VicHealth

LETTER

Healthy planet, healthy people

Shaping a sustainable healthy future

CONTENTS

COVER: Illustration by Toby Quarmby, Vishus Productions

Health is inextricably linked to the quality and structure of the environments we live in. In the last year we have watched on as global environmental events have had catastrophic consequences for people and places: the Indian Ocean tsunami, Hurricane Katrina and most recently the South Asia earthquake. These disasters have dramatically reinforced the immediate and sometimes painful connection between the environment and human health and survival.

The links between the environments where we live – towns, suburbs, cities – and our health appear much more mundane in comparison, and can quickly become lost amid the stresses and strains of daily life. However, these links are crucial: historically, it has been environmental improvements that have created the most significant health gains. It was the development of widespread sewage and sanitation systems in the late 1800s and 1900s which led to the most significant reduction in deaths and disease in the 20th century, rather than any one medical intervention.[1]

It is easy to see how people can become divorced from ecological realities, ignoring the impact of human presence and activity. But growth of populations and industrial activity cannot be sustained on their current path without seriously depleting the planet's resources and overloading its ability to deal with pollution and waste materials.

Today, there are a bewildering number of terms used to describe the links between the environment and health – ecological public health, healthy sustainable communities, and eco-cities to name a few. What they are all trying to articulate is that our health depends on the quality of our environment – natural, built, social and cultural – from whether we are able to walk safely, breathe easily or realise our potential physically, intellectually and emotionally.

The often fragmented links between the environment and health need to be restored. To this end we have been working with key organisations, including the International Council for Local Environment Initiatives (ICLEI) on a tool to quantify the economic, ecological and social benefits of investing in Walking School Buses; the Planning Institute of Australia (Victoria) so that health is 'planned in' rather than 'planned out' of urban design; and Environment Victoria, to implement a healthy outdoor exercise program; all three initiatives are covered in this issue. We are learning the value of working together to simultaneously achieve mutual environmental and health benefits.

These kind of one-off partnerships are exciting, but they are only a start. The recent House of Representatives Committee Inquiry into sustainable cities found that, to establish a path to sustainability, 'coordinated governance is essential'.[2] This will require nothing less than people at all levels of government working together for mutual advantage.

To help push the debate forward about how sectors can work better together to promote healthy environments we have asked some influential commentators to contribute to this *VicHealth Letter*, including Prof. Ian Lowe, Richard Eckersley, Dr Iain Butterworth, Prof. Evelyne de Leeuw and Dr Mardie Townsend.

I hope you enjoy reading this issue. As always, we welcome your feedback.

Dr Rob Moodie
Chief Executive Officer

REFERENCES

1 Crombie, H 1995, *Sustainable development and health*, Public Health Alliance, Birmingham.

2 Standing Committee on Environment and Heritage 2005, *Sustainable cities*, House of Representatives, Commonwealth of Australia, Canberra.

From the last issue

We had such a good response to our last issue (*An ounce of prevention is worth a pound of cure: making the case for choosing health promotion*) that we decided to publish some of your comments and feedback.

Comments in response to this issue are also welcome, and should be sent to smccrow@vichealth.vic.gov.au or by mail to the address on the back cover.

'Your team has done an excellent job in raising many of the most important challenges we face in health promotion …how to advocate effectively, what evidence to use, and what stakeholders want and need, as well as reminding us there are many examples of success that we need to draw on.'
– MICHELE HERRIOT, A/DIRECTOR, HEALTH PROMOTION BRANCH, DEPARTMENT OF HEALTH, SA

'Congratulations on producing such an excellent and thought-provoking newsletter in health promotion.' – VERONICA GRAHAM, STATE PUBLIC HEALTH NUTRITIONIST, DEPARTMENT OF HUMAN SERVICES, MELBOURNE

'The issue on prevention was excellent, and very relevant to our current Commission of Inquiry where the recent increase in investment in prevention versus acute care is being questioned.'
– LEISA ELDER, EXECUTIVE DIRECTOR PUBLIC AFFAIRS, QUEENSLAND HEALTH

'The last edition of the *VicHealth Letter* is a great read – simple but powerful, with helpful quotes that will serve as persuasive reminders. I will be using the magazine in my quest to continue reorienting those around me – government and non-government.'
– KAYE GRAVES, MANAGER HEALTHY COMMUNITIES, BENDIGO COMMUNITY HEALTH SERVICES

'I've sent this issue to our network of health promotion coordinators throughout rural South Australia. The view from the economist is the clearest explanation that I've read on why health promotion is an essential investment for a healthy society.' – CYNTHIA SPURR, CHIEF PROJECT OFFICER, COUNTRY HEALTH PROMOTION, DEPARTMENT OF HEALTH, ADELAIDE

Shaping a sustainable, healthy

PHOTO: NASA'S EARTH OBSERVATORY

Just as we are more likely to be healthy if we live in a healthy community, we are more likely to have healthy communities if we have healthy ecological systems.

This principle has been recognised for decades; the Ottawa Charter contains strong references to the need for environmental health. The Healthy Cities movement, now including more than 10,000 locations worldwide, has put increasing emphasis on the need for healthy environments.

There are direct health impacts of unhealthy environments, such as the established link between urban air quality and respiratory problems, as well as the consequences of polluted water and poor sanitation in the urban areas of developing countries. There are indirect effects, like the greater probability of deaths and injuries if travellers use cars or motorbikes rather than public transport. We should also be aware of the beneficial effects of natural areas in cities on mental health and wellbeing.

We rely on natural systems to provide the essentials of life: oxygen, water and food. We also need those systems to process our wastes. Some of the systemic features that contribute to poor health result directly from the degradation of the natural world's capacity to provide those essential services. Unsustainable food production practices are increasing the risk of animal infections crossing over to humans. Obvious examples include 'bird flu' and variant Creutzfeldt-Jakob disease from BSE, while there also

FUTURE

Consumerism, individualism and domination of nature must give way to quality of life, human solidarity and ecological sensibility.

is evidence linking HIV/AIDS with animal infections. Crowding more humans together with increasing numbers of farm animals increases the risks of these serious health problems.

A recent study[1] documented the alarming health impacts of climate change. With further warming inevitable, direct health effects like heat stress and indirect effects such as vector-borne disease will worsen, but the scale of the problem will be determined by the way we respond.

Natural systems provide our sense of place, our cultural identity and spiritual sustenance. We are healthier and more fulfilled when those needs are satisfied. So investments in the health of our natural systems, ranging from urban parks and healthy waterways to stabilising the global climate, are also investments in the health of the community.

A planet under pressure

The scale and seriousness of environmental problems are no longer in doubt. The first independent national report on the state of the environment showed that we have very serious problems, most obviously loss of biological diversity, degradation of inland waterways and destruction of the productive capacity of rural land.[2] That report linked lifestyle choices to environmental problems, showing that a sustainable future will require integrating environmental awareness into all social and economic decisions.

The second report, released in 2002,[3] noted an improvement in urban air quality but found that all the other critical environmental problems are getting worse, because the pressures on natural systems are still increasing. Like most countries, Australia has both a growing population and increasing material expectations per person. Each year the average person uses more energy, travels further, consumes more resources and produces more waste. The compounding effect of more people, each on average demanding more,

is putting ever-increasing pressure on natural systems. Successive ABS reports on measures of progress all show that the economic advance of the last 15 years has come at significant environmental cost.[4]

The 2004 report by the International Geosphere–Biosphere Programme, *Global Change and the Earth System: A Planet Under Pressure*,[5] painted a disturbing picture. It said that human activities are affecting global systems 'in complex, interactive and apparently accelerating ways', so that we now have the capacity to alter those natural systems in ways 'that threaten the very processes and components … on which the human species depends'. The Millennium Assessment Report (2005)[6] concluded that human activity has changed natural systems more in the last 50 years than in any comparable period of human history, directly causing a substantial and largely irreversible loss in the diversity of life on Earth.

Failure to reduce greenhouse pollution today will come at an enormous environmental and health cost.

Our ecological footprint

One way of conceptualising the demands we make on natural systems is the 'ecological footprint' – the area of productive land needed to provide our food, water, resources and waste management. The total ecological footprint of the human population is now 2.2 hectares per person, while the productive area is equivalent to 1.8; in other words, we are operating at an ecological deficit, systematically running down the capacity of natural systems.[7] But the average Victorian consumes much more than this, with a footprint of 8.1 hectares: nearly four times the global average and about 5% above the Australian average.[8]

One reason is that most Victorian electricity is generated from brown coal, releasing much more carbon dioxide per unit of delivered energy than any other technology. Victorians use more energy in their houses than the national average, largely because of the climate. It should be of more concern that Victorians drive further on average than other Australians, given

that the State has a higher population density than any other; the data show increasing car use in urban areas.

As one concrete example, recent years have seen a dramatic fall in the numbers of children walking or cycling to school, with more being driven in cars. The change has a triple effect on health. The children are getting less exercise and so are less physically fit. Increased car use causes local air pollution, associated with respiratory problems such as asthma. At the same time, increased amounts of carbon dioxide contribute to global climate change. On the other side of the same coin, better urban planning can reduce the need for car use and produce health benefits. Since there are major cities in western Europe in which more than a third of all urban journeys are made on foot or by bicycle, it should be a conscious aim to increase the proportion of our urban journeys made in these ways. Achieving this goal will require planning to make services more accessible, as well as the provision of safe paths for walking and cycling.

