

Promoting Healthy Lifestyles

**- with a focus on preventing chronic diseases
through physical activity and nutrition**



MAPPING REPORT

**Physical Activity and Nutrition
2009 - 2013**

Data Notes

All data contained in this report should be used strictly as a guide only and should be used in conjunction with further investigation, including consultation with local and regional health agencies.

Data for locations and population groups with smaller populations should be interpreted with particular caution. In many instances, actual numbers are very low and/or data has been aggregated over a number of years. Many agencies, including the Australian Bureau of Statistics, use random errors for small numbers, to ensure privacy of individuals is protected. For this reason, small numbers (e.g. under 20) should be treated as a preliminary indicator only and should be subject to further investigation at the local level.

Within the document, some per population rates are not standardised. In these cases, prevalence of disease or other wellbeing data are very likely to be affected by the age and gender structure of the local population.

Some data provides an indicator of how often a condition or disease is reported (e.g. sexually transmitted infections) rather than actual prevalence of the condition or disease. Additionally, figures for hospital separations, screening of various diseases and GP service delivery may be affected by accessibility (geographic, financial, cultural and other potential barriers) and not only prevalence of a disease, condition or behaviour.

It has not always been possible to include trend data (comparing figures over time) in this profile, as methodology and geographic boundaries have changed.

Some data in the profile, sourced from the PHIDU, is based on estimates using data from the 2007- 08 National Health Survey (NHS), conducted by the ABS: a description of the synthetic estimation process is at www.publichealth.gov.au/data_online/notes_estimates_Aust_2007-08.pdf.

Data was correct and current at the time of writing, however much of the information contained in this profile is subject to regular change and review by the relevant agencies. When interpreting data, it is strongly recommended to refer to the original source of the data where possible. Please refer to data notes, where applicable, for each data set.

[SMPCP Community Health and Wellbeing Profile 2009](#)

[SMPCP Community Health and Wellbeing Profile 2013](#)

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EXECUTIVE SUMMARY

Introduction

Overview of Southern Mallee Primary Care Partnership

The Southern Mallee Primary Care Partnership (SMPCP) is a partnership of organisations (health, welfare, disability, local government, community based), across the areas of Buloke, Gannawarra & Swan Hill, who are working together to improve the health and wellbeing of our communities. As a partnership, SMPCP works in the areas of health promotion, service coordination, chronic disease management, capacity building and partnership development.

SMPCP Promoting Healthy Lifestyle Committee was formed to progress the Integrated Health Promotion Priority of the SMPCP Strategic and Operational Plan 2009 – 2012 and Bridging Year Plan 2012 - 2013 - Promoting Healthy Lifestyles - with a focus on preventing chronic diseases through physical activity and nutrition.

Since the SMPCP Promoting Healthy Lifestyles Committee commenced the mapping activity the Victorian State Government has developed and released the Victorian Health Priorities Framework 2012 – 2022 which articulates the long term planning and development priorities for Victoria's health system, within this it is recognised prevention is a key element of reducing an increasing burden on the health system and seeing Victorian people and communities are able to contribute to workforce productivity and participation, and a strong economy.

The Victorian Public Health and Wellbeing Plan 2011 – 2015 has been developed to articulate the core contributing elements of the approach to health and wellbeing of all Victorians, these elements are *Systems and settings and Interventions*.

Aim and purpose of SMPCP Mapping – Physical Activity and Nutrition

As part of the SMPCP 2009-2012 Strategic and Operational Plan and SMPCP Bridging Year Plan 2012 - 13 the SMPCP Promoting Healthy Lifestyles Committee agreed to undertaking mapping of activities and programs, environments, strategies and plans that support increased physical activity, promote active communities and healthy urban planning approaches and nutritious food activities and options that are occurring within the SMPCP catchment.

The aim of this mapping is to develop an evidence base that will identify enablers and barriers to good nutrition and physical activity in the Southern Mallee catchment; this can then be utilised to inform and progress the objectives of SMPCP Promoting Healthy Lifestyles plan and future activity.

Mapping methodology and approach

A range of methods and approaches were undertaken to progress the mapping activity including viewing key data relevant to nutrition and physical activity such as consumption of fruit and vegetables, food insecurity, physical activity incidence and participation rates and vehicle use. Data on preventable disease was also viewed to provide context on the current health of Southern Mallee communities where if a healthy lifestyle is adopted can either prevent or reduce severity in most instances of cases. The Socio Economic Index for Area was also viewed as the level of disadvantage will often correlate to more prevalence of poorer health outcomes.

The Victorian Healthy Food Basket Survey tool was utilised to gather information from communities with a significant population on the cost of food and where it may be accessed. Gannawarra Shire Council and Swan Hill Rural City Council developed maps of communities of substantial populations utilising Geographic Information System technology to plot access to fruit and vegetables and environments for physical activity. A comprehensive list of programs and other initiatives relevant to physical activity and nutrition as identified and shared by SMPCP Promoting Healthy Lifestyles Committee members was also developed. The aim of utilising a range of methods and approaches in the mapping was to try and encapsulate some of the social determinants of health that may have an impact on nutrition and physical activity and the current prevention system.

Analysis

Nutrition

Particular to nutrition and **not meeting** the recommended daily guidelines for fruit and vegetable consumption **Gannawarra LGA** records the highest in the whole of the State of Victoria; also in **Gannawarra** the percentage of population who **do not consume any fruit or vegetables** is poorer than the State average. Swan Hill also has a relatively high percentage of population who are not consuming any fruit or vegetables daily.

Across the Southern Mallee catchment males are less likely to meet the dietary guidelines for fruit and vegetable intake than females but this is consistent with the State of Victoria.

Statistics regarding consumption of some portions of fruit and vegetables is in most instances comparable with the State and in some instances better such as; 33.4% of population in Buloke consuming 3 – 4 serves of vegetables and 39.1% of Gannawarra population consuming 1 serve of fruit.

- **Not meeting guidelines** for consumption of either fruit or vegetables: Buloke 51%, **Gannawarra 60.3%**, and Swan Hill 51.5% (State 48.2%)

Vegetables

- Vegetable serves meeting dietary guidelines **Males: Buloke 1.8%, Gannawarra 3.1%, and Swan Hill 2.45%** (State 5%)
- Vegetable serves meeting dietary guidelines Females: Buloke 12.5%, Gannawarra 13.8%, and Swan Hill 13.6% (State 10.7%)
- **No serves** of vegetables: Buloke 1.9%, **Gannawarra 7.9%**, and **Swan Hill 6%** (State 5.8%)

Fruit

- Fruit serves meeting dietary guidelines **Males: Buloke 32%, Gannawarra 23%, and Swan Hill 31.7%** (State 41%)
- Fruit serves meeting dietary guidelines Females: Buloke 51.9%, **Gannawarra 46.4%**, and Swan Hill 52.9% (State 53.5%)
- **No serves** of fruit: Buloke 14.4%, **Gannawarra 24.8%**, and **Swan Hill 21.8%** (State 14.3%)

Physical Activity

Buloke LGA population are slightly above the State in population who undertake sufficient physical activity, meeting the national guidelines, where Gannawarra and Swan Hill populations are below. Sedentary behaviour and incidental physical activity is also higher for all three LGA's than the State and most notably Gannawarra reports the highest in both these incidences.

Occupational physical activity where the work is heavy labour or physically demanding is significantly more likely to occur within populations of Southern Mallee than the State and more so in Buloke and Gannawarra LGA's. Southern Mallee catchment also reports less population who mostly sit or stand as part of their daily work than the State.

- **Sedentary physical activity levels:** Buloke 5.8%, **Gannawarra 6.9%**, and Swan Hill 5.8% (State 5.3%)
- Sufficient physical activity levels: Buloke 61.2%, **Gannawarra 52.3%**, and **Swan Hill 53.3%** (State 60.3%)
- **Zero days of physical activity:** Buloke 65.1%, **Gannawarra 71.1%**, and Swan Hill 64.9% (State 61.7%)
- Occupational physical activity, Mostly heavy labour or physically demanding work: Buloke 24.3%, Gannawarra 28.6%, and Swan Hill 20% (State 13.3%)

Preventable Health Conditions

The data regarding preventable health conditions confirms that there is a higher portion of the populations of Buloke, Gannawarra and Swan Hill than the State and in some incidences than Loddon Mallee and or rural Victoria reporting for these conditions.

Of particular notice is the overweight and obesity percentage of populations for Southern Mallee males and females where for all Local Government Areas (LGA's) there is a substantially higher percentage of population than the State in most instances.

Overweight

- Percentage of overweight **male population** is: Buloke 36.9%, **Gannawarra 46.6%**, and **Swan Hill 46.3%** (State 39.9%)
- Percentage of overweight **female population** is: **Buloke 30.5%**, Gannawarra 20.0%, and **Swan Hill 30%** (State 24.2%)

Obese

- Percentage of obese **male population** is: **Buloke 39.9%**, Gannawarra 13.3%, and Swan Hill 18.5% (State 17.3%)
- Percentage of obese **female population** is: Buloke 17.4%, **Gannawarra 21.4%**, and **Swan Hill 22.5%** (State 16.1%)

The rate of type 2 diabetes are slightly less than the State even though there has been an increase in prevalence right across the State and for the local government areas, high Cholesterol and Hypertensive disease are marginally higher than the State for each Southern Mallee LGA.

- Percentage of population with type 2 diabetes (self reported): Buloke 4.4%, Gannawarra 4.7%, and Swan Hill 3.4% (State 4.8%)
- Percentage of **population with high cholesterol** is: **Buloke 5.7%**, **Gannawarra 5.7%**, and **Swan Hill 5.7%** (State 5.4%)
- Percentage of **population with circulatory diseases** is: Buloke 10.8%, **Gannawarra 11.1%**, and **Swan Hill 11.2%** (State 10.3%)

Social Determinants of Health

Socio Economic Index for Areas (SEIFA)

The SEIFA confirms the majority of Southern Mallee communities are disadvantaged and more susceptible to vulnerabilities associated with income, education, occupation, and wealth and living conditions. For the Southern Mallee the portion of towns indexed as disadvantaged is higher than that of the state and regional Victoria average.

The following Southern Mallee communities are all in the second decile for the State with the exception of Nyah West that is in the first. The state ranking for these Southern Mallee communities is indicated in the brackets;

- Nyah West (9), Sea Lake (157), Kerang (164), Wycheproof (214), Manangatang (228), Donald (230), Quambatook (234), Nyah (235) and Swan Hill (283).

Food insecurity

Across the Southern Mallee food insecurity is reported less than the State and Loddon Mallee, Buloke reported to be the most food secure of the three LGA's but in instances where food insecurity is reported the reasons why are drastically higher than that reported for the State, particularly for quality, cost, and variety; also culturally appropriate and inadequate and unreliable transport are somewhat above the State. Gannawarra and Swan Hill LGA's are slightly more food insecure than Buloke but the reasons why are in most instances not quite as significant as Buloke but in most instances still reported higher than the State.

- Some foods are **too expensive**: **Buloke 45.9%**, **Gannawarra 34.7%**, and Swan Hill 28.9% (State 28.3%)
- Can't always get **right quality**: **Buloke 52.3%**, **Gannawarra 30.9%**, and Swan Hill 27.7% (State 25.5%)
- Can't always get **variety**: **Buloke 38.3%**, Gannawarra 12.6%, and **Swan Hill 13.5%** (State 10.9%)
- Can't always get **culturally appropriate**: **Buloke 10.3%**, Gannawarra 7.3%, and **Swan Hill 8.2%** (State 6.8%)
- Inadequate and **unreliable public transport**: **Buloke 12.7%**, **Gannawarra 11.3%**, and **Swan Hill 9.4%** (State 8%)

Food access and cost

The majority of communities across the Southern Mallee where there is a core population centre have access to either a general store or supermarket. In two of the sites surveyed (one in Swan Hill LGA and one in Gannawarra LGA), there was not access to fresh fruit or vegetables in the local store, the next closest location would require travelling approximately 17 kilometres (applicable to both sites).

Larger population centres of Swan Hill and Kerang host the larger buying group of Woolworths or Coles where other smaller population centres in Buloke and Gannawarra have buying groups of IGA or Foodworks. There are only two independent supermarkets which are located in Gannawarra LGA.

Green grocers are limited to two communities only, Cohuna and Swan Hill, and access to fruit and vegetables via community gardens, markets or road side stalls is mostly limited, sporadic and seasonal.

Utilising the Victorian Healthy Food Basket Survey facilitated the opportunity to view what the cost would be to family groups based on receiving income support via Centrelink payments. The average cost incurred to all family groups in Buloke and Gannawarra was higher than for populations of Swan Hill.

Average cost per LGA									
Key: B: Buloke G: Gannawarra SH: Swan Hill % of fortnightly income assistance via Centrelink payment									
Family Outline	Basket			Fruit			Vegetables		
	B	G	SH	B	G	SH	B	G	SH
Family of 4 \$1316.20	\$516 38%	\$541 37%	\$447 33.9%	\$124	\$123	\$94	\$109	\$101.5	\$99
Single mother family \$1024.96	\$358 33.9%	\$372.50 33.5%	\$307 30%	\$85.50	\$84	\$64.5	\$72	\$69	\$67.50
Elderly woman \$670.90	\$124 18.22%	\$128.50 17.85%	\$106.50 15.93%	\$29	\$29	\$22	\$27	\$25.50	\$24
Single man \$474.90	\$161 33.73%	\$167 32.74%	\$140 29.53%	\$37.50	\$38	\$28.50	\$37.50	\$36	\$33.50

In the Southern Mallee there is a significant difference between the least expensive and most expensive basket of food for the family groups. The cost of food from a family of four may need to pay \$151 more for a Healthy Food Basket in one community than the same family group in another community, fruit can vary as much as \$80 and vegetables as much as \$30. The following table further highlights the variance in cost from the least expensive to the most expensive for all the family groups.

Variance in cost across Southern Mallee catchment from least to most expensive			
Family Outline	Basket	Fruit	Vegetables
Family of 4	\$151	\$80	\$30
Single mother family	\$167	\$56	\$20
Elderly woman	\$56	\$20	\$8
Single man	\$50	\$27	\$11

The food basket surveys revealed that the cost of food from smaller general stores was more expensive and in some instances did not have all the items on the Victorian Healthy Food Basket Survey list.

Transport

Motor vehicle usage is the most utilised in the Southern Mallee catchment with either one or two cars per dwelling, this is in line with State trends. Access and use of other forms of transport such as train and bus are well below the State.

The percentage of population who walk due to it being the only means of transport is higher across the Southern Mallee catchment than the State and quite substantially so in Buloke LGA which possibly contributes to Buloke LGA reporting slightly above the State in sufficient physical activity.

- Selected journey to work, Car driver: Buloke 53.1%, Gannawarra 59.3%, and Swan Hill* 63.6% (State 62.5%) *excludes Robinvale
- Selected journey to work, Walk as only means of travel: Buloke 11.7%, Gannawarra 7.6%, and Swan Hill* 6.8% (State 3.3%) *excludes Robinvale

The data shows that transport limitations has seen a major increase in prevalence right across the Southern Mallee catchment since 2007 to 2011 and is well above the State and Regional Victoria. In 2007 transport limitations was mostly comparable for Gannawarra and Swan Hill with the State and only slightly higher in Buloke.

- People (adults) who experienced **transport limitations** in the last 12 months: **Buloke 39.9%, Gannawarra 42.4%, and Swan Hill 28.7%** (State 23.7%)

The 2011 VicHealth Indicator Survey reports;

- Females who experience transport limitations in the last 12 months: **Buloke 37.2%, Gannawarra 44.1%, and Swan Hill 32.8%** (State 25%)
- Males who experience transport limitations in the last 12 months: **Buloke 42.6%, Gannawarra 40.8%, and Swan Hill 24.9%** (State 22.3%)

SMPCP Promoting Healthy Lifestyles Nutritious Foods, Physical Activity Programs, Policies, Plans, Strategies & Environments Mapping

Across the Southern Mallee health promotion activity particular to nutrition and physical activity is occurring in a myriad of methods and with a range of focuses and target groups; in some instances participation and social inclusion are the main purpose and outcome.

The majority of activity is time specific programs provided or led by one organisation and at times linking with other services to either support or utilise their facilities. Many of the programs and initiatives are focused on individual benefit and include social marketing, health information and education and possibly screening as the health promotion intervention. The programs that have been shared over the mapping period have in some instances had a short life span and may no longer operate or they have been modified into another program. Promoting Healthy Lifestyles Committee members have reported most programs have a low number of referrals and participants.

There are some examples of programs that are more in line with the integrated health promotion model either being delivered or have potential to be rolled out across the catchment; these are the Victorian Prevention and Health Promotion Achievement Program for Schools and Workplaces and VicHealth Healthy Sporting Environments program.

Mallee Sports Assembly will be progressing work under the VicHealth initiative, Healthy Sporting Environments program, which includes a range of areas to be addressed but underpinned by change of thinking, policy and procedure for the clubs who become involved.

The Victorian Health Promotion Achievement Program for Schools also adopts a range of strategies that will take time to work through and embed including policy and activities. The support for the schools will be dependent on health organisations having the capacity to assist. (NB. Resourcing to support this initiative is not provided to SMPCP member organisations)

There are a range of community kitchens and gardens in a varied range of formats and stages throughout Buloke, Gannawarra and Swan Hill, the majority of these are in Buloke LGA due to the funded program Cook In Community Kitchen and Gardens supported by East Wimmera Health Service.

Opportunity for physical activity and nutrition programs look to be a little less available in Buloke and Gannawarra in particular for children and youth and there has not been a need identified for the target group of Culturally and Linguistically Diverse due to population numbers. Men and women specific programs are also limited across the catchment but it has been reported that at times there has been little interest shown from men in men only programs.

All councils have a vast range of plans, policies and strategies that identifies mostly health and wellbeing and physical activity as areas of priority or action, the mention of food access, food security or nutrition is minimal.

Organisation focus

Health and Community Health agencies are more likely to have programs that include physical activity and or nutrition for a target group such as men or women or for a particular purpose such as diabetes or weight loss. Programs are also often aligned with accredited programs such as *Heart Foundation Walking*, *HEAL* or *LIFE!*. There are several programs that have been developed by Southern Mallee organisations such as Swan Hill District Health *Women Able to Lose Kilos (WALK)* and Northern District Community Health Service *Me'n'U* program, some of these style of programs may need a referral into them or criteria to be met to participate. Health services do align their programs to their Health Promotion Plans and in most instances conduct some form of evaluation for analysis and reporting to particular bodies.

Mallee Sports Assembly is aligned with VicHealth working in the framework of *Participation in Community Sport and Active Recreation* and since July 2012 moving to the *VicHealth Supporting Sport Environments Program*. There are six key areas that will be addressed Responsible use of alcohol, UV protection, Inclusion, safety and support, Reducing tobacco use, Healthy eating, Injury prevention and management.

The Federal Government funded *Healthy Communities Initiative (HCI)* is operating in the Swan Hill LGA. This initiated a partnership to be formed with Swan Hill Rural City Council, Swan Hill District Health and Robinvale

District Health Services. The HCI partners deliver a selection of nationally accredited programs in addition to modifying existing programs to meet the needs of specific population groups not in the paid workforce. The HCI program will address active transport across the municipality and review local government policies to reflect the municipalities public health and wellbeing plan priorities.

It was not a requirement to partner with health services, but a deliberate decision locally to ensure the best possible organisations were delivering programs. It also enabled the Health services to select programs that were identified as gaps to prevent duplication.

Organisations operating under the Neighbourhood House banner offer a variety of physical activity initiatives for all community including exercise groups, dancing and sports such as carpet bowls.

Southern Mallee Transport Connections Partnership (SMTCP) have established a range of consistent but periodical bus services particularly for Buloke communities with the aim to assist with access to services such as medical and specialist appointments, the aim of these services is not for regular access to attend work or grocery shop outside of the community. During 2012 – 2013 SMTCP have undertaken the No Cars, No Worries Project; the aim of this project is to encourage people to use alternative methods of transport such as walking, cycling or gopher use rather than a car within town precincts.

Directories

There are a range of directories for a variety of target groups available across the catchment on physical activity options. Agencies do promote their programs at the local level too via a range means including media, flyers, networks and presentations and at times to a target group.

Advocacy

Recently a partnership between Swan Hill District Health and Swan Hill Rural City Council via the Healthy Communities initiative has provided a stronger link in advocating for improvement in walking trails and the development of the Active Transport Strategy. Mallee Sports Assembly successfully advocated for the increase in opening hours for Buloke public swimming pools during summer months, working with the local council and community to find solutions to what were seen as challenges.

SMPCP Promoting Healthy Lifestyle Committee developed a Position Paper regarding the Victorian State initiative Prevention Community Model (Healthy Together). The Position Paper was endorsed by SMPCP Board of Management and distributed to key people and organisations to put forward the concern of SMPCP that the Prevention Community Model was overlapping the partnership platform of Primary Care Partnerships and health promotion initiatives and has potential to cause inequity in health across the state by limiting the number of communities involved and extensive resourcing to those communities. The Position Paper included recommendations for collaboration, partnerships and moving toward an open form of communication.

Evaluation

The majority of programs are evaluated to some degree for the organisation's information. Programs that are part of a funded initiative are evaluated within an evaluation framework.

Enablers and barriers to nutritious food and physical activity programs and initiatives

There were a range of barriers and enablers, reported for programs and initiatives to be conducted which were consistent across the Southern Mallee, these are;

BARRIERS	ENABLERS
~ The need for funding appeared to be the most prevalent barrier	~ Funding streams
~ Program leaders/volunteers	~ Supportive staff ~ Key person driving the program
~ Transport	~ Participant fee that contributes to the cost of running the program
~ The need for childcare	~ Suitable venues
~ Limited referral to programs particularly from other professional sectors is minimal	~ Enough demand

Geographical Information Systems

Geographic Information Systems (GIS) maps were developed by Gannawarra Shire Council and Swan Hill Rural City Council which provide visual evidence of current options of physical activity spaces and access to nutritious food (fruit and vegetables).

SMPCP Promoting Healthy Lifestyle Committee had made an assumption that this would be a fairly straight forward exercise for all councils to undertake but it was revealed that this was not the case due to either GIS not available, information is not already known and plotted and capacity of staff.

Summary

Nutrition and physical activity data for the Southern Mallee indicates there is less percentage of populations than the State who are meeting the dietary guidelines for daily intake of fruit and vegetable consumption and undertaking sufficient physical activity. There are some positive indicators where guidelines are being partially met that could be explored as an asset and built upon in planning of future work to increase consumption of fruit and vegetables and participation in physical activity.

Occupational physical activity is reported much higher in the Southern Mallee than that of the State but is in line with other rural areas; this is most likely due to the environment being utilised for agricultural purposes. Buloke and Gannawarra LGA's are noted as having more of the population in occupations that is heavy labour or physical work; this may have an impact on the physical activity levels reported in these two LGA's.

Across the Southern Mallee males are less likely to meet the dietary guidelines for fruit and vegetable intake than females; this is consistent with the state. At the local level data on physical activity broken into gender is not available; this would be of value if available to see if there is a trend in regards to gender and local government area as seen for fruit and vegetable intake. Marrying this also with the body weight data, type 2 diabetes and indicators for social determinants may show a trend for gender and local government area. Further understanding of enablers and barriers for nutrition and physical activity per gender may assist in initiatives being developed to better target male and females and address the barriers.

Preventable health conditions are overall reported higher than the State and following the trends of increase in prevalence, along with the data for nutrition and physical activity leads to the assumption a relatively high portion of Southern Mallee populations are not adopting healthy lifestyle choices that may prevent or reduce the impact of the preventable health conditions.

The exploration of several social determinants of health does shed some light on the impacts for Southern Mallee communities in regards to nutrition and physical activity that could flow on to poorer overall health and wellbeing.

The SEIFA confirms the majority of Southern Mallee catchment has a relatively high level of disadvantage; the data for Southern Mallee relating to health factors does indicate following the usual trend of disadvantaged populations being more vulnerable to poorer health outcomes.

Food access across the Southern Mallee is available in most communities of significant population in some form and in most instances fruit and vegetables are available. The cost of food certainly changes across the catchment with it being more expensive in Gannawarra and Buloke LGA's than Swan Hill. Further assessment on smaller community stores would be useful to fully understand access and cost particularly for fruit and vegetables and what community members do when there isn't the access.

Food insecurity is reported less in Southern Mallee than the State but the reasons for food insecurity are markedly higher across the Southern Mallee catchment and in some instances significantly so in Buloke and Gannawarra. While the prevalence of food insecurity is lower than the state the high prevalence of the reasons for food insecurity brings these forward as considerable.

The Victorian Healthy Food Basket Surveys have been able to provide some knowledge toward the barrier of cost and we do know that there is a variance in cost where some Southern Mallee LGA's are paying a much higher price for food and fruit and vegetables. Further information on a budget formula recommended for families would assist in knowing what the impact the cost of food is having on Southern Mallee families.

The information on transport gathered in this report does show transport limitations is an increasing issue in Southern Mallee communities and significantly so for Buloke and Gannawarra LGA's, this correlates with a reason for food insecurity. More information is required to be gathered to understand the reason why there has been such a dramatic increase in transport limitations as reported from 2007 and 2011; and is this related to aging populations, impacts of climate or low income or are there other reasons.

Interestingly with transport Southern Mallee catchment is on a par with the State in regards to cars per dwelling. Buloke LGA is below the State, Gannawarra and Swan Hill in using a car or as a car passenger to

travel to work, but as the data shows more people work from home in Buloke which is most likely due to the rural environment and people living and working on farms.

In regards to understanding the other reasons of food insecurity, (quality, variety and cultural appropriateness), in the Southern Mallee catchment other methods of data collection would be required to gather this information; if this was to be undertaken there may be an opportunity to gather more data on fruit and vegetable consumption and the enablers and barriers.

