

Policy Signpost #3

Climate Change Adaptation: A Framework for Local Action

Southern Grampians and Glenelg
Primary Care Partnership

Rosie Rowe and
Anita Thomas

August 2008



The McCaughey Centre: VicHealth Centre for the
Promotion of Mental Health and Community Wellbeing,
Melbourne School of Population Health,
The University of Melbourne



“The greatest resource we have to solve any problem is how we think about it. The Climate Change Framework produced by the Southern Grampians and Glenelg Primary Care Partnership liberates us from thinking that as individuals, or as communities, we are powerless in the face of climate change. The Ottawa Charter for health promotion framework that the authors have used breaks down the seemingly insurmountable into actions and processes that show how all sectors have a role to play.”

– Professor Penny Hawe, Alberta Heritage Foundation for Medical Research Health Scientist Co-Chair, Population Health Intervention Research Initiative for Canada

Policy Signpost #1

Community Wellbeing in an Unwell World: Trends, Challenges and Opportunities

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Policy Signpost #2

Universities working with and for Communities: Strategies for Collaborative Community Research and Knowledge Exchange

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Acknowledgments

Our thanks to the range of organisations and individuals who have contributed to this work and helped develop a local Framework that will assist people across the state to develop their own local plans to assist in reducing the impacts of climate change.

We greatly appreciate the participation of local agencies and community members, including those representing health, community services, local government, education and agriculture.

We also appreciate the input of state representatives who agreed to participate in an Expert Panel, including Dr Jim Hyde, Jan Bowman, Monica Pfeffer, Jenk Akyalcin and Sally Rose from Department of Human Services, Gordana Marin from Department of Sustainability and Environment, Andrew Dolling from Department of Primary Industries, John Wiseman from University of Melbourne and Cath Smith from Victorian Council Social Services.

Several of the Expert Panel members have created opportunities for the PCP and we thank them for their proactivity. Jan Bowman has encouraged the PCP to apply the Framework to heat wave issues as a pilot area for the Victorian Heat Wave Strategy. John Wiseman has worked with the PCP to explore implementation, research opportunities and has helped publish the document. We value his mentoring and look forward to the opportunities for collaboration ahead. Others have mentioned our work in public forums and have enhanced our network.

Richard Weatherly has generously contributed his insight based on a wealth of experience as a farmer, environmental consultant and artist. He has offered a valuable 'reality check'.

Thankyou
Rosie Rowe,
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Foreword

Climate Change Adaptation: A Framework for Local Action was developed between December 2007 and February 2008 in response to a request from agencies to support local planning for climate change.

Two workshops were held with members of the Southern Grampians and Glenelg PCP and representatives from neighbouring PCPs. A draft Framework was released for Public Consultation in April. Comments were received from community members, education, agriculture, environment, local government, health and community service agencies.

An Expert Panel was convened to review the Consultation Draft which facilitated input from senior managers within Department of Primary Industries, Department of Sustainability and Environment, Department of Human Services, Victorian Council of Social Services and the University of Melbourne.

Contact was also made with internationally recognised Health Promotion expertise in Canada.

As evidence grows about the population health impacts and implications of climate change there is a rapidly growing demand for frameworks and tools which can assist local communities develop and implement effective local responses to climate change adaptation challenges. We are therefore delighted to have the opportunity to work with the Department of Human Services to publish this Local Climate Change Adaptation Framework, produced by the Southern Grampians and Glenelg Primary Care Partnership.

– Professor John Wiseman
Director, McCaughey Centre: VicHealth Centre for the Promotion of Mental Health and Community Wellbeing, University of Melbourne

Our understanding of the direct and indirect impacts of climate change in Victoria is improving, although some research is required to identify the magnitude of those impacts, and the population groups that will be most affected. Urgent action is required by governments and the health sector to help those most vulnerable adapt to the impacts of climate change.

The experience of the prolonged drought in Victoria has increased our understanding of the impact climate variations can have on individuals and communities. This experience has led to a number of initiatives including the development of the strategic framework.

The Victorian Government and the health and community sector collects a wide range of information which can provide insight into the capacity and resilience of the Victorian population to adapt to climate change. This information includes health and illness data, socio-economic status, workforce capacity, rural adjustment data, health service utilisation and levels of community connectedness. Combining these views of the Victorian community will provide valuable information for policy making and planning.

The impacts of climate change will hit certain communities, population groups and regions more than others, and this framework will help identify where government and service agencies can take action to have the most impact.

– Jan Bowman
Assistant Director, Environmental Health, Department of Human Services, Victorian Government

Executive Summary

Research into the health impacts of climate change has largely focused on the impacts of thermal stress, extreme weather events and infectious diseases. Little work has been done on the indirect impacts resulting in social, economic and demographic changes.

Climate change is predicted to cause major changes to the world's weather patterns and to have varying impacts within regions and local areas. While some may dispute the predictions and causes of climate change, there is no doubt that communities will be affected by the consequences of new policy and regulatory environments at a state and national level.

The Southern Grampians and Glenelg Primary Care Partnership (the PCP) has developed *Climate Change Adaptation: A Framework for Local Action* (the Framework) to guide local action to address the health and social impacts of climate change and rural adjustment. The Framework takes a strategic approach to the impacts of climate change, with a focus on health promotion. While service delivery is a component of the Framework, agencies will need to be guided by other documents regarding specific health service delivery issues arising from climate change.

Our goal is to ensure that we create communities resilient to the social, environmental and economic changes ahead. Specifically, the Framework aims to:

- identify local priority issues of climate change and rural adjustment;
- guide local planning and action by agencies and by the PCP as a collective; and
- encourage the development of inter-sectoral partnerships and integrated planning.

Research into the health impacts of climate change has largely focused on the impacts of thermal stress, extreme weather events and infectious diseases. Little work has been done on the indirect impacts resulting in social, economic and demographic changes. The most vulnerable groups in Australia are likely to include the elderly, the chronically ill, the socio-economically disadvantaged, those with poor access to essential services such as good housing and adequate fresh water, and those whose economic prosperity depends heavily on climatic conditions.

The PCP has identified population groups of greatest vulnerability using evidence from a range of sources. From this evidence, the PCP establishes key priority issues, as follows:

- i) Direct impacts – for low income households.
 - Household energy
 - Household water
 - Affordable food supply
 - Transport
 - Community strength and resilience
- ii) Indirect impacts – current issues likely to be amplified by climate change.
 - Health of farm families
 - Disadvantage in small towns

The Framework establishes an Action Plan to address the priority issues. This contains both actions for the PCP as a collective partnership and actions for individual member agencies. Importantly, the Action Plan identifies the need for broad partnerships between health, agriculture, industry and the community. The PCP is well placed to build on to existing partnerships formed to coordinate drought support.

1. Introduction

There are differing views about the existence, causes and likely impacts of climate change. Regardless of what level of change occurs, local communities will be impacted by the policy and regulatory environment created by climate change. Some local communities will also be impacted by the uncertainty and anxiety about change. There is no doubt that climate change is, or will be, a priority in local communities and therefore, climate change is a necessary focus of a Primary Care Partnership.

The Southern Grampians and Glenelg Primary Care Partnership (the PCP) has explored the likely effects on its local community and developed this Framework to guide local action. The Framework adopts a health promotion approach and uses evidence from state and national organisations. While service delivery is a component of the Framework, agencies will need to refer to other sources to guide their planning on specific service delivery issues arising from climate change. Agencies are also encouraged to refer to risk management tools to assist in their planning, some of which are being specifically designed for climate change.

Regardless of what level of change occurs, local communities will be impacted by the policy and regulatory environment created by climate change.