Social cohesion

A sustainable society has to be socially cohesive. Recent studies show that average life expectancy in the OECD countries correlates closely with the degree of equality. The USA is the richest country in the world, in terms of GDP per capita, but it is also the most unequal in the OECD – and has the shortest life expectancy.[9] So the concern for economic growth should not come at the expense of equality and its consequences, social cohesion and community health. Some of the problems are physical; a less equal society is more likely to be violent. There are also impacts on wellbeing and mental health. Widening divisions between rich and poor inevitably cause resentment and social tensions. Children growing up anywhere should have the opportunity to realise their potential in all ways: physically, intellectually and emotionally.

We should also be striving to be responsible global citizens. It is not just our humanitarian duty to try to improve the lot of the poorest people of the world. It is also enlightened self-interest because a world of increasing inequality will be a world of increasing tension. We cannot be secure while a billion people do not have clean drinking water, 2.6 billion do not have sanitation and about 3 billion live on less than US$2 a day. As the Australian delegation said at the 1999 UNESCO World Conference on Science, we should aim to make this not just a new century but a just new century.

A sustainable future?

Jared Diamond[10] argues that history shows some impressive societies have collapsed, while others resolved serious threats to their survival. It is an important reminder that past trend is not necessarily future destiny. Problems can be resolved and alarming trends can be halted. So Diamond argues that societies choose to survive or fail. This means our fate is not a matter of chance, but a result of social choices. Societies tend to expand until problems emerge from the imbalance between the resource base and the increasing needs of a growing population. Critically, Diamond argues, whether a society can manage a concerted response to its problems depends on cultural values and social institutions – including political

structures and economic practices. The depressing case studies of failed societies warn that survival requires new values and practices to meet serious challenges. At the global level, the obsession with economic growth and blind faith in markets are preventing a concerted response to problems that could destroy existing civilisations.

As discussed earlier, the way the world is now living is not sustainable. Human systems can change radically and rapidly. The impetus is growing recognition of the need for change. The serious obstacle is the dominant mind-set of decision-makers who don't recognise the problem, or see potential solutions as threatening their short-term interests.

Children growing up anywhere should have the opportunity to realise their potential in all ways: physically, intellectually and emotionally.

Market-led wealth generation and government-led technological change must be supplemented and guided by a values-led move to an alternative global vision, based around principles such as equity. We should see the economy as a means of serving our needs within the limits of natural systems, rather than an end in itself. New technology should be developed around the principles of renewable resources, efficient use and 'industrial ecology' – seeing the waste of one industrial process as the feedstock of another.[11]

Above all, we need genuine globalisation, rather than the present fad of reducing the restraints national governments can place on irresponsible corporations. Paul Raskin[12] wrote an essay looking back from 2084 to summarise the changes

that made a sustainable society possible. The crucial factor was what he called 'a new suite of values': 'Consumerism, individualism and domination of nature – the dominant values of yesteryear – have given way to a new triad: quality of life, human solidarity and ecological sensibility'. He noted that these would be applied with different weights and shades of meaning in different societies, but they are the necessary underlying values. In this plausible future, world population stabilises at about 8 billion as a result of improved living standards in poor countries and greater empowerment of women. Although the overall scale of the economy in 2084 is seen as being much greater than it is now, the flow of material resources is far less, water is used sustainably and fossil fuel use has been cut dramatically. The societies in this imagined future are much more egalitarian than today's and people are involved in decision-making at the local, regional and global level. The essay is an inspiring vision of the sort of world we could be building.

This vision of a sustainable future is utopian, but that has been said of all important reform movements. They happened because determined people worked for a better world. All around the world, people are striving to develop social and institutional responses that will enable the transition to a sustainable future.[13]

The foundation of a sustainable society has to be appropriate values, recognising that we share the Earth with all other species and hold it in trust for all future generations.

– Ian Lowe is emeritus professor of science, technology and society at Griffith University and President of the Australian Conservation Foundation. In 2000 he was awarded the Queensland Premier's Millennium Award for Excellence in Science and the Prime Minister's Environmental Award for Outstanding Individual Achievement.

REFERENCES

1. Woodruff, R, Hales, S, Butler, C & McMichael, A 2005, *Climate Change Health Impacts in Australia*, Australian Conservation Foundation, Carlton, and Australian Medical Association, Barton, ACT.
2. State of the Environment Advisory Council 1996, *State of the Environment Australia 1996*, CSIRO Publishing, Collingwood.
3. State of the Environment Committee 2001, *Australia State of the Environment 2001*, CSIRO Publishing, Collingwood.
4. Australian Bureau of Statistics 2002, 2004, 2005, *Measuring Australia's Progress*, ABS Cat. No. 1370.0, Commonwealth of Australia, Canberra.
5. Steffen, W, Jager, J, Matson, P, Moore, B, Oldfield, F, Richardson, K, Sanderson, A, Schnellnhuber, J, Turner, BL, Tyson P & Wasson R 2004, *Global Change and the Earth System: A Planet Under Pressure,* Springer-Verlag, Berlin.
6. Millennium Assessment Report 2005, UNEP, available at <www.mar.org>.
7. WWF 2004, *Living Planet Report*, WWF, Gland.
8. EPA of Victoria 2005, available at <www.epa.vic.gov.au/Eco-footprint/>.
9. Wilkinson, R 2005, *The Impact of Inequality: How to Make Sick Societies Healthier*, Routledge, London.
10. Diamond, J 2004, *Collapse*, Penguin, New York.
11. McDonough, W & Braungart, M 2002, *Cradle to cradle*, North Point Press, New York.
12. Raskin, P 2005, *Values for a Great Transition*, Tellus Institute, Boston.
13. Lowe, I 2005, *A Big Fix*, Black Inc., Melbourne.

Further reading

Our Environment, Our Future

Launched in mid 2005, the Victorian Government's Environmental Sustainability Framework establishes three key directions that Victoria must pursue to move towards being a sustainable state: Maintaining and restoring our natural assets; using our natural resources more efficiently; and reducing our everyday environmental impacts. For copies and more information, see <www.dse.vic.gov.au>.

Biodiversity: Its Importance to Human Health

Edited by Eric Chivian MD

Highlighting the importance of biodiversity to human health, this comprehensive report, with contributions from more than 60 international scientists, is a fantastic resource for those wanting to better understand the links between biodiversity and human health. See <http://chge.med.harvard.edu> (look under research/biodiversity).

In Search of Sustainability

Edited by J Goldie, B Douglas & B Furnass, CSIRO Publishing, 2005

In this new book, Australian leaders from a wide range of fields discuss the key issues we must address if we are to move towards a more just and sustainable future. Major concerns and challenges for achieving sustainability discussed include: human health, land use and natural ecosystems, equity and peace, economic systems, climate change, urban design and transport.

Sustainability and Health: Supporting global ecological integrity in public health

Edited by VA Brown, J Grootjans, J Ritchie, M Townsend and G Verrinder, Allen & Unwin, 2005

The worlds of sustainability and health have developed almost independently of one another, despite the best intentions of each to address issues of common concern like poverty, inequality, loss of biodiversity and climate change.

An inspiring list of contributors have combined to produce a textbook to bridge boundaries and overcome conceptual barriers. It is a compendium of international and national conventions, regulations, and literature, as well as some useful learning activities. The book will be of immediate value to tertiary students (particularly more senior ones), and I'm tempted to say 'mandatory' for professionals in the fields of planning, architecture, environmental management, all forms of natural resource management, and public health (of course!).

Review by Pierre Horwitz, Consortium for Health and Ecology, Edith Cowan University

EcoHealth Journal

EcoHealth Journal, published by Springer-Verlag, New York Inc., provides an authoritative forum for research and practice integrating human, wildlife and ecosystem health. See <www.ecohealth.net>.

Richer is better, right?
WELL ... NO, NOT ANY MORE!

Making health, not wealth, the bottom line of progress can help us lead a more sustainable lifestyle. RICHARD ECKERSLEY explains.

British business consultant Sir John Whitmore wrote recently that he met more and more people in his work who secretly despised the system they were part of, deplored the lack of corporate values, and knew their products and services were of little consequence.[1] They would love to be out of it and doing something more meaningful, he said, but felt trapped in their expensive lifestyles – the mortgage, the flash cars, the private school fees, the brand-name clothes. 'So they don their suit and tie and serve the system, but they glance more often out of the window. The spirit is stirring in such people, and they are increasingly asking themselves tough questions.'

These men and women, supposedly the winners in our current way of life, are not alone in their subversive thoughts. Whitmore's observations echo those of Australian social researcher Hugh Mackay, who says many people today are taking the time to explore the meaning of their lives and to connect with their most deeply-held values.[2]

The gap between 'what I believe in' and 'how I live' is uncomfortably wide for many of us and we are looking for ways to narrow it, he says. Whether this search for meaning is expressed in religion, New Age mysticism, moral reflection or love and friendship, the goal is the same: 'to feel that our lives express who we are and that we are living in harmony with the values we claim to espouse'.

At the leading edge of this social change are the so-called downshifters and cultural creatives, people who are making a comprehensive shift in their worldview, values and way of life, including trading off income for quality of life.[3,4] Rejecting contemporary lifestyles and priorities, they are placing more emphasis in their lives on relationships, communities, spirituality, nature and the environment, and ecological sustainability. They represent a profound repudiation of the way we have interpreted the world and our place in it.

This worldview is framed around notions of material progress, which equates more with better. Economic growth has overriding priority because we see it as the basis for improving quality of life (the degree to which people enjoy the conditions of life that are conducive to total wellbeing: physical, mental, social and spiritual). Wealth not only increases personal freedom and opportunity, the rationale goes, it also provides the means to address social goals, including improving health and environmental protection.