The mapping activity has shown that current health promotion activity in the Southern Mallee includes a vast array of programs and initiatives with the majority for physical activity often with a nutrition component included and are time specific programs. On face value the majority of programs that are being run are by one organisation rather than in an integrated health promotion model (a range of agencies and or sectors and areas of activity).

There are a couple of examples of programs that are coordinated with a view to a longer term approach; these are the Victorian Health Promotion Achievement Program for Schools, the VicHealth Healthy Sporting Environments program and Healthy Communities Initiative which marry better into the integrated health promotion model where implementation includes a mix of health promotion interventions and adopts a systems change direction as articulated in the current Victorian Health and Wellbeing Plan.

It may be valuable to assess the programs that are being delivered in the Southern Mallee catchment against the integrated health promotion continuum to better understand what we are doing and explore how we may be able to strengthen this work so there are greater benefits to either the target group and/or health of the populations.

There is a very strong platform available in the Southern Mallee for integrated health promotion with many sectors involved in some form and bringing a great deal of knowledge. Sharing and building this knowledge and skills further of those involved, including program planning, evaluation processes, impacts of social determinants of health and partnerships should support a stronger prevention system in the Southern Mallee.

Moving health promotion activity to a stronger integrated health promotion position should assist with a better link to local policy and planning development and implementation that could support physical activity and nutrition rather than is the current case of mostly broad health and wellbeing statements. There is a need for a better understanding of sector involvement in this area and how the local work can inform, influence and support health and wellbeing policy.

Utilising and building the evidence and assets available in the Southern Mallee, such as physical assets identified in the GIS mapping, skills and knowledge of the health promotion sector, data and strong partnerships and planning is essential to ensuring health promotion is undertaken in a manner where systems and settings and interventions are addressed as per the direction of the Victorian Public Health and Wellbeing Plan.

Recommendations

The following recommendations have been developed to see the progression and completion of a strong evidence base for nutrition and physical activity. This evidence base is important to the work that is considered and undertaken so limited resources are best utilised and future work will be more likely to see healthier communities.

The recommendations recognise the importance of continuing to learn and the strength strong partnerships play in facilitating change and positive outcomes.

Problem definition

It is evident to really understand the physical, social and environmental factors of Southern Mallee communities and catchment that are having a negative impact on the consumption of nutritious food (fruit and vegetables) and sufficient physical activity more information is required. Without a complete evidence base that covers the social determinants of health interventions and strategies cannot be most effective and sustainable.

- Reflect on each component of the Mapping Report and continue to gather evidence and answers
- Explore who else (external organisations) who may be able to assist and contribute to this work
- Collate the evidence for each LGA and Southern Mallee catchment to clearly show who is most vulnerable to poor nutrition and inadequate physical activity, barriers and enablers, assets and liabilities

Capacity building

To assist with SMPCP members in improving and adapting their health promotion practice to be as skilful as possible ongoing capacity building in integrated health promotion should occur. There is already a vast amount of knowledge within the catchment; further developing the skills of these people will enhance the potential of the system to prolong and multiply health effects and to address the underlying determinants of health.

- Develop a set of strategies that will enhance the skills of the Southern Mallee Health Promotion workforce following the guiding principles of Victorian Integrated Health Promotion: A practice guide for service providers
- Build the capacity of Southern Mallee Health Promotion workforce to address the broader determinants of health

Partnerships

The Victorian State Government are clear that the prevention system needs to be strengthened through governance and leadership, information systems, financing and resource allocation, partnerships and workforce development. A strong partnership in integrated health promotion which is able to work within the continuum of partnership (networking, coordination, cooperation, collaboration) as required will have more success in the preventative and restorative role in health and wellbeing of the communities.

- In progressing work regarding nutrition and physical activity SMPCP members and associate members identify others who could contribute to integrated health promotion activity
- Build interdependent systems to address issues and opportunities, sharing resources and making commitment recognising capacity

Conclusion

SMPCP Promoting Healthy Lifestyles Nutritious Food and Physical Activity Mapping exercise and report has commenced the task of really understanding nutrition and physical activity in the Southern Mallee. For SMPCP Member and Associate Members to truly make inroads into preventing chronic disease through physical activity and nutrition a complete and robust evidence base is needed. The information in this report has looked at the more obvious aspects of nutrition and physical activity and in doing so has brought to the fore other determinants that need to be explored further to truly have a solid evidence base where by SMPCP members and associate members can make informed decisions regarding the direction of future work in the area of nutrition and physical activity.

In relation to the objectives and strategies that have directed the mapping activity progress has been made.

We do know that Southern Mallee populations are mostly regarded as disadvantaged and therefore more susceptible to health inequalities that can be somewhat alleviated if healthy lifestyle choices are made. Preventable health conditions are most prevalent in Southern Mallee and in particular people who are overweight and obese. Fruit and vegetable consumption meeting the dietary guidelines and sufficient physical activity is mostly below the State average. Females rather than males in the Southern Mallee are more likely to be sufficiently active and meet fruit and vegetable guidelines.

Throughout the Southern Mallee there are many assets that are and can be utilised to work toward improving the health and wellbeing of individuals and populations. Several areas have emerged that really require further information to 'unpack' the issues, influences and impacts before possible solutions can be considered.

We know that in the majority of communities across Southern Mallee where there is a substantial population there is mostly access to nutritious food (fruit and vegetables) via either a supermarket or general store and we have identified a couple of communities where fruit and vegetables are not consistently available.

Other options for access to nutritious food are intermittent, seasonal or require participation or contribution and not available in every community. Examples of these other options are community markets that operate periodically, community gardens and road side stalls. These are assets toward food access but have limitations in consistency. Consideration how to include these opportunities as an asset in securing food access could be explored further.

Food security is not reported as a significant issue in Southern Mallee catchment but the reasons for food insecurity are strongly noted in statistical information; these barriers are cost, variety, quality, transport and not having culturally appropriate foods particularly in Buloke and Gannawarra.

- ~ There is a considerable difference in cost across the catchment in being able to purchase a healthy food basket with communities in Gannawarra and Buloke paying more than communities in Swan Hill
- ~ Transport limitations have significantly increased between 2007 and 2011, cars are the most common form of transport with most dwellings having one or two cars

Further information is required to answer the questions regarding variety, quality and culturally appropriate food. We need to know more about why food does cost more in some communities, what is an appropriate portion of income to be spent on food and are incomes covering the cost of rural living. Transport also needs further answers, why has the prevalence of transport limitations increased so much since 2007 to 2011?

Physical activity is mostly well supported through program activity and organisations providing opportunities to improve and increase physical activity levels. There are a mix of accredited physical activity programs and social opportunities most operating as directed by an organisation. We have been able to show the access of physical activity spaces in Gannawarra and Swan Hill communities by Geographical Information System mapping and it would be ideal to have this completed for Buloke LGA to know the assets in the communities.

For organisations barriers to providing a service or program are resources including funding, time and program leaders and when delivering a program the barriers are transport, childcare and insufficient numbers or referrals.

The current method of health promotion delivery for nutrition and physical activity is not broadly meeting an integrated health promotion approach; the focus is mostly for the individual and not inclusive of population. There is certainly a strong health promotion foundation in the Southern Mallee as far as expertise and knowledge which with collaboration, capacity building and a strong evidence base could steadily adjust to adopt a much more robust integrated health promotion approach. The move toward this should assist with limited resources and also enable health promotion covering the continuum of integrated health promotion.

Next Steps

SMPCP Promoting Healthy Lifestyles Committee members will have opportunity to view and provide comment on SMPCP Promoting Healthy Lifestyles Mapping Report – Physical Activity and Nutrition.

It is possible that this report can continue to be developed if actions are taken to further build a comprehensive evidence base for physical activity and nutrition. Further work could be undertaken utilising tools such as the VLGA Municipal Food Security Scanning Tool, Liveable and Just Toolkit or following direction of other like work.

In July 2013 [Victorian Population Survey 2011 – 2012 – Selected preliminary survey findings](#) were released to assist with planning processes of local governments and other organisations. The preliminary findings do indicate some change ranging from positive to negative and vice versa varying across the catchment. Continuing to view preliminary and final data summaries would be a suitable initiative to support ongoing monitoring of change in regards to nutrition and physical activity and identifying anomalies in data that is being presented in such reports.

It is expected that this report will be taken forward through SMPCP Strategic and Operational Plan 2013 – 2017. Information may be added, such as data updates and further evidence and will be done so with contribution and approval of SMPCP members and associates utilising an open and inclusive process.

This report will be reflected upon in developing the next SMPCP Strategic and Operational Plan 2013 – 2017 where decisions on what should be progressed in regards to physical activity and nutrition be made. It should also be noted that this information does connect with other areas of SMPCP work such as social inclusion, chronic disease management and mental health and wellbeing.

INTRODUCTION

Southern Mallee Primary Care Partnership

The Southern Mallee Primary Care Partnership (SMPCP) is a partnership of organisations (health, welfare, disability, local government, community based), across the areas of Buloke, Gannawarra & Swan Hill, who are working together to improve the health and wellbeing of our communities. As a partnership, SMPCP works in the areas of health promotion, service coordination, chronic disease management, capacity building and partnership development.

The 2009 - 2012 SMPCP Strategic Plan was developed over the 2009 year and focused on key achievements and challenges faced by the SMPCP over the previous three years (2006 – 2009). The SMPCP identified and agreed to work more collaboratively together over the next three years to address the following three strategic priorities;

- Mental wellbeing and social connectedness – with a focus on mental health and family violence.
- Promoting healthy lifestyles – with a focus on preventing chronic diseases through physical activity and nutrition.
- Management of chronic diseases – with a focus on Diabetes and Cardiovascular diseases.

A fourth priority area of work for SMPCP which underpins the above three Strategic Priorities is 'Partnership & Governance'. This area of work is critical in achieving better health and wellbeing outcomes for the southern Mallee communities, by establishing a structure that is more conducive for agencies to work collaboratively in partnership together. All four priorities are interlinked and strategies for each priority area impact on one another. Prevention and early intervention is an important part of the three year Strategic Plan.

SMPCP Promoting Healthy Lifestyles Committee

SMPCP Promoting Healthy Lifestyle Committee was formed to progress the Integrated Health Promotion Priority of the SMPCP Strategic and Operational Plan 2009 – 2012 - Promoting Healthy Lifestyles - with a focus on preventing chronic diseases through physical activity and nutrition.

The mission statement for the SMPCP Promoting Healthy Lifestyles Committee;

"The SMPCP members and other key stakeholders will work together in a planned way for the next three years to increase opportunities for participation in physical activity and promote accessible and nutritious food in our communities".

The goal and objectives of this priority;

Goal:

To increase participation in physical activity and improve access to nutritious food (*Integrated Health Promotion Plan*)

Objectives

- To establish 3 Community Kitchens (Cooking Up a Storm Project)
- To promote nutritious food (fruit and vegetable)
- To promote active communities and healthy urban planning approaches
- To build capacity of agencies and professionals to support and promote healthy lifestyle initiatives

SMPCP Promoting Healthy Lifestyle (PHL) Committee members developed strategies under each objective to progress toward the goal of the priority. The SMPCP PHL Committee is made up of representatives from health, local government, community and other organisations all of whom are provided information and open to contribute to the work as directed by SMPCP Promoting Healthy Lifestyles Committee.

BACKGROUND TO SMPCP PROMOTING HEALTHY LIFESTYLES MAPPING

Context to SMPCP Promoting Healthy Lifestyles undertaking Mapping

The physical, social and economic environments we live in interact in a number of different ways to affect our overall health and wellbeing. In order to address all of these factors a social model of health is required when dealing with health issues such as a person's lifestyle that can affect both the individual and their community. The social model of health framework recognises that a person's health is not just determined by their genetics or the biological environment they live in. The model is a conceptual framework for improving health outcomes, aimed at preventing and reducing illness and addressing inequalities and disadvantage that exist within the community (WHO 2005).

The World Health Organisation (WHO 2003) suggests that physical activity promotes psychological wellbeing, reduces stress, reduces anxiety and feelings of depression and loneliness, and helps prevent risky behaviours such as tobacco, other drugs and alcohol abuse, violence and unhealthy eating.

In order to help address the issue of inactivity for the Southern Mallee it is important that the environment, natural and built, that we live in is one that allows for and promotes a healthy lifestyle. There are a number of various factors that need to be considered when planning for a healthy community and environment. These include not just the physical environment but other factors such as access to nutritious food, medical assistance and a variety of physical activities available that can effect peoples overall health and wellbeing (Australian Heart Foundation 2004).

SMPCP Promoting Healthy Lifestyles Objective and Strategies for Mapping

As part of the SMPCP 2009-2012 Strategic and Operational Plan the SMPCP Promoting Healthy Lifestyles Committee agreed to undertaking mapping of activities/programs, environments, strategies and plans that support increased physical activity, promote active communities and healthy urban planning approaches and nutritious food activities/options that are occurring within the SMPCP catchment. The aim of this mapping is to develop an evidence base that will identify enablers and barriers to good nutrition (fruit and vegetables) and physical activity in the Southern Mallee catchment; this can then be utilised to inform and progress the objectives of SMPCP Promoting Healthy Lifestyles plan.

Obj. 1: To establish 3 Community Kitchens (Cooking Up a Storm Project)

Settings & Supportive Environments

- Investigate and advocate for identified barriers to accessing nutritious food across the catchment i.e. Transport/Cost etc
- Map potential community kitchen sites and possible interested groups, community members to be involved etc.

Obj. 2: To promote nutritious food (fruit and vegetable)

Health education and skill development

- Identify opportunities for, and integrate with existing activities, projects and programs to increase awareness amongst community members and service providers of accessible and nutritious food options
- Via mapping – establish current activities

Settings & Supportive Environments

Develop evidence base (via mapping) of the nutritious food options across the catchment, where possible focusing on;

- barriers to access nutritious food
- food security issues

Investigate implementation of key strategies from the Swan Hill Food For All Project to Gannawarra & Buloke Shires – Increasing 'food security' considering;

- Mapping undertaken
- Healthy by Design and healthy urban planning principles

Obj. 3: To promote active communities and healthy urban planning approaches

Health education and skill development

- Identify opportunities for, and integrate with existing activities, projects and programs to increase awareness amongst community members and service providers of physical activity opportunities
- Via mapping – establish current activities

Settings & Supportive Environments

- Develop evidence base of physical activity options across the catchment, where possible focusing on barriers and enablers to physical activity via mapping current activities and utilising existing resources developed

STATE CONTEXT

The Victorian Health Priorities Framework 2012 – 2022 was developed to articulate the long term planning and development priorities for Victoria's health system, within this it is recognised prevention is a key element of the reducing an increasing burden on the health system and seeing Victoria's people and communities are able to contribute to workforce productivity and participation, and a strong economy.

The Victorian Public Health and Wellbeing Plan 2011 – 2015 has been developed to articulate the core contributing elements to the approach to health and wellbeing of all Victorians, these are *Systems and settings* and *Interventions*.

Systems and settings action areas include;

- *Strengthening the prevention system* through governance and leadership, information systems, financing and resource allocation, partnerships and workforce development
- *Priority setting for action and engagement* through local communities and environments, workplaces, early childhood and education settings, health services

Interventions

- *Continue to protect health (health protection)* including environmental health and communicable disease control
- *Keep people well (health promotion/prevention)* with a focus on lifestyle-related risk factors such as smoking, diet and oral health
- *Strengthen preventive health care* including cancer screening, health checks, early detection and early intervention, counselling and lifestyle advice

Physical Activity and Nutrition

The following is information and data from the Victorian Public Health and Wellbeing Plan 2011 – 2015 relating to physical activity and nutrition and other social determinants that have an impact on these.

Health status and trends as per Victorian Public Health and Wellbeing Plan 2011 – 2015 Page 94:

The rate of overweight or obesity in Victorian adults is rising and is predicted to reach just over half of the adult population by 2013 if the current trend continues (Department of Health 2010c).¹

Twenty-five per cent of children are overweight or obese, which represents a large increase from five per cent in the 1960s (Preventative Health Taskforce 2008). By 2025 this figure is likely to increase to 33 per cent (Department of Human Services 2008a). Overweight and obese children are more likely than children of healthy weight to be overweight or obese as young adults (Magarey et al. 2003; Whitaker et al. 1997; Wright et al. 2010).

Victorians have an extremely low intake of vegetables and fruit. Only 7.9 per cent meet the guidelines for vegetable intake and only 47.4 per cent met the guidelines for fruit intake (Department of Health 2010c). This is lower than vegetable and fruit consumption in other states of Australia. High levels of salt and saturated and trans fats consumption are also of concern.

On average, Australians eat 5–10 times more than the 1–2 grams per day of salt required for health (Australian Division of World Action on Salt and Health), and Australians and New Zealanders consume 14–16 per cent of their total daily energy intake from trans fat and saturated fat combined, well above the National Health and Medical Research Council (NHMRC) guidelines of 8–10 per cent (Food Standards Australia New Zealand 2009; National Health and Medical Research Council and Department of Health and Ageing 2005).

Australian research has found a direct correlation between uninterrupted periods of sedentary time (primarily sitting) and weight and waist circumferences (Healy et al. 2008). Research is also confirming an important association between sedentary behaviour and type 2 diabetes, cardiovascular disease and musculoskeletal problems (Bassuk & Manson 2005; Katzmarzyk et al. 2009; Parkinson & Harris 2010; Thorp et al. 2010).

¹ Based on self-reported height and weight used to calculate body mass index (BMI) for the determination of weight status. Self-reported BMI underestimates the true proportion of overweight and obese persons because people typically overestimate their height and underestimate their weight.

Lifestyle changes as per Victorian Public Health and Wellbeing Plan 2011 - 2015 Page 22

Sedentary lifestyles:

Over the past 50 years, our lifestyles have shifted from being largely physically active to being predominantly sedentary. For example, significantly fewer Australians are now employed in jobs requiring any form of manual labour and many are working longer hours.

Eating out:

Fast food is now a part of the Australian lifestyle. Based on dollar value, consumption of fast food has doubled in Australia over the 10 years from 1999 to 2009, and Australians now spend \$42 a week on eating out-of-home (ABS 2006; NSW Health 2010). Foods eaten away from home have been shown to be more energy dense (up to 65 per cent more), have larger portion sizes, and are often higher in saturated fat and salt than meals prepared at home (Diliberti et al. 2004; Prentice & Jebb 2003; Rolls et al. 2004; Young & Nestle (2003).

Community Participation

The demands of modern life are changing the way in which Victorians participate in their communities. The percentage of Victorians who belong to a sports or recreational club has dropped from 28 per cent in 2003 to 26 per cent in 2010, and the percentage participating in any form of organised physical activity has dropped from 45 per cent to 41 per cent over the same period period (Standing Committee on Recreation and Sport 2003; 2010). Although the percentage of the Victorian population who volunteer increased from 20 per cent to 33 per cent between 1995 and 2006, the amount of time donated by each volunteer has decreased (ABS 1996; 2007; Department of Planning and Community Development 2009). Of those who have access to the internet at home, 11 per cent used the internet for voluntary or community purposes, which highlights the way volunteering opportunities are changing as community and technology evolve (ABS 2009b).

At risk population groups as per Victorian Public Health and Wellbeing Plan 2011- 2015 Page 24

The *Victorian Population Health Survey 2008* report clearly shows that socioeconomic status is highly correlated with poor health outcomes. As household income increases, rates of preventable health conditions decrease for both males and females.

Health outcomes also vary by gender, with men having higher rates of diabetes, smoking, alcohol related harm, poor nutrition and being overweight, while women face higher rates of psychological distress, depression and anxiety (Department of Health 2010f).

It is important to highlight that many chronic conditions causing significant burden of disease in adulthood actually start in adolescence, for example, tobacco or alcohol use, depression and anxiety. Therefore, there is a strong rationale to concentrate prevention efforts early in life to prevent or delay the onset of chronic disease, thereby preventing long-term morbidity.

Interventions: Keep people well (as per Victorian Public Health and Wellbeing Plan 2011 - 2015 Page 69)

The influences on health are many and complex, operating at individual, societal and systemic levels, and at different stages of wellbeing. For example, whether or not an individual is obese or suffers from stress may arise from factors as diverse as income and behaviour, and whether obesity and stress develop into CVD and mental illness may in turn be determined by physical activity and involvement in a supportive community.

Health can be promoted by both increasing the factors that build our wellbeing and protect our health, and reducing the factors that put us at risk of illness and expose us to threats to our wellbeing. Both health and non-health sector organisations play an important preventive and restorative role in the health and wellbeing of the community.

Maintaining the health of Victorians entails providing individuals with the information and skills required to make healthy choices, coupled with supporting communities to facilitate living a healthy lifestyle.

Healthy Eating as per Victorian Public Health and Wellbeing Plan 2011 - 2015 Page 70

Opportunities for progress in 2011–2015 include:

- Support local councils and urban planners to enhance supply of and access to nutritious food in municipalities through promoting the uptake of existing tools (for example, the Victorian Local Governance

Association's Municipal food security scanning tool and the Heart Foundation's Food-sensitive planning and urban design)

Implement policies and programs to support settings (early years services, schools, hospitals and workplaces) to promote healthy eating across the life course

- Promote and support breastfeeding practice through a range of supportive social and educational initiatives
- Develop strategies that facilitate an environment and culture where healthy choices are the easy choices for all Victorians, potentially including nutrition disclosure schemes for food outlets, healthy food outlet award/accreditation schemes, extension of current healthy food provision and procurement policy and guidelines
- Support to improve healthy food supply and access by development and implementation of specific strategies to address identified nutrition issues for subpopulation groups and regional locations, especially vulnerable populations
- Encourage a culture of healthy eating, through multi-strategy community-based programs and social marketing such as regional healthy cooking classes, healthy cooking grants, urban gardens, food rescue and distribution
- Programs, and launch of an interactive health application on the Better Health Channel to support these initiatives
- Implement the Healthy Together Victoria, (formerly Prevention Community Model) in 14 LGAs and implement health promotion initiatives for early childhood services and schools (see chapter 5.3) that support healthy eating, as well as implementing healthy workplace programs (see chapter 5.2) that include initiatives to encourage healthy eating
- Develop healthy eating and nutrition approaches for Victoria and support the implementation of the *Victorian Aboriginal nutrition and physical activity strategy 2009–2014* (VACCHO 2009) in order to achieve a secure, accessible and sustainable supply of healthy food choices for all Victorians to consume and enjoy.

Physical Activity per Victorian Public Health and Wellbeing Plan 2011 - 2015 Page 72

Opportunities for progress in 2011–2015 include:

- Get more people, more active, more often, through implementation of:
 - ~ the Active Places program to help communities with low levels of physical activity to participate more frequently
 - ~ in sport and recreation
 - ~ the Premier's Active Families Challenge to encourage Victorian families to undertake regular physical activity
 - ~ the Ride2School program, supporting schools and assisting young people to incorporate physical activity into every day by choosing active modes of transport to and from school
- Coordinate efforts across state and local government with policy and planning responsibilities for physical activity initiatives such as walking infrastructure, parks and open space for example:
 - ~ the Department of Planning and Community Development – Sport and Recreation Victoria – community programs that encourage more people to be physically active and that support local government and local sport and recreation clubs to improve access to sporting and recreational facilities
 - ~ coordinating the resources available to local government to support planning for walkability, open space, active transport and local transport solutions to make it easier for people to take part in community life
- Implement the Prevention Community Model in 14 LGAs and implement health promotion initiatives for early childhood services and schools (see chapter 5.3) that support active play and physical activity, as well as implementing healthy workplace programs (see chapter 5.2) that include initiatives to reduce sedentary behaviour
- Investigate a comprehensive statewide approach to promote physical activity and support the implementation of the *Victorian Aboriginal nutrition and physical activity strategy 2009–2014* (VACCHO 2009).

SMPCP PROMOTING HEALTHY LIFESTYLES MAPPING METHODOLOGY / APPROACH

1. Key Data

A range of statistical data relating to physical activity and nutrition has been sourced from SMPCP Community Health and Wellbeing Profile 2013. Also data of other determinants and indicators have been sourced due to their known influence on nutrition and physical activity.

Data sets are under the headings of Nutrition, Food Security and Access, Physical inactivity, Diabetes, High Cholesterol, Cardiovascular Disease and Transport.

NB. Data is from a range of sources and is referenced accordingly; for complete explanation of variables, margins of error and other details refer to source document. It is recognised data is continually updated and at times adjustments and reporting methods and grouping are changed which may affect future comparisons.

Effort has been made to represent data with a true perspective as per the data source.

2. Victorian Healthy Food Basket Survey Tool

Victorian Healthy Food Basket Survey Tool developed by Monash University, Department of Nutrition & Dietetics was used to survey stores that were the prime grocery outlet in the community in Gannawarra, Swan Hill and Buloke. A total of sixteen grocery stores were identified and SMPCP member agency representatives agreed to undertake the surveys between 10th October and 31st October 2012. A letter was written to all grocery stores informing them of the activity that was going to be undertaken and by which organisation, the letter did include contact details for SMPCP.

The Victorian Healthy Food Basket meets the nutritional requirements of the four family types described below for two weeks, providing greater than 80% of the NRVs for nutrients and at least 95% of energy requirements.

The four family types include:

- ~ Typical family – 2 adults and 2 children (44 year old male, 44 year old female, 18 year old female and 8 year old male).
- ~ Single parent family – 44 year old female, 18 year old female and 8 year old male.
- ~ Elderly pensioner – 71 year old female.
- ~ Single adult – Adult male > 31 years

The Victorian healthy food basket is designed to collect information on the cost, availability and accessibility of a healthy basket of foods from a store that has all the food groups in the basket. Collection of data from stores that have less than 40 of the 44 items in the basket is not recommended. This allows accurate comparisons of data to be made.

The tool also calculates the cost of the basket as a percentage of the family's income. The income amount outlined for each family type is based on estimated current government assistance which would be received based on the composition of the families.