1.1 Goal and Aims

Our goal is to ensure that we create communities resilient to the social, environmental and economic changes ahead.

The Framework aims to:

- identify local priority issues of climate change and rural adjustment;
- guide local planning and action by agencies and by the PCP as a collective; and
- encourage the development of inter-sectoral partnerships and integrated planning.



Picture: Southern Grampians Shire

2. Context

Even if the level of greenhouse emissions were reduced, scientists predict that decades of climate change will occur due to the emissions already in the atmosphere.

2.1 Mitigation and adaptation

Efforts to reduce the impact of climate change focus both on mitigation and adaptation. Mitigation seeks to reduce the level of greenhouse gas being emitted, while adaptation seeks to increase our ability to moderate, cope with and take advantage of the consequences. Adaptation recognises that some level of impact is inevitable and hence a response strategy will be required to minimise the impacts.

2.2 Global context

Over the next century, global warming of 1.1-6.4°C is predicted (DHS, 2007). A change of 1-2°C has had dramatic impacts in the past. Climate change is predicted to cause major changes to the world's weather patterns and to have varying impacts within regions and local areas. Even if the level of greenhouse emissions were reduced, scientists predict that decades of climate change will occur due to the emissions already in the atmosphere.

The Intergovernmental Panel on Climate Change (IPCC) is a scientific intergovernmental body set up by the World Meteorological Organization and the United Nations Environment Programme. It was established to provide decision makers and others interested in climate change with an objective source of information about climate change. The IPCC does not conduct any research nor does it monitor climate related data or parameters. Its role is to assess on a comprehensive, objective, open and transparent basis the latest scientific, technical and socio-economic literature produced worldwide relevant to the understanding of the risk of human-induced climate change, its observed and projected impacts and options for adaptation and mitigation.

Further information is available at www.ipcc.ch

2.3 National policy

National Adaptation Framework – the National Council of Governments (COAG) requested the development of a National Adaptation Framework in February 2006 as part of its Plan of Collaborative Action on Climate Change. The National Framework outlines the agenda for government collaboration to provide information to support business and community decision-makers to better understand and incorporate climate change in their decisions.

The National Framework aims to guide action over the next 5 to 7 years, including:

- practical guides and tools to assist decision makers to manage the impacts of climate change;
- establishment of a new centre for climate change to provide information on impacts, vulnerability and adaptation options;
- provide climate change projections at a regional scale;
- generate knowledge to manage climate change risks for human health, biodiversity etc;
- work with stakeholders to commence developing practical strategies to manage risks; and

- assess implications and potential adaptations for specific regions, including Murray-Darling Basin, SW Western Australia, tropical north and drying regions of eastern Australia.

Further information is available at www.greenhouse.gov.au.

Garnaut Climate Change Review – this review has been commissioned by Australia’s commonwealth, state and territory governments to examine the impacts, challenges and opportunities of climate change for Australia. A Final Report will be delivered to the Australian governments by 30 September 2008.

The Garnaut Review is developing a set of economic models that describe the benefits and consequences of climate change. One focus is the development of a national emissions trading scheme. The approach was outlined in an Interim Report released in February 2008 and an Emissions Trading Scheme Discussion Paper released in March 2008.

Discussions have commenced on how an emissions trading scheme can be used to offset the impact of climate change on low income households. This includes options to use the revenue of the emissions trading scheme to assist low income households to mitigate their greenhouse emissions by enhancing their energy efficiency. It also includes the need for direct income distribution mechanisms to reduce the impact of rising utility prices. This is highly relevant to the discussions within this local Framework.

Further information is available at www.garnautreview.org.au.

Discussions have commenced on how an emissions trading scheme can be used to offset the impact of climate change on low income households.

2.4 State policy

Victorian Climate Change Adaptation program – involves a whole-of-government approach being coordinated by the Department of Sustainability and Environment under ‘*Our Environment Our Future – Sustainability Action Statement 2006*’. It includes research and pilot programs for health, agriculture and natural resources. The program outlines actions for clean greenhouse friendly energy; improving our energy efficiency and adapting to the impacts of climate change.

The third action area, ‘adapting to the impacts of climate change’, is of most relevance to the PCP. It includes four initiatives:

- i) adapting for Victoria’s future, including:
 - making Victoria’s agricultural systems resilient to climate change;
 - making buildings, infrastructure and homes more adaptable to problems such as heat stress;
 - understanding the impacts on the health of Victorians, particularly the elderly, young and chronically unwell; and
 - understanding what climate change will mean for individual communities in regions, so they can better prepare;
- ii) a research centre on climate change adaptation;
- iii) local action, including:
 - regional assessments of social, environmental and economic impacts;

Increasingly, decision makers at all levels are applying a risk management approach as a result of such uncertainty.

- iv) human health and climate change, including:
 - assessments of the impacts on health care systems and identifying priority areas for action, for example the development of responses to heat waves (further detail below); and
 - convening a climate change and human health conference (held in 2007).

The Victorian Premier hosted a major summit on climate change in April 2008 which sought ideas from the community about how Victoria should remain at the forefront of this crucial issue. The summit recognised that Victoria has entered a new phase of climate change action which builds on the initiatives already taken by the Victorian Government, for example *'Our Environment Our Future – Sustainability Action Statement 2006'*.

A summit paper, 'A Climate of Opportunity' was released for public consultation and will help develop Victoria's future policies to reduce emissions and prepare the community, the environment and industry for the impacts of climate change. The summit paper is the start of a Green Paper/White Paper on climate change which aims to ensure Victoria's policy settings are appropriate for preparing industry, households and regions for climate change.

Further information is available at www.dse.vic.gov.au.

Victorian Heat Wave Strategy – is an initiative under the Victorian Climate Change Adaptation program and is being coordinated by the Department of Human Services (DHS).

The first phase of the Heat Wave Strategy is the development of a toolkit for local government to guide local responses to planning for and managing the risks associated with heat waves. This aims to reduce the incidence of heat wave related morbidity and mortality.

The initiative commenced in late 2007 with the selection of 10 pilot areas across the state, including rural and metropolitan areas. Findings from the pilots are due to be collated in late 2008, with the local government toolkit due to be released in 2009.

Further information is available at www.dhs.vic.gov.au.

2.5 General uncertainty

The information used to prepare this Framework has various limitations. Clearly, climate change predictions are uncertain with regard to magnitude, timing and impacts. There is also uncertainty regarding the impacts of climatic conditions on health and socio-economic and technological changes.

Predictions of impact at a local level are increasingly uncertain due to local climatic patterns. Predictions of effects on human health are limited by longitudinal health data and little research has been undertaken on the indirect social, economic and demographic impacts (DHS, 2007).

Increasingly, decision makers at all levels are applying a risk management approach as a result of such uncertainty. Risk assessment and planning tools are either being used or are under development to assist local planning.

3. Health Promotion Principles

Health promotion is often said to be everybody's business. In other words, the promotion of people's health is a universal concern, requiring multi level, multi sector action. The Ottawa Charter for Health Promotion (WHO, 1998) provides an internationally recognised framework that focuses on addressing the causes, not the symptoms, of ill health.

This represents a comprehensive social and political process. It not only encompasses action toward enhancing the skills and capabilities of individuals but also action towards changing social, environmental and economic conditions to alleviate their impact on public health (Kelleher and Armstrong, 2003).

