commute from Kapiti to your tally costs a heinous 0.34 earths.

Things are significantly better if you're prepared to take the train. You may get to work late most days, but the eco-cost of your annual 24000 km trek into Wellies and back drops to 0.04 earths (0.08 if you take the bus or carpool).

And finally, should you want to wipe the USA and Spain off your footprint there are a number of options, all in the travel section. You can downgrade your SUV to a minivan, or your minivan to a 4-door sedan, or the 4-door to a 2-door, or a 2-door to a hybrid. Each of these steps saves 0.02 earths, as will sharing whichever vehicle you choose with a fellow passenger....<sup>6</sup>

#### High Impact Behaviour Change

Kylie highlights one of the core reasons the competition used an ecological footprint tool: to communicate the different impact of actions. She also emphasises the degrees of change that can be implemented to address a particular issue.

Her neighbours' responses demonstrate how this can be applied to provide launching points for a range of lifestyle choices and to encourage transitional change. For example, Kylie identifies becoming vegan as the most effective step to reducing your footprint. It is generally acknowledged that this is a level of change

most New Zealanders aren't willing to take, but as Kylie's neighbour, Rachel, commented, her analysis "at least helps us focus our minds on the most valuable changes we could make. While I doubt the entire street will 'go vegan', I think there's a strong argument for a few more vegan and vegetarian meals each week making a big difference to our eco-footprint and waistlines"<sup>7</sup>.

### Aspirational Footprinting

In 'Kakariki Street', Florence took a more personal approach when she worked her way through the quiz "filling in...a new set of answers to fit in with the changes I hope to make over the next 7 or 8 months". She purposely ignored things she felt unable or

unwilling to do, "[b]ut I did change my curtains, my insulation, the size of my vege garden, turning appliances off at the wall, collecting rainwater, installing a grey water system and other things too"<sup>9</sup>.

She reported being "very pleasantly surprised at the results", because her footprint would be "pretty close to excellent and still have plenty of areas where I could continue making it even better"<sup>10</sup>. By experimenting in this way she discovered "it's not nearly as



Janet, Vic and Jude check out eco-downlights in Avion Terrace.

hard to do as I have been thinking it would be! I didn't spend big money upfront (maybe excluding the insulation) but will definitely save \$ in the long run, and I didn't even modify my behaviour too noticeably"<sup>11</sup>.

#### The Quiz as a Tool

While Florence and Kylie's methods differed, both of their blog entries highlight another of the quiz's benefits as a tool for change – it covers a wide range of behaviours. Selecting a broad quiz was a conscious decision on the part of the competition organisers to ensure recognition for as many of the participants' positive behaviours as possible, and to provide a spectrum of challenges for most participants, irrespective of their starting point.

## A Holistic Approach

An expansive quiz and advice/assistance covering a holistic range of impact-reducing activities limits the risk of 'single action bias'. The Center for Research on Environmental Decisions (CRED) at Columbia University, explains:

In response to uncertain and risky situations, humans have a tendency to focus and simplify their decision making. Individuals responding to a threat are likely to rely on one action, even when it provides only incremental protection or risk reduction and may not be the most effective option. People often take no further action, presumably because the first one succeeded in reducing their feeling of worry or vulnerability. This phenomenon is called the single action bias.<sup>12</sup>

The importance of breadth and variety is particularly evident when considering the smallest footprints attained over the course of the competition – the nineteen of less than two 'Earths'.

## Learning from Small Footprints

Common themes could be seen between many of these participants' lifestyles, however there were also fundamental differences. Some are vegetarian (but not all, though it certainly helps reduce a footprint), and some introduced organic and local produce. Carpooling, minimising car travel, and not flying all make a difference.

Composting and recycling are common across the board, as is an emphasis on making things last before replacing them with second-hand or eco-friendly goods. Having a household income at the lower end of the scale also has a positive correlation with a small footprint and can influence other planet-friendly choices with regard to diet, travel and consumption.