Ref: Instructions for use of the Victorian healthy food basket - Developed by Monash University, Department of Nutrition & Dietetics. Provided by Claire Palermo

Other Victorian Healthy Food Basket Survey results were sent by an email request to the State wide Primary Care Partnerships Integrated Health Promotion network in an endeavour to have at least one area for comparison. The surveys needed to be undertaken within a similar time frame as each other for comparison.

3. SMPCP Promoting Healthy Lifestyles Collection Template for Nutritious Foods, Physical Activity Programs, Policies, Plans, Strategies & Environments Mapping

SMPCP Promoting Healthy Lifestyles Committee developed the SMPCP Promoting Healthy Lifestyles Collection Template for Nutritious Foods, Physical Activity Programs, Policies, Plans, Strategies & Environments Mapping, which was distributed and promoted via SMPCP committee and networks with a request to provide information.

The information collected was then collated into a table that grouped activities into target groups or headings, indicating if it was particular to nutrition, physical activity or both. Enablers and barriers to the programs and initiatives as identified were also noted.

A search of local council websites was undertaken in an endeavour to identify plans, strategies and policies supportive of access to nutritious food and environments for physical activity, and existing directories for physical activity or programs are listed.

A standard agenda item of the SMPCP Promoting Healthy Lifestyles Committee is **Information Sharing**. Information on agency activity was minuted and as appropriate added to the list of nutrition and physical activity initiatives or used to update what was currently listed.

4. Geographical Information System Maps

Gannawarra Shire Council and Swan Hill Rural City Council have created maps via Geographic Information Systems on communities of significant populations providing evidence of current options for physical activity and access to nutritious food (fruit and vegetables).

Note

In the analysis and presentation of information effort has been made to de-identify communities with consideration that some of the information may be sensitive in nature due to the smaller populations of Southern Mallee communities. The information in this report is to show what is available in communities.

OUTCOMES

Nutrition

Introduction

A healthy diet improves quality of life and wellbeing, and protects against chronic diseases. For infants and children, good nutrition is essential for normal growth. For a nutritious diet it is recognised that a variety of food from the food groups and quantities should be consumed daily depending on age, gender, body size and physical activity levels.

SMPCP Promoting Healthy Lifestyles Committee focus for nutrition has been on fruit and vegetables therefore statistical data sourced has been for fruit and vegetable consumption. It is recognised that food security indicators can provide an insight in to why the levels of consumption for fruit and vegetables are at the reported level.

Fruit and vegetable intake

The following data is based on the Australian dietary guidelines pre 2012 with a recommendation of a daily vegetable intake of five serves and a recommended minimum daily fruit intake of two serves for persons aged 19 years and over.

State summary

State-wide findings from the Victorian Population Health Survey indicate that across Victoria:

- 90% of people aged ≥ 18 years did not meet the guidelines for vegetable intake and 53% of persons aged ≥ 18 years did not meet the guidelines for fruit intake
- More males than females did not meet the vegetable and/or fruit intake guidelines
- The 18-24 years age group had the lowest intake of 3 or more daily serves of vegetables
- The 25-34 years age group had the lowest intake of 2 or more daily serves of fruit.

Local level

Vegetable consumption

The proportion of population for all Southern Mallee LGA's meeting the dietary guidelines of consuming five or more vegetables per day is higher than the Victorian average but is lower than the Loddon Mallee region average.

Men in all three Southern Mallee LGA's are well below the Victorian and Loddon Mallee average for consumption of vegetables and are considerably lower than women for each. Women of Southern Mallee LGA's have a higher rate of meeting the dietary guidelines of five serves than the Victorian average and are comparable to the Loddon Mallee region average.

Men in Buloke LGA record the lowest of meeting the dietary requirement of five serves of vegetables at 1.8% while men in Gannawarra the highest of the three LGA's with 3.1%.

Assessment for vegetable intake meeting the dietary guidelines for the Southern Mallee region is 8.4% of population (2844 people), less than Loddon Mallee region and .7% higher than the state average.

Vegetable intake, population aged 18 years and over (2008)

Vegetables serves meeting dietary guidelines	Buloke	Gannawarra	Swan Hill RC#	Loddon Mallee	Victoria
5 or more serves of vegetables per day+	8.0%	8.8%	8.4%	9.9%	7.7%
Men 5 or more serves of vegetables per day§	1.8%	3.1%	2.4%	6.1%	5%
Women 5 or more serves of vegetables per day§	12.5%	13.8%	13.6%	13.5%	10.7%

+SMPCP Community Health and Wellbeing Profile 2013 P112, Figure 105 / §Victorian Population Health Survey 2008, Dept. Of Health 2010 P30 & 31, 46 & 47 #Including Robinvale

Further exploration of the Victorian Population Health Survey 2008, provides a break down of vegetable consumption per serves scaling as none, 1 – 2, 3 – 4 and 5 or more (as shown below).

Vegetable serves	Buloke	Gannawarra	Swan Hill	Loddon Mallee	Victoria
None	1.9%	7.9%	6%	5.1%	5.8%
1 – 2 serves	55.9%	55.3%	57.2%	55.2%	56.9%
3 – 4 serves	33.4%	27.4%	23.6%	28.7%	28.2%

Victorian Population Health Survey 2008, Dept. Of Health 2010 P30 & 31 #Including Robinvale

Viewing actual consumption rates provides a clearer picture that a significant portion of the Southern Mallee LGA population are consuming between 1 to 4 serves of vegetables and it is a minority not consuming any or consuming the recommended intake.

Gannawarra (7.9%) and Swan Hill (6%) have a higher portion of population that are not consuming any vegetables than the Loddon Mallee (5.1%) and Victorian (5.8%) averages, they also have less population consuming three to four serves of vegetables.

It is evident that just over half of the populations are consuming one to two serves of vegetables which is on par with State and Loddon Mallee region.

While Buloke LGA records the lowest portion or population meeting the dietary guidelines of five serves they do record better for all other areas – Buloke is well below Swan Hill, Gannawarra, Loddon Mallee and Victoria regarding no consumption at 1.9% of population. Buloke LGA also records a better position in consuming 3 to 4 serves of vegetables too.

Vegetable consumption in Buloke is higher than Swan Hill, Gannawarra, Loddon Mallee and State where Swan Hill is the lowest for none or some portion.

Fruit Consumption

The recommended dietary intake of fruit is two serves per day.

The portion of Buloke LGA that meets the dietary guidelines of 2 serves of fruit per day is 47.1% which is higher than the Loddon Mallee region and slightly less than the Victorian average of 48.9%. Swan Hill LGA is on a par with the Loddon Mallee region but lower than the state average. Gannawarra LGA is considerably lower than other Southern Mallee LGA's and the Loddon Mallee and State in meeting the recommended daily intake of fruit recording the portion of population at 34.6%.

As with vegetables men in all three Southern Mallee LGA's have a lower portion of population consuming the recommended serves of fruit than women and the Victorian and Loddon Mallee average. Women record considerably better rates of consumption of fruit that is closer to the state and Loddon Mallee region average.

Both men and women in Gannawarra LGA are the lowest of Southern Mallee communities in meeting the dietary guidelines of two serves and men are significantly lower; 15% than Loddon Mallee region and 18% lower than the state average.

Assessment for fruit intake meeting the dietary guidelines for the Southern Mallee region is 41.2% of population, comparable with the Loddon Mallee region and 7.4% less than the state average.

Fruit serves meeting dietary guidelines	Buloke	Gannawarra	Swan Hill	Loddon Mallee	Victoria
2 or more serves of fruit per day+	47.1%	34.6%	42.0%	42.9%	48.6%
Men 2 or more serves of fruit per day§	32%	23%	31.7%	38%	41%
Women 2 or more serves of fruit per day§	51.9%	46.4%	52.9%	47.5%	53.5%

+SMPCP Community Health and Wellbeing Profile 2013, Figure 105, P112, §Victorian Population Health Survey 2008, Dept. Of Health 2010 P30 & 31, 46 & 47 #Including Robinvale

The Victorian Population Health Survey 2008, provides a break down of fruit consumption per serves scaling as none and one.

Fruit serves	Buloke	Gannawarra	Swan Hill#	Loddon Mallee	Victoria
None	14.4%	24.8%	21.8%	17.5%	14.3%
One	37.8%	39.1%	35%	38.7%	36.1%

Victorian Population Health Survey 2008, Dept. Of Health 2010 P30 & 31 #Including Robinvale

Gannawarra and Swan Hill LGA's are above the State and Loddon Mallee region average for no consumption of fruit. The result for Gannawarra LGA (24.8%) is actually the highest in the state for portion of population not consuming fruit, 2% higher than the next LGA which is Northern Grampians on 22.8%. Gannawarra does fair better with the consumption of one serve of fruit with more percentage of population than the other Southern Mallee LGA's and Loddon Mallee and State average.

Overall Fruit and Vegetable Intake

The data shows that men in Buloke, Gannawarra and Swan Hill are not meeting recommended dietary guidelines for the consumption of both fruit and vegetables which is consistent with men in the State of Victoria and Loddon Mallee region.

Females in Buloke, Gannawarra and Swan Hill LGA's are significantly more likely to meet or partially meet the dietary guidelines for the consumption of fruit, vegetables and combined fruit and vegetables than males of each of the LGAs.

Gannawarra LGA has the highest portion of population in the state not meeting the guidelines for the consumption of either fruit or vegetables at 60.3% with the next highest Ararat which is reported at 57.6%.

Buloke and Swan Hill is comparable with the Loddon Mallee region but higher than the state average.

Not meeting guidelines for consumption of either fruit or vegetables	Buloke	Gannawarra	Swan Hill#	Loddon Mallee	Victoria
	51%	60.3%	51.5%	52.5%	48.2%

Victorian Population Health Survey 2008, Dept. Of Health 2010 P30 & 31 #Including Robinvale

Summary

Women residing in Southern Mallee LGA's are significantly more likely to be meeting the dietary guidelines for the consumption of fruit and vegetables than men and are mostly comparable with State and Loddon Mallee average percentage of population. While it is noted that the percentage of men across the State and Loddon Mallee are not meeting the dietary guidelines for fruit and vegetable consumption, men of Buloke, Gannawarra and Swan Hill are recording even lower averages than that of the State and Loddon Mallee.

Overall Gannawarra LGA is the highest in the state for population not meeting the dietary guidelines for fruit and vegetable consumption, 12.1% higher than the state and 7.8% higher than the Loddon Mallee region. Also the percentage of Gannawarra population not having any serves of fruit and vegetables is the highest out of Southern Mallee LGA's and 10.5% higher than the state in regards to fruit and 2.1% higher for vegetables.

Consumption of some vegetables and fruit (portion of recommended serves) in the Southern Mallee is comparable with the State and Loddon Mallee Region, Swan Hill has the lowest consumption of portions where Buloke fairs better with higher rates of some portion of fruit and vegetables.

What else is needed and / or what do we need to do to overcome

- Why do men consume less fruit and vegetables than women?
- What are we doing to improve the consumption rate of fruit and vegetables in Southern Mallee and in particular for men?
- What are the barriers to consumption of fruit and vegetables? – cooking skills, access, storage
- Are barriers more significant for men than women? – cooking skills, nutrition knowledge, shopping knowledge, access

Physical Activity

Introduction

Physical activity is 'any bodily movement produced by the muscles that result in energy expenditure. Exercise is a subset of physical activity...[While] most measures of physical activity focus on deliberate activity in leisure time, other forms of activity – such as walking and cycling for transport, and activity associated with a person's job – are important components of overall physical activity'²

The National Physical Activity Guidelines for Australia recommend a range of levels of daily physical activity; the recommendations vary throughout the lifespan commencing in infancy through to older age. The amount of physical activity required in gaining and maintaining good health is also dependent on lifestyle, occupation, gender and physical capacity and inclusive of moderate and intense activity.

'Physical activity promotes wellbeing, physical and mental health, prevents disease, improves social connectedness and quality of life, provides economic benefits and contributes to environmental sustainability. Communities that support health enhancing physical activity, in a variety of accessible and affordable ways, across different settings and throughout life, can achieve many of these benefits' (Global Advocacy Council for Physical Activity 2010).

State context

Physical activity levels for people aged 19 and over have stayed relatively the same since 2005 – 2008 for both men and women; and they are at very similar levels for each of the physical activity categories.

Explanation:

<u>Physical activity category</u>	<u>Time and sessions per week</u>
~ Sedentary	0 minutes
~ Insufficient time and/or sessions	Less than 150 minutes or 150 or more minutes, but fewer than 5 sessions
~ Sufficient time and sessions	150 minutes and five or more sessions ³

The information is showing that there has been a slight increase for men and women in becoming more sedentary and not being sufficiently physically active.

Physical activity levels by sex 2005 - 2008	2005	2006	2007	2008
Men				
Sedentary	6.5%	5%	4.8%	5.1%
Insufficient time and / or sessions	28%	27.7%	28.1%	27.2%
Sufficient time and sessions	63.5%	63.5%	63.8%	61%
Women				
Sedentary	5.4%	5.6%	4.9%	5.4%
Insufficient time and / or sessions	28.8%	28%	29.7%	27.2%
Sufficient time and sessions	63.5%	63.7%	61.3%	59.7%
Persons				
Sedentary	5.9%	5.4%	4.8%	5.3%
Insufficient time and / or sessions	28.4%	27.8%	28.9%	27.4%
Sufficient time and sessions	63.6%	63.5%	62.5%	60.3%

Victorian Population Health Survey report 2008, page 79

Similarities remain the same throughout the majority of the lifespan for men and women until the age group of 65+ when men are more likely than women to undertake sufficient physical activity.

The Victorian Population Health Survey 2008 also reports that

- Persons with higher levels of self-reported health status (excellent, very good, good) were more likely to report higher levels of physical activity (sufficient time and sessions)
- Persons with poorer levels of self reported health status were more likely to report higher levels of sedentary behaviour
- The same is reported for both men and women

² AIHW (Australian Institute of Health and Welfare) 2010a, *Australia's health 2010. Australia's health series no.12*, Cat. no. AUS 122, Canberra Page 92.

³ Victorian Population Health Survey 2008, Definition of sufficient physical activity time and sessions per week, Page 77

Local Level

Physical activity levels

Compared to Victoria and the Loddon Mallee Region, a higher proportion of all Southern Mallee PCP region population was sedentary^(b) this is also the same for zero days of incidental^(c) physical activity in the past week.

Residents of Gannawarra were more likely to be sedentary and have the least population in the Southern Mallee to be having sufficient physical activity.

Buloke LGA reported a slightly higher population that were participating in sufficient physical activity than that of the Loddon Mallee Region, State and is considerably higher than Swan Hill and Gannawarra LGA's.

Swan Hill RC populations are slightly above the State and Loddon Mallee Region for sedentary behaviour are 7% lower in the local population undertaking sufficient physical activity.

Physical activity levels persons over age of 18	Buloke	Gannawarra	Swan Hill RC#	LMR⊗	Victoria
Sedentary ^(b)	5.8*	6.9	5.8	5.1	5.3
Insufficient physical activity time and/or sessions	26.0	26.1	28.9	28.	27.4
Sufficient physical activity time and sessions	61.2	52.3	53.3	58.3	60.3

SMPCP Community Health and Wellbeing Profile 2013, Figure 107, P 113, #Including Robinvale ⊗Victorian Population Health Survey 2008, Department of Health 2010 P82

Incidental physical activity

*Explanation: To explore the extent to which the Victorian population includes physical activity in their everyday activities to get from place to place (eg, to school, work, the shops or the train station) the VPHS 2008 asked respondents about the number of days on which they walked or cycled for transport for trips taking longer than 10 minutes.*⁴

No days of incidental physical activity in the Loddon Mallee Region is reported at 69.4% which is 7.7% higher than the Victorian average, this higher rate is consistent with reports for the majority of Victorian rural areas.

Gannawarra LGA is 9.3% higher than the State in population having zero days of incidental physical activity. Buloke and Swan Hill are also higher than the State but lower than the Loddon Mallee Region.

Incidental physical activity	Buloke	Gannawarra	Swan Hill RC#	LMR⊗	Victoria
Zero days of incidental ^(c) physical activity in past week	65.1	71.1	64.9	69.4	61.7

SMPCP Community Health and Wellbeing Profile 2013, Figure 107, P 113, #Including Robinvale ⊗Victorian Population Health Survey 2008, Department of Health 2010 P82

Physical activity at work

*Explanation: Respondents to the VPHS 2008 who were employed were asked whether their work activities were best described as mostly sitting or standing, mostly walking, or mostly heavy labour or physically demanding work.*⁵

All Southern Mallee PCP region residents were much more likely to have occupations involving physical exercise through walking, heavy labour or other physically demanding exercise and in all instances report better than the State average and comparable or mostly better than the Loddon Mallee Region.

⁴ Victorian Population Health Survey 2008, Incidental physical activity, Page 88

⁵ Victorian Population Health Survey 2008, Physical activity at work, Page 95

Gannawarra LGA reports the highest population of employed people who work in an area that includes heavy labour or physically demanding work at 28.9% which is 15.6% higher than the State and 12% higher than the Loddon Mallee Region.

Swan Hill Rural City has less population than Gannawarra and Buloke LGA's involved in heavy labour or physically demanding work and more population who sit or stand.

Occupational physical activity:	Buloke	Gannawarra	Swan Hill RC#	LMR[⊗]	Victoria
Mostly sitting or standing	48.5	42.8	49.4	53.2	64.2
Mostly walking	24.9	26.3	25.9	26.0	20.5
Mostly heavy labour or physically demanding work	24.3	28.9	20.0	16.9	13.3

SMPCP Community Health and Wellbeing Profile 2013, Figure 107, P 113, #Including Robinvale ⊗Victorian Population Health Survey 2008, Department of Health 2010 P96

Summary

Within the workplace Southern Mallee populations are undertaking more heavy labour and physically demanding work than the State and Loddon Mallee Region and is consistent with other state rural areas. The level of heavy labour or physically demanding work is quite significantly higher than the state particularly in the case of Gannawarra and Buloke and somewhat so for Buloke. Occupations that require sitting or standing are also less likely in the Southern Mallee catchment.

In regards to the levels of physical activity sedentary behaviours all three Southern Mallee LGA's are above the State and Loddon Mallee Region average. Most notably is Gannawarra, who also have less of the population participating in sufficient physical activity, this might be a reflection on the fact that the workforce is more likely to involve physical activity and further exercise is not regarded as necessary.

Sufficient physical activity time and sessions is occurring in Buloke LGA who are reporting a higher percentage than the State and Loddon Mallee Region. In smaller rural communities often sporting clubs are an important resource not only for physical activity but for socialisation. The makeup of sport in Buloke LGA appears to be strong and could be the support for recording strongly in sufficient physical activity time and sessions.

Incidental physical activity, where people either walk or cycle for more than ten minutes to get from place to place rates poorly in rural areas, this would be due to minimal public transport systems, the distance of ten minutes may be on the outskirts of smaller communities where there is not a safe walking or cycling path to travel on and some of the populations would live on farming properties that would be considerable distance from towns and town centres.

Incidental physical activity does rate poorly in the Southern Mallee catchment and particularly in Gannawarra. It would be valuable to have an understanding of why people who live within Southern Mallee town precincts may not walk or cycle a minimum of ten minutes to get from place to place.

The local data available does not break into male and females but it would be useful to know if Southern Mallee populations follow the same trends as for the State in this regards as in other instances such as fruit and vegetable consumption where men rate more poorly.

What else is needed and / or what do we need to do to overcome

- Build further understanding of enablers and barriers within town precincts to undertaking incidental physical activity
- Does the fact that more people are employed in physically active occupations impact on more sedentary behaviours? State figures report men are more likely to undertake more physically demanding work where women report slightly higher in regards to mostly walking
- Why does Buloke LGA have a higher proportion of population who are sufficiently physical active than Gannawarra and Swan Hill?
- With Gannawarra actively pursuing Healthy By Design and similar planning principles follow if this is making a difference to physical activity rates

Preventable Health Conditions

Introduction

Good nutrition and sufficient physical activity is required in the prevention and management of preventable health conditions such as obesity, type two diabetes and cardio vascular disease. The following information is provided in this report to give a snap shot only of the current health of SMPCP catchment where good nutrition habits and sufficient physical activity could contribute to prevention and management of such health conditions.

Many chronic diseases are preventable, or react more favourably in terms of management and medical treatment, in those persons who adopt healthy behaviours, such as controlling body weight, eating nutritious foods, avoiding tobacco use, and increasing physical activity. When the risk factors for chronic disease are kept low and the protective factors are kept high people will enjoy both a longer quantity and quality of life; they will remain healthy and able to manage their own lives as they grow older, and fewer people will require costly medical treatment and care services.⁶

Obesity and Body Weight Status

Explanation: Body weight status is measured utilising the Body Mass Index (BMI) which provides a measure of weight in relation to height and can be used to estimate levels of unhealthy weight in a population. It is calculated as weight in kilograms divided by height in metres squared: $BMI = (kg)/height\ squared\ (m^2)$

State level

State-wide findings from the Victorian Population Health Survey also indicate that across Victoria:

- The proportion of males who were overweight was higher than females
- The proportion of persons who were overweight or obese increased between 2002 and 2008
- Persons aged 45 years and over were more likely to be overweight or obese
- More people from rural areas were overweight or obese, compared with metropolitan areas
- The Loddon Mallee Region was the second highest rural area for persons who are obese at 21%

Local level

In 2008, compared to Victoria, all Southern Mallee PCP region females were more likely to be obese than the Victorian average.

Overweight

In 2008, females from Buloke and from Swan Hill RC were more likely to be overweight than the Victorian average.

Within the region

- Buloke had the highest proportion of female population that was overweight
- Males from Gannawarra and Swan Hill RC were also more likely to be overweight than the Victorian average.
- Gannawarra had the highest proportion of male population that was overweight

Obese

Within the region;

- Swan Hill RC had the highest rate of female population that was obese
- Males from Buloke and Swan Hill RC were more likely to be obese than the Victorian average
- Buloke had the highest proportion of male population that was obese and this figure was much higher (more than double) than the Victorian average.

	Buloke		Gannawarra		Swan Hill RC [#]		Victoria	
	Males	Females	Males	Females	Males	Females	Males	Females
Overweight	36.9	30.5	46.6	20.0	46.3	30.0	39.9	24.2
Obese	39.9	17.4	13.3	21.4	18.5	22.5	17.3	16.1

SMPCP Community Health and Wellbeing Profile 2013, Figure 109, P 114, [#]* Including Robinvale

⁶ SMPCP Strategic and Operational Plan 2009 – 2012, Management of chronic diseases – with a focus on diabetes and cardiovascular diseases, Page 30

Type 2 Diabetes and Body Weight Status

In 2008, the rate of population in the Southern Mallee PCP region that had type 2 diabetes and were overweight or obese was the same as or lower than the Victorian average and slightly lower than the regional Victoria average.

People Who Had Type 2 Diabetes and Were Overweight/Obese (2007 - 08)

	No.	Rate* p/100
Buloke (S) - North	104	3.0
Buloke (S) - South	117	3.0
Gannawarra (S)	357	3.1
Swan Hill (RC) - Central	264	3.1
Swan Hill (RC) - Balance	189	3.0
Non-metropolitan Vic	127,536	3.2
Victoria	37,734	3.1

SMPCP Community Health and Wellbeing Profile 2013, Figure 112, P 115

Type 2 Diabetes

Explanation: Accounting for around 85% of all cases of diabetes mellitus, it is caused by insufficient production of insulin and /or the body becoming resistant to high glucose levels in the blood.

Type 2 diabetes is the most common form of diabetes, which occurs mostly in people aged 50 years and over who are overweight, or have a family history of the condition. In many cases, appropriate diet and exercise can control type 2 diabetes.

State level

The Victorian Population Health Survey 2008 gathered information at the LGA level on prevalence of doctor-diagnosed type 2 Diabetes.

- The prevalence of type 2 diabetes increased with age and was higher for males (5.8%) compared with females (3.8%)
- The prevalence for type 2 diabetes was similar between metropolitan and rural areas of Victoria
- Prevalence of type 2 diabetes did not change for females between 2005 and 2008
- Prevalence of type 2 diabetes in males increased from 3.9% in 2005 to 5.8% in 2008, and

Local Level

The number and proportion of residents with diabetes* increased substantially between 2001 and 2011 for all Southern Mallee PCP LGAs. In 2011, all Southern Mallee PCP LGAs had a higher proportion of population with diabetes than the Victorian average. Within the region, Gannawarra had the highest proportion.

The Survey found that compared to Victoria Buloke and Gannawarra had a higher proportion of population aged 18 years and over that reported having doctor-diagnosed type 2 diabetes.

Within the region, Gannawarra had the highest proportion of population with doctor-diagnosed type 2 diabetes.

Type 2 Diabetes prevalence* (2008)

Location	%
Buloke	4.4
Gannawarra	4.7
Swan Hill RC#	3.4
Loddon Mallee	5.1
Victoria	4.8

SMPCP Community Health and Wellbeing Profile 2013, Figure 127, P 128,*Self reported, #Includes Robinvale

High Cholesterol

In 2007-08, all Southern Mallee PCP LGA and SLA populations had a higher rate of high cholesterol compared to Victoria and Regional Victoria. Within the region, the LGAs shared the same rate of 5.7, while Swan Hill RC – Central had the highest rate of the SLAs (5.8).

High cholesterol** (2007 – 08)

	SLA	No.	Rate*
SLAs	Buloke (S) - North	248	5.6
	Buloke (S) - South	277	5.7
	Gannawarra (S)	829	5.7
	Swan Hill (RC) - Central	628	5.8
	Swan Hill (RC) - Balance	439	5.5
LGAs	Buloke	525	5.7
	Gannawarra	829	5.7
	Swan Hill RC#	1,283	5.7
	Non-metropolitan Vic	86,578	5.5
	Victoria	284,371	5.4

SMPCP Community Health and Wellbeing Profile 2013, Figure 134, P 134

Cardiovascular Disease

Circulatory system diseases

In 2007-08, all Southern Mallee PCP LGA and SLA populations had a higher rate of Circulatory system diseases compared to Victoria. Within the region, Gannawarra and Swan Hill RC shared the highest rate at the LGA level, while Swan Hill RC – Central had the highest rate at the SLA level.