The PCP recognizes the following key health promotion principles (DHS, 2003):

- **Best available evidence.** This includes evidence for:
 - problem definition – evidence to define the problem to be addressed;
 - solution generation – evidence to know what strategies are going to work; and
 - evaluation – evidence to demonstrate success and effectiveness;
- **Population** focused in contrast to focusing on individual health status;
- Addresses the **broader determinants of health**, including the social and economic determinants;
- Seeks to **reduce social inequities and injustice** to reduce health inequalities;
- Emphasises **active consumer and community participation**;
- **Empowers** individuals and communities;
- Considers differences in **culture and gender**; and
- Facilitates **cross-sector collaboration**.

The PCP has used a health promotion approach in the development of this Framework because this provides a holistic approach for addressing the broad determinants of health. Direct service responses to diseases or illnesses associated with climate change are not dealt with in this Framework. Further information can be obtained from the Department of Human Services (2007).

The PCP has used a health promotion approach in the development of this Framework because this provides a holistic approach for addressing the broad determinants of health.

4. Climate Change and Rural Adjustment – the local issues

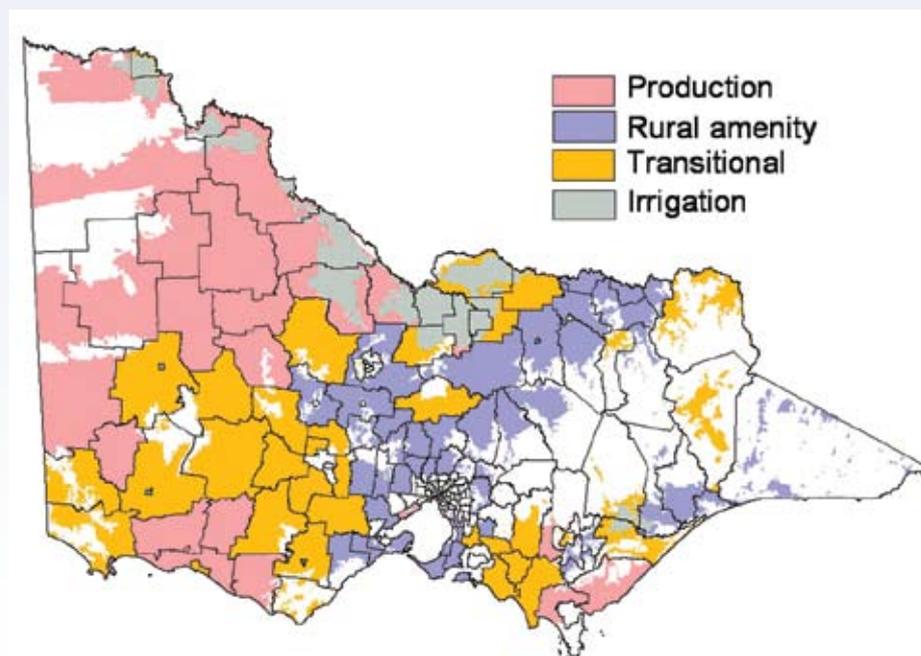
Each landscape has its own social and demographic characteristics, its own issues and opportunities.

Significant change in landuse and demographics has occurred and is continuing to occur in our local area. The 'rural adjustment' process forms an important context for the emerging changes in climate.

4.1 Rural adjustment

Neil Barr (2005) details the range of social/demographic landscapes in rural Victoria. He describes the 'agricultural production' areas in the Wimmera/Mallee; the 'amenity' landscape in the north-east; and the 'transition' landscapes of the south west. Each landscape has its own social and demographic characteristics, its own issues and opportunities. Figure 1 outlines the geographic distribution of each landscape.

Figure 1 – Social/Demographic Landscapes of Victoria



Source: Barr, 2005

The 'transition' landscapes are of most relevance to the Southern Grampians and Glenelg. Barr describes the characteristics of the 'transition' landscapes as follows:

- areas experiencing rapid land use change, eg. from wool production to lambs or timber;
- decline in small towns and migration away of young people;
- decreasing number and increasing average age of farmers;
- shift of population to some small towns due to housing affordability pressures in Melbourne and regional towns;
- increasing numbers of 'newcomers', raising issues of tolerance and trust;
- low social 'bridging' capital (connection with others outside their area).

The transitional characteristics are likely to amplify as a result

of climate change. Lower rainfall and higher temperatures will increasingly shift agriculture away from grazing into cropping enterprises. Nearer the coast, higher rainfall will increase competition between timber, dairy and market gardening. This will increase land prices and may force a shift of low socio-economic households inland, potentially to small isolated towns for affordable housing. Wind and other energy industries will also be competing for land.

For public health, the issues include:

- increasing vulnerability in isolated small towns with few services (health, education, transport, fresh food);
- increasing social isolation as a result of higher fuel costs and hence reduced affordability to travel to services;
- reduced social 'bonding' capital (connections within and between communities) resulting in reduced community strength; and
- poorer health outcomes for those living in disadvantaged towns.

Many of these issues are already occurring as a result of other factors. Climate change will amplify existing issues that are the focus of prevention programs and primary care services.

The weight of scientific evidence now confirms that to avert dangerous climate change global greenhouse gas emissions will need to be reduced by 60-80% over the next 45 years.

4.2 Physical impacts of climate change

The weight of scientific evidence now confirms that to avert dangerous climate change, global greenhouse gas emissions will need to be reduced by 60-80% over the next 45 years (CSIRO and the Bureau of Meteorology, 2007).

Even if greenhouse gas emissions can be drastically reduced, some degree of climate change is now inevitable. The Victorian Government uses projections from the Commonwealth Scientific and Industry Research Organisation (CSIRO) as a basis for climate change policy.

The Department of Sustainability and Environment (2006 and 2008) has summarised the CSIRO data for the Glenelg Hopkins Catchment in SW Victoria as follows:

- increased summer temperatures and heatwaves with an increase in average temperatures of 0.7 to 4.3°C by 2070. An increase of 10-50% in the number of hot days (over 35°C) by 2030;
- reduced number of frosts by 10-40% by 2030;
- a change in rainfall from +3% to -10% by 2030. Extreme heavy rainfall events may be more intense. Droughts are likely to become more frequent and longer in duration. Dry conditions that currently occur on average 1 in 10 years may increase to 1 in 5 years.
- reduced runoff by 5 to 40% by 2030;
- higher intensity winds in coastal regions, particularly in winter;
- longer bush fire season and potentially more serious fires;
- increased solar radiation due to decreased cloud cover;
- increased flooding and sea level rises;

Climate change research to date has focused mostly on the impacts of thermal stress, extreme weather events and infectious diseases. Little work has been done on the indirect impacts.

- increased coastal erosion and storm surges;
- decreased air quality resulting from increased dust and bushfire;
- reduced water quality, including drinking water supplies;
- increased drought and water shortages; and
- increased extreme weather conditions, including severe storms.

A 2°C increase in the maximum temperature and 15% reduction in rainfall by 2070, would result in the climate of Hamilton being similar to the current climate of Naracoorte in South Australia (DSE, 2006).

4.3 Health impacts

i) Direct

The Department of Human Services has identified the following physical health impacts (DHS, 2007):

- changes in the distribution of disease vectors (such as mosquitoes), food and water-borne disease;
- increased thermal stress and heat related illness and death (particularly in the elderly, chronically ill or young children) as a result of increased heatwaves;
- increased injury and death from extreme weather;
- increased water borne illness as a result of reduced water quality and quantity; and
- increased respiratory conditions as a result of reduced air quality.

ii) Indirect

Research on climate change and population health interactions has been increasing in recent times, yet there is still much to learn. Climate change research to date has focused mostly on the impacts of thermal stress, extreme weather events and infectious diseases. Little work has been done on the indirect impacts. Some potential areas are discussed below.