While insulation, ecobulbs, vegetable gardens, non-toxic household cleaners and conserving power and water each make little difference to a footprint on their own, they are consistent themes in lower-impact lifestyles. Vegetable gardens also support a reduction in meat consumption and an increase in organic produce.

The commonalities between these small footprints give us an indication of where the starting points or low-hanging fruit can be found on the eco-journey. The differences illustrate the variety of options available to reduce a footprint.

"We have made huge changes in the family - I am buying second-hand clothing, the children are much more aware of what is compostable and what isn't. Our waste has reduced greatly, we only put out one rubbish bag per fortnight and the recycling bin is now at a point that it can go fortnightly too. I have joined a co-op and am buying dried food in bulk and organic meat, cheese and butter - a huge decrease in packaging. We are much more conscious of the additives in foods we eat also. Overall [we have] a greater awareness. Of course I am trying to use home-grown [produce] and, if not, locally grown fruit and veggies, and trying to make my own bulk stores, i.e. the sauce, tomatoes, chutneys, jam etc.."

Gwen & Jason, Alexander Road, 2012

Another indicative tool was the international footprint comparisons included in the 'league tables' used throughout the competition, which powerfully illustrated how out of step with the Earth's carrying capacity we are in New Zealand. Comparisons with other countries (and awards for smallest footprints and large proportional reductions), refuted beliefs about the impossibility of creating a sustainable environmental footprint, and brought into focus New Zealand's proportional culpability for global ecological degradation.

### The Ration Card Concept

The holistic approach to reducing environmental impact, exemplified by small footprints, aligns with the idea of the 'ration card' developed by Brenda and Robert Vale. Brenda was a competition judge in 2011/12 and is a Professorial Research Fellow at the School of Architecture, Victoria University. She and her husband Robert have focussed on sustainable and low-impact buildings in their lives and research, and in recent years they have taken a strong interest in sustainable behaviour and the way people live. Despite her focus on eco-buildings, speaking in Paekākāriki in 2012 Brenda emphasised the importance of lifestyle choices in reducing your footprint.

As Florence put it in her blog entry, "The most important take home message for me was that it really doesn't matter how amazingly eco/sustainable/perfect your house is, the lifestyle choices you make about the way you live in it, your mode of travel to work, the food you eat and holidays you take, can cancel it all out very quickly"<sup>13</sup>.

Brenda used the idea of a ration card to illustrate the need to make choices<sup>14, 15</sup>. In one slightly tongue-in cheek example she asked, 'If

you want to fly, why not convert the car into henhouse?". The audience was asked to think of their lifestyle as being a series of trade-offs. There is no one prescribed sustainable lifestyle, but some of the things we want must be balanced by other choices if we wish to mitigate our ecological impact. Florence summarised it by saying, "It's the wanting to have it all that's literally costing us the earth"16.



The rat trap factory.

### **5.5** Collective Projects

As Geoff from Wellington Road said, "A united group was a good starting point to try some projects only possible on a large communal scale." Participants' enthusiasm for large projects achieved results that went beyond the sum of the impact of each household acting alone.

The specialised nature of some of the activities and the degree of enthusiasm even saw groups gain a degree of specialist knowledge. The competition organisers admit that some of the projects undertaken by the Streets were impressively beyond the scale of anything they would have suggested.

### The Importance of Collective Action

Participants' enjoyment of the social aspects of the competition and

the commitment to working together as a neighbourhood group seems to have created the ideal climate for group projects.

Anable et al. (2006) refer to the "growing body of evidence that shows that engaging communities rather than individuals can increase the level of engagement and can be more effective in diffusing proenvironmental practices" <sup>18</sup>.



Rainbow Court's Spring Fair included tours of their community garden.