Hypertensive disease

In 2007-08, all Southern Mallee PCP LGA and SLA populations had a higher rate of Hypertensive diseases compared to Victoria. Within the region, Swan Hill RC had the highest rate at the LGA level, while Swan Hill RC – Central had the highest rate at the SLA level.

Circulatory system diseases (2007 – 08)

	SLA	Circulatory system diseases		Hypertensive disease	
		No.	Rate*	No.	Rate*
SLAs	Buloke (S) - North	792	17.8	489	10.5
	Buloke (S) - South	889	18.2	571	11.1
	Gannawarra (S)	2,631	18.1	1,687	11.1
	Swan Hill (RC) - Central	2,072	18.5	1,295	11.4
	Swan Hill (RC) - Balance	1,393	17.8	865	10.8
LGAs	Buloke	1,681	18.0	1,060	10.8
	Gannawarra	2,631	18.1	1,687	11.1
	Swan Hill RC#	4,140	18.1	2,584	11.2
	Non-metropolitan Vic	280,266	18.0	173,284	10.9
	Victoria	915,371	17.3	544,640	10.3

SMPCP Community Health and Wellbeing Profile 2013, Figure 135, P 134

Summary

In most instances Southern Mallee PCP populations are reporting higher than the state average for health conditions that in some instances could be preventable through the consumption of a nutritious diet meeting Australian Dietary Guidelines and participating in sufficient physical activity that would see good health and wellbeing.

Southern Mallee males and females have a considerably high proportion of the population who are overweight or obese in comparison to the State of Victorian.

The overweight male population is over 6% higher in Gannawarra and Swan Hill than for the Victorian State average and females in Buloke and Swan Hill just over 5% higher than the Victorian State average.

Obesity is a concern for males in Buloke LGA with a percentage of 39.9% which is 22.6% more than that of Victoria. Females in Gannawarra and Swan Hill LGA's are 5.3% and 6.4% respectively higher than the Victoria data.

Diagnosed type 2 diabetes rates are slightly less than the State for each LGA; Gannawarra reports the highest at 4.7%, Buloke 4.4% and Swan Hill 3.4%, the Victorian percentage is 4.8%. Interestingly the ratio of Southern Mallee population that are either overweight or obese and have type 2 diabetes is on a par with the state even though Southern Mallee catchment appears to have more of an issue with weight management.

Further information regarding prevalence of type 2 diabetes for males and females at the LGA level would be valuable to reference body weight, government area and percentage of population to see if there is a correlation between the issue and gender. This could also be further connected with nutritious food consumption and physical activity rates.

In the areas of high cholesterol, and cardiovascular disease Southern Mallee area once again is slightly higher in prevalence than the State.

Overall Southern Mallee catchment appears to have a larger population who have health conditions that are possibly preventable or that would benefit from adopting healthier lifestyles that includes consumption of nutritious food and increasing participation in regular physical exercise, males appear to slightly more at risk than females. It is a very real concern if a change does not occur and in some instances continue to follow State trends of increasing rates the Southern Mallee catchment populations will see an increasing rate of preventable health conditions.

What else is needed and / or what do we need to do to overcome

- Male and female type 2 diabetes per LGA statistics
- Chart males and females for each LGA and statistical information
- What interventions are occurring to prevent and reduce preventable diseases?

Social Determinants of Health

Social Economic Indexes for Areas

Explanation

The Social Economic Indexes for Areas (SEIFA) provides a comparison snapshot of the socio-economic standing of local government areas and towns within Victoria. The SEIFA Index is based on the Australian Bureau of Statistics Index of Relative Socio-economic Disadvantage (IRSD) 2006 (ABS 2010). This index combines census variables relating to income, education, occupation, wealth and living conditions and ranks localities on a continuum of advantage to disadvantage.

Introduction

Evidence tells us the people and communities who reflect levels of higher disadvantage are more vulnerable to poor nutrition and are less likely to undertake regular physical activity. The presentation of the data aims to reflect the current position of southern Mallee LGA's and where appropriate individual communities. Other statistical information has been drawn upon to reflect the contributors and impacts of poor nutrition and physical inactivity.

Poor social and economic circumstances affect health throughout life. People down the social ladder usually run at least twice the risk of serious illness and premature death as those nearer the top.⁷

The average value of SEIFA for Victoria 2006 was 1010 – values higher indicate areas of advantage and lower indicates areas of disadvantage.

The data available shows that all southern Mallee local government areas, including Robinvale, are more disadvantaged than the Victorian average and regional Victoria.

Local Government Areas in Regional Victoria	2006 SEIFA index of disadvantage
Swan Hill RC*	958.8
Gannawarra	970.9
Buloke	970.6
Regional Victoria	986.0
Victoria	1010

SMPCP Community Health and Wellbeing Profile 2013, Figure 54, P74 *Includes Robinvale

Swan Hill Rural City (incl. Robinvale) is the lowest score of the three LGAs and its score was the 10th lowest ranking in regional Victoria, while Buloke and Gannawarra were ranked 17th and 19th respectively.

SEIFA scores for relative socio-economic disadvantage – by town (2006)		SEIFA Score	State Rank	State Decile
Swan Hill RC	Lake Boga	971	321	3
	Manangatang	951	228	2
	Nyah	953	235	2
	Nyah West	804	9	1
	Swan Hill	964	283	2
	Woorinen	1023	744	6
Gannawarra	Cohuna	988	441	3
	Kerang	935	164	2
	Leitchville	1008	605	5
	Quambatook	953	234	2

⁷ Social Determinants of Health, The Solid Facts, Second Edition, World Health Organisation, Page 10

Buloke	Birchip	967	299	3
	Charlton	969	309	3
	Donald	952	230	2
	Sea Lake	934	157	2
	Wycheproof	947	214	2

SMPCP Community Health and Wellbeing Profile 2013, Figure 55, P74

Nyah West had the lowest SEIFA score, followed by Sea Lake and then Kerang, within the region Woorinen had the highest SEIFA score, followed by Leitchville and Cohuna, indicating a low level of relative socio-economic disadvantage.

The State decile refers to which 10% a location's score was placed in within Victoria, i.e. Nyah West was in the bottom 10% (first decile) of all scores in Victoria.

Summary

The above SEIFA scores indicate the majority of communities in Southern Mallee are disadvantaged and the portion of towns is higher than that of the state and regional Victoria average.

This knowledge tells us there is more likely to be higher incidents of health and wellbeing issues throughout the Southern Mallee due to the vulnerabilities of income, education, occupation, wealth and living conditions that align with disadvantage.

As the level of disadvantage is somewhat significant it is more likely that the area of nutrition and physical activity will reflect higher rates of overweight and obesity and sedentary behaviour and in the interventions health and non-health sector organisations would play a role in preventive and restorative initiatives for these communities and should cover individual, societal and systemic levels, and at different stages of wellbeing.

What else is needed and / or what do we need to do to overcome

- What should we know about the most disadvantaged/vulnerable communities – further information regarding the SEIFA index / other data / community consultation?
- Why are they disadvantaged/vulnerable – do community members view themselves as this?
- What are the assets/ challenges / opportunities of the disadvantaged/vulnerable communities?
- What do we know about nutrition and physical activity for these communities / is this an important issue or concern for the community?
- What work are we undertaking regarding nutrition and physical activity in the most disadvantaged communities and who are we working with, (are they the disadvantaged / vulnerable?) and is it making a difference?

Note June 2013

The 2011 SEIFA data is now available and does indicate some change in score, state decile and rank. Overall the position of Southern Mallee communities remains the same as previously summarised.

Refer to SMPCP Community Health and Wellbeing Profile, June 2013, page 74.

Food Security

Definition

Food security is the state in which all persons obtain nutritionally adequate, culturally acceptable, safe foods regularly through non-emergency sources⁸ (Victorian health Promotion Foundation (VicHealth). Fact sheet: Food security. Carlton; Victoria: 2007). Food insecurity exists "whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable food in socially acceptable ways is limited or uncertain" (Radimer, 2002).

At an individual level, food security affects people's physical, mental and social wellbeing, including their dignity. The immediate (within-day) effects are anxiety, hunger and lack of energy. In the longer term people are more likely to be overweight or obese, or underweight. Source: Victorian health Promotion Foundation (VicHealth) Food for All evaluation report.

A range of influences can contribute to food insecurity including; cost, quality, variety, culturally appropriate and access of and to food.

State summary

As reported in the Victorian Health Population Survey 2008 there has been an increase across the State from 2005 to 2008 in the proportion of persons who ran out of food at least once in twelve months and could not afford to buy more. Consistently females have reported a higher prevalence of food insecurity than males.

Reported food insecurity State of Victoria	2005	2006	2007	2008
Men	4.3%	4.4%	4.8%	4.5%
Women	4.8%	5.4%	5.4%	6.5%
Persons	4.6%	4.9%	5.1%	5.6%

Victorian Population Health Survey 2008, Dept. Of Health 2010 P339

Food insecurity is reported as more prevalent in earlier age groups, 18 – 34, than later 45 – 65+, the most prominent age range is 25 – 34 at 8.1%. Females reported significantly higher percentages than men for each age group other than the 25-34 age group where males report as 8.7% and females 7.5%.

The Department of Health Region reported the Loddon Mallee region as having the highest proportion of persons affected by food insecurity with a percentage of 7.1%, Loddon Mallee region females 9.7%, male 4.5% compared to Victoria 6.5% females and males 4.5%.

The Victorian Population Health Survey 2008 Department of Health 2010 reports on five reasons that may affect a persons food security these are; too expensive, quality, variety, culturally appropriate and lack of public transport. This information is collected when survey respondents have reported having run out of food at least once in the last twelve months and could not afford to buy more.

In all these areas more rural areas than metropolitan areas are reporting higher percentages of population stating these as barriers. The reason of 'Some foods are too expensive' out of the ten rural areas noted as above the Victorian average five of the LGA's are in the Loddon Mallee region⁹; Buloke LGA is one of these.

Local Level

Food insecurity for Buloke, Gannawarra and Swan Hill is below the State and Loddon Mallee region average with Swan Hill and Gannawarra reported at 5.2% and Buloke 4.5%. Comparison to other Loddon Mallee LGA's this indicates Southern Mallee local government areas along with Campaspe are the most food secure of the Loddon Mallee region. Collectively for Southern Mallee LGA's the percentage of populations reporting to be food insecure is 4.97%.

Reported food insecurity	Buloke	Gannawarra	Swan Hill#	Loddon Mallee ⊗	Victoria
	4.5%	5.2%	5.2%	7.1%	5.6%

SMPCP Community Health and Wellbeing Profile 2013, Figure 56, P 75 #Including Robinvale ⊗Victorian Population Health Survey 2008, Department of Health 2010 P 340

⁸Victorian Health Promotion Foundation (VicHealth). Fact sheet: Food security. Carlton; Victoria: 2007

⁹ Victorian Population Health Survey 2008 Department of Health 2010, page 350, Social Inequalities in Health, Figure 9.13: Proportion of persons reporting some foods were to expensive, by LGA.

While people reporting to be slightly more food secure in Southern Mallee LGA's for those that are food insecure the stated reasons in most instances are above and for some reasons significantly higher than the state average.

Access to food - population aged 18 yrs and over (2008)

	Stated reasons why people don't always have the quality or variety of foods they want:				
	Some foods are too expensive	Can't always get right quality	Can't always get right variety	Can't always get culturally appropriate	Inadequate and unreliable public transport
Buloke	45.9%	52.3%	38.3%	10.3%	12.7%
Gannawarra	34.7%	30.9%	12.6%	7.3%	11.3%
Swan Hill RC#	28.9%	27.7%	13.5%	8.2%	9.4%
Loddon Mallee⊗	34.9%	27%	11.7%	6.2%	8.3%
Victoria	28.3%	25.5%	10.9%	6.8%	8.0%

SMPCP Community Health and Wellbeing Profile 2013, Figure 56, P 75 #Including Robinvale ⊗Victorian Population Health Survey 2008, Department of Health 2010 P 347

Sth. Mallee	36.5%	36.63%	21.4%	8.6%	11.2%
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Buloke LGA actually reports the lowest rate of food insecurity in Southern Mallee but significantly higher for the stated reasons why than Victoria and Loddon Mallee region, particularly in the areas of cost, quality and variety. Further review of the Victorian Population Health Survey 2008 Department of Health 2010 shows Buloke LGA reported as the highest in Victoria regarding these three reasons.

The variances in percentages between State and Loddon Mallee region are shown in the following table and only indicated where the difference is 3% and above.

Percentage variance between State and Loddon Mallee region for stated reason 3% and above	Stated reasons why people don't always have the quality or variety of foods they want:									
	Some foods are too expensive		Can't always get right quality		Can't always get right variety		Can't always get culturally appropriate		Inadequate and unreliable public transport	
	State	LMR	State	LMR	State	LMR	State	LMR	State	LMR
Buloke	17.6%	11%	26.8%	25.3%	27.4%	26.6%	3.5%	4.1%	4.7%	4.4%
Gannawarra	6.4%	-	5.4%	3.9%	1.7%	-	5%	-	3.3%	3%
Swan Hill RC#	-	-	-	-	-	-	-	-	1.4%	-

Gannawarra LGA also reports 6.4% higher than the State that some foods are too expensive, 5.4% that quality isn't right and 1.7% higher that variety isn't right. Lack of access to culturally appropriate food is also noted as 5% above the state average.

Inadequate and unreliable transport is noted for Buloke, Gannawarra and Swan Hill as a barrier.

Summary

Swan Hill and Gannawarra LGA's reported incidence of food insecurity is 5.2% and Buloke LGA 4.5%, all of which are lower than the State and Loddon Mallee Region.

The data available provides why people don't always have the quality or variety of food they want and these are reported in significantly much higher instances in the Southern Mallee than for the State and Loddon Mallee Region. While we can view the reasons and they are contributors to food insecurity it should be remembered other factors such as unemployment, unforeseen circumstances and addiction for example may also be a contributing factor.

Buloke LGA strongly indicates the cost, quality and variety are most significant reasons for not having foods people want, the percentage reported for these reasons are 17.6%, 26.8% and 27.4% respectively higher than the State average. While Gannawarra and Swan Hill LGA don't report these reasons as highly as Buloke the reasons are still noted as above the State and Loddon Mallee averages.

Transport and culturally appropriate food is also a barrier identified for Southern Mallee LGA's.

At a local level the data does not provide details of prevalence of food insecurity as per men and women or age groups when it is known women are more likely to be food insecure than men and men in the age group of 25 – 34 are most vulnerable.

Further knowledge of food security in Southern Mallee and contributors would be beneficial to planning future work in regards to improving nutrition as we could link this broadly with access and consumption rates of fruit and vegetables and work in reducing barriers such as cost, variety, quality and transport.

What else is needed and / or what do we need to do to overcome

- More in depth knowledge of why Southern Mallee catchment reports so highly on the stated reasons when reporting food insecurity
- What are the opportunities to improve food security in Southern Mallee?
- Who are the most vulnerable to food insecurity in the Southern Mallee- men / women / age groups?
- Investigate VLGA Food Security Scanning Tool as possible tool to assist with understanding of food security in Southern Mallee
- Explore the relationship between fruit and vegetable consumption and barriers such as cost, variety, quality and transport

Food Access

In the Southern Mallee PCP region there are a range of options for access to nutritious food (particularly fruit and vegetables), these include supermarkets, general and convenience stores, fruit and vegetable markets, periodic community markets and road side stalls. Across the catchment the size and access of the food facility varies considerably dependant on the population of the community it is situated and style of outlet.

SMPCP Promoting Healthy Lifestyle Committee members agreed to utilise the Victorian Healthy Food Basket Survey as developed by Monash University to assess access and cost a healthy food basket in the towns noted as significant centres within the region.

In establishing the sites and stores to conduct the surveys mapping of stores where consistent access to food and particular fruit and vegetables was undertaken.

Mapping of Access to Nutritious Food

LGA	SUPERMARKET	GENERAL STORES	OTHER OPTIONS
Buloke	Donald <ul style="list-style-type: none"> • Weirs IGA* Wycheproof <ul style="list-style-type: none"> • Foodworks* Birchip <ul style="list-style-type: none"> • Doyles IGA * Charlton <ul style="list-style-type: none"> • Tormey IGA* Sea lake <ul style="list-style-type: none"> • Foodworks* 	Culgoa Berriwillock Nandaly Nullawil	Community Gardens <ul style="list-style-type: none"> • Birchip • Wycheproof • Charlton • Donald Markets <ul style="list-style-type: none"> • Wycheproof • Donald • Sea Lake
Gannawarra	Kerang <ul style="list-style-type: none"> • Kerang IGA * • Safeway* Cohuna <ul style="list-style-type: none"> • Una Supermarket* Leitchville <ul style="list-style-type: none"> • Walkers Supermarket* Barham <ul style="list-style-type: none"> • Foodworks Barham* 	Murrabit Koondrook Lalbert Quambatook* Lake Charm*	Green Grocer <ul style="list-style-type: none"> • Cohuna Community Gardens <ul style="list-style-type: none"> • Kerang Markets <ul style="list-style-type: none"> • Koondrook Farmers • Kerang • Murrabit
Swan Hill	Swan Hill <ul style="list-style-type: none"> • Coles * • Safeway* • Aldi* Nyah West <ul style="list-style-type: none"> • IGA* 	Lake Boga* Woorinen Nyah Piangil Ultima Manangatang	Green Grocer <ul style="list-style-type: none"> • Swan Hill Community Gardens <ul style="list-style-type: none"> • Swan Hill Specialist School Markets <ul style="list-style-type: none"> • Swan Hill • Nyah

* Indicates stores where Victorian Healthy Food Basket Surveys were to be conducted

In discussion with SMPCP Promoting Healthy Lifestyle Committee members when planning for the surveys the importance of being sensitive in the approach to the stores was highlighted as most important as in many instances the store is the only local access for food and household items. It was recognised these stores play a vital role in the community and loss of such a facility would have considerable impact regarding access for daily items such as milk, bread, newspapers and emergency supplies.

Summary

Swan Hill and Kerang are the only communities in Southern Mallee where there is more than one option for access to food via a supermarket; other communities are serviced either by one supermarket or a general store.

All major population centres of Buloke are serviced by a supermarket which is affiliated with a buying group where in Gannawarra two of the five supermarkets are independent stores.

Many of the communities where there was a core population a general store is available. SMPCP Promoting Healthy Lifestyles Committee members agreed that such general stores are most important to communities and the loss of such a service would have negative impact on that community.

Green grocers where traditionally fruit and vegetables are the predominant item for sale are only located in two communities, Swan Hill city and Cohuna, Gannawarra. Discussion with SMPCP Promoting Healthy Lifestyles Committee members identified that in the past there had been other green grocers in Kerang and Swan Hill but had subsequently closed.

Community Gardens are operating in Buloke LGA for four communities which have been established with the support of East Wimmera Health Service Cook In and Community Garden Project since 2010.

Periodic access to fruit and vegetables is available via local markets, these vary across the Southern Mallee in consistency and food available. An accredited Farmers Market has been established in Koondrook which operates once a month. Seasonal produce is available at roadside stalls once again varying in consistency and limited range of food available.

What else is needed and / or what do we need to do to overcome

- Identify communities where there is not a general store or supermarket – gaps in access
- What do people do / where do they go to access food where there is not a store?
- Identify any further gaps where communities do have access?
- Are Community Gardens and markets utilised by the wider community to assist with access?
- Build understanding of how markets can be better utilised as a form of access to fruit and vegetables
- Utilise GIS to plot Southern Mallee catchment communities, food access and kilometre radius (eg. 5Km. 10Km.)

Victorian Healthy Food Basket Surveys

Fourteen grocery stores out of the sixteen grocery outlets identified and informed the Victorian Healthy Food Basket Surveys were going to be undertaken in the time period of 10th October to 31st October 2011 were surveyed. Two stores in the Swan Hill LGA were surveyed in December rather than October due to lack of capacity from the member agency who had initially indicated they were able to complete the work and one of the Buloke grocery stores was not surveyed at all.

The introductory letter was viewed by most agencies as valuable as the store manager did know they were coming. On two occasions the store managers said they had not seen the letter and for one of these grocery stores the survey did not go ahead. It was expressed that in the future it would be valuable for the agency to take a copy of the letter with them – agencies had been provided with a copy of each letter.

Agencies reported store managers were fine with the surveys being conducted and mostly helpful and expressed interest in the process.

Agency members collected the price of each item as per the list and weight noted in the VHFB survey tool, the information was then entered into the calculation template which self populates all templates and calculates for the varying family types.

The calculation template creates a summary sheet which outlines the total cost of the basket, the total cost of each food group (based on the 'Australian Guide to Healthy eating' food groups).

The calculation tool does provide the cost of the basket as a percentage of the family's income which is outlined for each family type and is based on estimated current government assistance which would be received each fortnight and based on the composition of the families

- **Family:** 44 year old man (unemployed), 44 year old woman (unemployed), 18 year old (full time student) and 8 year old boy
- **Single mother family:** 44 year old woman (unemployed), 18 year old girl (full time student), 8 year old boy
- **Elderly woman:** 71 year old woman (pensioner)
- **Adult man:** >19 years unemployed

Results

The range of brands and size of grocery stores varied across the catchment with three of the stores identifying as general stores rather than a supermarket, larger centres of Swan Hill and Kerang accommodated Coles, Safeways/Woolworths and ALDI stores. Other stores aligned with the IGA group and Foodworks are most prominent across the Southern Mallee catchment in the smaller population communities.

The populations of the communities varied greatly across the Southern Mallee catchment with Swan Hill and Kerang being the largest centres and Quambatook the lowest population centre.

Data from one of the general stores in the Swan Hill LGA has not been included in the final analysis as they had less than the minimum of forty items which included minimal fresh fruit and vegetables for sale. Also one store in Gannawarra has been omitted due to less than the minimum items which were mostly from the meat range.

Under the guidelines for the survey, data from ALDI stores are omitted due to products being classified as generic. A survey was conducted on this store and over forty of the forty four items were available in a generic brand or limited range of brand options. Survey results indicated the cost of shopping at this grocery outlet was considerably lower than the other alternatives within the Swan Hill LGA and others across the Southern Mallee catchment. This survey data has not been included in the following analysis.

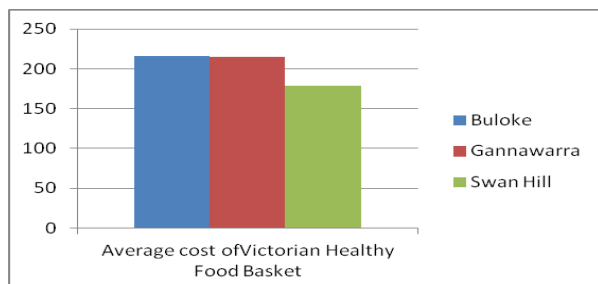
To ensure de-identification names of specific communities is not referred to and the information has been calculated and presented as an average for the LGA of Buloke, Gannawarra and Swan Hill is applicable to the Southern Mallee area only.

The request made to the State wide Primary Care Partnerships Integrated Health Promotion Network saw no less than eight responses indicating similar work utilising the Victorian Healthy Food Basket Survey tool has been undertaken, some of which is in previous years and for some is an ongoing activity. For a majority of the respondents the surveys are undertaken as part of work investigating indicators for food security.

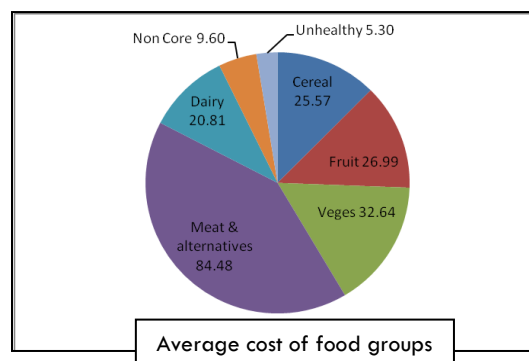
Information from the City of Greater Geelong and Borough of Queenscliffe Market Basket Survey have been used as a comparison, the sample size is double of Southern Mallee surveys and were undertaken in August 2011 which is close to when the majority of Southern Mallee surveys were completed. The data used for comparison is the overall average of all surveys undertaken.

Analysis of the Victorian Healthy Food Basket

The average cost of a base Victorian Healthy Food Basket in the Southern Mallee is \$203.89. The average cost of a total basket ranged from \$179 in Swan Hill which was the lowest to Gannawarra at \$215 and Buloke the highest at \$216, this theme continued throughout further analysis.

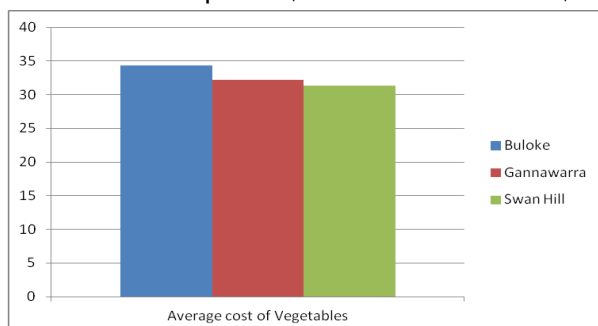


The average cost for each of the food groups of cereal, fruit, vegetables, meat and alternatives, dairy, non core foods and unhealthy food across the Southern Mallee shows meat and alternatives is the highest portion of the cost followed by vegetables, fruit then cereals.