Social/economic impacts

The Victorian Council of Social Services (VCOSS, 2007) argue that climate change will have the following social impacts:

- increased prices of essential goods and services such as food, utilities and transport;
- changes in availability and distribution of employment; and
- the potential increase in social conflict as a result of resource scarcity.

CSIRO (2006) note the economic impact of high temperatures and humidity on infrastructure, including buildings, roads, rail and power services.

The actual health impacts will be strongly influenced by local environmental and socio-economic factors and by the adaptations made to reduce the full range of these impacts.

Mental health

Another area of indirect impact is the potential for increased stress, anxiety and hence reduced mental health. Many have also identified the increasing impact on mental and physical health from reduced leisure and recreation opportunities, eg. due to reduced water supply for sporting facilities.

Reduced connection with nature

A broader area of discussion is the increasing research into the vital role nature plays on human health, wellbeing and development. Maller et al (2002) have reviewed a broad cross-section of the literature that relates to the potential and actual benefits of contact with nature. While they focus their analysis on parks, much of the literature applies to contact with nature generally, whether that be a wilderness, local park or garden experience.

Maller et al (2002) outline the range of evidence of the positive impacts on human physical and mental health of links to nature in either of the following ways:

- simply viewing natural scenes;
- being in nature;
- restorative natural settings that foster recovery from mental fatigue;
- participation in leisure and recreation in natural settings;
- contact with plants – eg. by being in a garden or participating in gardening; and
- contact with animals.

The authors argue that a reduction in our connection with nature is partly responsible for increasing levels of stress and stress-related illnesses and violence and aggression. They also table the initial evidence for the positive effects of nature on blood pressure, cholesterol, outlook on life and stress-reduction. They argue that the evidence of the broad health benefits of nature is compelling enough to warrant its application to all Australian National Health Priority Areas, including cardiovascular disease, cancer, injuries, mental problems and disorders, diabetes and asthma.

Climate change has the potential to further sever our connection with nature and hence reduce our health and wellbeing. Weatherly (2008) argues that this potentially will occur due to:

- the increasing 'demonising' of nature leading to increasing fear – particularly created by the media after severe weather events and in relation to bushfires. The media's focus on bushfires creates pressure to implement intensive and frequent burning which acts to reinforce the existence of fire as a frequent occurrence;
- the reduced exposure to nature as communities are driven to shelter inside by harsher climatic conditions;
- the locking up of our National Parks to exclude public access from many areas, therefore reducing public familiarity with nature; and

Climate change has the potential to further sever our connection with nature and hence reduce our health and wellbeing.

Low income and disadvantaged groups have been identified as being the most likely to be impacted by both the direct and indirect impacts of climate change.

- increasing resource scarcity that will potentially move attitudes away from conservation to resource exploitation.

Weatherly also argues that climatically driven changes to soil biota would affect the robustness of our ecosystem generally. This would have a profound effect on human existence.

Evidence of the impact of a reduced connection to gardening is already emerging, as seen in the results of a recent survey conducted by the Department of Planning and Community Development (McFaul pers com, 2008). The Department received responses from 157 women in the Barwon South Western Region who identified that one of their three highest concerns regarding drought and climate change was the impact on their health and wellbeing from the loss of amenity associated with the dying of gardens. They also reported a decline in health and wellbeing from a decline in the security of fresh food, arising from their inability to grow their own and/or inability to afford fresh food as prices increase.

One woman reported, *“As an older woman I can no longer enjoy my garden. The garden gave me exercise as well as hope and pleasure. Now this is gone. Everywhere you go feels like it is suffering and stressed. It makes me depressed.”* The link between reduced ability to grow food locally and the future nutrition and general health, such as dental health, of children was also noted by those surveyed.

4.4 Those most vulnerable to the effects of climate change

Low income and disadvantaged groups have been identified as being the most likely to be impacted by both the direct and indirect impacts of climate change.

VCOSS (2007) have identified that the most vulnerable groups in Australia are likely to include the elderly, the chronically ill, the socio-economically disadvantaged and those with poor access to essential services such as good housing and adequate fresh water. Other groups who will be vulnerable are those whose economic prosperity depends heavily on climatic conditions and who do not have sufficient resources and capacity to adapt.

Research by organisations such as the World Health Organisation, reveals that disadvantaged groups have poorer health compared with communities of higher socio-economic advantage (WHO, 2000). The fact that climate change has the ability to amplify disadvantage, suggests the potential for climate change to have a negative impact on the health status of disadvantaged groups.

5. Priority Issues and Actions

As noted above, there are direct and indirect social and health issues arising from climate change. The direct issues arise from increasing heat stress and increasing utility prices. The indirect issues are already observable in our community. These indirect issues reflect existing health inequalities that are likely to be amplified as a result of climate change.

5.1 Direct issues

5.1.1 Issues

The PCP has identified five issues associated with the direct impact of climate change. These are:

- household energy;
- household water use;
- transport;
- affordable food supply; and
- community strength and resilience.

i) Household energy

The cost of energy is predicted to increase, as a result of a greater demand on the system due to higher temperatures and heat waves. Low income groups are less likely to be able to afford air conditioning and to climate proof their homes by installing insulation, cooling systems or by shading. They will therefore be more vulnerable to heat related illness. This is particularly true for low-income people living in rental properties, temporary accommodation or low cost housing such as caravans.

Current policy initiatives to support households to increase their energy efficiency are aimed at home owners. Rental households are largely excluded. The current standard of energy efficiency in community and public housing is very low, hence such households are highly vulnerable to increased energy pricing and climate change. The degree of impact on lower income households will need to be assessed if income distribution policies and processes are included in the Garnaut Review and adopted by Government.

ii) Household water use

The cost of water is expected to increase and restrictions on its use will continue to be applied and in many locations restrictions will be increased. This will have similar impacts to increased energy prices on low income households. People living in rental accommodation or in public housing are more likely to have less efficient water systems. If water prices increase significantly, there may be an increase in the use of tank water for potable supply. While rural communities have always relied on such sources for potable water supplies, the increasing use of tanks within regional centres may have public health risks.

iii) Affordable food supply

Food costs represent the largest category of household expenditure in Australia. The cost of food has been identified by VicHealth as a

The current standard of energy efficiency in community and public housing is very low, hence such households are highly vulnerable to increased energy pricing and climate change.

Climate change will have a significant impact on the cost of food, especially if agricultural adjustment to new climate conditions is slow.

contributing factor to food insecurity – which is currently experienced by 6% of Victorians. Lack of access to affordable food has significant health effects.

Climate change will have a significant impact on the cost of food, especially if agricultural adjustment to new climate conditions is slow. Already in Victoria, food prices have increased due to drought conditions and international factors (ABS, 2006). The high cost of grain and fodder prices flow through to meat prices as the cost of feeding livestock increases. The drought has reduced dairy output and many horticultural products such as fruit will have to be imported as irrigated agriculture is further compromised by lack of water. Extreme weather events such as storms, fires and flooding can also cause damage to food crops and kill or injure stock leading to higher food prices.

Low-income households spend a disproportionate percentage of their income on basic items such as food. Cost increases in these basic commodities, especially in the context of high housing costs, will contribute to financial hardship and to poor nutrition.

As already mentioned, the degree of impact on lower income households will need to be considered if income distribution policies/processes are adopted by Government.

iv) Transport

Fuel prices are likely to increase due to climate change and through emission reduction such as carbon pricing. Low-income families in areas of poor public transport already spend a significant proportion of their income on transport and may have difficulty affording increased fuel costs. Rural households are additionally vulnerable to high fuel costs due to the centralisation of services in larger towns, and their distance disadvantage.