Reasons for this, as she identifies in the literature, include:

- The movement of information through social networks (i.e. communities). Social networks have been identified as a robust mechanism for the diffusion of pro-environmental ideas, solutions and behaviours.
- Word-of-mouth diffusion of information is the most effective method because when a person tells someone about what they are doing, they reinforce their own behaviour and show their commitment.
- The presence of change agents to introduce an innovation into a social network.
- The presence of change agents to 'champion' initiatives. The importance of dynamic involvement (e.g. catalysed by a

- champion) has been identified in the success of Car Club development in the UK.
- The conditions being created for 'discursive consciousness' (where issues are thought about and discussed with others), which has been shown to be important for creating lasting behaviour change.
- Fostering a framework for collective action, which may be required for some types of pro-environmental actions (such as travel behaviour).
- Champions are present who can tap into the social capital networks within their community.

To this list, the Council would also add:

- Involvement of fringe participants, encouraged by the existence of an end date and social networking opportunities.
- Attaining a scale that attracts attention, and sometimes resources or funding, from the wider community.
- Working as a group can add legitimacy to a project (e.g. Alexander Road's campaign to remove polystyrene trays was reinforced by their collective action and their survey provided an indication of the community's appetite for change).

# **5.6 Growing Community**

There is a constant emphasis on new-found community and friendships through all of the Streets' blogs, final summaries, and surveys. From Shirley in Alexander Road enjoying knowing who her neighbours are when they drive past, to Te Roto Road's discovery that "we had a lot more in common than simply living in the same street and this resulted in some friendships and bonds that most likely would not have occurred in our previous 'busy lives'." <sup>19</sup>

When asked about the main benefits of participation, 88% of survey respondents rated getting to know their neighbours better as 'very beneficial'. The remaining 12% said it was beneficial. The same proportions rated the strengthening of their community as very beneficial or beneficial.

Other benefits rated highly for participants, like 'increased awareness of my choices and the impact of my lifestyle', however there were greater numbers of respondents ticking the 'beneficial' box (56%) rather than very beneficial.

"It's been amazing to find what a big difference the little, everyday, things make - and just how easy it is to get started and to get hooked! Our early ideas seemed too simple to have any real impact - use energy saving light bulbs, recycle, buy local, drive less, take the small car, swap produce, share knowledge - but what a huge difference it made. It was also very satisfying and great fun to talk to neighbours about our virtuous new habits. So starting out with these simple concepts was a great way to begin.

This gave us the encouragement to take on the more ambitious projects and we quickly found that by sharing ideas and working together we could achieve more than we could as individuals. Macadamia nut harvesting for example, planting native seedlings, stacking firewood - how fantastic to share the workload!"

Terena, Te Roto Rd, 2011

### It's Not For Everyone

It is worth noting that respondents were those who completed the competition and engaged enough to answer the survey. The competition won't be for everyone and some people are perfectly happy with their existing level of neighbourly interaction.

One participant did comment on a level of intensity in his Street that put some people off:

The actual experience of neighbours coming over the fence (so to speak) with email overload and different communication styles and agendas was offputting....A learning experience for me but a couple of neighbours withdrew over time as they couldn't confront what they considered 'pushy people'....

### **5.7 Ongoing Benefits**

Having met over a common goal reinforces the likelihood that participants will continue to cultivate more sustainable lifestyles, or at least stronger and more resilient communities:

It's been an awesome time getting to know the neighbours better, coming together for various projects, the Sustainable Living Show [sic] and just passing and chatting in the street. There are plenty more projects to come. (Robert, Grange Park Ave, 2012).

The proximity of people who are aware of their behavioural changes and keen to discuss them will help to provide support, reminders, and gentle social pressure to continue them. Many of the larger projects have continued in some form, and some have expanded to include other members of the community.

The prevalence of children among many of the Streets may also contribute to the retention of new habits, particularly when parents see their behaviour change as a contribution to their children's future:

The best part of the project has been seeing the kids following us to workshops, morning teas and pot lunch dinners after working bees, playing while we share, work and dig. Taking it all in and by seeing our actions and intentions, learning for the future. (Kirsty and Paul, 'Kakariki' Street, 2011)

The Greenest Street competition has been rated a success by participants and will continue in the future. When asked 'Overall, how do you rate your experience of participating?' twenty-six of the

thirty-four respondents said they got a lot out of the competition and would definitely recommend it to others. The remaining respondents all got something out of the competition and may recommend it to others.