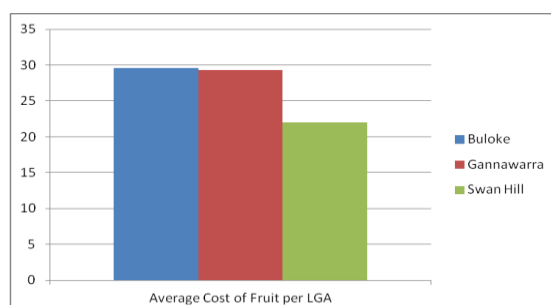
Vegetables

The variance in the average cost of vegetables across the catchment was only small with a \$3 difference. Swan Hill was the cheapest at \$31 with Gannawarra \$32 and Buloke \$34.



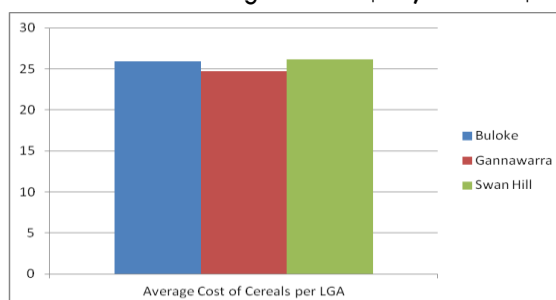
Fruit

The average cost of fruit in Swan Hill was \$22, this is over \$7 lower than the average cost of fruit in Buloke and Gannawarra LGA's which was \$29.



Cereals

The average cost of cereals was slightly lower in Gannawarra at an average cost of \$24, Buloke \$25 with Swan Hill recording the average cost of \$26.



Average cost per family groups

When placing the average cost of the healthy food basket into the family groups a better indication is provided as to what the true cost and impact is for people and families.

The table provides the average for Southern Mallee catchment for the four family types based on income estimates on June 2011 Centrelink information payments and a comparison with City of Greater Geelong and Borough of Queenscliffe. (Surveys undertaken in August 2011 with a total of 33 supermarkets surveyed)

At a catchment level the average cost and percentage of income for the family groups is shown in the following table;

	Southern Mallee		City of Greater Geelong & Borough of Queenscliffe	
Family Outline	Cost	% of income	Cost	% of income
Family of 4	467.28	35.5%	486.54	37%
Single mother family	308.29	30.7%	331.65	32%
Elderly woman	120.42	17.95%	116.04	17%
Single man	162.42	34.2%	152.84	32%

The comparison indicates relatively small differences in the average cost of the basket for all four family types with the most significant being \$19.26 for a family of four. The comparison indicates for a family situation in the Southern Mallee region the cost of the basket is slightly less while for single people the cost is slightly higher.

Significant differences are identified when the family groups are viewed per LGA base; this shows there is a considerably higher cost and percentage of the income to family groups living in Buloke and Gannawarra LGA's than there is to people residing in Swan Hill.

Average cost per LGA									
Key: B: Buloke G: Gannawarra SH: Swan Hill									
Family Outline	Basket			Fruit			Vegetables		
	B	G	S	B	G	SH	B	G	SH
Family of 4	\$516	\$541	\$447	\$124	\$123	\$94	\$109	\$101.5	\$99
Single mother family	\$358	\$372.50	\$307	\$85.50	\$84	\$64.5	\$72	\$69	\$67.50
Elderly woman	\$124	\$128.50	\$106.50	\$29	\$29	\$22	\$27	\$25.50	\$24
Single man	\$161	\$167	\$140	\$37.50	\$38	\$28.50	\$37.50	\$36	\$33.50

Percentage of Income Family Type and Per LGA			
Family Outline	Buloke	Gannawarra	Swan Hill
Family of 4	38%	37.9%	33.9%
Single mother family	33.9%	33.5%	30.0%
Elderly woman	18.22%	17.85%	15.93%
Single Man	33.73%	32.74%	29.53%

In all areas Buloke and Gannawarra present higher for all family types and requires a higher percentage of income to cover the cost of the food basket. The cost of vegetables is relatively closer in price range for all three LGA's but there is a considerable higher cost for fruit in Gannawarra and Buloke.

The variance in cost and impact on different family groups residing in Swan Hill, Buloke and Gannawarra is highlighted when you compare the difference between the lowest cost of a basket, fruit and vegetables which is consistently available in Swan Hill to the highest costs experienced in Buloke and Gannawarra as demonstrated in the following tables.

Variance in cost from least to most expensive			
Family Outline	Basket	Fruit	Vegetables
Family of 4	\$151	\$80	\$30
Single mother family	\$167	\$56	\$20
Elderly woman	\$56	\$20	\$8
Single man	\$50	\$27	\$11

Summary

The Victorian Healthy Food Basket Survey tool is an effective way of capturing if access to healthy items is available in a community and at what cost. While information in this report is viewed for a local government area data is captured for individual communities. Use of specific data could be used in project planning but it would be important to understand presentation of this could be sensitive due to easy identification of the grocery store as in many communities there is only the one store which is very important to that community.

With the exception of Swan Hill and Kerang access to food in all other communities via a store that had a significant range of groceries was at one business only. In a couple of instances for the smaller General Stores there were not enough items to be included in the survey analysis. Of the items that were missing generally it was higher cost products such as meat or a vegetable not in season.

One community in Swan Hill did not have fresh fruit or vegetables available at the general store however it was identified that within the area several roadside seasonal produce stands operate. As this produce is seasonal it is assumed access to all fruit and vegetable items as noted in the survey would still not be available.

In Gannawarra several surveyed communities were limited in the portion size of the product; they were not always available in a larger size portion but in ready packed smaller portions which appears to increase the cost, (comparison made with larger portion). Smaller pre-packaged items were more likely to be found as the option in general stores.

Meat was the largest portion of cost in a base healthy food basket in Southern Mallee followed by vegetables and then fruits. Across the Southern Mallee the average cost of vegetables was relatively similar but the average cost of fruit had a greater variance with Buloke and Gannawarra being more expensive than Swan Hill. Cereals were the only items that were most expensive in Swan Hill.

The comparison of the base food basket for Southern Mallee with the Greater City of Geelong and Borough of Queenscliffe indicate the costs and percentage of income to be relatively similar for all family types.

Actually viewing the Healthy Food Basket in the family groups provides the context for what it would cost to feed the four family types in Buloke, Gannawarra and Swan Hill. This highlights a greater disparity between the food costs of Southern Mallee LGA's and the considerably higher costs for residents of Buloke and Gannawarra than for Swan Hill.

It would be useful to know 'what is the recommended percentage of family income for food costs when establishing a household budget' to better understand the impact for each of the family types.

The analysis undertaken to show the variance in cost for a Healthy Food Basket, vegetables and fruit from least expensive to most expensive further brings to the fore the disparity in cost being experienced in some communities in Southern Mallee. This variance would greatly alter the percentage of income to be significantly higher for family groups in some communities and possibly reduce their ability to be able to purchase a Healthy Food Basket.

In the Southern Mallee a family of four may need to pay \$151 more for a Healthy Food Basket in one community than the same family group in another community, fruit can vary as much as \$80 and vegetables as much as \$30.

In reflecting on the data for the fruit and vegetable consumption and food security for Southern Mallee LGA's the variance in cost across the catchment may be an indicator to the levels of consumption and fit with the reasons for not having food.

It is interesting to note however that Gannawarra LGA reports lower rates of fruit and vegetables intake meeting the dietary guidelines, higher rate of food insecurity and higher cost in the Southern Mallee for a Healthy Food Basket. Buloke LGA reports a smaller percentage of population as food insecure than of Gannawarra and Swan Hill even though we can see the cost of food is higher in this LGA but comparable with Gannawarra. Where the reasons are stated for food insecurity in Buloke and Gannawarra cost, variety and quality are significantly higher than the State and Loddon Mallee average.

What else is needed and / or what do we need to do to overcome

- Gain further knowledge on the percentages recommended for household budgets eg. Food, utilities, education
- Why is a Healthy Food Basket so much more expensive in some communities?
- What is the reason fruit is particularly more expensive in Gannawarra and Buloke?
- Utilise Victorian Healthy Food Basket Surveys to continue to monitor food access and cost to family groups
- How can we use the survey data in a sensitive way where the cost of a Healthy Food Basket is a significant percentage of family income in particular communities?

Transport

Introduction

When looking at access to nutritious food and incidental physical activity means of transport are noted as enablers and barriers. The following information on transport is included in this report to assist with understanding what transport is available to Southern Mallee communities and people and what is predominantly used and relied upon.

Method of Travel to Work

Outside of Swan Hill, most towns in the Southern Mallee PCP region* have limited or no public transport available and population density, locations of places of employment and proximity to large employment centres also have a substantial impact upon modes of transport. As such, it should be noted that the figures below are not just a comprehensive indication of how people prefer to travel, but also an indication of the options available. It should also be noted that the figures do not measure how people who are not in the workforce (unemployed, children, adolescents, older people) get around.

In 2011, compared to regional Victoria, workers from all Southern Mallee PCP LGAs* were less likely to have: used a train, or used a bus to get to work on the day of the census; while they were much more likely to have walked to work or to have worked from home.

Overall the predominant mode of transport for Southern Mallee PCP region is by car which is in line with State and Regional Victoria. A higher percentage of people walked to work or worked from home than that of the State and Regional Victoria.

Within the Southern Mallee PCP region*, Buloke had the highest proportion of workers who walked to work, worked from home and it also had the equal highest proportion of workers who rode a bicycle to get to work. Gannawarra had 59.3% of people who were car drivers which is slightly less than the State and Regional Victoria.

Swan Hill RC* had the highest proportion of workers who travelled to work as a car driver or as a car passenger and lowest who walked.

Selected Journey to Work Details (2011)

	Buloke		Gannawarra		Swan Hill RC*		Southern Mallee PCP region*		Regional Victoria	Victoria
	No.	%	No.	%	No.	%	No.	%	%	%
Train	0	0.0%	6	0.1%	2	0.0%	8	0.1%	1.3%	7.9%
Bus	14	0.5%	19	0.4%	27	0.3%	60	0.4%	0.8%	2.0%
Car - driver	1,447	53.1%	2,597	59.3%	5,268	63.6%	9,312	60.5%	64.9%	62.5%
Car - passenger	87	3.2%	176	4.0%	546	6.6%	809	5.3%	5.5%	4.9%
Bicycle#	30	1.1%	47	1.1%	55	0.7%	132	0.9%	0.9%	1.2%
Walked#	318	11.7%	332	7.6%	559	6.8%	1,209	7.9%	4.5%	3.3%
Worked from home	406	14.9%	509	11.6%	620	7.5%	1,535	10.0%	6.3%	4.3%
Other/not stated/ did not go to work	424	15.6%	695	15.9%	1,204	14.5%	2,323	15.1%	15.8%	14.0%
Total Labour Force	2,726	100%	4,381	100%	8,281	100%	15,388	100%	100%	100%

SMPCP Community Health and Wellbeing Profile 2013, Figure 233, P 194,* Excluding Robinvale SLA #As the only means of travel

Motor Vehicle Usage

In 2006, compared to the Victorian average, Southern Mallee PCP LGAs had a lower proportion of dwellings with no motor vehicles. Buloke and Gannawarra LGAs had a higher proportion of dwellings that had 3 or more motor vehicles, compared to Swan Hill Rural City, excl. Robinvale UCL, and the Victorian average.

Vehicles per Dwelling (2006)	Buloke		Gannawarra		Swan Hill RC*		Southern Mallee PCP Region		Victoria
None	166	6%	250	6%	521	8%	937	7%	9%
1 motor vehicle	868	32%	1,333	31%	2,087	31%	4,288	31%	34%
2 motor vehicles	939	35%	1,640	38%	2,583	38%	5,162	37%	37%
3 motor vehicles	376	14%	575	13%	844	12%	1,795	13%	11%
4 or more motor vehicles	255	9%	327	8%	458	7%	1,040	7%	5%
Not specified	109	4%	250	5%	349	5%	708	5%	4%

SMPCP Community Health and Wellbeing Profile 2013, Figure 234, P 195, * Excluding Robinvale UCL

Transport Limitations

In 2011, adult survey respondents in the VicHealth Indicator Survey 2011 were asked if their day to day travel had been limited or restricted for any reason in the last 12 months.

The survey results indicate that Buloke, Gannawarra and Swan Hill RC# adult residents were more likely to have experienced transport limitations in the previous year, compared to the regional Victoria and Victoria average. Within the region, Gannawarra and Buloke had a significantly high proportion of population reporting they had experienced transport limitations much.

In 2007 transport limitations were similar for Southern Mallee LGA's and in some instances lower than the State and Regional Victoria; a comparison with 2007 and 2011 results shows transport limitations have dramatically increased particularly in Buloke and Gannawarra and at a much higher rate than the State and Regional Victoria.

The 2011 VicHealth Indicator Survey reports 44.1% of females in Gannawarra and 32.8% in Swan Hill have experienced transport limitations where in Buloke the gender affected the most have been men at 42.6%. Females in Buloke did report limitations at 37.2% which is higher than Swan Hill.

There has been a change from 2007 when females in Buloke reported the highest percentage experiencing transport limitations and Swan Hill men – opposite to 2011 results.

People Who Experienced Transport Limitations in the Last 12 Months - % of adult population - VicHealth Indicators Survey	Buloke	Gannawarra	Swan Hill RC#	Regional Victoria	Victoria
2011	39.9%	42.4%	28.7%	25.0%	23.7%
Males	42.6	40.8	24.9	23.8	22.3
Females	37.2	44.1	32.8	26.2	25

2007	23.6	20.9	16.8	18.1	20.3
Males	22.1	17.8	18.3	18.1	19.4
Females	25.1	23.9	15.2	20.6	21.2

Community Indicators Victoria 2007 & 2011 #Including Robinvale

Summary

People who have experienced transport limitations has dramatically increased across the Southern Mallee from 2007 to 2011 and this is significant in Buloke and Gannawarra which report well above the State and Regional Victoria.

Limitations in transport is reported higher as a barrier to accessing food for all Southern Mallee LGA's compared to the State and Loddon Mallee Region, this is consistent with the much high percentage of Southern Mallee populations experiencing transport limitations.

Females in Southern Mallee are more likely to experience limitations with transport; this has particularly increased in Swan Hill and Gannawarra but females in Buloke have a high percentage too.

Males in Swan Hill are in line with State and Regional Victoria for experiencing transport limitations but males in Buloke and Gannawarra are 20.3% and 18.5% respectively higher than the State.

The main method of transport across the Southern Mallee is by car and there are significant limitations in the majority of communities of alternative transport, the exception is Swan Hill city where a public bus service is run by a private operator. The majority of households have either one or two cars with less reporting no vehicle than the state average.

The incidence of people walking or riding to work and working from home was highest in Buloke which may contribute to the fact that the percentage of people who have sufficient exercise in Buloke is 61.2% which is slightly higher than the State and Loddon Mallee Region and highest in Southern Mallee.

What else is needed and / or what do we need to do to overcome

- Why has there been such a significant increase in people experiencing transport limitations from 2007 – 2011?
- Are there alternative solutions for transport particularly to assist with accessing food?
- What is needed to increase the percentage of populations in either walking or using a bicycle as a means of transport?
- Why is the percentage of walking and bicycle use lowest in Swan Hill?

SMPCP Promoting Healthy Lifestyles Nutritious Foods, Physical Activity Programs, Policies, Plans, Strategies & Environments Mapping

Introduction

Mapping of access to nutritious foods, physical activity programs, policies, plans, strategies and environments commenced in 2010 with agencies responding to the request for information by completing the template that was provided. Information provided an outline of the program or initiative, contact details and enablers or barriers to conducting the program.

Information was also gathered at bi monthly SMPCP Promoting Healthy Lifestyle Committee meetings where agency representatives provided an update of what was occurring for their organisation. This opportunity also allowed for progress and any change to programs or initiatives to be identified.

In this mapping process sporting clubs such as football, netball, soccer, cricket, gymnastics etc. have not been included, it is acknowledged that there is a vast range of sporting clubs and groups within communities who do provide physical activity options for all age groups and open to people of all cultural backgrounds.

Overview

A broad range of activities, projects and programs has been identified and listed as per target groups including children, youth, men, women, mature aged, indigenous, multicultural and people with disabilities. Community focused activity such as markets, gardens and groups have also been captured to some degree providing only a snap shot of opportunities within Southern Mallee communities. On further examination of the list several of the items were not specific to physical activity or nutrition but more so to social inclusion or part of a program where the focus is mental health or chronic disease management.

From commencing the mapping in 2010 it is evident many of the programs provided by health, local government and community agencies are predominantly for physical activity and are mostly short term programs, (6 to 8 weeks) or run on a school term basis. A nutrition component is often included but not the main focus of the program. Activities have included programs that are either offered once per year or as the need arises, there is a limited range of programs that operate on a regular time frame consistently throughout the year. Promoting Healthy Lifestyles Committee members have reported most programs have a low number of referrals and participants.

Nutrition and Physical Activity

Children

Government supported programs such as Kids Go For Your Life have been introduced into the appropriate children's setting with support provided by the health services across Gannawarra, Buloke and Swan Hill. With the role out of the Victorian Prevention and Health Promotion Achievement Programs for Schools, (replacing Kids Go for Your Life) Swan Hill District Health, East Wimmera Health Service and Northern District Community Health will view the initiative and consider their role and capacity to support the local schools.

Smiles for Miles has been delivered in Swan Hill LGA, working with early childhood settings such as preschools and long day care centres. The schools work through an accreditation process where they need to show evidence of policy development and implementation that promotes good dental health but also includes eating nutritious foods.

Swan Hill Rural City Council coordinate after school care and holiday programs which includes a variety of activities some of which are focused on physical activity initiatives and cooking. The program has provided food for children attending since 2010 to have better control on what is being consumed, the cost was incorporated into the fees.

Youth

For youth a range of organisations such as Health and Community Health, Neighbourhood Houses and Local Government often link with one or another to provide programs, some of which are for physical activity or cooking either after school or during school holidays.

Swan Hill District Health partners with the school VET Sport and Recreation course to run physical activities after school hours for youth during the school terms. Mallee Sports Assembly coordinates the Active Youth Program in Buloke via the high schools where the youth decide on all the activities they are going to undertake, this might include health and social issues and also physical activity.

Swan Hill Leisure Centre host's 'Youth Hour' one afternoon during the school term where youth participate in a variety of physical activities and are provide with a nutritious snack, there is a small fee for attendees.

Aged

Local government tend to work particularly with older or vulnerable members of the community. For older members of the community social inclusion is more likely to be addressed via a range of means such as Community Support Services and links with Senior Citizens groups; physical activity is more likely to be addressed rather than nutrition in these settings.

Through the Home and Community Care service support to access food and monitor consumption for individuals or household can be provided if a need is identified. Throughout Buloke, Gannawarra and Swan Hill meals on wheels is available in some format ranging from daily weekday delivery, to periodic delivery of frozen meals.

Neighbourhood Houses across the catchment offer a range of activity options that are suitable to an older age range, there are also several walking groups some of whom are independent of an organisation that meet and walk together weekly.

Health Services across the catchment coordinate a range of physical activity programs varying for abilities and purpose.

Aboriginal

Swan Hill Aboriginal Health and Family Services coordinate a monthly calendar where physical activity and cooking is included on a regular basis. Other initiatives occurring are walking groups, community garden and a range of social events which might include physical activity and a meal being provided.

Kerang Aboriginal Community Centre has been coordinating a Community Cooking group that requires all who are going to eat to contribute to the cooking; Gannawarra Shire Council provides some support for this program.

Mallee Sports Assembly works with Swan Hill Aboriginal Health and Family Service in providing a range of programs for all age groups and both men and women. Eg. Swimming, tennis, gym

People with Disabilities

Mallee Sports Assembly appears to be the most consistent agency in supporting physical activity options that are for people with a range of abilities. Programs may be over a series of weeks such as lawn bowls, croquet and snooker / billiards. Other initiatives they have supported and assisted in coordinating are periodical such as Sailability.

Culturally and Linguistically Diverse

The only programs identified for Culturally and Linguistically Diverse (CALD) appear to have been run in Swan Hill where there is a higher CALD population than that of Buloke and Gannawarra. Both boys and girls in the youth age group have had swimming programs and women have been provided with information on nutrition and physical activity also a swimming program has been coordinated where privacy is accommodated.

Programs for CALD men have not been noted.

Community

There are a range of programs that are open to all the community (men and women) offered and/or supported by a varying range of agencies.

Community Kitchens

There are a range of community kitchens in a varied range of formats and stages throughout Buloke, Gannawarra and Swan Hill. Kerang District Health hosts a community kitchen for disengaged men and Kerang

Aboriginal Community Centre coordinates a weekly community kitchen for community members, these have been operating since 2010.

Over the past couple of years there has been an increase in Community Kitchens in the SMPCP catchment due to East Wimmera Health Service Cook In project and SMPCP Cooking Up a Storm Project. Buloke LGA has the most community kitchens with five being consistently operated. At this time (April 2013) both Cook In and Cooking Up a Storm Community Kitchens are looking at options for their continuation without the support of funding and/or organisation. The stage of pre establishment appears to be vital in ensuring community buy in and drive to continue on with such initiatives.

Community Gardens

The number of community gardens has increased since 2010 from one in Gannawarra supported by Kerang District Health and one in Swan Hill at the Swan Hill Specialist School. Most community gardens are within the Buloke Shire due to the funded project supported by East Wimmera Health Service which has seen community gardens being established in Charlton, Birchip, Donald and Wycheproof. As with the Cook In project sustainability of the gardens are being explored and worked toward but once again it requires the community ownership for the maintenance of the gardens.

Community Facilities

In regards to facilities available to community venues for physical activity are more abundant than facilities that are suitable for community kitchens or other cooking groups. Limited information was gathered by the mapping process regarding venues; this would have been helpful particularly for progressing the Cooking Up a Storm Community Kitchen project and supported the start of the Cook In project. Via these projects it has highlighted the range of kitchen facilities available in some communities and how they vary across the catchment, some schools have very good kitchens and partnerships have been established to use them, some community halls are suitable options but may incur a fee for use. Other options that have been explored were local CFA buildings, health service campus buildings, golf course club rooms and recreation halls. While venues maybe available they might not always be in a suitable location or at a standard suitable for use, insurance is also a cost that might be required.

Community gardens sites vary depending on the driver and purpose. In some instances the gardens are within school settings, land within health service facilities or on occasion council owned property. Depending on the setting and style of garden agreement for use is negotiated with the users and appropriate organisation.

Men

Periodically programs particular to men have been offered in the Swan Hill region with promotion by flyer and media outlets but lack of numbers at times has prevented the program from going ahead. In recent time 'Men in the Kitchen' has been run by Swan Hill District Health where men come together and cook under the direction and support of a dietitian.

Using local sporting clubs, such as football, has been a method to engage with men and undertake screening aimed at blood pressure, obesity and diabetes. This setting appears to be a good place for organisations to identify people who should be addressing lifestyle factors that would include an increase of physical activity and intake of nutritious food.

Women

Northern District Community Health Service and Swan Hill District Health each run a time limited program for women where overall health is covered including physical activity, nutrition and managing daily stresses.

Plans, policies, strategies and advocacy

The plans, policies and strategies range greatly from council to council, the mandated council plan and municipal public health and wellbeing plans were the most readily accessible by the way of web searches. Many communities also have community plans that were in a broad range of currency and progression.

Searching and identifying plans, policies and strategies was mostly undertaken by searching council websites. All councils have a vast range of plans, policies and strategies that identifies mostly health and wellbeing and physical activity as areas of priority or action, the mention of food access, food security or nutrition is minimal. Overall health and wellbeing is a term used broadly throughout many plans, further and targeted investigation would be required to identify particular strategies that are specific to physical activity and nutrition.

All *Council Plans 2009 – 2013* mention health and wellbeing with a varying range of initiatives. Gannawarra Shire has an overarching plan *Vision 2025* which includes a key direction of improving the health of the community by planning healthy communities; this is further supported within the *Municipal Public Health and Wellbeing Plan 2009 – 2013* where it articulates application of Heart Foundation Healthy By Design principles.

There are examples of strategies and plans in the Southern Mallee catchment that would have an impact on physical activity, these are Swan Hill Rural City Council (SHRCC) *Bike Strategy*, they are also developing the *Active Transport Strategy* as an initiative of the Healthy Communities Initiative. Gannawarra Shire Council has a *Recreation and Walking Trails Strategy* and Buloke Shire *Recreation Strategy*.

The *Community Plans* of some communities have had a focus on improving areas for physical activity such as playgrounds, skate parks and community gardens in a range of styles from traditional fruit and vegetable gardens to bush tucker.

Further collaboration with council partners and a clearer understanding of the purpose for noting the plans may have supported this component of mapping.

Other information

Organisation Focus

Health and Community Health agencies are more likely to have programs that include physical activity and or nutrition for a target group such as men or women or for a particular purpose such as diabetes or weight loss. Programs are also often aligned with accredited programs such as *Heart Foundation Walking*, *HEAL* or *LIFE!*. There are several programs that have been developed by Southern Mallee organisations such as Swan Hill District Health *Women Able to Lose Kilos (WALK)* and Northern District Community Health Service *Me'n'U* program, some of these style of programs may need a referral into them or criteria to be met to participate. Health services do align their programs to their Health Promotion Plans and in most instances conduct some form of evaluation for analysis and reporting to particular bodies.

Mallee Sports Assembly is aligned with VicHealth working in the framework of *Participation in Community Sport and Active Recreation* and since July 2012 moving to the *VicHealth Supporting Sport Environments Program*. This program supports grassroots sports clubs to become healthier, welcoming and more inclusive – leading to greater participation in sport and improved health and wellbeing within communities. There are six key areas that will be addressed Responsible use of alcohol, UV protection, Inclusion, safety and support, Reducing tobacco use, Healthy eating, Injury prevention and management.

The Federal Government funded *Healthy Communities Initiative (HCI)* is operating in the Swan Hill LGA. This initiated a partnership to be formed with Swan Hill Rural City Council, Swan Hill District Health and Robinvale District Health Services. The HCI partners deliver a selection of nationally accredited programs in addition to modifying existing programs to meet the needs of specific population groups not in the paid workforce.