Material progress remains dominant, especially in the thinking of government and business, but is increasingly being challenged by an alternative model, sustainable development. Sustainability does not regard economic growth and wealth creation as paramount, but rather seeks to balance and integrate economic, social and environmental goals and objectives to enhance quality of life. A common theme is the perceived need to shift from *quantity* to *quality* in our way of life and our measurements. Rather than casting the core question in terms of being pro-growth or anti-growth, we need to see that economic growth itself is not the main game.

> *The goal of marketing is not only to make us dissatisfied with what we have, but also with who we are.*

Because of the assumptions behind material progress, the key challenge of sustainability has usually been seen as reconciling the requirements of the economy – growth – with the requirements of the natural environment – conservation and sustainable resource use. However, our increasing understanding of the social determinants of health can shift this perspective, making an important contribution to working towards sustainable development. It provides a means of integrating different priorities by allowing them to be measured against a common goal or benchmark: improving human health and wellbeing.

When we look more closely at the relationship between wealth and health, we find that it is not nearly as close as advocates of material progress assume. Other issues that we need to take into account in explaining historic improvements in health include the role of other factors such as the growth in knowledge and innovation; improvements in governance, social justice and civil rights; and an expanded role of government in the provision of

services such as education, health care, welfare, and sanitation.

Increasing income confers large benefits at low income levels, but little if any benefit at high income levels. Both health and happiness show this pattern. Life expectancy levels off above a per capita GDP of about US$5,000, and happiness at about US$10,000.[5] In rich countries, people have not become happier over recent decades even though they have become, on average and in real terms, much richer. Across countries, happiness is more closely associated with democratic freedoms than with income. It is also strongly linked to equality, stability and human rights.

When we look at rich countries, including Australia, we find that rising income does not only have diminishing benefits, it has escalating costs. These costs are most apparent in young people's lives, which reflect best the tenor and tempo of our times. While their health, when measured by life expectancy and mortality, continues to improve, adverse trends in young people's health range across both physical and mental problems, and from relatively minor but common complaints such as chronic tiredness to rare but serious problems such as suicide.[5,6]

A quarter of Australian children today are overweight or obese, and this proportion is increasing by almost one percentage point a year; inactivity has also increased.[7] These changes place the children at risk of a wide range of health problems later in life, including diabetes, heart disease and cancer. A fifth to a third of young people today are experiencing significant psychological distress at any one time, with some estimates of the prevalence of a more general malaise (headaches, stomach aches, sleeplessness) reaching 50 per cent.[5,6]

Young people are experiencing higher levels of mental health problems than older people, and carrying this increased risk into later life. A major new US study has found almost a half of Americans will experience a clinical mental disorder during their lives, while over a quarter will suffer a disorder in any one year.[8,9] The risk increases for successive generations; people aged 18 to 29

Local government planning for wellbeing

The Victorian Community Indicators Project is a VicHealth-funded initiative designed to develop a sustainable system to support local governments develop and use community indicators as tools for measuring health, wellbeing and sustainability, and for improving citizen engagement, community planning and policy making. The Department of Human Services has also contributed funding support.

The project is being carried out in partnership with the Municipal Association of Victoria and the Victorian Local Governance Association and with input from relevant Victorian government departments and non-government organisations.

Local councils across Victoria are currently working with the project team to identify a set of around 30 core indicators of community wellbeing. The project is also working out the best arrangements for ensuring that data is collected for the indicators and made available to councils on an ongoing basis.

Many local councils have been involved, with input from a broad range of councillors, council staff and community members.

This project complements VicHealth's *Leading the Way* project, which supports local governments to take opportunities for improving health in all areas of planning.

For more information, check out the website:<www.communityindicators.net.au>

Average Australian earnings exceed $50,000 a year, yet a substantial majority of Australian who experience no real hardship – and indeed live lives of abundance – believe they have difficulty making ends meet and that they qualify as battlers.

FACTS

have an estimated lifetime risk four times that of those aged 60 and over.

Declining quality of life is also apparent in people's perceptions of life today. Studies over the past decade, both qualitative and quantitative, reveal a degree of levels of anger and moral anxiety about changes in society that were not apparent thirty years ago.[5] About twice as many Australians say in surveys that quality of life is getting worse as say it is getting better. Many of us are concerned about the greed and selfishness we believe drive society today, which underlie social ills, and threaten our children's future. We yearn for a better balance in our lives, believing that when it comes to things like individual freedom and material abundance, we don't seem 'to know where to stop' or now have 'too much of a good thing'.

Behind many of the concerns is consumerism, the driving force behind economic growth as we now pursue it – and, it follows, a source of growing pressure on the environment. However much we seem to be able to address local and regional impacts through increased wealth and technological innovation, the evidence suggests we are disrupting planetary systems on a scale that grows ever greater and more pervasive.

As consumerism reaches increasingly beyond the acquisition of things to the enhancement of the person, the goal of marketing becomes not only to make us dissatisfied with what we have, but also with who we are. As it seeks evermore ways to colonise our consciousness, consumerism both fosters – and exploits – the restless, insatiable expectation that there has to be more to life. And in creating this hunger, consumerism offers its own remedy: more consumption.

This ceaseless consumption is not, then, simply a matter of freedom of choice; it is culturally 'manufactured' by a massive and growing media-marketing complex. For example, big business in the United States spends over US$1000 billion a year on marketing – about twice what Americans spend annually on education, private and public, from kindergarten through graduate school.[10] This spending includes 'macromarketing', the management of the social environment, particularly public policy, to suit the interests of business.

The distortion of personal and social preferences by government policy and corporate practice has costs that go beyond the current impacts on our wellbeing. Confronted with the magnitude and scale of twenty-first century challenges – population pressures, environmental destruction, risks of new disease pandemics, economic inequity, global governance, accelerating technological change – it simply makes no sense to continue to regard these issues as something we can deal with by fiddling at the margins of the economy, the main purpose of which remains to serve, and promote, our increasingly extravagant – and unhealthy and unsustainable – consumer lifestyle.

The lesson seems clear: if we were to make optimising human health and wellbeing the goal of progress, we would be forced to recognise that the basis of these things is much more complex, and often less tangible and material, than current strategies presume. Wellbeing comes from being connected and engaged, from being suspended in a web of relationships and interests which give meaning to our lives. The intimacy, belonging and support provided by close personal relationships seem to matter most; isolation exacts the highest price.

Wellbeing comes from being connected and engaged, from being suspended in a web of relationships and interests which give meaning to our lives.

Money and what it buys constitute only a part of what makes for a high quality of life. And the pursuit of wealth can exact a high cost when it is given too high a priority – nationally or personally – and so crowds out other, more important goals. Policies that, in the name of maintaining a strong, growing economy, make our working lives longer, harder or more insecure, and so increase pressures on families and other relationships, will diminish our wellbeing, however richer they make us.

Promoting the idea of making health the bottom line of progress will help the transition to a sustainable way of life, which will, in turn, improve our wellbeing.

– Richard Eckersley is a fellow at the National Centre for Epidemiology and Population Health at the ANU and author of Well & Good: Morality, meaning and happiness (Text Publishing 2005).

REFERENCES

1. Whitmore, J 2005, 'Denial and Demise', *Resurgence*, issue 233, Nov–Dec.
2. Mackay, H 2003, 'The Wrap: Understanding Where We Are Now and Where We've Come From', *The Mackay Report: 1979-2003*, June, Mackay Research, Sydney.
3. Ray, PH & Anderson, RS 2000, *The Cultural Creatives: How 50 Million People are Changing the World*, Harmony Books, New York.
4. Hamilton, C & Mail, E 2003, *Downshifting in Australia: A Sea-change in the Pursuit of Happiness*, Discussion paper no. 50, January, the Australia Institute, Canberra.
5. Eckersley, R 2005, *Well & Good: Morality, meaning and happiness*, 2nd edition, Text Publishing, Melbourne.
6. Eckersley, R, Wierenga, A, Wyn, J 2006, *Flashpoints and signposts: pathways to success and wellbeing for Australia's young people*, Australia 21 and Australian Youth Research Centre.
7. Hoban, R 2005, 'The "Bubble Wrap" Generation', *VicHealth Letter*, no. 24, summer; 8-13.
8. Kessler, RC, Berglund, P, Demler, O, Jin, R & Walters EE 2005, 'Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication', *Archives of General Psychiatry*, 62: 593-602.
9. Kessler, RC, Chiu, WT, Demler, O & Walters EE 2005, 'Prevalence, severity, and comorbidity of DSM-IV disorders in the National Comorbidity Survey Replication', *Archives of General Psychiatry*, 62: 617-27.
10. Dawson, M 2003, *The Consumer Trap: Big Business Marketing in American Life*, University of Illinois Press, Champaign.

FACTS The Wellbeing Manifesto has been developed by Clive Hamilton, Richard Eckersley and Richard Denniss from the Australia Institute. It spells out nine key areas of public policy required to improve national wellbeing: <www.wellbeingmanifesto.net>

Creating environments as if
health mattered

Planning for health and wellbeing

For 10 years the National Heart Foundation has been lobbying for a concerted effort to plan the places where we live so that they are attractive and convenient to walk and cycle around as part of people's daily routine.[1] This has been part of the Foundation's overall push to improve cardiovascular health through more exercise. Its most recent contribution to this work has been the award-winning guide for urban planners called *Healthy by Design*.[2]

Efforts to link town planning and health, helped in part by VicHealth (see page 21), have raised awareness about the health benefits for people if they live in walking distance to local facilities.