#### References:

8, 9, 10, 11. www.kakarikistreet.wordpress.com/2010/11/14/el-launcho

<sup>12.</sup> The Psychology of Climate Change Communication: A Guide for Scientists, Journalists, Educators, Political Aides, and the Interested Public (2009). Center for Research on Environmental Decisions (CRED), Columbia University. <a href="https://www.guide.cred.columbia.edu/index">www.guide.cred.columbia.edu/index</a>

<sup>13, 14.</sup> www.kakarikistreet.wordpress.com/2012/08/07/brenda-vale-telling-it-how-it-is

- <sup>15.</sup> Brenda Vale discusses the relative benefits of eco-housing and lifestyle changes in 'Living Within a Fair Share Ecological Footprint' (draft chapter).
- <sup>16.</sup> www.kakarikistreet.wordpress.com/2012/08/07/brenda-vale-telling-it-how-it-is
- <sup>17</sup> Kapiti Coast's Greenest Street 2012 participant survey
- <sup>18.</sup> Anable, J; Lane, B. and Kelay, T. (2006). An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour. For the Department of Transport, UK Government.

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<sup>&</sup>lt;sup>1, 2.</sup> 'Kakariki Street' final presentation

<sup>&</sup>lt;sup>3.</sup> Rainbow Court final summary

<sup>&</sup>lt;sup>4, 5, 6, 7.</sup> www.rainbowcourt.wordpress.com/2011/01/18/crunching-the-ecofootprint-numbers

<sup>&</sup>lt;sup>19.</sup> www.terotootaki.blogspot.co.nz/2011/08/te-roto-road-kapitis-greenest-street

## 6.1 Participant Feedback

Feedback from participants has been integral to improving the competition model. Surveys were held at the end of each competition round, and a more in-depth group discussion was held after round two. The responses have been creative, personal, well thought out, and hugely useful.

The information gathered covered how participants feel about the competition, what happened behind the scenes in different streets, what they wanted from the experience, and what we could do better. It has helped to fine-tune the operational aspects of the competition and develop the bigger picture.

It is worth noting that rounds one and two ran virtually back-to-back, in terms of ending one competition and starting recruitment for the next. This was less than ideal for assessing the competition's workings and making changes. However, the change to competition timing has allowed time for evaluation and changes to be made.

# **6.2 Future Changes**

### **Timing**

Following the end of the 2012 competition, an immediate decision was made to postpone the start of round three until mid 2013. Participants' survey responses and comments convinced organisers that a winter start would benefit future competitors for several reasons:

- The interest in gardening and food production was a given, and a winter start would give participants (especially new gardeners) time to get organised before the true growing season began.
- It would be preferable finish at a time of year when participants' gardens were in full production.
- Winter, traditionally a quieter time, is better for participants to get to know each other and make their plans.
- To hit the Christmas break later in the competition, when Streets were more established.

Council staff also realised that this could shift the end of the competition to March, traditionally the month during which the Sustainable Home and Garden Show is held, meaning Streets wouldn't need to create both a display for the Greenest Street tent and a final summary for the judges — these could be combined. It would also provide the prizegiving with a larger audience, and participants and judges would have one fewer event to attend if the Show and prizegiving were on the same weekend.

## Competitive element

Suggestions have been made that the competitive element be removed, as some participants found it intimidating or unnecessary. Canterbury University's 'Eco-My-Flat' programme had similar feedback and decided to run a non-competitive workshop series. However, at the roundtable discussion and in the survey it was clear that the competitive element did motivate some people and provided a sense of urgency and legitimacy.