Investment in public and active transport options will reduce the vulnerability of low income and disadvantaged households to increasing fuel costs.

v) Community strength and resilience

Drought has profound social and economic impacts in rural and regional communities. In particular, large sections of the rural population have low incomes, even though they remain asset rich. As a result, farming families increasingly need to access financial and social support services. This challenges the identity of hard working farm families and results in a reluctance to seek or accept help.

In communities, it may appear that some families are managing better than others. This can result in a decrease in social capital. Increasing stress can be a contributor to an increased level of violence. Violence usually occurs through frustration and powerlessness. Resource scarcity in rural areas places enormous stress on communities and key stakeholders are concerned about the potential increase in tension and violence that this may cause.

The stress and uncertainty associated with drought conditions and

the emotional impact of crop and stock losses lead to increased levels of depression and anxiety for farmers, their families and the whole community.

Community strength and resilience will be enhanced by Governments taking leadership but allowing communities to develop on their own terms. As with other change, communities will be able to adapt to climate change where leadership is provided and where communities are encouraged to co-operate, understand the impacts of change and show compassion for others less fortunate. The more we turn to the government for assistance, and are rewarded for this, the less resilient communities will become – and that will be genuinely unsustainable (Weatherly, 2008).

Community strength and resilience will be enhanced by Governments taking leadership but allowing communities to develop on their own terms.

5.1.2 Strategies for action

This section uses the Ottawa Charter for Health Promotion to identify potential strategies to address the five areas of action to reduce the direct impacts of climate change.

A key requirement of quality integrated health promotion program delivery is the implementation of a mix of health promotion interventions. Interventions need to include a balance between responding on a population scale and on an individual basis. Two key questions to answer in choosing interventions are:

- What strategies are the best means to bring about the desired change? and
- Which mix of interventions will produce the largest health gains?

The Ottawa Charter for Health Promotion provides an effective tool to help answer these questions. It outlines a range of actions that are required to address the broader determinants of health; it operates at multiple levels and points to the need for an integrated inter-sectoral approach.

The following matrices provide a range of options that agencies can use to select strategies that are most appropriate for their local community. That may be one or many interventions, depending on the local situation.

Strategies for Action – Tables

1. Household Energy – potential options	
A guide to potential local strategies to reduce the impacts associated with an increasing price of household energy.	
Build Healthy Public Policy	<p>Advocate to state government to encourage power companies to provide information re: hardship relief, such as grants for energy efficient appliances.</p> <p>Advocate to state government to include energy efficiency as criteria for infrastructure grants.</p> <p>Advocate to state government to retrofit public housing in areas of highest vulnerability – eg. window protection; plantings to reduce heat.</p> <p>Advocate for changes in local government building permits to include incentives for the development of energy efficient houses.</p> <p>Offer rebates for energy efficiency (eg. solar).</p> <p>Advocate for local government landscape design to include a focus on shade.</p>
Create Supportive Environments	<p>Provide emission scores for households and businesses.</p> <p>Focus on energy efficient landscape design as well as built environment.</p> <p>Provide links to relevant climate change websites.</p> <p>Encourage local and state media to feature programs highlighting issues of rural energy efficiency. For example the ABC to feature a rural ‘Carbon Cops’.</p> <p>Work with local retailers to promote the availability of energy efficient products such as light globes etc, as well as nurseries for appropriate plants.</p> <p>Create a directory of retail outlets promoting energy efficient products.</p> <p>Partner with local business to explore options of discounted energy efficient products for those most disadvantaged.</p> <p>Local government to identify opportunities to showcase environmentally friendly housing, eg. via DSE programs.</p>
Strengthen Community Action	<p>Create an opportunity for community members to form local energy efficiency action groups.</p> <p>Partner with existing community groups who have an interest in environmental and sustainability issues.</p> <p>Provide advocacy training for community groups around energy efficiency and sustainability.</p>
Develop Personal Skills	<p>Increase the knowledge of household energy efficiency strategies such as using off peak power, doing only full loads of washing, turning off lights, having electrical equipment on stand by.</p> <p>Increase the knowledge in the use of shade for cooling houses. This would include appropriate planting, internal and external other uses of shade.</p> <p>Increased knowledge of financial hardship relief options.</p> <p>Develop the skills in financial management including household budgeting.</p> <p>Increase knowledge about the carbon credit system for informed decision making.</p>
Re-orient Health Services	<p>Health service staff participation in Municipal Public Health Plan processes.</p> <p>Health service involvement in the Regional Managers’ Forum – Climate Change Working Group.</p> <p>Actively participate in local planning processes that impact on issues of household energy.</p> <p>Member organisations adopting energy efficiency strategies in own organisations.</p> <p>Build capacity of health service staff in issues of household energy.</p>

2. Household Water – potential options

A guide to potential local strategies to reduce the impacts associated with an increasing price and reduced availability of household water.

<p>Build Healthy Public Policy</p>	<p>Advocate for water tanks to be mandatory in public housing.</p> <p>Advocate to government and water authorities to make rebates available for water capture and efficiency, eg. rainwater tanks, etc.</p> <p>Advocate for the extension of the rebates to accommodate those in rental accommodation.</p> <p>Advocate for policy changes for new housing developments to include water efficient design features.</p> <p>Local government to consider water efficiency issues within the Municipal Public Health Plan.</p>
<p>Create Supportive Environments</p>	<p>Partner with local retailers to promote water efficient products such as shower heads.</p> <p>Develop local demonstration projects potentially with local water supplier.</p> <p>Engage local nurseries to promote appropriate planting and ensure availability of plants.</p> <p>Advocate to local government to plant water efficient plants in public spaces.</p> <p>Develop community gardens so that people have access to gardening.</p>
<p>Strengthen Community Action</p>	<p>Create the opportunity for community members to form local water efficiency action groups.</p> <p>Partner with existing community groups who have an interest in environmental and sustainability issues.</p> <p>Provide advocacy training for community groups around water capture and sustainability.</p>
<p>Develop Personal Skills</p>	<p>Increase the knowledge and skills to support water efficient approaches to home gardening including water capture and storage, dry gardening techniques, use of bore water.</p> <p>Increase the knowledge of rebates available for efficient water usage.</p> <p>Increase the skills and knowledge of tank maintenance and water quality issues.</p>
<p>Re-orient Health Services</p>	<p>Health service staff participation in Municipal Public Health Plan processes.</p> <p>Health service involvement in the Regional Managers' Forum – Climate Change Working Group.</p> <p>Ensure health professionals are aware of water borne diseases and information on water quality.</p> <p>Build the capacity of the health workforce on issues of water efficiency.</p> <p>Develop partnerships with local water suppliers.</p> <p>Encourage the presence of a health representative on the Board of the town and rural water supplier.</p>

3. Affordable Food Supply – potential options

A guide to potential local strategies to reduce the impacts associated with increasing price and reduced availability of fresh food.