This emphasis on more compact neighbourhoods overlaps with much of the contemporary thinking in environmental circles which has been examining how to reduce the amount of

Congestion is now costing Melbourne business $4 billion a year.

energy we consume and carbon we produce (13% of Australia's overall greenhouse gas emissions come from transport).[3] *Melbourne 2030*, the strategic plan for the Victorian capital, recommends increasing densities around existing services and making much more use of public transport.[4]

But actual changes to urban environments based on this principle may not come easily. After the local council elections in 2004 *The Age* reported that 'a backlash against high-density developments under the State Government's planning blueprint Melbourne 2030 was evident in voting results for metropolitan councils'.[5]

Ever since Europeans invaded Australia, towns and cities here have been traditionally spread-out affairs: shortly after his arrival with the First Fleet, Governor Arthur Phillip issued a decree to Lord Sydney instructing that 'the land will be granted with a clause that will ever prevent more than one house being built on [each] allotment'.[6] So perhaps it is understandable if people are suspicious of higher densities, especially when this is fuelled by provocative headlines like 'crowded suburbs may make people mentally ill' (the lead sentence in an article in the *Sydney Morning Herald* in 2004).[7] It is true that mental health issues 'may be strongly influenced by the designing, planning and building of communities', but this is only one of a range of factors.[8] In any case, environmental improvements can lead to better mental health too.

The number of overweight and obese Australians has doubled over the past two decades.

Nonetheless, the need to increase physical activity and build it into our daily lives is stark: the number of overweight and obese Australians has doubled over the past two decades.[9] VicHealth is backing walking as a solution. For example, it is working to increase the number of children walking to school (see page 21). The challenge is considerable as a presumption of car access is literally built into the way our towns and cities are constructed. However, it is not just health concerns that are prompting calls for change: congestion is now costing Melbourne business $4 billion a year, which is forecast to rise to $8 billion annually in a decade.[10] The combined economic, health and environmental arguments provide a powerful case for using cars less.

Healthy environments for everyone

What are currently the easiest or most cost-effective choices do not always work in the best interests of our health. But cajoling and encouraging people can only go so far: broader structural changes are needed to make it easier for people to live a healthier lifestyle that also reduces resource use. What could this look like? One example comes from Vienna where trams service new housing developments even before the first residents arrive.[11] This reflects the aim of the local council that no one should be forced to drive because the public transport isn't good enough to get them to local amenities. It builds in a lack of car dependency from the start.

Less energy, more health

There are health implications too of the way we design buildings. Good design can reduce energy use and greenhouse gas emissions. Less emissions means improved air quality and better health.

Another way to reduce emissions is to increase the amount of energy produced by renewable sources like solar and wind. According to the Australian Conservation Foundation, barriers currently exist to renewable energy reaching its full potential and these are hampering attempts to more vigorously implement renewable energy sources.[12]

Change is happening though. In Victoria, all new homes are now required to meet a 5 star energy rating which promotes energy efficiency through better design and layout.[13] There are exemplar projects like Council House 2, the new City of Melbourne office building which the council claims will be a 'world leader' on a range of environmental design issues including energy efficiency,[14] and the Commonwealth Games village currently under development (see The Green Games box).

Where the living is easy

The annual Sustainable Living Fair in Melbourne's Federation Square highlights all sorts of products and services that have been developed to reduce the use of resources and increase our sense of health and wellbeing. But what will it take to turn these from niche market initiatives into mainstream lifestyle aspirations?

Research on sustainable lifestyles suggests that people will only do something if it is easy and convenient to do:

'It is possible to introduce actions to reduce environmental impacts which individuals are willing to take, but they must involve minimal inconvenience or extra cost'.[15]

This assessment helps to explain the success of the reusable green bags that have become a fixture of many people's grocery shopping trips.

It seems that while we don't want to live in environments which are unhealthy, nor do we want to have to radically change the way we already live. Meeting these seemingly conflicting objectives will require health and environmental professionals to better understand what the other is trying to achieve. They will also need to work collaboratively with planners, architects, engineers, community workers and others who can contribute to creating more healthy environments – but somehow without us really noticing.

The toxic timebomb

Despite our perceived love of the great outdoors, Australians actually spend up to 90% of their time inside.[16] In some cases the air in buildings can be more polluted than the air outside, thanks to elements like a lack of ventilation, air-conditioning and the pollutants produced by the fixtures, furniture and office equipment. This has been dubbed the 'Sick Building Syndrome', which in turn has been linked to Chronic Fatigue Syndrome and other illnesses. Unhealthy indoor air has been estimated to cost Australia $12 billion due to lost work days through illness and reduction in quality of life.[17]

These same pollutants can also be present in our homes. According to the National Toxics Network this is particularly alarming for children's health as they are 'uniquely vulnerable' to hazardous chemicals.[18]

We can minimise the products we use which contain potentially harmful airborne pollutants.[19] Well-chosen indoor plants can reduce or eliminate some harmful toxins in the air in buildings, especially volatile organic compounds (VOCs) which are produced by a range of office equipment (photocopiers, printers) and cleaning agents (liquid soap, carpet cleaner).

The great outdoors

If people drive past poorly maintained parks or polluted bushland to get to a clean, looked-after gym then they probably won't be encouraged to try walking outdoors as alternative exercise.

These areas of bushland – which are important pockets of flora and fauna habitat – are often around catchment areas for creeks. If these areas are polluted with litter and other waste then the run-off into the water courses (or 'blue wedges') contaminates these too and becomes a health threat to other species, as well as looking unsightly.

Proximity to nature has long been recognised as part of what makes a place desirable. It can be healthy too: there are a number of projects that are now trying to utilise outdoor spaces to improve people's health, such as green gyms (see page 18).

You are where you live

We know that people who are disadvantaged are more likely to have poorer health. This health inequality contains an environmental dimension. Areas of disadvantage are more likely to 'lack accessible, cheap and healthy food, safe streets or opportunities for meaningful social participation'.[20] In other words, the local urban environment will be dominated by fast food outlets and busy roads, and will have a dearth of places for people to get together, like community centres and parks.

To make matters worse, public transport is more likely to be inadequate. If people cannot afford a car then this only compounds the likelihood of poor health as they will not be able to conveniently access what facilities and services do exist.[21]

We know what constitutes a decent place to live, and we know the health benefits of living in one. What we need to do now is to create environments in which everyone's health matters.

– Andrew Ross is a freelance writer and editor specialising in environment, health and built environment issues.

REFERENCES

1. Wright C, MacDougall C, Atkinson R & Booth B 1996, *Exercise in daily life: supportive environments*, National Heart Foundation (SA Division), Adelaide.
2. National Heart Foundation of Australia (Victoria Division) 2004, *Healthy by design: a planners guide to environments for active living*, National Heart Foundation of Australia (Victoria Division).
3. See <www.greenhouse.gov.au>, accessed 23 November 2005.
4. For more information on Melbourne 2030 go to <www.melbourne2030.vic.gov.au>
5. Khadem N & Boulton M 2004, 'Voters in backlash against high rise', *The Age*, 28 November.
6. Cited in Boyd R 1968, *Australia's home: why Australians built the way they did*, Penguin Books, Victoria.
7. Dick T 2004, 'Urban sprawl makes you fat', *Sydney Morning Herald*, 9 December.
8. Raphael B & Wooding S 2004, 'Mental health and the built environment' in Johnson C (ed) *Healthy environments, 11 essays*, Government Architect's Publications (GAP), NSW.
9. See <www.healthinsite.gov.au>, accessed 23 November 2005.
10. Committee for Melbourne 2005, *Committee for Melbourne identifies Melbourne's worst transport crisis points*, media release 1 June.
11. This example cited in Levett R 2003, *Really sustainable communities,* conference paper presented at Building for Life.
12. See <www.acfonline.org>, accessed 23 November 2005.
13. For more information visit <www.sustainable-energy.vic.gov.au>
14. For more information visit <www.melbourne.vic.gov.au>
15. Bedford T, Jones P and Walker H 2004, *Every little bit helps: overcoming the challenges to researching, promoting and implementing sustainable lifestyles*, Centre for Sustainable Development, University of Westminster, London.
16. Clean Air Society of Australia and New Zealand 2002, *Indoor air quality in Australia: a strategy for action*, CASANZ, Canberra.
17. Wood R 2003, *Improving the indoor environment for health, wellbeing and productivity*, conference paper presented at Greening cities: a new urban ecology.
18. National Toxics Network 2004, *Children at risk from toxic chemicals*, media release, 16 November.
19. See for example the Australian Greenhouse Office guidance at <www.greenhouse.gov.au/yourhome/technical/fs33.htm>
20. VicHealth 2005, *VicHealth position statement on health inequalities*, VicHealth, Melbourne.
21. For a discussion on this see Dodson J, Gleeson B and Sipe N 2004, *Transport disadvantage and social status: a review of literature and methods*, Urban Policy Program, Griffith University, Brisbane.

The Green Games

Hosting the 2006 Commonwealth Games has the potential to make Victoria a much more sustainable place to be. To make sure that the Games are as good for the environment as they are for the rest of Victoria, strategies include:

- WATERWISE - using water-efficient appliances, collecting stormwater and recycling wastewater at major Games venues.
- CARBON NEUTRAL - reducing energy consumption, increasing public transport use and planting trees to act as carbon sponges.
- LOW WASTE - discouraging littering and reducing waste that goes to landfill by recycling more.

Over a million trees have been planted across Victoria to help make the Games the first event of its kind to be carbon neutral. The trees will act as 'carbon sponges', soaking up the equivalent emissions generated through air travel, cars, electricity and other sources connected with the Games.