#### **Promotion**

The Council is currently looking for new avenues to promote the competition in order to recruit participants. Radio and newspaper advertising showed no obvious benefits. However, newspaper ads will be run again, as local newspapers are the main way people keep up to date in the district. Other avenues will be the Council's sustainability newsletter *On To It*, posters in service centres and libraries, and Council-affiliated Facebook pages and press releases.

Past participants can be the best competition advertisement, and some have offered to be 'ambassadors'. The Council will provide these 'ambassadors' with advertising material to share with their networks, and they will be presenting a 'How to Build a Greenest Street' workshop at the 2013 Sustainable Home and Garden Show. It is planned to repeat this workshop in the main townships that make up the Kāpiti Coast district.

Participants noted that providing Council with list of signed-up participants was daunting and they preferred encouraging people to get in touch for advice on recruitment. Advertising will be adjusted accordingly. Additionally, a promotional event associated with Earth Hour 2013 is being planned to encourage people interested in the competition to get together.

Purchasing column space in a local newspaper created quite a large workload without clear benefit. The Council will be exploring a range of other promotional avenues, including a group blog, broader coverage in print media, and other radio opportunities.

## Rebranding

In addition to reworking some of the promotional material with a more relaxed tone and appearance, the Council will be renaming the competition 'Kāpiti Coast's Greenest Neighbourhood'. Participants explained that the Street concept caused some people to exclude themselves from enquiring further as they felt their physical street was too big, too small, etc. Although promotional material defines a Street in terms of a neighbourhood, the renaming will bring this to the fore and encourage alliances. There will be no change to the definition of an eligible group (see box: 'What is a Street?' in *Introduction*).

#### The Launch

Drawing on participants' suggestions, future competitions will launch with one gathering of all the Streets, allowing competitors to meet each other in a relaxed environment (previously this hadn't happened until the Sustainable Home and Garden Show). This will help shift the focus to create a fun event to encourage and inspire participants.

Environmental footprints will be measured in the subsequent week, and the judges' Street tour will take place a month or two later. The intent is to reduce the pressure on the Streets to "turn something on" straight away, and to allow them time to shape their ideas and get started. With the formal aspects covered in a shared event, the judges can focus on getting to know the participants and talk through their aspirations when they visit each Street.

### Environmental Footprinting

An argument could be made for providing more information on how to use the quiz to measure footprint change and check the impact of different behaviours (see Table 6 on the perceived usefulness of environmental footprinting). However, in light of Flo and Kylie's blogs on exactly this subject, it seems likely that participants are actively choosing not to engage with the quiz beyond the initial footprinting.

It is hoped that a more New Zealand-focussed quiz will be available for the next round. Ideally, this will be online and able to retain participant's answers from one session to the next so change can be tracked over the course of the competition, and the final quiz would be pre-populated with the first set of answers.

Footprinting can be a technical and somewhat dry exercise that is intimidating for some people. Efforts were made to meet with Streets before the footprinting, however this will be extended further. Participants were clear about the need to ease people into the competition, explaining that footprinting at the first gathering created the biggest drop-off point in the course of the competition. Environmental footprinting will be scheduled for the first week of the competition, after an initial information session with each Street and the launch event.

#### Resource Materials

Decreasing the number of resource folders from one per household to three per Street actually increased the number of people who looked at them, so this will be continued. Some suggested that documents be provided on a disc (making it easier to print copies), however other participants resisted spending any more time in front of a computer. The ability to dip into the folder was also appreciated.

### Competition Structure

It has been proposed that the minimum number of households be increased to keep groups from becoming too small if people drop out. However, based on conversations Council staff have had with some groups, this would effectively be raising the entry bar and put some groups off.

Discussion group participants were keen to see the fun aspects of the competition emphasised to increase the engagement of households and neighbourhoods without existing green interests. These are also likely to be good tools for increasing the competition's media profile. Drawing heavily on participant's ideas, a series of fun challenges are being developed to be held bi-monthly throughout the competition:

- a quiz to be incorporated into the launch event;
- a DIY challenge to create a useful item from recycled materials;
- a cooking challenge using seasonal produce; and
- a civil defence emergency challenge.