Build Healthy Public Policy	<p>Municipal Public Health Plan includes a focus on affordable food supply.</p> <p>PCP or each local government develops a Food Security policy.</p> <p>Advocate for school canteen policies – healthy lunch box policy.</p> <p>Advocate for policy on decreasing television advertising of fast food to children.</p> <p>Advocate for increased competition in fresh food retail market.</p>
Create Supportive Environments	<p>Make bulk buying and delivery options available.</p> <p>Planting of edible foods, such as fruit, in streetscapes.</p> <p>Local food barter or sharing system created.</p> <p>Identify food gaps in catchment.</p> <p>Partner with local food retailers and advocate for a full range of fruit and vegetables at competitive prices and promotion of healthy choices.</p> <p>Advocate for retailers to be located in areas where people live and work.</p> <p>Create transport options to access local food supply for people most disadvantaged.</p> <p>Partner with local business to explore options of discounted food and preparation equipment for the most disadvantaged.</p>
Strengthen Community Action	<p>Partner with local community organisations with an interest in gardening and food production to explore community garden options.</p> <p>Create setting-based action groups to advocate for change – such as schools, sports clubs, child care centres, kindergartens.</p> <p>Develop partnerships with local community groups to include the celebration of food into community activity.</p>
Develop Personal Skills	<p>Skills in home gardening.</p> <p>Developing knowledge and skills in the use of seasonal food.</p> <p>Develop skills in traditional food preserving and drying techniques.</p> <p>Develop food preparation and storage skills in those groups identified at high risk.</p> <p>Develop skills and knowledge in food preparation and storage, and the ability to make appropriate choices.</p>
Re-orient Health Services	<p>Health service staff participation in Municipal Public Health Plan processes.</p> <p>Health service involvement in the Regional Managers’ Forum – Climate Change Working Group.</p> <p>Growing of food crops on agency land.</p> <p>Culturally appropriate food available in health care setting.</p> <p>Health services invest in food security audit of local communities, especially in those areas most disadvantaged.</p> <p>Build capacity of health workforce on the issues of food security.</p>

4. Transport – potential options

A guide to potential local strategies to reduce the impacts associated with increasing price of fuel.

<p>Build Healthy Public Policy</p>	<p>Municipal Public Health Plan includes focus on transport.</p> <p>Advocate for continued public sector investment in public transport in rural areas.</p> <p>Advocate for work places to develop policy to support active transport – availability of showers, secure bike storage, discounted use of public transport.</p> <p>Local government planning has policy in place to support active transport in the development and maintenance of footpaths, urban design, planning processes and permits.</p> <p>School councils developing policy to support a walking school bus program.</p> <p>Advocate for rail freight infrastructure developed to decrease volume of truck traffic on country roads.</p> <p>Consider flexible work arrangements, as relevant.</p>
<p>Create Supportive Environments</p>	<p>Support SWTransport Connections project to ensure adequate public transport options and gaps are addressed.</p> <p>Bike racks available in public spaces.</p> <p>Showers available at workplaces.</p> <p>Well maintained walking tracks and footpaths.</p> <p>Create and ensure that there are public spaces where people feel safe.</p> <p>Urban design that ensures services are available in neighbourhoods.</p> <p>Bikes available for use by staff to attend meetings.</p> <p>Marked cycle lanes.</p> <p>Integrated walk/cycle trails – to link houses, shops, parks to enable safe access on foot, bike, wheelchair.</p> <p>Partner with local business to explore options of discounted cycling products for those most disadvantaged</p>
<p>Strengthen Community Action</p>	<p>Support SWTransport Connections project to involve communities in identifying and resolving transport needs.</p> <p>Employee group advocating for safe place to store bicycles.</p> <p>Parents group lobby school council for walking school bus.</p> <p>Bicycle Victoria lobbying for safer space for members.</p> <p>Bicycle users advocacy for safe space and infrastructure for riding.</p> <p>Community advocacy for changes to roads to discourage speeding.</p> <p>Support for recycle bicycle programs to provide cheap bikes (eg. a local service club initiative).</p>
<p>Develop Personal Skills</p>	<p>Increased knowledge of community and public transport options.</p> <p>Increased knowledge of the benefits of being active.</p> <p>Bike safety programs.</p> <p>Bike maintenance programs.</p> <p>Pedestrian safety education programs.</p>
<p>Re-orient Health Services</p>	<p>Health service staff participation in Municipal Public Health Plan processes.</p> <p>Health service involvement in the Regional Managers’ Forum – Climate Change Working Group.</p> <p>Health sector staff advocating to local government to include active transport components into urban design.</p> <p>Health centre staff recruiting volunteers to conduct walk ability audits.</p> <p>Health organisations working with disadvantaged groups to identify barriers to transport options.</p> <p>Build capacity of health workforce on the issues of active transport.</p> <p>Identify service outreach models to increase access to outlying areas.</p>

5. Community strength and resilience – potential options

A guide to potential local strategies to increase community strength and resilience for local agencies.

Build Healthy Public Policy	<p>Advocate for enhanced access to telecommunications, particularly in areas without mobile coverage or where broadband access is expensive.</p> <p>Advocate for increased number of employment options, including number of apprenticeships.</p> <p>Implement actions under the PCP Alcohol and Drug Plan.</p> <p>Policies that encourage and support inclusion for those disadvantaged members of community developed in a range of organisations representing a range of sectors and settings.</p>
Create Supportive Environments	<p>Create communities that offer a diversity of activities – arts, culture, farmers markets, alternative sport, imaginative playgrounds, town square, climbing walls etc.</p> <p>Support programs to address ‘volunteering fatigue’, including volunteer support and mentoring programs.</p> <p>Support leadership development in local communities.</p> <p>Training and skill development opportunities available in local community.</p> <p>Regular community celebrations and opportunities for get together such bike rides, family fun days.</p> <p>Community gathering to celebrate the diversity of culture.</p> <p>Create links with other communities.</p>
Strengthen Community Action	<p>Create opportunity for community members to be involved in decision making processes that effect their community.</p> <p>Work with community to create community action groups to inform local planning and decision making.</p> <p>Initiatives to link with other rural, urban and international areas.</p>
Develop Personal Skills	<p>Continue community Mental Health First Aid training.</p> <p>Early reading programs developed in local communities.</p> <p>Advocate for the local provision of work readiness skills and knowledge.</p> <p>Increased computer and internet knowledge and skills.</p>
Re-orient Health Services	<p>Health service staff participation in Municipal Public Health Plan and other local planning processes.</p> <p>Health service involvement in the Regional Managers’ Forum – Climate Change Working Group.</p> <p>Build capacity of health service staff around issues of community strength and resilience.</p>

5.2 Indirect issues

The following indirect issues are current issues for many communities. They have the potential to be amplified by climate change.

5.2.1 Farm family health

i) What the evidence tells us

The following information has been sourced from research and publications of the Western District Health Service (WDHS) Sustainable Farm Families program. Please refer to www.sustainablefarmfamilies.org.au for source documents, particularly Brumby et al 2006, 2007 and 2008.

Farm families are already experiencing increased levels of stress, they are working harder, longer and relying on family to provide extra workforce to survive. They are experiencing reduced terms of trade, increased regulatory requirements and high input prices.

The results of the WDHS Sustainable Farm Families program are confirming that farm families have poorer health than their urban counterparts. Farmers have higher death and morbidity compared with the average Australian population. Farmers are over represented in injuries and have a range of socio-economic disadvantage.

Male farmers have a 40% increase in age standardised deaths relative to the average Australian male (Fragar and Franklin 2000). This is a result of higher rates of cancer, cardiovascular disease, farm injury and suicide. Unfortunately there is limited health data on farm women. Prior to 1996 only one person per marriage was recorded as a farmer in the Australian census. This has made determining female farmer health very difficult, as distinct from other rural people (Brumby et al 2006).

The degree of change resulting from rural adjustment and climate change is likely to increase levels of stress and exacerbate existing health problems amongst this community. Research is also suggesting that during periods of great stress and change, decisions to change are postponed as people just work to survive the current crisis despite some critical breaking points being reached – ie. they are in so deep they can't get out. This has multiple impacts on not only individuals, families, children and employees but also communities, landscapes and potentially animal welfare.

ii) Action required

There is already a range of factors contributing to the poor health, wellbeing and safety of farm families, such as geographic and social isolation, financial stress, work related injury, limited physical activity, smoking, alcohol use, work life balance, food choice, poorer access to services, demands of job, working alone, limited time off-farm, increased changes related to climate and industry regulation.