The Athletes Village will showcase best practice water recycling. It will incorporate recycling features that will eventually become standard in Victorian households. Each Village house will have a six-star energy efficiency rating which will result in 60% less heating and cooling energy consumption than a regular house.

TravelSmart programs within CBD businesses and communities close to key Games venues will be conducted to encourage walking, cycling and public transport in the lead up to, during and beyond the Games.

VicHealth will have a presence at the Commonwealth Games, which will give us a unique opportunity to promote health.

We will promote walking as a preferred way of getting around - for health and wellbeing - and that it is easy and enjoyable.

Walking tracks and messages to promote walking will appear in the Spectator Guide and Spectator Maps. We will also promote a daily walking challenge from an exhibition space at Birrarung Marr.

See the Commonwealth Games Environment Program at <www.dvc.vic.gov.au/ocgc>

The Australian Conservation Foundation's GreenHome Challenge (<www.acfonline.org.au>) outlines actions individuals can take to help improve the environment, including energy, transport and climate change, water conservation, waste, recycling and buying green, native gardens and food.

FACTS

Natural connections

Research across many disciplines supports the idea that connecting with nature is good for human health and wellbeing. DR MARDIE TOWNSEND explains.

arvard biologist Edward Wilson states that human beings rely intellectually, emotionally, physically and spiritually on connections with nature/the natural environment.[1] This view is supported by eco-psychologists and other health professionals, who assert that many psychological and physical afflictions are due to withdrawal from contact with nature, and that exposure to nature can have positive rehabilitative benefits.[2]

No matter what form this connection takes – viewing nature, being in the natural environment, connecting with nature through parks, gardens or pets – there is evidence from a wide range of sources that these connections are beneficial. Viewing nature, for example, helps people to recover from stress[3], improves concentration and productivity, and improves our psychological state, particularly if we are in confined circumstances such as prisons and hospitals[4]. Wilderness and related studies clearly demonstrate that being in a natural environment is good for people's mental health.

There are also multiple benefits from brief encounters with nature, or experiencing nature on a smaller scale, such as in parks or through gardening or pets. Parks have long been recognised as an important component of the urban environment. Nineteenth-century planners adhered to the view that parks would reduce disease, crime and social unrest, and would act as 'lungs' for cities as well as settings for recreation.[5] A quick look at the Parks Victoria website will show you the wide range of activities occurring in parks.

Other studies demonstrate that plants and nearby vegetation can have profound effects on individuals, small groups, or even entire neighbourhoods.[6] Interacting with plants has been shown to help heal those who are elderly and mentally disadvantaged; improve the mental capacity and productivity of office workers; improve job and life satisfaction of residents; attract consumers and tourists to shopping districts;[7] and aid community cohesion and identity.

There is also a growing body of literature identifying the benefits of contact with companion animals for health;[8] and, increasingly, within the health professions, the health benefits of animal-assisted therapy are gaining recognition.[9]

The Deakin University 'NiCHE' (Nature and Health) research group has undertaken a number of research projects exploring the links between connection with nature and human health. Two studies exploring the health benefits of 'civic environmentalism', one in partnership with the City of Hobsons Bay and the other in partnership with the Trust for Nature, have shown that people who connect with nature through 'friends of parks' groups visit doctors less frequently than the population as a whole, feel safer in their local community, and have a higher sense of community belonging.

Around Victoria, there is growing recognition of this link between the environment and health. For example, Jesuit Social Services (JSS) provides bush adventure therapy experiences for young people struggling with difficult life circumstances, through its 'TOE' (The Outdoor Experience) program. In addition, JSS has recently received funding from the Alcohol Education and Rehabilitation Foundation to refurbish a heritage-listed property in the heart of Yarra Bend Park as a site for outdoor program activities to allow a smoother transition into 'normal life' after the bush adventure experience.

Hospitals are also getting in on the act. For example:
- The Royal Children's Hospital has a sensory garden which provides patients and their families with a touch of normality and tranquillity.
- Western Hospital has a 'visiting pet program' within its neurological disorders ward.
- The Royal Talbot Rehabilitation Centre is running a horticulture therapy program with patients in its Acquired Brain Injury unit.

In schools, too, recognition of the connection between the environment and health is growing. For example, at

FACTS   Australians share their homes with nearly 30 million dogs, fish, cats and other pets. In Australia, 64% of households are home to at least one pet.

PHOTO: CAROLINE SHEEHAN

Viewing nature, being in the natural environment, or connecting with nature is good for your health.

PHOTO: CAROLINE SHEEHAN

Collingwood College the kitchen garden established by Stephanie Alexander involves the children in growing and harvesting food, preparing that food for the table, and sharing the delicious and healthy meals.

Details of other Australian and international research into the links between health and nature can be found on the 'Human Health and Nature Clearinghouse' – a searchable website database compiled by the Deakin 'NiCHE' group (<http://www.deakin.edu.au/hbs/hsd/research/niche/clearinghouse.php>). Initially funded by VicHealth, it is anticipated that the clearinghouse database will expand and, subject to the availability of funding, include an online discussion forum.

Despite all the current research and past evidence that contact with nature is beneficial for human health and wellbeing, our policies and practices often fail to reflect this connection. Perhaps it is a case of 'familiarity breeds contempt' – that we take little account of the benefits of nature for human health and wellbeing because we have had the good fortune to have ready access to private gardens and public parks. If this is the reason, it is possible that as our urban areas become more densely populated and developed, we will come to a greater appreciation of the benefits of access to nature. For the sake of the health of future generations, it is to be hoped that this recognition occurs sooner rather than later.

– Dr Mardie Townsend is a Senior Lecturer in the School of Health and Social Development at Deakin University, where she teaches on the links between 'people, health and place'.

Healthy Parks, Healthy People

Parks Victoria has developed *Healthy Parks Healthy People*, a program to encourage people to use parks as venues for healthy activities. One of the many community events to come out of this campaign is the World's Greatest Pram Stroll, held annually across Victoria. It demonstrates the health benefits of parks to new families and highlights the role parks can offer in combating post-natal depression and social isolation.

Working with Bicycle Victoria, Parks Victoria also developed Bike Path Discovery Day, which aims to encourage school children and their families to get active, and discover the many bike paths connecting local communities. Walks in parks have been graded by Asthma Victoria and Arthritis Victoria, and activities have also been tailored to seniors.

For the results of a study on the relationship between nature (including parks) and human health, check out the Healthy Parks Healthy People Literature Review on the Parks Victoria website: <http://www.parkweb.vic.gov.au/resources/mhphp/pv1.pdf>

REFERENCES

1. Wilson, EO 1984, *Biophilia*, Harvard University Press, Cambridge, Mass.
2. Roszak, T, Gomes, ME & Kanner, AD 1995, *Ecopsychology: Restoring the Earth, Healing the Mind*, Sierra Club Books, San Francisco.
3. Leather, P, Pyrgas, M, Beale, D & Lawrence, C 1998, 'Windows in the Workplace', *Environment & Behavior*, 30, 739-63.
4. Ulrich, RS 1984, 'View Through a Window May Influence Recovery From Surgery', *Science*, 224, 420-1.
5. Rohde, CL E & Kendle, AD 1997, 'Nature for People', in *Urban Nature Conservation – Landscape Management in the Urban Countryside*, AD Kendle & S Forbes (eds), E & FN Spon, London, pp 319-35.
6. Kuo, FE & Sullivan, WC 2001, 'Environment and Crime in the Inner City: Does Vegetation Reduce Crime?', *Environment & Behavior*, 33, 343-67.
7. Wolf, KL 1999, 'Trees in Business Districts', *TreeLink*, Washington State Department of Natural Resources Community Forestry Program, Spring, 1-3.
8. Friedmann, E, Katcher, A, Thomas, SA, Lynch, JJ & Messent, PR 1983, 'Social Interaction and Blood Pressure: Influence of Animal Companions', *The Journal of Nervous and Mental Disease*, 171, 461-5.
9. Delta-Society 2003, 'Recent Discoveries about Our Relationship with the Natural World', <http://www.deltasociety.org>.

Parks Victoria (<www.parkweb.vic.gov.au>) manages 4.1 million hectares of parks and reserves (17% of Victoria) comprising 196 parks which contain 3673 km of walking tracks and attract 73.5 million visits per year.

FACTS

Sense of PLACE

Yorta Yorta elder Paul Briggs struggles to describe sense of place. It's one of those nebulous terms that are tossed around freely by lots of people. But Paul uses it carefully. Sense of place, he says, is like a beating heart; impossible to describe, but vital – it's what keeps him going.

Paul's sense of place is country, family and community. He lives in Shepparton (in Victoria's Goulburn valley) on Yorta Yorta land, just 45 minutes drive from the Cummeragunja Mission where he was raised. He identifies strongly with 'Cummera and the Murray River' and sees it as his first place; the place where everyone living on the mission was Indigenous and no conflict arose over sharing space and compromising culture.

"Families were together. The sense of belonging and cultural support was very strong. It's funny isn't it? The missions are now thought of as the good old days," Paul said with a sense of irony during a conversation on leadership a few years ago.[1]

Paul and his wife, Kaye, who have five children and five grandchildren, have campaigned for decades to develop the connection between Yorta Yorta people and the non-Indigenous community so that all people can have a strengthened sense of respect and understanding of their sense of place.