Prizes will be awarded, but the outcome of the challenges will not directly affect judging of the 'Greenest Neighbourhood'.

### Involving Previous Participants

Previous participants have expressed interest in involvement with new rounds of the competition. The idea of forming 'alumni teams' to compete in the challenges has proven popular and may meet several needs identified by past participants:

- to continue the momentum and enthusiasm of the competition by coming together as a Street with a green goal;
- to reinforce their identity as a Street;
- to build links with other Streets, past and present, in a relaxed forum; and
- to provide a fun way of introducing new neighbours to the Greenest Street concept and the Street identity it established.

## Continued Support

The other issue discussed was 'where to from here?' for past participants. Relieved of the pressure of a competition and with their Street leaders stepping down, some Streets were concerned about waning enthusiasm. The question was how the Council could best serve those households who wanted more input and inspiration as they continued their green journey.

Participants from round two were surveyed for their preferences from a range of options raised in conversations with participants from both rounds and between Council staff.

Table 7: Ranked options for 'supporting what Greenest Street has started'

	Yes, sounds	Maybe	No,
	good		thanks
Monthly workshops/speakers on 'Greenest Street' type subjects	71%	29%	-
Online discussion & noticeboard for past participants & interested others	56%	38%	6%
Facilitating neighbourhood/community ideas & planning as part of monthly gatherings	56%	25%	19%
Linking past participants with new streets as mentors, speakers, advisors etc.	56%	31%	13%
An annual 'Greenest Street' alumni get- together	38%	56%	6%
A 'Greener Street' accreditation process	29%	64%	7%

A 'Greener Kapiti' Facebook page has been set up and advertised through *On To It* - the Council's sustainability newsletter. Facebook

was favoured due to participants' familiarity with its use, and the fact that they were using it already so wouldn't haven't to 'check another site'. However while some respondents were keen for the online contact, many didn't have a huge appetite for increased computer use. Membership of the online group has been slow to grow and remains relatively low.

Face-to-face contact was the clear favourite. It is intended that a series of workshops/speakers be set up to alternate with the Greenest Street challenges. These will be open to the wider community and include opportunities for discussion and planning in localised sub-groups. Topics will be drawn, at least initially, from those lifestyle areas that survey respondents indicated they were planning to change in the future.

While the idea of joining with existing social groups was not popular, the idea of 'social mapping' found favour. This is likely to be a workshop session with participants coached in the art of mapping their connections and assets to increase resiliency and create a community resource/gift for new residents.

Interactive aspect of the workshops could provide a solution for households who shifted, interested residents who weren't able to be part of Greenest Street, and ex-Greenest Streeters who want to cultivate and extend their neighbourhoods. The intent is to match ongoing learning and information sharing with action planning and neighbourhood building.

#### Involvement of Civil Defence

Although attempts were made to involve Neighbourhood Support and Civil Defence in the Greenest Street competition previously, it didn't come together. This remains a priority, as resiliency is a strong third partner to sustainability and community. This was highlighted by Rainbow Court's experience with a day-long power cut – they told us it revealed a lot about community resources.

The competition has attracted the attention of the Wellington Region Emergency Management Office and discussions are underway to involve Civil Defence representatives within the Council to promote the benefits of neighbourhood resiliency, for the Streets and the wider community. It is likely that a simulated civil defence emergency will be added to the list of challenges.

### **Blogs**

Facebook group pages for Streets have been suggested, as it is a medium most are familiar with and facilitates sharing posts beyond the participant group. However Facebook presents several drawbacks: it requires frequent checking-in to keep up with activity, is not ideal for longer stories, and lacks the ability to store or search posts in a useful way.

The Council is currently considering options for building a shared platform with space for each Street. This would make the Street blogs accessible in one place and improve technical support. A 'comments' application is also favoured because, as one participant noted, this would allow the judges (and public) to provide feedback, reassuring the Streets that their stories are being read.