The PCP has identified '**access to services**' as the key issue it should address. The key reasons are as follows:

- The limited number of services coupled with distance to services makes access more difficult, time consuming and

Farm families are already experiencing increased levels of stress, they are working harder, longer and relying on family to provide extra workforce to survive.

The effects of drought and centralisation of services has resulted in a decrease in town infrastructure and services available.

expensive. Travel to services can mean loss of wages and increased costs including childcare and fuel. Access is even more problematic due to fewer medical, nursing and allied health providers per head of population in rural areas; and

- PCP agencies believe they are well placed to provide enhanced access.

5.2.2 Small towns

i) What the evidence tells us

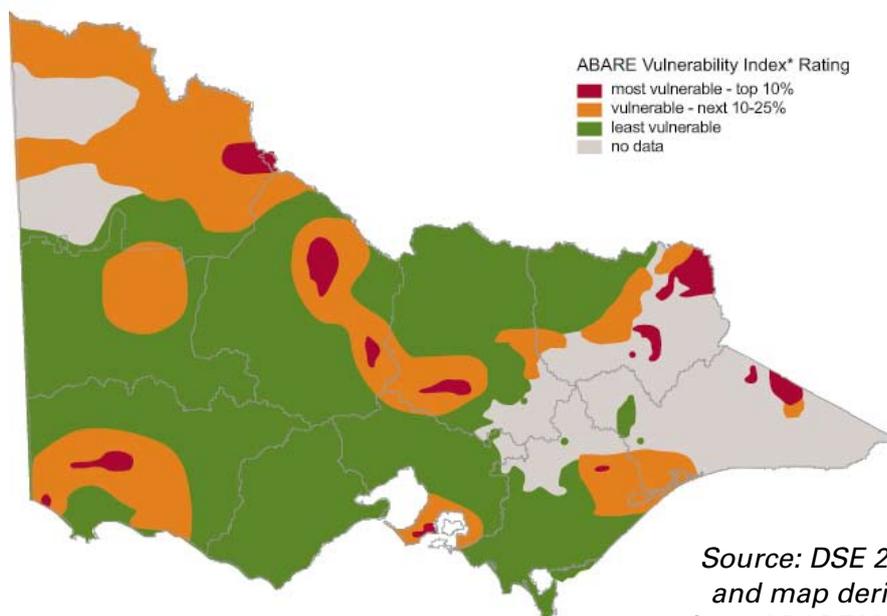
There are varying levels of advantage in small towns within the PCP catchment. Some, such as Dunkeld, are experiencing growth while others are in decline. This is characteristic of the transitional landscapes identified in Neil Barr's work. Characteristics include the emigration of young people, changing patterns of land use and the immigration of families seeking affordable housing. The effects of drought and centralisation of services has resulted in a decrease in town infrastructure and services available. This is particularly the case for towns near to timber plantations. Such towns have experienced a decline in the number of farm families with a resulting impact on local business. In many towns, a population decline has provided cheap housing attracting low socio-economic households.

Figure 2 identifies areas in the state most vulnerable to rural adjustment (DSE, 2005). A high level of vulnerability has been identified in the PCP catchment in the Merino/Digby/Branxholme area. ABS data identifies lowest socio-economic status in small towns of Merino, Coleraine and Glenthompson and in some parts of Portland and Hamilton.

Figure 2 – Level of community vulnerability to rural adjustment

Vulnerability index based on:

- 1. Education levels – internet use, Landcare membership**
- 2. Economic factors – income sources, average income, income risk**
- 3. Environmental factors – land degradation, pastures**



Source: DSE 2005 and map derived from ABARE Vol.12 No.1 Article 2005

There is a clear link between levels of disadvantage and health status. The World Health Organisation's *The Solid Facts* (WHO, 2000) describes the social and economic determinants of health and provides the evidence of the link between health and wealth. Relative socio-economic position is one determinant of health and is the obvious contributing factor to social disadvantage in small communities.

The Victorian Health Promotion Foundation identifies the reduction of health inequalities as one of its key priorities. Within this, action toward strengthening community resilience is a key focus.

The state government of Victoria has identified the need to build stronger communities and has invested resources in Community Strengthening and Neighbourhood Renewal programs (www.neighbourhoodrenewal.vic.gov.au). These programs invest resources in areas with the highest levels of disadvantage to strengthen communities in areas such as health and wellbeing, education attainment, school retention and social connection

The PCP has identified that a new focus to reducing the gap in advantage in small towns is a priority. This can be achieved via a community strengthening approach.

ii) Action required

The PCP has identified that a new focus to reducing the gap in advantage in small towns is a priority. This can be achieved via a community strengthening approach. Community strengthening is a sustained effort to increase involvement and partnership among members of a community to achieve common objectives. It involves local people, community organisations, government, business and philanthropic organisations working together to achieve agreed social, economic and environmental outcomes.

Strong, healthy communities have:

- strong partnerships and collaboration between the broadest range of community organisations;
- strong local leadership, ownership and control;
- economic, social and environmental assets;
- knowledge and understanding of their community;
- the ability to organise the participation of community members around community issues (ie. volunteering) and determine priorities and make best use of resources; and
- local institutions providing governance structures through which action can be organised.

'Community renewal' programs that seek to build community strength aim to facilitate:

- ongoing community participation in decision-making;
- new job and learning opportunities;
- increased volunteering and support for each other ;
- better community facilities and safer, more attractive open spaces;
- more involvement in cultural, recreational and sporting activities; and
- improved feelings of safety and wellbeing.

The PCP recognises that effective community strength and resilience programs need to address a range of social and economic determinants, such as education, transport, internet access, employment and social connection.

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7. Appendix – Climate Change Action Plan

The Southern Grampians and Glenelg PCP has developed the following Action Plan to address the priority issues identified in the PCP's *Climate Change Adaptation: A Framework for Local Action*. It contains actions for the PCP as a collective partnership and actions for individual member agencies.

Goal 1 – Reducing the direct impacts of climate change

Outcomes

- Consistent implementation of a health promotion approach to climate change adopted by PCP agencies
- Agency Health Promotion or other plans incorporate a response to climate change
- Agency action commenced towards the direct issues of climate change

Objective/Strategy	Responsibility
<p>Objective 1 – By December 2008, SGG PCP health promotion reference group members will be able to identify the five areas for action identified to address the impacts of climate change that relate to organisation's health promotion planning (household energy use, household water use, transport, affordable food supply and community strength and resilience).</p> <p>Strategy – PCP office to disseminate final Framework to all member agencies and host discussions with Health Promotion Reference Group members.</p>	HP Reference Group
<p>Objective 2 – PCP to develop a pilot Heatwave Strategy in partnership with local government by December 2008.</p> <p>Strategy – PCP office to coordinate a partnership project to develop a local heatwave response for the catchment.</p>	Local government and PCP Office
<p>Objective 3 – By June 2009, senior managers of PCP member agencies will agree to incorporate elements of climate change into their health promotion or other organisational plans.</p> <p>Strategy – PCP office to disseminate Framework to senior managers and Boards of member agencies.</p>	PCP agencies
<p>Objective 4 – By December 2009, PCP member agencies will have incorporated elements of climate change response into health promotion or other organisational plans.</p>	PCP agencies

Goal 2 – Farm family health

To increase the number of farm families accessing health and community services.