But ultimately, he says, each person, Indigenous and non-Indigenous, has to find their own sense of place deep inside themselves by connecting with their country, community and family. Paul's experience, as a community leader and increasingly as a prominent national figure, has convinced him that sense of place is what makes you want to get up each day and do the things you do. He has buried enough friends and relatives to know that the sense of being misplaced leads to myriad health problems that often spiral out of control.

General practitioner Dr Paul Burgess, like Paul, is convinced that sense of place and wellbeing are connected. In the context of his work as a district medical officer working within Arnhem Land, he believes that sense of place may be an important prerequisite for health and wellbeing. His clients frequently assert that place or more simply 'country' makes them well. He works with people who have retained strong interaction with ancestral country and also with people who have been 'squeezed' off their country and are now living in larger Indigenous townships, on someone else's country.

"Indigenous peoples have an intense and personal interaction with their country. This is not limited to Indigenous peoples only. When I speak to fourth or fifth generation farmers they often feel and talk the same way about their land. Their experience of country is like a chain of events that are significant, both traditional and contemporary, and I think that is how non-Indigenous farming families would see their land," Dr Burgess said.

"Sense of place is not static – it is a lived experience, and I think people, groups of people, can create a sense of place based on their interactions with that place. Place then becomes a part of our identity due to the events that have occurred and continue to occur there. You see that all around the world where people identify very strongly with a place that might be a religious place, such as a temple."

Dr Burgess, who is undertaking his PhD at Charles Darwin University through the Centre for Remote Health, Menzies School of Health Research and the School for Social and Policy Research, says many Indigenous people feel that continued interaction with ancestral lands and 'caring for country' are important prerequisites for health.

Dr Burgess's previous research experience has convinced him that people maintaining a connection to their ancestral country have better physical, emotional and mental health than those Indigenous people who have been displaced. In 1998 he was a co-author on a paper titled *Beneficial impact of the homelands movement on health outcomes in central Australian aborigines*.

The longitudinal cohort study compared prevalence of obesity, hypertension and diabetes in two groups of Aboriginal adults: those living in homelands versus centralised communities in central Australia. It also compared weight gain, incidence of diabetes, mortality and hospitalisation rates between the groups over a seven-year period. Homelands residents had a lower baseline prevalence of diabetes, hypertension and overweight/obesity. They were also less likely to be hospitalised for any cause, particularly infections, injury involving alcohol and other injury. Mean age at death was 48 and 58 years for residents of centralised communities and homelands respectively.

Sense of place is what makes you want to get up each day and do the things you do.

'Sense of place is like a beating heart; impossible to describe, but vital.'

Barmah State Park and Barmah State Forest on the Murray River flood plain between Echuca and Tocumwal; together they make up the largest River Red Gum forest in Victoria.
PHOTO: PARKS VICTORIA

Does that mean that finding a sense of place is only possible for those Indigenous people living in remote parts of Australia? Not so, says Dr Burgess, pointing to the strong sense of community that exists in The Block, in Sydney's Redfern. Paul Briggs agrees, but believes it is harder for people to find their sense of place once they leave their country, particularly if they move out of the Aboriginal world and have to face what he calls 'cultural aggression'. Family and community are the anchor points in any sense of place, he says. And few would argue that sense of place isn't just as important for non-Indigenous culture, though it is less often articulated.

Australian social researcher Hugh Mackay argued recently that place is crucial to all Australians and to our sense of self, community, mortality and sense of destiny.[2]

"I suspect that much of the uneasiness, anxiety and moral uncertainty of modern urban societies can be traced to our loss of a strong sense of continuous connection with places that help to define us," Mackay said.

"Our problem is not that we lack the yearning for a sense of place; that yearning is universal. Our problem, especially compared with Aborigines, is that we've often failed to acknowledge the deep need in ourselves."

Mackay contends that non-Indigenous people could learn from Indigenous people on how to best nurture this sense of place.

Paul Briggs does it every day in boardrooms, with politicians and local government around council tables, at the dinner table with family and friends, and in casual conversations with young people. He is passionate about building community, providing an anchor point for Indigenous people to call place and to build on some embryonic inner sense of place.

Finding a sense of place is also a critical issue facing the thousands of people who journey to Australia every year, many forced to flee their home, their country, and their place. Basil Natoli, the Melbourne 'gardener' who spearheaded the fight to develop community gardens in public housing estates more than a decade ago, says sense of place is vital if people are to truly settle in a new country.

In 1989 a group of older Vietnamese residents from the high rise estates in Hoddle Street, Collingwood, asked Basil, who was studying horticulture at Burnley College, to assist them in the creation of a community garden at the base of their 20 storey high rise flats.

Basil is now employed by the Department of Human Services to coordinate the 18 community gardens operating on public housing estates in Melbourne that provide plots for 750 residents. The residents can come down from their flats, work the land, grow food and build communities – all the while forging their own sense of place and one for their children.

"In each of the estate gardens the origin of the residents is apparent. In Collingwood the small plots are filled with Asian greens that are used for culinary and medicinal purposes. It is amazing to see the effect on people when they can touch the land, see something grow and develop a sense of ownership. For some people this is almost a sacred place, their connection with the earth," Basil says.

Paul Briggs has no qualms about sharing the land with those wanting to create a place in a new country. In fact, he more than many understands the need for country, though the reasons still elude him – it's just an inner sense.

"Maybe it's because we are all vulnerable and if we don't hang onto our land, this physical thing, then we will disappear," he says.

– Rosie Hoban is a Melbourne journalist. She writes for a number of publications and is particularly interested in writing about people, their lives and how they contribute to their environment, and the social issues that concern them.

REFERENCES
1. Morrow L, Verins I, Willis E, 2002, *Mental Health and Work: Issues and Perspectives*, Commonwealth of Australia.
2. Mackay H, 'A Sense of Place', *The Age*, October 15, 2005.

The first Australian community garden opened in Nunawading in 1977.   **FACTS**

Natural
HIGHS

When you first hear the term 'green gym', it may conjure up an image of something like a solar-powered treadmill. But it is actually the name that has been coined for programs that promote health and wellbeing through physical work to improve local natural environments.

The first green gym program was set up in 1998 by a British doctor outside London. He wanted to create activity that would be both preventative and curative, and which could be applied to physical and mental conditions.

In Victoria, VicHealth recently funded the *Bringing Back Nature* program which provided older people in the inner eastern suburbs of Melbourne with the chance to go on guided walks to get to know their local bushland better, as well as getting involved in practical help to maintain the bush.

Forty people attended the 12 different project activities which were organised by the project partners – Environment Victoria, Alamein Neighbourhood and Learning Centre, and Ashburton Support Services.

The conservation sessions – along the lines of the green gyms conceived in the UK – included working with two friends' groups on streamside restoration projects and helping the City of Boroondara plant an additional 600 plants in the Markham Reserve at Ashburton.

Participants enjoyed the activity and sense of purpose, with one commenting that 'It gives me a buzz to be planting back the bush'.

This is not the first time that VicHealth has funded a project which has aimed to combine health and natural environments. In 2002 it supported the Mental Illness Fellowship of Victoria to organise physical activities in bushland around Wonthaggi near the Bass Coast. These alternated between educational walks and tree planting sessions.

The project funding enabled participants to plant 10,000 trees as well as maintain vegetation from previous plantings. The project organisers provided free healthy lunches to participants, who were a mix of people with mental health concerns and people from the local area. One of the positive outcomes was helping to break down some of the stigma surrounding mental health problems.

'Sport is not for everybody…giving people other ways to be active that can have such significant benefits for their health is fantastic.'

According to the coordinator of the project, Harry Kiekebosch, the project was 'a huge success with outcomes exceeding expectations'. The fellowship formed a steering group to build on the work of the project, and to prepare a 3-year development plan to guide subsequent activities.

The environmental and physical benefits of the green gym approach are clear. Kate Rathbun from VicHealth points out that there are wider health benefits too: 'The social opportunities that arise and the known mental health benefits that come from being involved with trees and nature make projects like these exciting. We know sport is not for everybody so giving people other ways to get out and be active that can have such significant benefits for their health is fantastic'.

FACTS The 2nd EcoHealth Conference will be held in Victoria in November 2007. Focusing on 'Sustaining People and Places' it will explore the links between environments, sustainability and health. Further information: Glenda Verrinder (03) 5444 7585.

BRINGING THE PADDOCK closer TO THE plate

The food choices we make every day have an impact on our individual health and on the health of our environment. The environment we live in also influences our ability to access a variety of nutritious foods. MARYANN McINTYRE explains.

Bringing the paddock closer to the plate – improving access to fresh and affordable local produce – promotes health for individuals, families and communities, as well as health for the environment.

VicHealth's *Food for All* program funds a number of local government projects that are improving access to food through activities such as community gardens and local distribution services.

The Sprouting New Ideas project, for example, being implemented by the City of Casey and Shire of Cardinia, aims to make fresh, nutritious, locally produced food more accessible for isolated, low socioeconomic communities.

Research shows that people on the lowest incomes cannot easily or affordably purchase or prepare a variety of food, and many are more likely to be overweight or even obese. There are also reports that increasing numbers of Australians are experiencing food insecurity in the last 10 years. Food insecurity (the inability to eat safe and nutritious food regularly from non-emergency sources) is much more common than we think and it has much broader consequences than just diet – it impacts on people's physical, mental and social wellbeing.

Sally Surgey, Community Support Officer at Cardinia Shire Council, says that surveys indicate that many residents in Cardinia and Casey are at risk of food insecurity, poor food intake and diet-related diseases. 'Some of the residents don't have easy access to nutritious food choices. They have no car, live away from public transport and have a low income. In addition, these municipalities have a high density of takeaway outlets and not enough fruit and vegetable outlets', she says.