It was not a requirement to partner with health services, but a deliberate decision locally to ensure the best possible organisations were delivering programs. It also enabled the Health services to select programs that were identified as gaps to prevent duplication.

Organisations operating under the Neighbourhood House banner offer a variety of physical activity initiatives for all community including exercise groups, dancing and sports such as carpet bowls.

Southern Mallee Transport Connections Partnership (SMTCP) have established a range of consistent but periodical bus services particularly for Buloke communities with the aim to assist with access to services such as medical and specialist appointments, the aim of these services is not for regular access to attend work or grocery shop outside of the community.

During 2012 – 2013 SMTCP have undertaken the No Cars, No Worries Project; the aim of this project was to encourage people to use alternative methods of transport such as walking, cycling or gopher use rather than a car. The project has seen the development of maps for communities across Southern Mallee catchment showing

the radius for walking within a time period of 5, 10 and 20 minutes and included some general information on active transport. The maps are available for download at www.smtcp.com.au

Physical Activity Directories and Data Bases

With the mapping activity a range of directories developed by agencies was identified. There are a range of directories for a variety of target groups available across the catchment on physical activity options. There is a great challenge for anyone involved in maintaining the information in a directory and is an ongoing task to keep them current and sustainable. Agencies do promote their programs at the local level too via a range of means including media, flyers, networks and presentations and at times to a target group.

An extensive data base of sporting clubs was developed by Mallee Sports Assembly in 2009 in Gannawarra Shire to capture information relevant to clubs of all dimensions unfortunately little came of this activity and some information collected was lost with the change of staff. Mallee Sports Assembly has promoted the Sportslink website which has been available to sporting groups and community groups to use in promotion of their activity and as a resource for sourcing training and funding. This web resource is now being closed

Advocacy

Swan Hill District Health is collecting and contributing data to the development of SHRCC Active Transport Strategy by utilising programs they run and using them to gather information; an example of this is mapping of where people walk. Swan Hill District Health have also been advocating to SHRCC for more than three years to improve walking trails along the river. Recently a partnership between Swan Hill District Health and Swan Hill Rural City Council via the Healthy Communities initiative has provided a stronger link in advocating for improvement in walking trails and the development of the Active Transport Strategy.

Mallee Sports Assembly successfully advocated for the increase in opening hours for Buloke public swimming pools during summer months, working with the local council and community to find solutions to what were seen as challenges. Mallee Sports Assembly works with a large array of organisations across the southern Mallee catchment to provide and deliver programs particularly for physical activity.

Evaluation

It appears a majority of programs are evaluated to some degree for the organisations information. Programs that are part of a funded initiative are evaluated within an evaluation framework. Outcomes of evaluated projects have not been readily shared via SMPCP Promoting Healthy Lifestyle committee at this point or being greatly using the data collected toward advocacy and/or development of strategic practice and action.

Enablers and barriers to nutritious food and physical activity programs and initiatives

Within the mapping activity contributors were asked to provide information on what enablers and barriers they came across in their work. There were a range of barriers, which also available were enablers, reported for programs and initiatives to be conducted which were consistent across the southern Mallee, these are;

Barriers for programs/initiatives;

- ~ The need for funding appeared to be the most prevalent barrier
- ~ Program leaders/volunteers
- ~ Transport
- ~ The need for childcare
- ~ Limited referral to programs particularly from other professional sectors is minimal

Enablers for programs/initiatives;

- ~ Funding streams
- ~ Supportive staff
- ~ Suitable venues
- ~ Key person driving the program
- ~ Enough demand
- ~ Participant fee that contributes to the cost of running the program

Summary

There is a vast array of programs and initiatives run across the Southern Mallee catchment; the majority are for physical activity often with a nutrition component included. From the information that has been gathered and shared via SMPCP Promoting Healthy Lifestyle committee programs and initiatives are run either as time specific programs or per term. Consistent per term programs are more likely to occur for open community activity coordinated by a Neighbourhood House. On face value the majority of programs that are being run are by one organisation rather than in an integrated health promotion model (a range of agencies and or sectors and areas of activity).

There are a few programs available across the catchment that are coordinated with a view to a longer term approach; these are the Victorian Health Promotion Achievement Program for Schools, Healthy Community Initiatives and the VicHealth Healthy Sporting Environments program. Mallee Sports Assembly will be progressing work under the VicHealth initiative which includes a range of areas to be addressed but underpinned by change of thinking, policy and procedure for the clubs who become involved. The Victorian Health Promotion Achievement Program for Schools also adopts a range of strategies that will take time to work through and embed including policy and activities. The support for the schools will be dependent on health organisations having the capacity to assist. (NB. Resourcing for this initiative is not provided to SMPCP member organisations). These longer term approaches marry better into the integrated health promotion model where the program implementation includes a mix of health promotion interventions and also adopt a systems change direction as articulated in the current Victorian Public Health and Wellbeing Plan.

Opportunity for physical activity and nutrition programs look to be a little less available in Buloke and Gannawarra in particular for children and youth and there has not been a need identified for the target group of Culturally and Linguistically Diverse due to population numbers. Men and women specific programs are also limited across the catchment but it should be noted that at times there has been little interest shown from men in men only programs. The questions this raises is "Are these gaps in target groups or is there not the need or capacity to work in the area of physical activity and nutrition for these targets?"

For programs to get off the ground and or be sustainable organisations have indicated they require a range of resources and in particular funding. Funding could possibly remove some of the barriers such as childcare, suitable venues and pay for a leader. It would be valuable to further explore ways to address the barriers if funding is often the challenge. In doing this actually considering the social model and determinants of health may provide a good framework to identify and understand the barriers people and communities face and in consideration that much of the Southern Mallee catchment is viewed as disadvantaged.

The marketing of programs may also need further exploration if what is currently occurring to promote and receive referrals is not seeing positive results. Consideration of literacy, diversity of community and language, organisation knowledge, relationships and referral processes may be some of the areas to expand.

Community kitchens and gardens are at this point in time at a crucial point where they could be monitored to see if the approach taken to establish will result in ongoing community activities and assets.

With the programs that are undertaken across the catchment it is possible the evaluation component could be more broadly utilised if avenues were explored to link with other pieces of strategic work (inter organisational) and in instances of advocacy.

The programs that have been shared over the mapping period have in some instances had a short life span and no longer operate or they have been modified into another program. With this the question could be asked are these programs having an effect on the population in regards to improving nutrition and physical activity or is there another method or approach that we should be taking?

The investigation of policies, plans and strategies did reveal there is some consideration for health and wellbeing but this is in broad terms, a strong correlation with physical activity and nutrition is minimal. Key policies and strategies to continue to monitor influence and development are Heart Foundation Healthy By Design directive in the current Gannawarra Municipal Public Health and Wellbeing Plan and Swan Hill Rural City Council Active Transport Strategy. Community Plans also appear to be another very good opportunity to drive initiatives at a community level where physical activity and nutrition could be a strong factor following more of an integrated model rather than just being supported by councils. The area of policies, plans and

strategies was raised as a bit of a 'mystery' at SMPCP Healthy Rural Planning Presentation and Workshop. Further work in really understanding the influence and opportunity policy, strategies and plans can play in regards to nutrition and physical activity is needed if there is to be any strength in using this avenue as an enabler.

An outcome of the mapping exercise has been the development of the *SMPCP IHP Prevention System for Physical Activity and Nutrition (following 2 pages)*. This is a live document and has been develop as an evidence base to assist with future planning eg. Integrated Health Promotion, Municipal Public Health and Wellbeing, SMPCP Strategic and Operational Plan

- Provide a guide to what physical activity and nutrition/food programs are occurring in each LGA - 2009 – 2012
- Identify target groups and which service providers are working with the target group
- Identify target group gaps
- Identify same or similar work of agencies across each LGA and catchment
- Assist with planning for future integrated health promotion work - LGA based and catchment wide
- Identify programs that link to initiatives of the National Partnership Agreement on Preventative Health (NPAPH), Victorian Public Health and Wellbeing Plan 2011 - 2015, Victorian Prevention System and other initiatives eg. The Prevention Community Model, Centre of Excellence in Intervention and Prevention Science (CEIPS)

What else is needed and / or what do we need to do to overcome

- Do we have evidence that the short term programs do improve the communities' physical activity and nutrition levels?
- How do we overcome the barriers to program participation and what do the social determinants of health tell us?
- What are our target groups / gaps – do we or are we doing anything in this space?
- Follow the outcomes of catchment wide community kitchens and gardens
- Is our prevention system meeting the need or making a difference? – reflect on the data
- How do we better work together to implement 'Integrated Health Promotion' activities that has a broad range of interventions?
- How do we make changes so nutrition and physical activity initiatives are undertaken in an integrated manner?
- We need to know more about policies, plans and strategies
- Follow the progress of Swan Hill Rural City Council Active Transport strategy
- How can we use evaluation to learn more regarding physical activity and nutrition across the catchment?



Promoting Healthy Lifestyles

Southern Mallee Integrated Health Promotion Prevention System

Physical Activity and Nutrition

Live Document
Version 3: April 2013

The Southern Mallee Integrated Health Promotion Prevention System for physical activity and nutrition has been developed from information that has been collected via SMPCP Promoting Healthy Lifestyle Committee mapping activity.

The purpose of developing this document is to develop an evidence base to assist with future planning eg. Integrated Health Promotion, Municipal Public Health and Wellbeing, SMPCP Strategic and Operational Plan

- Provide a guide to what physical activity and nutrition/food programs are occurring in each LGA - 2009 - 2012
- Identify target groups and which service providers are working with the target group
- Identify target group gaps
- Identify same or similar work of agencies across each LGA and catchment
- Assist with planning for future integrated health promotion work - LGA based and catchment wide
- Identify programs that link to initiatives of the National Partnership Agreement on Preventative Health (NPAPH), Victorian Public Health and Wellbeing Plan 2011 - 2015, Victorian Prevention System and other initiatives eg. The Prevention Community Model, Centre of Excellence in Intervention and Prevention Science (CEIPS)

Public Health and Wellbeing Act 2008 → [Victorian Health Priorities Framework 2012 - 2022](#) → [Victorian Public Health and Wellbeing Plan 2011 - 2015](#)

The goal of the Victorian Public Health and Wellbeing Plan 2011 - 2015, derived from the Act and from the framework, is: to improve the health and wellbeing of all Victorians by engaging communities in prevention, and by strengthening systems for health protection, health promotion and preventive healthcare across all sectors and levels of government. The Act identifies the principles of the primacy of prevention, collaboration and evidence-based decision making as key to future directions in public health and wellbeing. In particular, the principle of collaboration asserts that public health and wellbeing can be enhanced through collaboration between all levels of government and industry, business, communities and individuals.

Victorian Public Health and Wellbeing Plan Intervention: 7. Keep People Well

Intervention 7.1 Healthy Eating

Opportunities for progress in 2011 - 2015 include

— support local councils and urban planners to enhance supply of and access to nutritious food in municipalities through promoting the uptake of existing tools (for example, the Victorian Local Governance Association's Municipal food security scanning tool and the Heart Foundation's Food-sensitive planning and urban design)

— implement policies and programs to support settings (early years services, schools, hospitals and workplaces) to promote healthy eating across the life course

— promote and support breastfeeding practice through a range of supportive social and educational initiatives

— develop strategies that facilitate an environment and culture where healthy choices are the easy choices for all Victorians, potentially including nutrition disclosure schemes for food outlets, healthy food outlet award/accreditation schemes, extension of current healthy food provision and procurement policy and guidelines

— support to improve healthy food supply and access by development and implementation of specific strategies to address identified nutrition issues for subpopulation groups and regional locations, especially vulnerable populations

— encourage a culture of healthy eating, through multi-strategy community-based programs and social marketing such as regional healthy cooking classes, healthy cooking grants, urban gardens, food rescue and distribution programs, and launch of an interactive health application on the Better Health Channel to support these initiatives

— implement the **Prevention Community Model** in 14 LGAs and implement health promotion initiatives for early childhood services and schools (see chapter 5.3) that support healthy eating, as well as implementing healthy workplace programs (see chapter 5.2) that include initiatives to encourage healthy eating

— develop healthy eating and nutrition approaches for Victoria and support the implementation of the Victorian Aboriginal nutrition and physical activity Strategy 2009-2014 (VACCHO 2009) in order to achieve a secure, accessible and sustainable supply of healthy food choices for all Victorians to consume and enjoy.

Ref. Victorian Public Health and Wellbeing Plan P. 69 - 72

Interventions: 7.2 Physical Activity

Opportunities for progress in 2011 - 2015 include

— Get more people, more active, more often, through implementation of:

- the Active Places program to help communities with low levels of physical activity to participate more frequently in sport and recreation
- the Premier's Active Families Challenge to encourage Victorian families to undertake regular physical activity
- the Ride2School program, supporting schools and assisting young people to incorporate physical activity into every day by choosing active modes of transport to and from school

— coordinate efforts across state and local government with policy and planning responsibilities for physical activity initiatives such as walking infrastructure, parks and open space for example:

- the Department of Planning and Community Development – Sport and Recreation Victoria – community programs that encourage more people to be physically active and that support local government and local sport and recreation clubs to improve access to sporting and recreational facilities
- coordinating the resources available to local government to support planning for walkability, open space, active transport and local transport solutions to make it easier for people to take part in community life

— implement the **Prevention Community Model** in 14 LGAs and implement health promotion initiatives for early childhood services and schools (see chapter 5.3) that support active play and physical activity, as well as implementing healthy workplace programs (see chapter 5.2) that include initiatives to reduce sedentary behaviour

— investigate a comprehensive statewide approach to promote physical activity and support the implementation of the Victorian Aboriginal nutrition and physical activity strategy 2009-2014 (VACCHO 2009).

Ref. Victorian Public Health and Wellbeing Plan P. 69 - 72

SMPCP Promoting Healthy Lifestyles (Integrated Health Promotion Plan) Goal: To increase participation in physical activity and improve access to nutritious food

Objectives:

1. To establish 3 Community Kitchens (Cooking up a Storm Project)
2. To promote nutritious food (fruit and vegetable)
3. To promote active communities and healthy urban planning approaches
4. To build capacity of agencies and professionals to support and promote healthy lifestyle initiatives

Key activities

- Promoting Healthy Lifestyles Committee meetings - bi monthly
- Cooking Up a Storm—Community Kitchens
- Nutrition & Physical Activity Mapping
 - GIS Mapping
 - VHFBS
 - Enablers and barriers to physical activity
- Healthy Rural Planning—Healthy By Design; A Rural Experience Project, Health By Design Workshops

Ref. SMPCP Strategic and Operational Plan 2009 - 2012 & SMPCP Bridging Year Plan 2012 - 2013

Acronym List

CDH	Cohuna District Hospital	MTCHS	Mallee Track Health and Community Services	SHDH	Swan Hill District Health
CG	Community Group	NDCHS	Northern District Community Health Service	SHRCC	Swan Hill Rural City Council
EWHS	East Wimmera Health Service	NHH	Neighbourhood House (C: Cohuna / K: Karang / SH: Swan Hill / SL: Sea Lake)	SHSS	Swan Hill Specialist School
GSC	Gannawarra Shire Council	PWD	People with Disabilities	SMPCP	Southern Mallee Primary Care Partnership
KACC	Karang Aboriginal Community Centre	RDH	Robinvale District Health	SMTCP	Southern Mallee Transport Connections Partnership
KDH	Karang District Health	SHAS	Swan Hill Aboriginal Services	TAFE	Technical and Further Education
MSA	Mallee Sports Assembly	SHHADN	Swan Hill and Districts Health Aged and Disability Network		

Ottawa Charter

Build Healthy Public Policy Create Supportive Environments Strengthen Community Actions Develop Personal Skills Reorient Health Services

BULOKE	GANNAWARRA	SWAN HILL
CHILDREN		
<ul style="list-style-type: none"> Victorian Prevention and Health Promotion Achievement Program: Schools / Kids Go For Your Life ? 	<ul style="list-style-type: none"> Victorian Prevention and Health Promotion Achievement Program: Schools / Kids Go For Your Life ? 	<ul style="list-style-type: none"> Healthy Beginnings (SHDH) Smiles for Miles (SHDH) Victorian Prevention and Health Promotion Achievement Program: Early childcare services, Schools (SHDH) Walk on Wednesday (SHDH) Kids' Cooking Challenge - for families & referral required (SHDH) After School Care and School Holiday Program (SHRCC) 0 - 5 Year Guide & Physical Activity Options for Children directory (SHDH)
YOUTH		
<ul style="list-style-type: none"> Active Youth Program (MSA) Cooking Up a Storm Community Kitchen - Sea Lake (MTHCS) 	<ul style="list-style-type: none"> Active Youth Program (MSA) 	<ul style="list-style-type: none"> Dynamo Culture School term @ Jubilee Centre - Facilitated by VET Sport & Rec Dynamo Culture School holiday activities (SHDH) Youth Hour - Swan Hill Leisure Centre
AGED		
<ul style="list-style-type: none"> Mallee Sports Assembly - a range of programs Physical Activity Support Worker (EWHs) Planned Activity Group (EWHs) Walk 'n Talk - Wycheproof (EWHs) Nordic Walking - Charlton, Donald (BH) Fitness for Older Adults Program (EWHs) Donald Dolphins - summer only (EWHs) No Falls (EWHs) Chair Based Exercise in Donald - Megan Brennan 	<ul style="list-style-type: none"> Exercises for Men & Women Young at Heart (CNHH) Strength training (CDH / KDH) Mallee Sports Assembly - a range of programs Senior Citizens Clubs: Activity Programs - Cohuna, Kerang, Koondrook, Lake Charm, Leitchville, Murrabit, Quambatook (GSC) 	<ul style="list-style-type: none"> Community Care Services - exercise programs (SHRCC) Gentle Exercise, Tai Chi, Walking (SHNHH) Community Rehabilitation Centre - range of programs (SHDH) Southern Mallee Older Adults Recreation Network, Walking Groups (CG) Mallee Sports Assembly - a range of programs Senior Citizens Clubs: Activity Programs - Swan Hill Older Adults Pilates - Swan Hill Leisure Centre Fitness for older adults Exercise Directory (SHHADN)
INDIGENOUS		
	<ul style="list-style-type: none"> Kethawil Pembungguk - Indigenous Playgroup (NDCHS) Community Kitchen (KACC) Healthy Cooking Program (KACC & involving KDH) Mallee Sports Assembly - a range of programs 	<ul style="list-style-type: none"> Calendar of events physical activity and nutrition SHAS Community Garden & Foodbank (SHAS / Payika) Healthy Living and Walking (SHAS) Sport for young people (SHAS) Indigenous Tennis Program (MSA) Mallee Sports Assembly - a range of programs SHAS & Payika Netball team - plays in Wednesday comp
PEOPLE WITH DISABILITIES		
<ul style="list-style-type: none"> Mallee Sports Assembly - a range of programs; eg. Lawn bowls, carpet bowls, International day for PWD Physical Activity Support Worker (EWHs) 	<ul style="list-style-type: none"> Mallee Sports Assembly - a range of programs; eg. Lawn bowls, carpet bowls, International day for PWD Community Care Services - Respite services, Swimming / ten pin bowling (GSC) 	<ul style="list-style-type: none"> After School Program at Swan Hill Specialist School (Vista) Community Farm Garden - Swan Hill Specialist School Mallee Sports Assembly - a range of programs; eg. Lawn bowls, carpet bowls, International day for PWD
CULTURALLY AND LINGUISTICALLY DIVERSE		
		<ul style="list-style-type: none"> Youth Swimming program - Boys / Girls (SHDH) Multi-cultural girls swimming program (MSA) Physical activity and nutrition information provided by SHDH to Multicultural Women at SH TAFE
COMMUNITIES		
<p>MEN</p> <ul style="list-style-type: none"> Cook In Community Kitchens - Donald, Wycheproof (EWHs) Men's Shed - Donald, Wycheproof (EWHs) <p>WOMEN</p> <p>GENERAL</p> <ul style="list-style-type: none"> Mallee Sports Assembly a range of programs Cook In Community Kitchens - Birchip, Charlton (EWHs) Community Gardens - (EWHs) Gills Exercise Classes - Wycheproof Community Resource Centre Birchip Business and Learning Centre - range of programs <p>DIRECTORIES</p> <ul style="list-style-type: none"> Sportslink <p>COMMUNITY SUPPORT</p> <ul style="list-style-type: none"> Meals on Wheels Food relief / food bank (range of charitable agencies) <p>OTHER INITIATIVES</p> <ul style="list-style-type: none"> 'No Car - No Worries' Project (SMTCP) Research project - Weight loss barriers for people in rural settings (EWHs) Sporting Club Health Checks (EWHs) VicHealth Healthy Sporting Environments (MSA) 	<p>MEN</p> <ul style="list-style-type: none"> Community Kitchen for disengaged men (KDH) <p>WOMEN</p> <ul style="list-style-type: none"> Me 'n' U Program (NDCHS) <p>GENERAL</p> <ul style="list-style-type: none"> Mallee Sports Assembly a range of programs Cohuna Neighbourhood House - range of programs Kerang & District Community Centre - a range of programs Cooking Up a Storm Community Kitchen - Lake Charm (NDCHS) Community Garden (KDH) Markets - Kerang, Murrabit, Koondrook <p>DIRECTORIES</p> <ul style="list-style-type: none"> Sportslink Physical Activity Options Directory - NDCHS. Includes range of options for all ages and abilities provided by local agencies and individuals throughout Gannawarra communities <p>COMMUNITY SUPPORT</p> <ul style="list-style-type: none"> Meals on Wheels Food relief / food bank (range of charitable agencies) Community Meals - provided periodically (GSC) <p>OTHER INITIATIVES</p> <ul style="list-style-type: none"> 'No Car - No Worries' Project (SMTCP) VicHealth Healthy Sporting Environments (MSA) 	<p>MEN</p> <ul style="list-style-type: none"> Better Blokes (SHDH) Men in the Kitchen (SHDH) Mallee Men - Swan Hill Leisure Centre <p>WOMEN</p> <ul style="list-style-type: none"> Well Women's Program (SHDH) Women Able to Lose Kilos (WALK) Mallee Women - Swan Hill Leisure Centre <p>GENERAL</p> <ul style="list-style-type: none"> Mallee Sports Assembly a range of programs Swan Hill Neighbourhood House - range of programs Cooking Up a Storm Community Kitchens- Nyah West (SHDH) Heart Foundation Walking, Heartmoves, HEAL, Nordic walking, Tia Chi (SHDH) Independent walking groups - Nyah West, Woorinen & via SHNHH Community Gardens - George Lay Park, Swan Hill / Ultima / Manangatang Mallee Garden (SHRCC) Markets - Nyah, Swan Hill <p>DIRECTORIES</p> <ul style="list-style-type: none"> Sportslink Physical Activity Directory for Adults (SHDH) Youth Directory Data (SHDH) <p>COMMUNITY SUPPORT</p> <ul style="list-style-type: none"> Meals on Wheels Food relief / food bank (range of charitable agencies) <p>OTHER INITIATIVES</p> <ul style="list-style-type: none"> 'No Car - No Worries' Project (SMTCP) Healthy Communities Initiative (SHRCC/SHDH/RDH) VicHealth Healthy Sporting Environments (MSA)

Geographical Information System Maps

The aim of Geographic Information Systems (GIS) mapping was to provide visual evidence of current options in Buloke, Gannawarra and Swan Hill by developing maps that showed physical activity spaces and access to nutritious food (fruit and vegetables).

SMPCP Promoting Healthy Lifestyle Committee had made an assumption that this would be a fairly straight forward exercise for all councils to undertake but it was revealed that this was not the case due to either GIS not available, information is not already known and plotted and capacity of staff.

Gannawarra Shire Council have been able to create the maps via GIS with little difficulty due to council having already plotted food outlets, green spaces and other places utilised for sport and recreation so applying these layers was straight forward.

The results of the maps produced by Gannawarra (as follows) clearly shows the location of access to nutritious food and the opportunity and locations of access to green space and/or options for physical activity and proximity to residential areas.

Swan Hill Rural City Council have also developed maps, it was in the development of the Swan Hill maps that the challenges were highlighted.

Summary

Earlier knowledge of the barriers to developing GIS maps in Swan Hill and Buloke may have been able to be addressed by supportive and preparatory work by SMPCP Promoting Healthy Lifestyles Committee members.

It would be valuable to continue to pursue the development of maps for all LGA's as they do provide a visual picture of assets in regards to physical activity and nutrition and where gaps or barriers maybe for residents and population areas.

The benefit of having this information would be the links that can be made to other data and social determinants such as transport barriers, food insecurity and levels of physical activity, fruit and vegetable consumption, access to food and proximity to housing. Fully developed maps could be further used in planning processes and knowing the environmental and built assets and barriers within a community.