Outcomes

- Increased knowledge and skills of PCP member agencies in reducing barriers to access for farm families
- Increased access to PCP agencies by farm families

Objective/Strategy	Responsibility
<p>Objective 1 – By March 2009, the SGG PCP will increase the knowledge of services regarding the barriers to access for farm families to health and community services.</p> <p>Strategy – WDHS Sustainable Farm Families program to develop a Guide outlining barriers to access.</p> <p>Strategy – PCP office to disseminate to all PCP member organisations and ensure knowledge has increased.</p>	SFF program on behalf of PCP
<p>Objective 2 – By December 2009, the current level of farm family access to health and community services (PCP member agencies) will be identified.</p> <p>Strategy – PCP agencies will commence monitoring farm family access to their service.</p>	PCP agencies
<p>Objective 3 – By December 2009, PCP member agencies will be able to identify the key features of service delivery that promote access to services by farming communities.</p>	PCP agencies
<p>Objective 4 – By July 2010, 50% of PCP member agencies will have embedded the key features of service delivery that enables access to services of farmers into organisational practices, including working and understanding issues pertaining to farm families health.</p> <p>Strategy – PCP member agencies to provide documentation to demonstrate embedding of key features.</p>	PCP agencies
<p>Objective 5 – By December 2010, PCP member agencies will report an increase of 20% in the number of farm families accessing their services.</p>	PCP agencies

Goal 3 – Healthy and liveable communities

Increased strength and community resilience within smaller communities to create healthy and liveable communities.

Outcomes

- 'Place based' planning approach implemented in a priority township within PCP catchment, including community development/engagement process
- Integrated service delivery implemented

Objective/Strategy	Responsibility
<p>Objective 1 – By October 2008, the PCP will identify and prioritise small towns vulnerable to rural adjustment.</p> <p>Strategy – PCP to use indicators of vulnerability and results of Victorian Community Indicators Project to identify priority towns.</p>	<p>PCP office, in collaboration with Area Based Planning Network and Regional Managers' Forum</p>
<p>Objective 2 – By November 2008, the PCP will have commenced collaborative planning/ action in the highest priority town(s).</p> <p>Strategy – a 'place based' approach be undertaken to identify needs of the town and to develop plan to address needs.</p>	<p>PCP office</p>
<p>Objective 3 – By June 2009, PCP member organisations will provide services in an integrated way to the residents of identified towns.</p> <p>Strategy – PCP member organisations to describe changes in services to the residents of identified towns.</p>	<p>Relevant PCP agencies</p>
<p>Objective 4 – By March 2009, PCP will have sourced funding to support community planning/development approach in the towns.</p>	<p>Local government</p>

Goal 4 – Enhancing partnerships and integrated planning

An integrated planning approach implemented with involvement of a range of sectors.

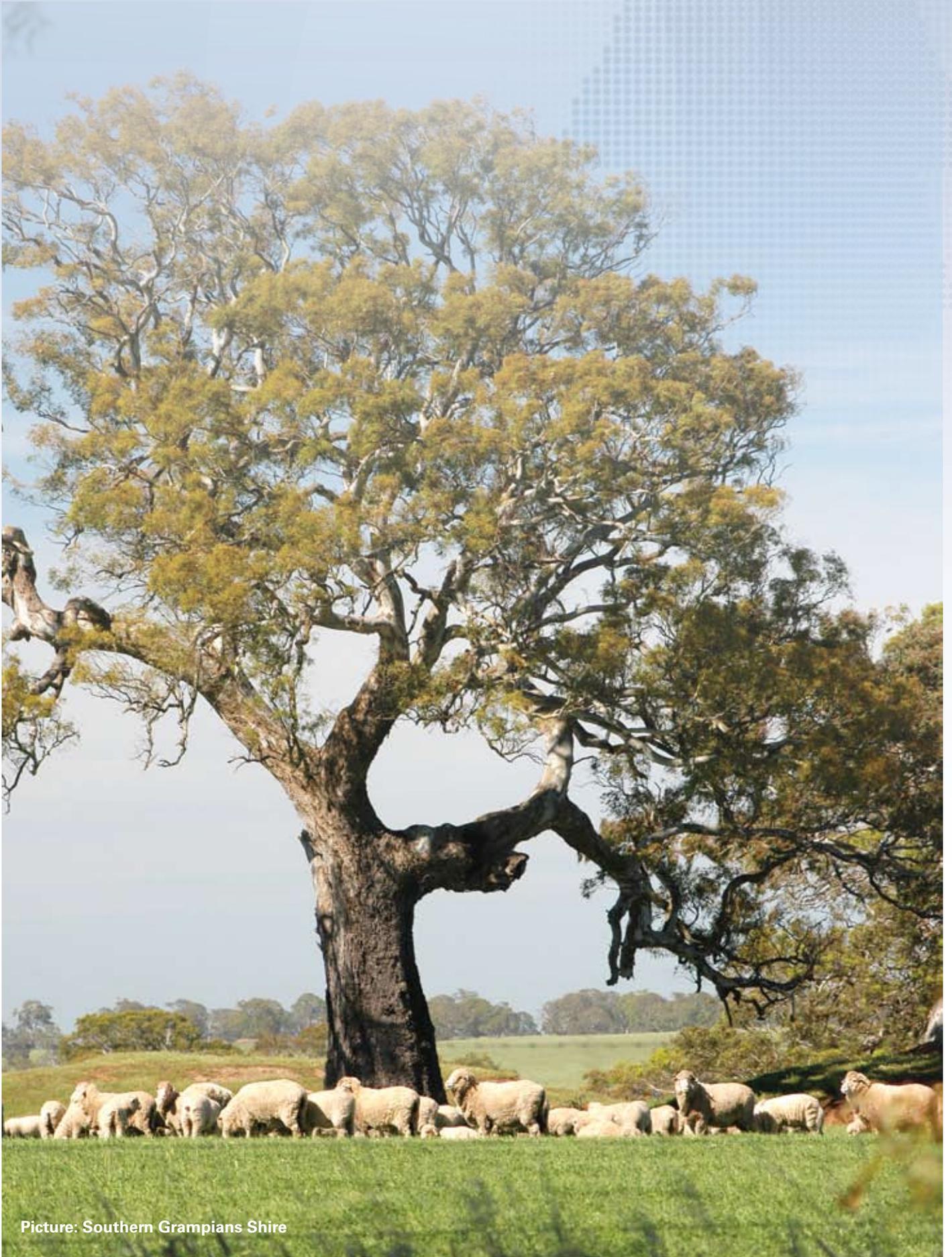
Outcome

- Enhanced linkages created with a range of climate change/rural adjustment stakeholders
- Integrated plan developed on climate change/rural adjustment

Objective/Strategy	Responsibility
<p>Objective 1 – By June 2009 the SGG PCP will advocate for enhanced linkages between sectors, reflecting the decision makers on issues of rural adjustment and climate change, eg. via Regional Managers’ Forum Climate Change Working Group.</p> <p>Strategy – PCP to facilitate discussions between health, environment, local government, planning, agriculture, department of primary industry, education, university and representation from community including indigenous, farm families, etc.</p> <p>Strategy – New Partnership documentation developed between organisations representing a range of sectors to jointly tackle issues of rural adjustment and climate change OR use of existing partnership structure.</p>	PCP office
<p>Objective 2 – By December 2009, the PCP will advocate for the partnership to have an integrated action plan to address issues of rural adjustment and climate change.</p>	PCP office
<p>Objective 3 – PCP member agencies will be active participants in the implementation of the integrated action plan to address issues of rural adjustment and climate change.</p>	PCP agencies



Picture: Southern Grampians Shire



Picture: Southern Grampians Shire