A 3-year $300,000 grant from VicHealth will help establish the project, which includes an affordable fruit and vegetable home delivery service. The local producers and service agencies in Casey and Cardinia will work together to operate the service.

A *Farm to Plate* school program will also be created, bringing community members, schools, local organisations and fruit and vegetable producers together to teach children about growing, harvesting and cooking fresh food.

Strengthening the connection between local food producers and consumers has many benefits, says Lee Choon Siauw, who looks after VicHealth's *Food for All* program. 'It increases awareness of and access to healthy local produce and supports local agricultural activity and the production of fresh foods, at the same time bringing the community together to provide a healthy solution.'

Choosing fresh foods produced locally – for example from farms or community gardens – over processed foods reduces the processing, packaging, transport and storage of food. As a result, less energy and resources are devoted to production and associated greenhouse gas emissions are reduced.

While *Food for All* focuses on increasing consumption of fresh fruit and vegetables by improving awareness of healthy eating, reducing barriers to access to nutritious food, and creating opportunities for people to choose nutritious food – an added bonus is the positive impact on the environment.

Composting your food scraps reduces your household's landfill waste by 40%.

FACTS

Healthy Cities

The Ottawa Charter for Health Promotion[1] acknowledges the crucial role of equity, social justice, civic participation and empowering public policy in both environmental and health issues.[2]

Drawing on the Ottawa Charter, the WHO's Healthy Cities and Communities approach uses a broad-based community development approach to place health, wellbeing and ecological sustainability on the agenda of cities around the world, and build a local constituency of support for public health.

Initiated in the mid 1980s, Healthy Cities has been adapted for use in up to 10,000 locations worldwide, and incorporated into *Environments for Health*, the Victorian municipal public health planning policy framework.[3] As detailed in the box, sustainability, health and wellbeing must be planned and built 'into' cities; this process is presented as everyone's business.

Intersectoral collaboration does not just happen, however: the Healthy Cities approach may require overturning entrenched, fragmented ways of seeing and working amongst all stakeholders and sectors. Political endorsement, champions, leadership and appropriate documentation are crucial to elevate ecological health to become everyone's core business, and create synergy out of people's efforts.

Partnerships between sectors are essential. In Victoria, we have worked hard over many years to build relatively strong levels of collaboration between levels of government, non-government, industry and higher education. This was exemplified in the strategy used to develop and implement *Environments for Health* and VicHealth's *Leading the Way.*

The challenge – and opportunity – for researchers, practitioners and advocates in public health, health promotion and the environmental sector is to keep building shared understanding and action towards our sectors' shared goals. To do this we need to build on our efforts to engage in joint research, education and advocacy that challenge the dominant free market mindset that externalises the environment and ignores the health consequences of unfettered 'growth'.

– Dr Iain Butterworth & Prof. Evelyne de Leeuw, School of Health and Social Development, Deakin University

REFERENCES

1. World Health Organisation 1986, *Ottawa Charter for Health Promotion*, Available at: <http://www.euro.who.int/AboutWHO/Policy/20010827_2> (Accessed 25 November 2005).

2. Brown V 1994, 'Health and environment: A common framework and common practice', in C Chu & R Simpson (eds), *Ecological public health: From vision to practice*, pp 52-61, Griffith University, Brisbane, Australia,

3. Department of Human Services 2001, *Environments for Health: Municipal Public Health Planning Framework*, DHS. Melbourne, Australia.

4. Hancock T & Duhl L 1988, 'Key parameters for healthy cities, communities and towns', *Promoting health in the urban context*, (WHO Healthy Cities papers, No. 1), WHO Regional Office for Europe. Copenhagen.

What does it take to make a healthy city?[4]

1. A clean, safe, high-quality environment (including housing).

2. An ecosystem that is stable now and sustainable in the long term.

3. A strong, mutually supportive and non-exploitative community.

4. A high degree of public participation in and control over the decisions affecting life, health and wellbeing.

5. The meeting of basic needs (food, water, shelter, income, safety, work) for all people.

6. Access to a wide variety of experiences and resources, with the possibility of multiple contacts, interaction and communication.

7. A diverse, vital and innovative economy.

8. Encouragement of connections with the past, with the varied cultural and biological heritage and with other groups and individuals.

9. A city form (planning and design) that enhances health and wellbeing for all citizens.

10. An optimum level of appropriate public health care services accessible to all.

11. High health status (both high positive health status and low disease status).

FACTS | *Our Common Future* (1987), 'The Brundtland Report', by the World Commission on Environment and Development is a seminal environmental document, highlighting the links between environmental damage and the policies that cause the damage. The Ottawa Charter and the Brundtland Report advocate a similar framework for action.

When win-win works

ANDREW ROSS

Two summers ago, a *VicHealth Letter* profiled a project which was in its early stages: VicHealth had funded ICLEI (International Council for Local Environment Initiatives) to develop a Walking School Bus Quantification Tool (WSB Tool). Walking School Buses are programs which provide children with opportunities to walk to school in a supervised and safe environment.

The purpose of the WSB Tool is to quantify the economic, environmental and social benefits of investing in WSBs so that more funding can be made available for WSBs and other active transport initiatives.

The WSB Tool is now a reality. It has been developed as an electronic spreadsheet, with clear instructions for participating councils about how to complete it. Staff enter relevant data, such as the number of children walking on each WSB route, how many months the WSB operates and how much money is allocated to the WSB program. The WSB Tool then calculates the carbon dioxide equivalent saved (in tonnes), savings to families from not driving their children to school, spending which has been avoided on coronary heart disease, spending which has been avoided on Type 2 diabetes, and more.

The WSB Tool has helped to quantify savings. For example VicHealth estimates, using the WSB Tool, that the economic savings to households through reduced car expenditure thanks to WSB routes has amounted to more than $76,000 over a 12-month period.

Rather than adopt a conventional funder/fundee model, VicHealth staff have been involved in the development and assessment of the WSB Tool. VicHealth's Rita Butera explains that this approach has reaped dividends:

'For us, WSB is about getting kids walking. For ICLEI it is about reducing car congestion and greenhouse gas emissions. This project is a great example of the cross-sectoral partnerships that can be formed between environmental and health groups, and how organisations can add value to each others' projects and gain multiple benefits.'

Planning for healthy environments

VicHealth has agreed to extend its funding of a planning for health and wellbeing project that has been managed for the last 2 years by the Planning Institute of Australia (Victoria). The links between urban and regional planning and health are significant (see page 11), but many of these connections have been decoupled as policy areas have become more fragmented and specialised.

This project has begun to restore some of these links through raising planners' awareness of the relevance of their work to improve health. The project officer, Stephanie Knox, organised seminars and training, contributed regularly to the planning literature and spoke at numerous events.

Stephanie believes that the project has made 'a significant contribution to getting health on the agenda of planning'. She argues that it has 'enhanced the capacity of planners working in local government, state government and private consultancy to contribute to healthy planning'.

In fact, the project has been considered such a success within the planning profession that the Planning Institute of Australia has decided to develop a national health and wellbeing project.

Lee Choon Siauw, Senior Project Officer at VicHealth, welcomes this decision; however, she warns that there is a problem of capacity within the profession, with an overall shortage of planners: 'The challenge will be how to implement this awareness when planners are mostly already overworked'.

Ultimately what is needed is new legislation. According to Lee Choon, planners are not compelled to incorporate health considerations into their work but this could be addressed through 'clear legislative or regulatory-based requirements'.

The second phase of the project will advocate for more inclusion of health outcomes in planning practice and will build on the professional and research partnerships established in the first 2 years.

Bayside counts the savings

Using the WSB/ICLEI tool, the schools in the Bayside area have calculated some of the benefits of Walking School Buses:

- Number of kids registered to walk on the buses: 404
- Total distance walked per year: 29,611 km – that's more than 2 laps around the world!
- Total carbon dioxide savings: 5.5 tonnes
- Financial benefit for parents by avoiding driving: $18,690
- Time saved by parents: 740 hours = 6.5 weeks – that's a lot of car-free stress!
- Overall increase in happiness(!): 14.3%

You can check out the tool online at: <http://ccp.iclei.org/plus/PlusWSB.cfm>

More than 70% of children in grades 3–6 are driven to school; 61% of these children say they would prefer to walk to school if given the choice.

FACTS

VicHealth NEWS

VICHEALTH AWARD WINNERS 2005

Outstanding achievements in promoting health were announced at the Victorian Health Promotion Foundation's annual general meeting held in December at Zinc function centre, Federation Square. The recipients of the 2005 VicHealth awards were recognised for their contribution to promoting the health of all Victorians. The following awards were presented:

Awards for projects primarily promoting physical activity

Winner – Bounce Back with Babes, South West Sports Assembly
(Budget under $15,000)
Fitness classes designed exclusively for post-natal women, which accommodate their babies and pre-school children.

Winner – Walking School Bus, East Gippsland Shire Council
(Budget from $15,000 to $75,000)
Successful implementation of numerous Walking School Buses and the development of Riding School Buses.

Winner – Partnerships for Health Scheme, Tennis Victoria
(Budget over $75,000)
Establishing a framework to link existing and new services to promote participation, good club values and healthy outcomes.

Awards for projects primarily promoting mental health and wellbeing

Winner – Braybrook Celebrates Diversity, Braybrook College
(Budget under $15,000)
An event to establish better ways of resolving tensions between groups and improving the whole school experience for Braybrook's Horn of Africa students.