### Prize Money

As a means of funding additional activities, the prize money will be reduced to \$2000. This is unlikely to dampen participant enthusiasm for the competition, especially as it is being diverted into community-building activities.

In light of the difficulties of allocating the prize money at the end of round one, a voting process will be written into the competition rules as a fall-back option. This will enshrine the 'one participant/ one vote' model adopted by Te Roto Road.

# 6.3 Conclusions

### Change is Possible

After the 2012 Greenest Street competition, judge Brenda Vale said,

The importance of this competition is it shows it is possible to make a difference. A 12% average reduction in the ecological footprint of all those taking part in this year's competition is a substantial achievement. The fact that the winning individual EF [ecological footprint] met the fair earth share EF of 1.9ha was also a major achievement.<sup>1</sup>

Not only is it possible to make a difference, but the competition demonstrates that meaningful change can be achieved in our everyday lives and neighbourhoods. With its emphasis on working in community and behavioural change (over technological fixes), the competition invites participants to take up the challenge with the resources available to them in ways that suit them. Their responses

were creative, sustainable, within the boundaries of their lives and means, and readily replicable by others.

## Emphasising Community

The community aspects of the competition were undeniably appealing to participants and, working as Streets, they soon discovered that their neighbourhood is their greatest asset. Not just because "it is easier to do things against the current paradigm in society if you do them in a group, because of the self-reinforcement this offers"<sup>2</sup>, but for meaning, fun, and practical support.

The other great strength of the competition is the breadth of action it encourages. Many participants are aware of the challenges posed by climate change and environmental degradation. As discussed earlier, research by CRED explains that humans have a tendency to focus and simplify their decision-making in response to uncertain and risky situations. This can result in single-action bias as they rely on one action, even when it provides only incremental risk protection, and take no further action because they've appeased their anxiety.

An expansive quiz and advice/assistance covering a holistic range of impact-reducing activities, combined with an emphasis on working in community, ensures participants are aware of the many options for action. These actions can reinforce and build on each other as the neighbourhood interactions create gentle social pressure to 'keep going'.

### Continuing into the Future

The Council is aware that the Greenest Street competition is breaking new ground in its field and, as such, will continue to evolve. Feedback from participants has highlighted some shortcomings and provided exciting suggestions for improving the format from start to finish. The Council remains committed to increasing sustainability and resilience in the district, and will continue to champion the competition as an effective mechanism for delivering their wide range of existing community sustainability support programmes.

The marked reductions in participants' average environmental footprints, numerous stories of the competition's life-enhancing benefits, and continued positive activities of past participants leave little doubt as to its value.

"It was noticeable that none of those taking part thought this reduction in environmental impact was a reduction in quality of life.

In fact the opposite was true, as the coming together as a collective street to tackle the problem was observed to be life enriching and enhancing.

This has much to teach the rest of
New Zealand. In the face of
constant advertising to do more
and have more, realising that doing
less together is an alternative route
to happiness for self and the
environment, is hugely significant.

Long may this competition continue and spread."<sup>3</sup>

Brenda Vale, competition judge, 2011/12

#### References:

- <sup>1</sup> B. Vale (personal communication, 16 July 2012). Brenda is a Professorial Research Fellow at the School of Architecture, Victoria University. She is known for her work on sustainable and low-impact buildings, but more recently has taken a strong interest in behaviour and lifestyles. Her upcoming book, Living Within a Fair Share Ecological Footprint, includes a chapter making comparisons between the footprints of participants in various impact-reducing projects (including Greenest Street) and those of inhabitants of the Hockerton Housing Project (HHP) the first attempt in the UK to build a zero-emission community.
- <sup>2.</sup> B. Vale. Draft chapter from Living Within a Fair Share Ecological Footprint.

<sup>&</sup>lt;sup>3.</sup> B. Vale (personal communication, 16 July 2012).



An initiative of