Winner – Schools as Core Social Centres, Catholic Education Office Melbourne
(Budget from $15,000 to $75,000)
A project to position schools as key sites for promoting mental health and wellbeing.

Winner – Victorian Community Indicators Project, Victoria University, Institute of Community Engagement and Policy Alternatives
(Budget over $75,000)
Project designed to support local governments to measure health, wellbeing and sustainability, and improve citizen engagement, community planning and policy making.

Awards for projects promoting other health issues

Winner – Uncontested Possessions and Key Positions, Judy Gold, Burnet Institute
(Budget under $15,000)
A study of 108 men from four football clubs to find out more about the sexual health and risk behaviour of young males.

Winner – Planning for Health and Wellbeing, Planning Institute Australia (Victoria)
(Budget from $15,000 to $75,000)
A project to increase planners' awareness of the links between planning, health and wellbeing.

Winner – The Epidemiology and Control of Chlamydia Infection in Victoria, Burnet Institute
(Budget over $75,000)
Program of research into genital Chlamydia to promote awareness and build the information base necessary to inform future control strategies.

MORE AWARD WINNERS

VicHealth also congratulates the **Women's Circus**, who won the 2005 Melbourne Award for Community Development; the **Warrnambool City Council** for its Tarerer Multicultural Festival 2005, which won the South West Institute of TAFE and One and All Inclusive Events Award for the Most Outstanding Inclusive Event 2005; the Community Unit of **Adult Multicultural Education Services** (AMES), which won an award for excellence in multicultural affairs from the Victorian Multicultural Commission; and **Multicultural Arts Victoria**, the proud recipient of the Victorian Multicultural Commission ambassador award, which acknowledged the organisation's exemplary work throughout 2005 with new and emerging communities in Victoria.

NEW WEBSITE

When you next visit the VicHealth website you'll see that it has had a full make-over. The new site structure will give you even better access to current information about health promotion, health issues and VicHealth programs and events. The new site has the same URL (<www.vichealth. vic.gov.au>), and if you're not already a subscriber, we recommend you sign up. You'll get regular updates about what's new on the site, including new data, open funding rounds and upcoming seminars. Simply click on 'subscribe' in the top right hand corner and follow the prompts.

RESEARCH FUNDING

ARC Linkage Projects – Industry Partner Scheme
These grants support collaborative research projects between higher education researchers and industry in Victoria that have applied for funding through the ARC Linkage Projects Scheme.
Guidelines and Application Form:
<www.vichealth.vic.gov.au/arc> or phone VicHealth on (03) 9667 1333
Closing date: 1 February 2006

Senior/Public Health Research Fellowships
VicHealth awards up to two Senior and up to three Public Health Research Fellowships each year. Each Fellow is funded for 5 years.
Guidelines and Application Form:
<www.vichealth.vic.gov.au/fellowships> or phone VicHealth on (03) 9667 1333
Closing date: 17 March 2006

FUNDING ROUNDS OPEN

Building Bridges: Together We Do Better
New grant scheme to support initiatives aimed at addressing discrimination affecting migrant and refugee communities.
Guidelines and Application Form:
<www.vichealth.vic.gov.au/bbs> or phone VicHealth on (03) 9667 1333
Closing date: 1 March 2006

Conference Support Scheme
Small grants for organisations who are implementing health promotion conferences.
Guidelines and Application Form:
<www.vichealth.vic.gov.au/conference> or phone VicHealth on (03) 9667 1333
Closing date: 30 March 2006

Communities Together Scheme
Funding to support the development of inclusive and participatory community festivals and celebrations.
Guidelines and Application Form:
<www.vichealth.vic.gov.au/cts> or phone VicHealth on (03) 9667 1333
Closing date: 30 June 2006

Community Arts Participation Scheme
Funding to assist community members to work in collaboration with artists to create a performance, exhibition or public event.
Guidelines and Application Form:
<www.vichealth.vic.gov.au/caps> or phone VicHealth on (03) 9667 1333
Closing date: 20 October 2006

PUBLICATIONS

The Story of VicHealth

The Story of VicHealth – A world first in health promotion was officially launched by the Hon. Bronwyn Pike, Minister for Health, at VicHealth's annual general meeting in December. It is a fascinating overview of VicHealth from its inception in 1987 to the present day. To receive a copy, phone VicHealth on (03) 9667 1333 or visit the website: <www.vichealth.vic.gov.au/history>

Annual Report

VicHealth's *Annual Report* for 2004–2005 was tabled in the Victorian Parliament on 16 November 2005. Copies are available from VicHealth by phoning (03) 9667 1333, or visit the website: <www.vichealth.vic.gov.au/annualreport>

New Mental Health Resources

The following new resources are available from the VicHealth website (<www.vichealth.vic.gov.au/mentalhealth>).
- VicHealth Review of Communication Components of Social Marketing/Public Education Campaigns Focusing on Violence Against Women
- VicHealth Review of the Links Between and Interventions to Reduce Alcohol Related Interpersonal Violence
- VicHealth Research Report on Children at Risk in Families Affected by Parental Mental Illness
- VicHealth Scoping Report on Workplace Stress [*available February 2006*]
- VicHealth Scoping Report on Information Technology and its Impact on Young People's Social Relationships [*available February 2006*]

Mental Health Project Summaries

The following program summaries are also available on the website:
- Creating Access to the Arts
- Participating in Community Arts
- Community Festivals and Celebrations
- Building Indigenous Leadership
- Facilitating Social Inclusion for Children and Young People of Parents with a Mental Illness
- Increasing Young People's Access to Economic Resources

DATES FOR YOUR DIARY

Mental Health Promotion Short Course

VicHealth's 2-day short course will be provided on the following dates. More info and registration forms are available from the VicHealth website: <www.vichealth.vic.gov.au/shortcourse>
- February 15 & 16: Swan Hill
- February 20 & 21: Shepparton
- February 27 & 28: Ballarat
- February 27 & 28: VicHealth (Carlton)
- March 6 & 7: Lakes Entrance
- March 16 & 17: Geelong
- March 20 & 21: VicHealth (Carlton)
- March 20 & 21: Noble Park

Human Rights and Health Forums

The University of Melbourne School of Population Health and Law Faculty, in collaboration with VicHealth, are hosting a public seminar series focusing on health and human rights. The remaining two forums, to be staged in early 2006, focus on *Indigenous Australians' Right to Health* and *Human Rights & Health Issues Relevant to Refugees.* For more information contact: <law-rights@unimelb.edu.au>

OTHER NEWS

Health Costs of Violence

VicHealth's *The Health Costs of Violence* report was one of two studies acknowledged by the World Health Organisation as tremendously important examples of how to design and conduct research that is of practical value for changing the face of violence prevention. The publication – *Milestones of a Global Campaign for Violence Prevention 2005: Changing the Face of Violence Prevention* – was launched in October 2005 and is available at: <www.who.int/violence_injury_prevention/violence/global_campaign/en>

Cochrane Colloquium

The VicHealth-funded Cochrane Health Promotion & Public Health Field participated extensively in the 13th Cochrane Colloquium hosted in Melbourne in October. There were significant shifts in thinking in several areas of great interest to health promotion, including inclusion of studies outside traditional randomised control trials, meeting the needs of end users, knowledge transfer and the need for priority topics. Following the Colloquium a 1-day symposium, 'Cutting Edge Debates in Evidence-Informed Public Health', was held at VicHealth. The slides are available on the Field website (<www.vichealth.vic.gov.au/cochrane>) or by contacting <rarmstrong@vichealth.vic.gov.au>

FUNDED CONFERENCES

Through the Conference Support Scheme, VicHealth provides limited support to conferences held by other providers. Check out the online events calendar (<www.vichealth.vic.gov.au/events>) for more information about individual events listed below (entries are updated when more info comes to hand) or visit <www.vichealth.vic.gov.au/conference> to find out more about the scheme.

9 March 2006
2006 Commonwealth International Sport Conference, Victorian Institute of Sport

2 April 2006
COTA VIC Conference 2006, Council on the Ageing

4–5 May 2006
Refugee Relocation in Regional Australia: Best Practice & Policy Initiatives, Victoria University

18–20 May 2006
The Art of Difference Creative Conference, Gasworks Arts Inc

May/June 2006 (to be confirmed)
Health Promotion and Preventing Violence Against Women – What Does it Really Mean?, Women's Health West

10–11 August 2006
2006 Rural Victorian Alcohol & Drug Conference, South West Health Care

31 August–2 September 2006
Community Based Obesity Prevention, Deakin University

23–25 October 2006
7th International Walk 21 Conference, Kinect Australia

FACT REFERENCES

Page 9 Hamilton C & Denniss R 2005, *Affluenza – When too much is never enough*, Allen & Unwin.

Page 11 Australian Conservation Foundation and Australian Medical Association, 'Addressing the public health impacts of climate change', September 2005.

Page 12 www.dse.vic.gov.au/melbourne2030online/content/introduction/02_summary.html

Page 14 Wood L, Giles-Corti B & Bulsara M 2005, *The Pet Connection: Pets as a conduit for social capital?, Soc Sci Med* Sep;61(6):1159-73. Epub 2005 Mar 3.

Page 16 Hugh Mackay, 'A sense of place', The Age, October 15, 2005.

Page 19 www.acfonline.org.au

Page 21 VicHealth 2003, *The Walking School Bus Pilot Program 2001–2002 Key Learnings*, VicHealth, Melbourne.

OFFICIAL SUPPORTER

WALKING INSTEAD

VicHealth

http://officialsupporter.vichealth.vic.gov.au

VicHealth

State Government
Victoria