What else is needed and / or what do we need to do to overcome

- Support and work with councils to develop a consistent GIS mapping or other such maps showing the assets and barriers toward nutrition and physical activity and with consideration for social determinants of health
- Support local councils to further develop maps to include radius and other key items
- SMPCP Promoting Healthy Lifestyles Committee discuss/analyse each community map in relation to nutrition and physical activity

Geographical Information System Maps Gannawarra Shire

- ~ Cohuna
- ~ Kerang
- ~ Leitchville
- ~ Koondrook/Barham
- ~ Quambatook

LEGEND



Greengrocer



Supermarket



Netball courts



Tennis



Public swimming pool



Lawn bowls



Playgrounds



Waterways



Ovals

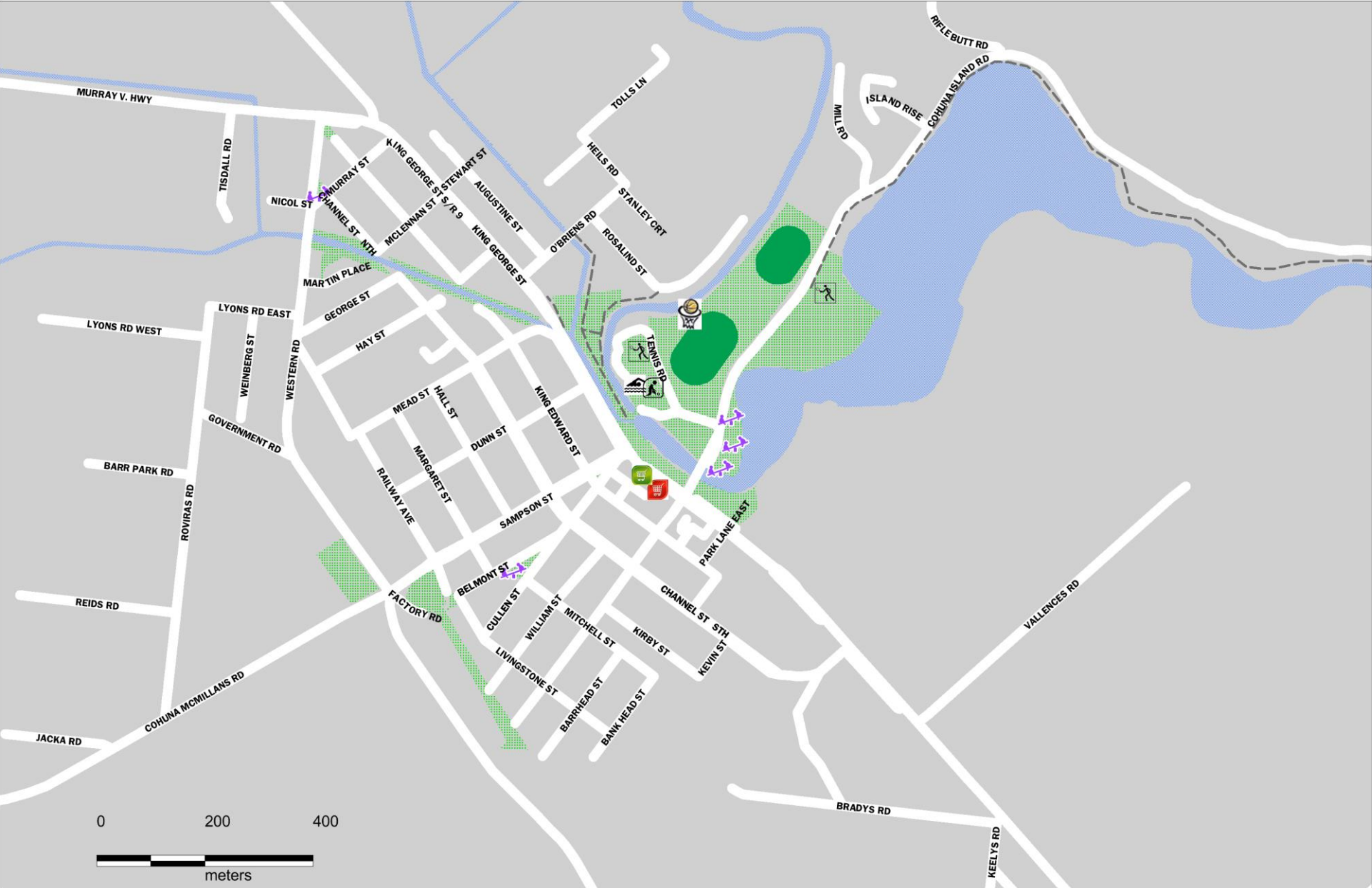


Greenspace/reserves

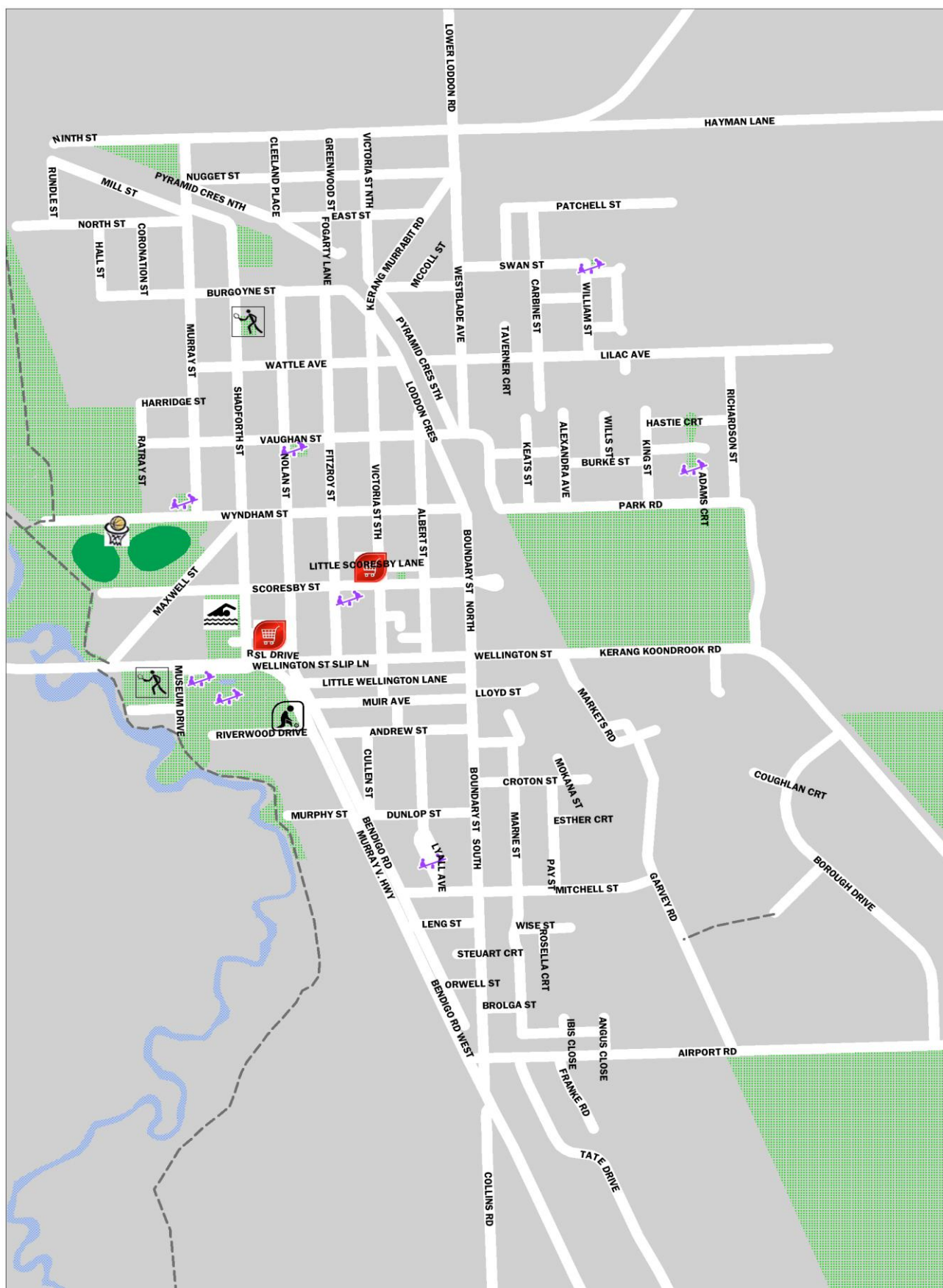


Walking and bike trail

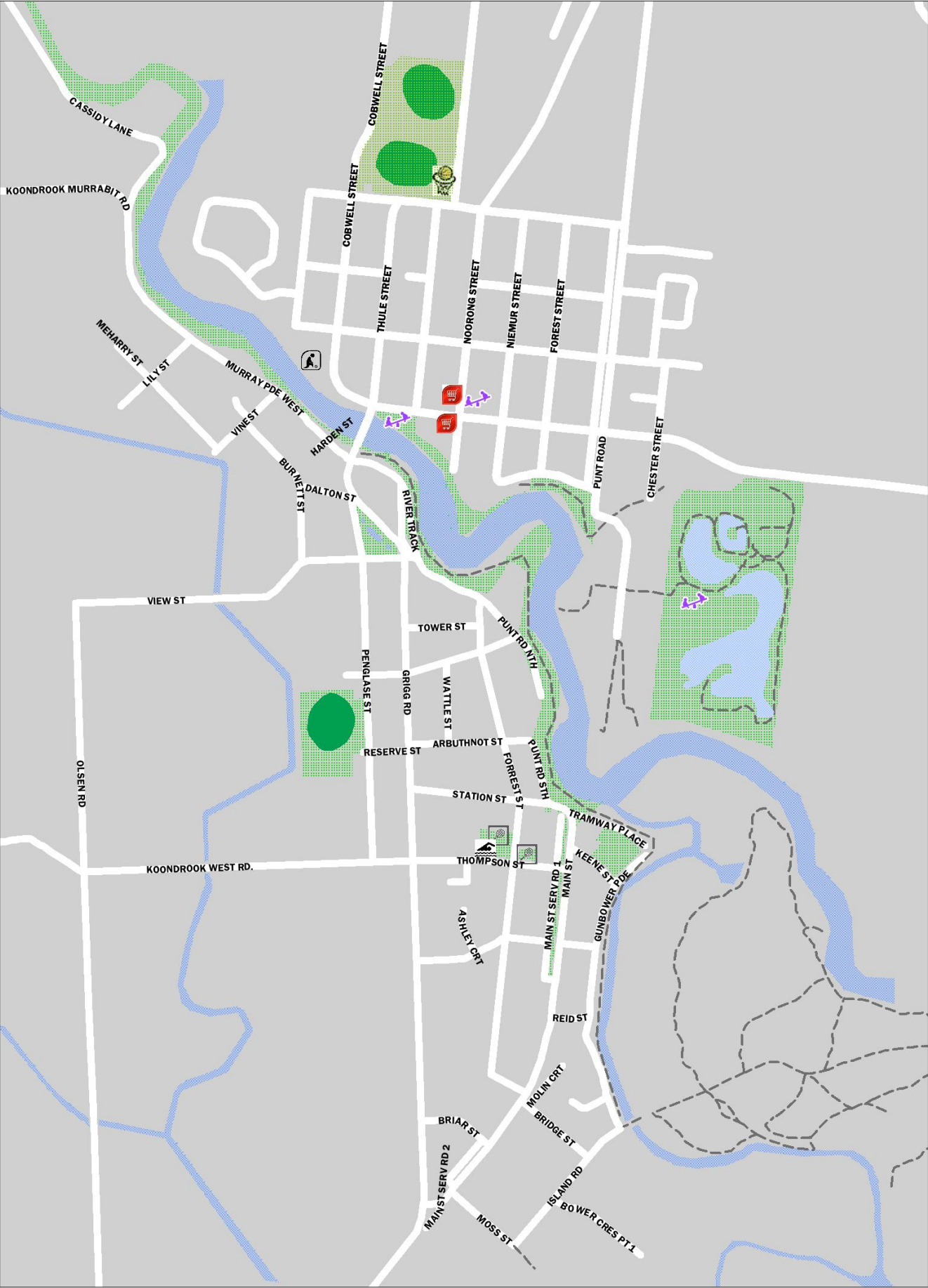
ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD - COHUNA



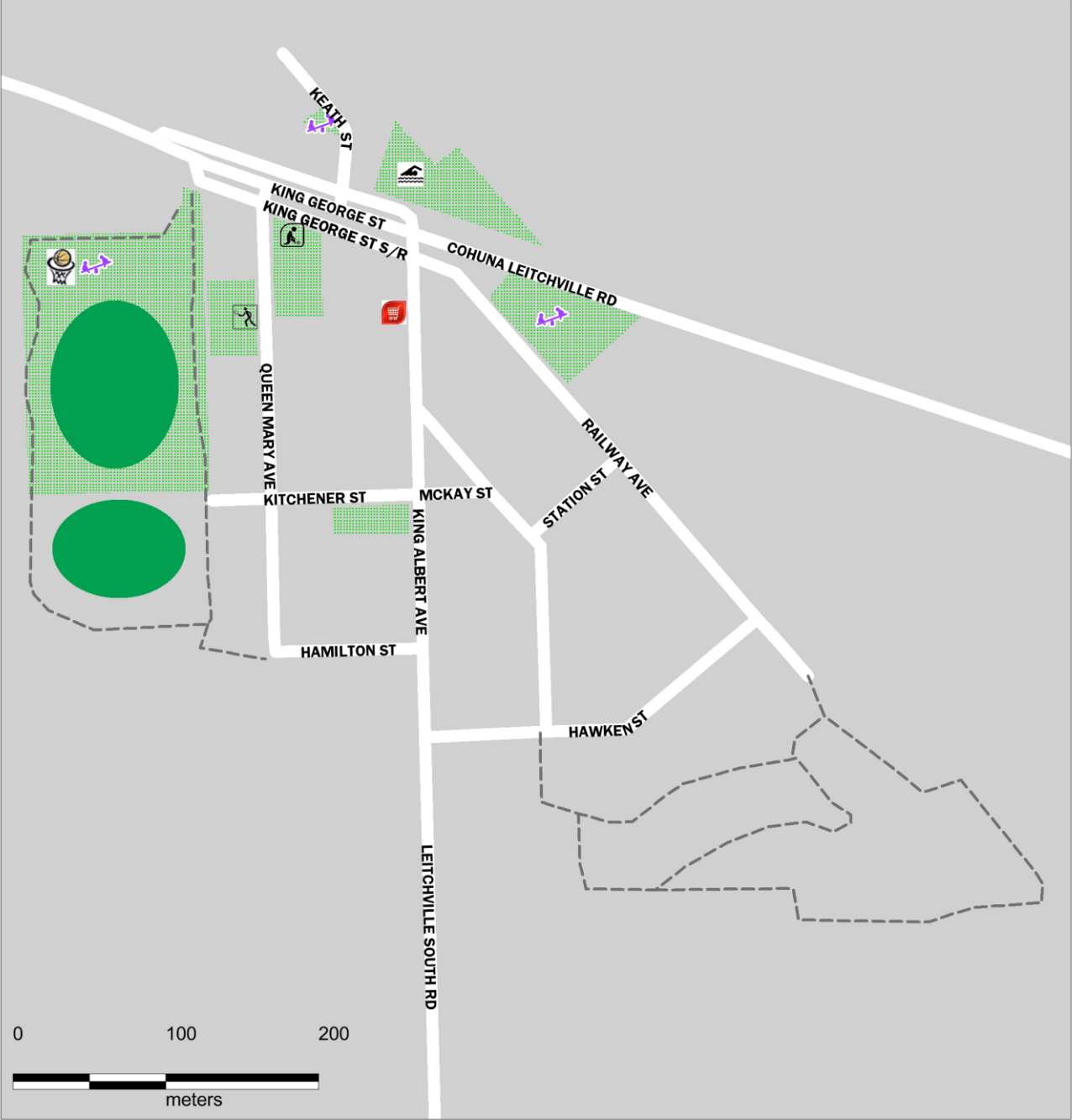
ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD - KERANG



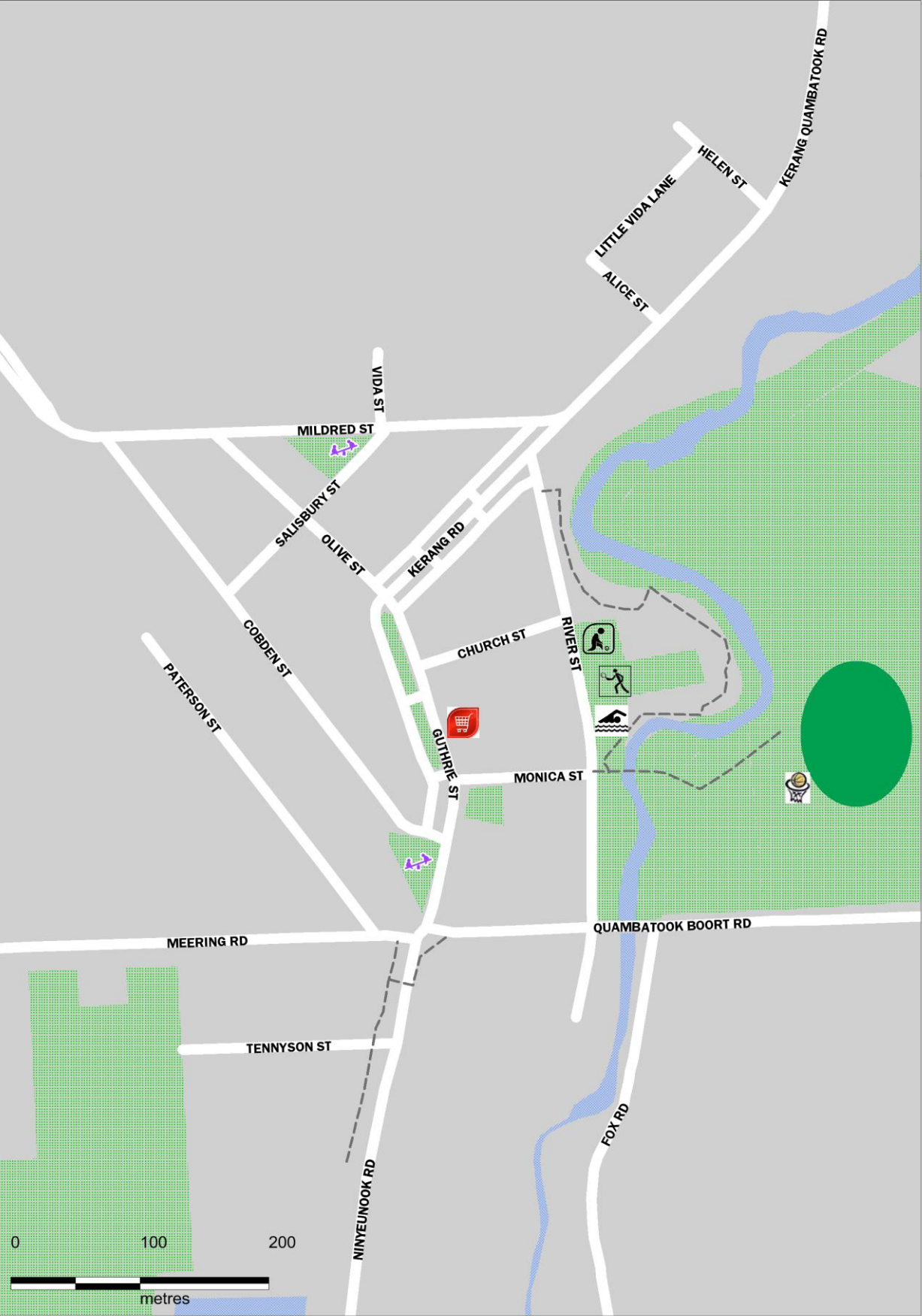
ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD - KOONDROOK/BARHAM



ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD - LEITCHVILLE



ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD - QUAMBATOOK



Geographical Information System Maps Swan Hill Rural City Council

- ~ Lake Boga
- ~ Nyah
- ~ Nyah West
- ~ Swan Hill

LEGEND



Greengrocer



Supermarket



Netball courts



Tennis



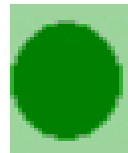
Public swimming pool



Lawn bowls



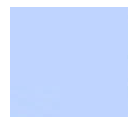
Playground



Oval



Green space



Waterway

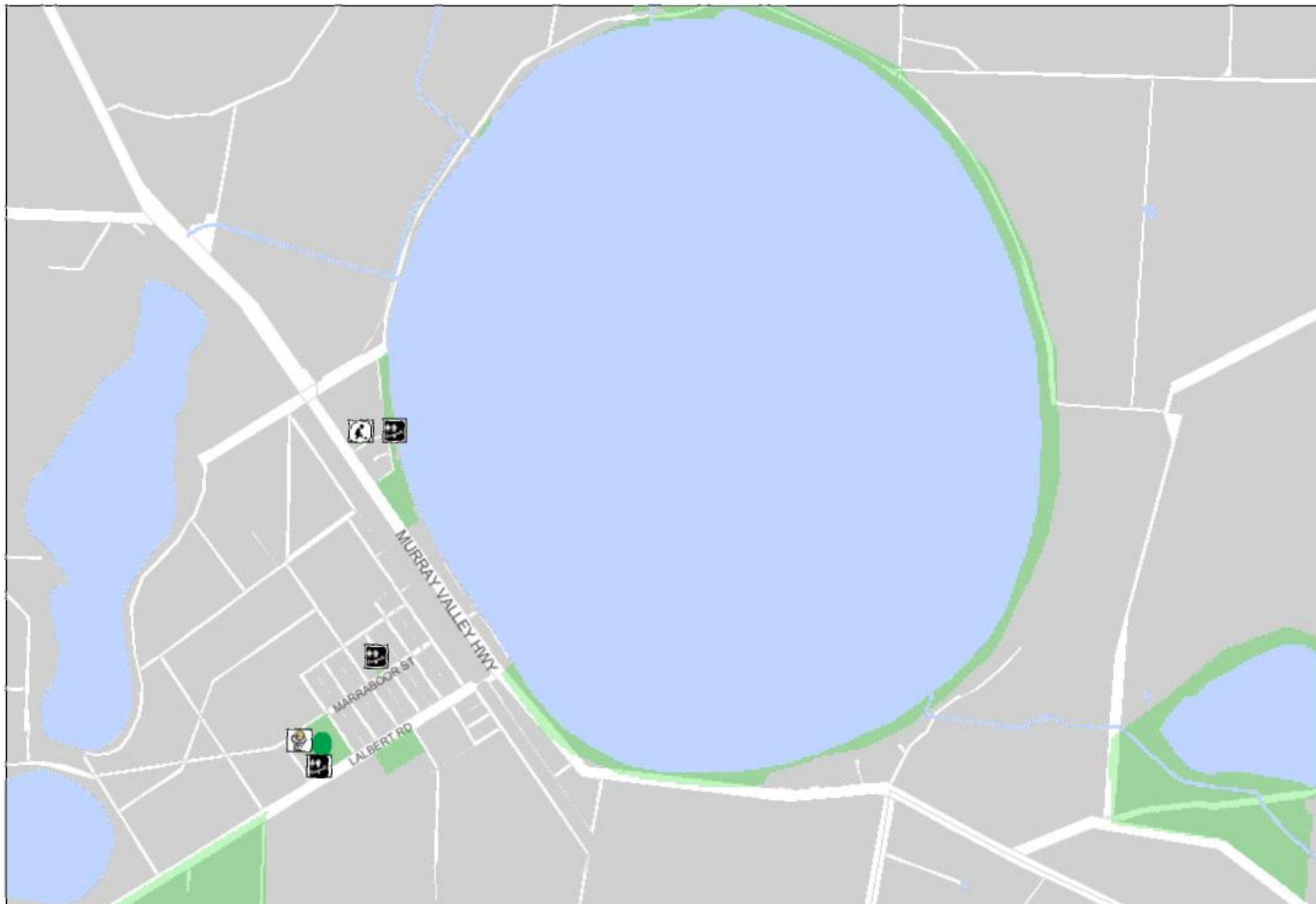


Walking trail

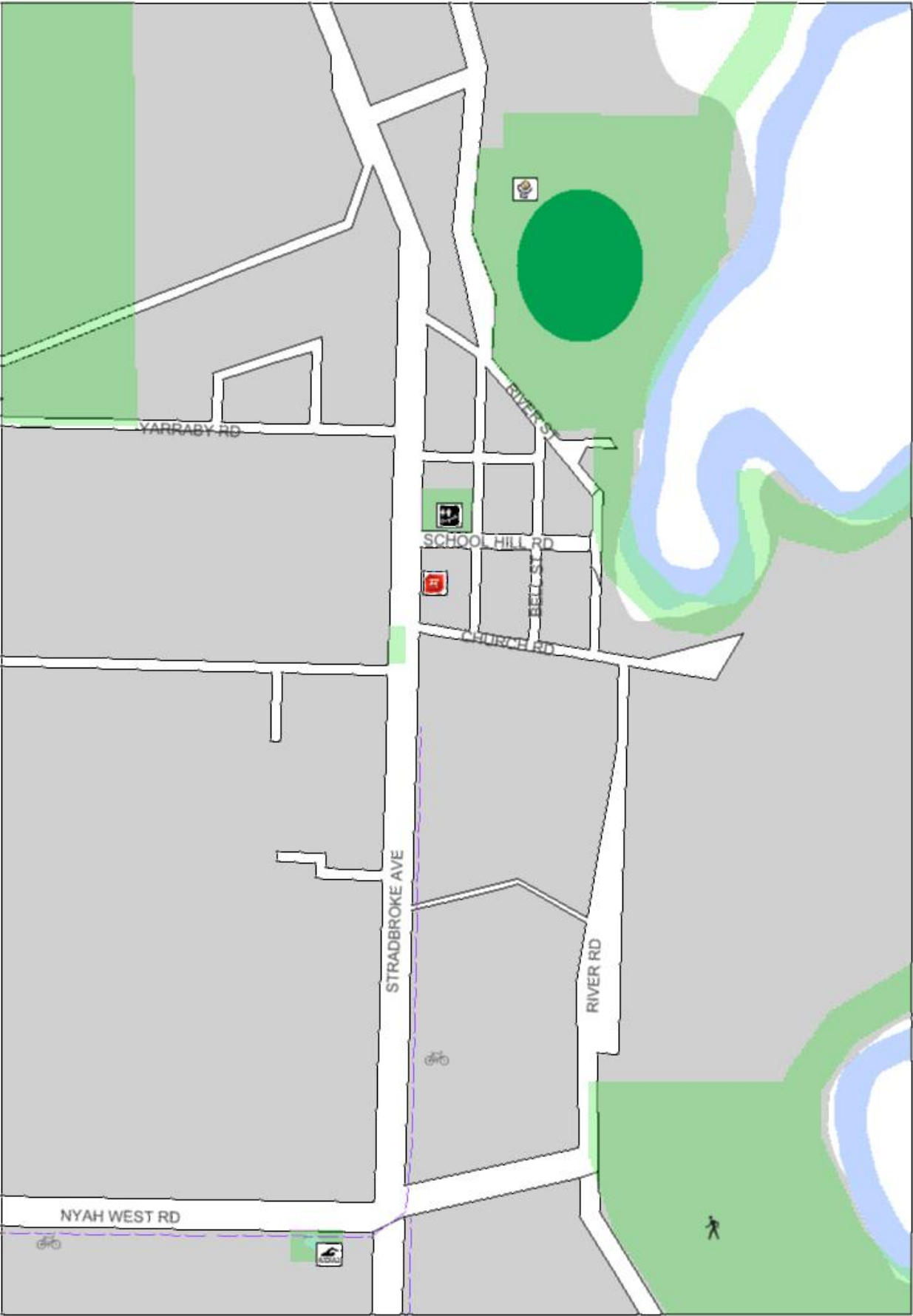


Bike trail

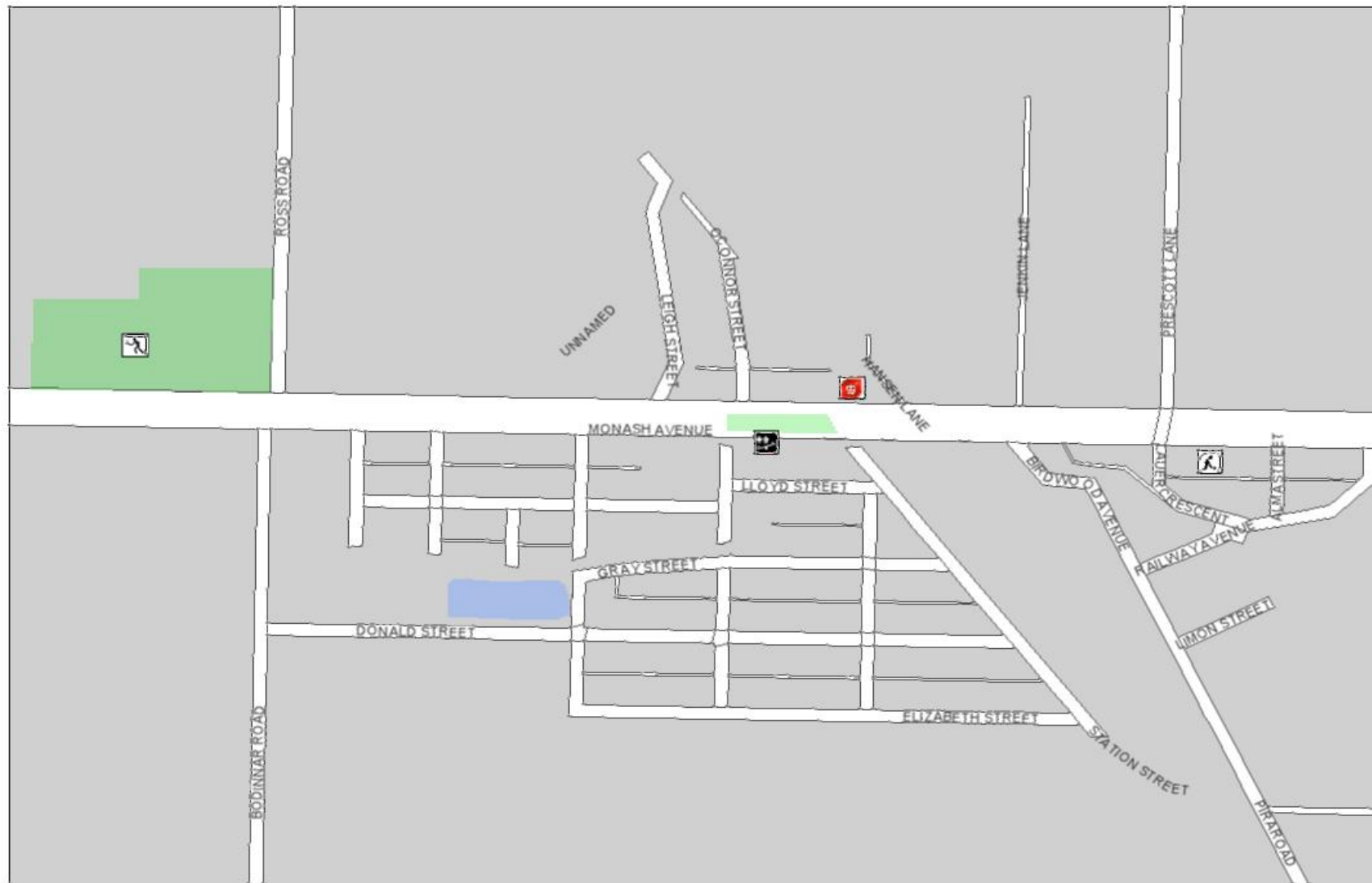
ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD – LAKE BOGA



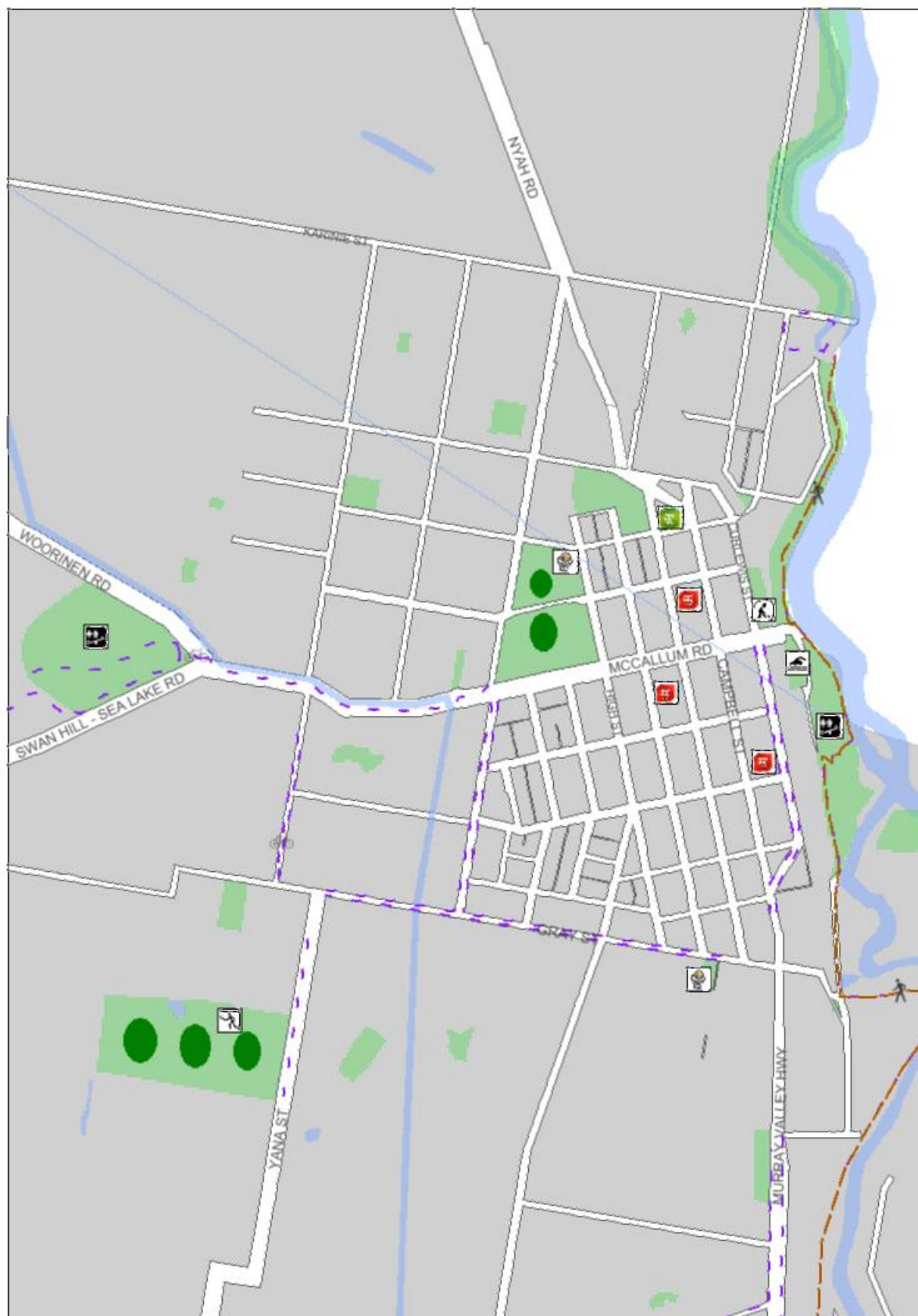
ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD - NYAH



ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD – NYAH WEST



ACCESS TO PHYSICAL ACTIVITY AND NUTRITIOUS FOOD – SWAN HILL



OVERALL SUMMARY

Nutrition

Particular to nutrition and **not meeting** the recommended daily guidelines for fruit and vegetable consumption **Gannawarra LGA** records the highest in the whole of the State of Victoria; also in **Gannawarra** the percentage of population who **do not consume any fruit or vegetables** is poorer than the State average. Swan Hill also has a relatively high percentage of population who are not consuming any fruit or vegetables daily.

Across the Southern Mallee catchment males are less likely to meet the dietary guidelines for fruit and vegetable intake than females but this is consistent with the State of Victoria.

Statistics regarding consumption of some portions of fruit and vegetables is in most instances comparable with the State and in some instances better such as; 33.4% of population in Buloke consuming 3 – 4 serves of vegetables and 39.1% of Gannawarra population consuming one serve of fruit.

- **Not meeting guidelines** for consumption of either fruit or vegetables: Buloke 51%, **Gannawarra 60.3%**, and Swan Hill 51.5% (State 48.2%)

Vegetables

- Vegetable serves meeting dietary guidelines **Males: Buloke 1.8%, Gannawarra 3.1%, and Swan Hill 2.45%** (State 5%)
- Vegetable serves meeting dietary guidelines **Females: Buloke 12.5%, Gannawarra 13.8%, and Swan Hill 13.6%** (State 10.7%)
- **No serves** of vegetables: Buloke 1.9%, **Gannawarra 7.9%**, and **Swan Hill 6%** (State 5.8%)

Fruit

- Fruit serves meeting dietary guidelines **Males: Buloke 32%, Gannawarra 23%, and Swan Hill 31.7%** (State 41%)
- Fruit serves meeting dietary guidelines **Females: Buloke 51.9%, Gannawarra 46.4%, and Swan Hill 52.9%** (State 53.5%)
- **No serves** of fruit: Buloke 14.4%, **Gannawarra 24.8%**, and **Swan Hill 21.8%** (State 14.3%)

Physical Activity

Buloke LGA population are slightly above the State in population who undertake sufficient physical activity where Gannawarra and Swan Hill populations are below. Sedentary behaviour and incidental physical activity is also higher for all three LGA's than the State and most notably Gannawarra reports the highest in both these incidences.

Occupational physical activity where the work is heavy labour or physically demanding is significantly more likely to occur within populations of Southern Mallee than the State and more so in Buloke and Gannawarra LGA's. Southern Mallee catchment also reports less population who mostly sit or stand as part of their daily work than the State.

- **Sedentary physical activity levels:** Buloke 5.8%, **Gannawarra 6.9%**, and Swan Hill 5.8% (State 5.3%)
- Sufficient physical activity levels: Buloke 61.2%, **Gannawarra 52.3%**, and **Swan Hill 53.3%** (State 60.3%)
- **Zero days of physical activity:** Buloke 65.1%, **Gannawarra 71.1%**, and Swan Hill 64.9% (State 61.7%)
- Occupational physical activity, Mostly heavy labour or physically demanding work: Buloke 24.3%, Gannawarra 28.6%, and Swan Hill 20% (State 13.3%)

Preventable Health Conditions

The data regarding preventable health conditions confirms that there is a higher portion of the populations of Buloke, Gannawarra and Swan Hill than the State and in some incidences than Loddon Mallee and or rural Victoria reporting for these conditions.

Of particular notice is the overweight and obesity percentage of populations for Southern Mallee males and females where for all Local Government Areas (LGA's) there is a substantially higher percentage of population than the State in most instances.

Overweight

- Percentage of overweight **male population** is: Buloke 36.9%, **Gannawarra 46.6%**, and **Swan Hill 46.3%** (State 39.9%)
- Percentage of overweight **female population** is: **Buloke 30.5%**, Gannawarra 20.0%, and **Swan Hill 30%** (State 24.2%)

Obese

- Percentage of obese **male population** is: **Buloke 39.9%**, Gannawarra 13.3%, and Swan Hill 18.5% (State 17.3%)
- Percentage of obese **female population** is: Buloke 17.4%, **Gannawarra 21.4%**, and **Swan Hill 22.5%** (State 16.1%)

The rates of type 2 diabetes are slightly less than the State even though there has been an increase in prevalence right across the State and for the local government areas, high Cholesterol and Hypertensive disease are marginally higher than the State for each Southern Mallee LGA.

- Percentage of population with type 2 diabetes (self reported): Buloke 4.4%, Gannawarra 4.7%, and Swan Hill 3.4% (State 4.8%)
- Percentage of **population with high cholesterol** is: **Buloke 5.7%**, **Gannawarra 5.7%**, and **Swan Hill 5.7%** (State 5.4%)
- Percentage of **population with circulatory diseases** is: Buloke 10.8%, **Gannawarra 11.1%**, and **Swan Hill 11.2%** (State 10.3%)

Social Determinants of Health

Socio Economic Index for Areas (SEIFA)

The SEIFA 2006 confirms the majority of Southern Mallee communities are disadvantaged and more susceptible to vulnerabilities associated with income, education, occupation, wealth and living conditions. For the Southern Mallee the portion of towns indexed as disadvantaged is higher than that of the state and regional Victoria average.

The following Southern Mallee communities are all in the second decile for the State with the exception of Nyah West that is in the first. The state ranking for these Southern Mallee communities is indicated in the brackets;

- Nyah West (9), Sea Lake (157), Kerang (164), Wycheproof (214), Manangatang (228), Donald (230), Quambatook (234), Nyah (235) and Swan Hill (283).

Food insecurity

Across the Southern Mallee food insecurity is reported less than the State and Loddon Mallee, Buloke reported to be the most food secure of the three LGA's but in instances where food insecurity is reported the reasons why are drastically higher than that reported for the State, particularly for quality, cost, and variety; also culturally appropriate and inadequate and unreliable transport are somewhat above the State. Gannawarra and Swan Hill LGA's are slightly more food insecure than Buloke but the reasons why are in most instances not quite as significant as Buloke but in most instances still reported higher than the State.

- Some foods are **too expensive**: **Buloke 45.9%**, **Gannawarra 34.7%**, and Swan Hill 28.9% (State 28.3%)
- Can't always get **right quality**: **Buloke 52.3%**, **Gannawarra 30.9%**, and Swan Hill 27.7% (State 25.5%)
- Can't always get **variety**: **Buloke 38.3%**, Gannawarra 12.6%, and **Swan Hill 13.5%** (State 10.9%)
- Can't always get **culturally appropriate**: **Buloke 10.3%**, Gannawarra 7.3%, and **Swan Hill 8.2%** (State 6.8%)
- Inadequate and **unreliable public transport**: **Buloke 12.7%**, **Gannawarra 11.3%**, and **Swan Hill 9.4%** (State 8%)

Food access and cost

The majority of communities across the Southern Mallee where there is a core population centre have access to either a general store or supermarket. In two of the sites surveyed (one in Swan Hill LGA and one in Gannawarra LGA), there was not access to fresh fruit or vegetables in the local store, the next closest location would require travelling approximately 17 kilometres (applicable to both sites).

Larger population centres of Swan Hill and Kerang host the larger buying group of Woolworths or Coles where other smaller population centres in Buloke and Gannawarra have buying groups of IGA or Foodworks. There are only two independent supermarkets which are located in Gannawarra LGA.

Green grocers are limited to two communities only, Cohuna and Swan Hill, and access to fruit and vegetables via community gardens, markets or road side stalls is mostly limited, sporadic and seasonal.

The Victorian Healthy Food Basket Surveys provides the opportunity to view what the cost would be to family groups based on receiving income support via Centrelink payments. The average cost incurred to all family groups in Buloke and Gannawarra was higher than for populations of Swan Hill.

Average cost per LGA									
Key: B: Buloke G: Gannawarra SH: Swan Hill % of fortnightly income assistance via Centrelink payment									
Family Outline	Basket			Fruit			Vegetables		
	B	G	SH	B	G	SH	B	G	SH
Family of 4 \$1316.20	\$516 38%	\$541 37%	\$447 33.9%	\$124	\$123	\$94	\$109	\$101.5	\$99
Single mother family \$1024.96	\$358 33.9%	\$372.50 33.5%	\$307 30%	\$85.50	\$84	\$64.5	\$72	\$69	\$67.50
Elderly woman \$670.90	\$124 18.22%	\$128.50 17.85%	\$106.50 15.93%	\$29	\$29	\$22	\$27	\$25.50	\$24
Single man \$474.90	\$161 33.73%	\$167 32.74%	\$140 29.53%	\$37.50	\$38	\$28.50	\$37.50	\$36	\$33.50

In the Southern Mallee there is a significant difference between the least expensive and most expensive basket of food for the family groups. The cost of food from a family of four may need to pay \$151 more for a Healthy Food Basket in one community than the same family group in another community, fruit can vary as much as \$80 and vegetables as much as \$30. The following table further highlights the variance in cost from the least expensive to the most expensive for all the family groups.

Variance in cost across Southern Mallee catchment from least to most expensive			
Family Outline	Basket	Fruit	Vegetables
Family of 4	\$151	\$80	\$30
Single mother family	\$167	\$56	\$20
Elderly woman	\$56	\$20	\$8
Single man	\$50	\$27	\$11

The food basket surveys revealed that the cost of food from smaller general stores was more expensive and in some instances did not have all the items on the Victorian Healthy Food Basket Survey list.

Transport

Motor vehicle usage is the most utilised in the Southern Mallee catchment with either one or two cars per dwelling, this is in line with State trends. Access and use of other forms of transport such as train and bus are well below the State.

The percentage of population who walk due to it being the only means of transport is higher across the Southern Mallee catchment than the State and quite substantially so in Buloke LGA which possibly contributes to Buloke LGA reporting slightly above the State in sufficient physical activity.

- Selected journey to work, Car driver: Buloke 53.1%, Gannawarra 59.3%, and Swan Hill* 63.6% (State 62.5%) *excludes Robinvale

- Selected journey to work, Walk as only means of travel: Buloke 11.7%, Gannawarra 7.6%, and Swan Hill* 6.8% (State 3.3%) **excludes Robinvale*

The data shows that transport limitations has seen a major increase in prevalence right across the Southern Mallee catchment since 2007 to 2011 and is well above the State and Regional Victoria. In 2007 transport limitations was mostly comparable for Gannawarra and Swan Hill with the State and only slightly higher in Buloke.

- People (adults) who experienced **transport limitations** in the last 12 months: **Buloke 39.9%, Gannawarra 42.4%, and Swan Hill 28.7%** (State 23.7%)

The 2011 VicHealth Indicator Survey reports;

- Females who experience transport limitations in the last 12 months: **Buloke 37.2%, Gannawarra 44.1%, and Swan Hill 32.8%** (State 25%)
- Males who experience transport limitations in the last 12 months: **Buloke 42.6%, Gannawarra 40.8%, and Swan Hill 24.9%** (State 22.3%)

SMPCP Promoting Healthy Lifestyles Nutritious Foods, Physical Activity Programs, Policies, Plans, Strategies & Environments Mapping

Across the Southern Mallee health promotion activity particular to nutrition and physical activity is occurring in a myriad of methods and with a range of focuses and target groups; in some instances participation and social inclusion are the main outcome.

The majority of activity is time specific programs provided or led by one organisation and at times linking with other services to either support or utilise their facilities. Many of the programs and initiatives are focused on individual benefit and include social marketing, health information and education and possibly screening as the health promotion intervention. The programs that have been shared over the mapping period have in some instances had a short life span and no longer operate or they have been modified into another program. Promoting Healthy Lifestyles Committee members have reported most programs have a low number of referrals and participants.

There are some examples of programs that are more in line with the integrated health promotion model either being delivered or have potential to be rolled out across the catchment; these are the Victorian Prevention and Health Promotion Achievement Program for Schools and Workplaces, activities from Healthy Communities Initiative and VicHealth Healthy Sporting Environments program.

Mallee Sports Assembly will be progressing work under the VicHealth initiative, Healthy Sporting Environments program, which includes a range of areas to be addressed but underpinned by change of thinking, policy and procedure for the clubs who become involved.

The Victorian Health Promotion Achievement Program for Schools also adopts a range of strategies that will take time to work through and embed including policy and activities. The support for the schools will be dependent on health organisations having the capacity to assist. (NB. Resourcing for this initiative is not provided to SMPCP member organisations).

There are a range of community kitchens and gardens in a varied range of formats and stages throughout Buloke, Gannawarra and Swan Hill, the majority of these are in Buloke LGA due to the funded program Cook In Community Kitchen and Gardens supported by East Wimmera Health Service.

Opportunity for physical activity and nutrition programs look to be a little less available in Buloke and Gannawarra in particular for children and youth and there has not been a need identified for the target group of Culturally and Linguistically Diverse due to population numbers. Men and women specific programs are also limited across the catchment but it has been reported that at times there has been little interest shown from men in men only programs.

All councils have a vast range of plans, policies and strategies that identifies mostly health and wellbeing and physical activity as areas of priority or action, the mention of food access, food security or nutrition is minimal.

Organisation focus

Health and Community Health agencies are more likely to have programs that include physical activity and or nutrition for a target group such as men or women or for a particular purpose such as diabetes or weight loss. Programs are also often aligned with accredited programs such as *Heart Foundation Walking*, *HEAL* or *LIFE!*. There are several programs that have been developed by southern Mallee organisations such as Swan Hill District Health *Women Able to Lose Kilos (WALK)* and Northern District Community Health Service *Me'n'U* program, some of these style of programs may need a referral into them or criteria to be met to participate. Health services do align their programs to their Health Promotion Plans and in most instances conduct some form of evaluation for analysis and reporting to particular bodies.

Mallee Sports Assembly is aligned with VicHealth working in the framework of *Participation in Community Sport and Active Recreation* and since July 2012 moving to the *VicHealth Supporting Sport Environments Program*. There are six key areas that will be addressed Responsible use of alcohol, UV protection, Inclusion, safety and support, Reducing tobacco use, Healthy eating, Injury prevention and management.

The Federal Government funded *Healthy Communities Initiative (HCI)* is operating in the Swan Hill LGA where the partners involved deliver a selection of nationally accredited programs in addition to modifying existing programs to meet the needs of specific population groups not in the paid workforce. The HCI program will address active transport across the municipality and review local government policies to reflect the municipalities public health and wellbeing plan priorities.

Organisations operating under the Neighbourhood House banner offer a variety of physical activity initiatives for all community including exercise groups, dancing and sports such as carpet bowls.

Southern Mallee Transport Connections Partnership (SMTCP) have established a range of consistent but periodical bus services particularly for Buloke communities with the aim to assist with access to services such as medical and specialist appointments, the aim of these services is not for regular access to attend work or grocery shop outside of the community. During 2012 – 2013 SMTCP have undertaken the No Cars, No Worries Project; the aim of this project is to encourage people to use alternative methods of transport such as walking, cycling or gopher use rather than a car.

Directories

There are a range of directories for a variety of target groups available across the catchment on physical activity options. Agencies do promote their programs at the local level too via a range means including media, flyers, networks and presentations and at times to a target group.

Advocacy

Recently a partnership between Swan Hill District Health and Swan Hill Rural City Council via the Healthy Communities initiative has provided a stronger link in advocating for improvement in walking trails and the development of the Active Transport Strategy. Mallee Sports Assembly successfully advocated for the increase in opening hours for Buloke public swimming pools during summer months, working with the local council and community to find solutions to what were seen as challenges.

SMPCP Promoting Healthy Lifestyle Committee developed a Position Paper regarding the Victorian State initiative Prevention Community Model (Healthy Together). The Position Paper was endorsed by SMPCP Board of Management and distributed to key people and organisations to put forward the concern of SMPCP that the Prevention Community Model was overlapping the partnership platform of Primary Care Partnerships and health promotion initiatives and has potential to cause inequity in health across the state by limiting the number of communities involved and extensive resourcing to those communities. The Position Paper included recommendations for collaboration, partnerships and moving toward an open form of communication.

Evaluation

The majority of programs are evaluated to some degree for the organisations information. Programs that are part of a funded initiative are evaluated within an evaluation framework.

Enablers and barriers to nutritious food and physical activity programs and initiatives

There were a range of barriers and enablers, reported for programs and initiatives to be conducted which were consistent across the Southern Mallee, these are;

BARRIERS	ENABLERS
~ The need for funding appeared to be the most prevalent barrier	~ Funding streams
~ Program leaders/volunteers	~ Supportive staff ~ Key person driving the program
~ Transport	~ Participant fee that contributes to the cost of running the program
~ The need for childcare	~ Suitable venues
~ Limited referral to programs particularly from other professional sectors is minimal	~ Enough demand

Geographical Information Systems

Geographic Information Systems (GIS) maps were developed by Gannawarra Shire Council and Swan Hill Rural City Council which provide visual evidence of current options of physical activity spaces and access to nutritious food (fruit and vegetables).

SMPCP Promoting Healthy Lifestyle Committee had made an assumption that this would be a fairly straight forward exercise for all councils to undertake but it was revealed that this was not the case due to either GIS not available, information is not already known and plotted and capacity of staff.

Conclusion

Nutrition and physical activity data for the Southern Mallee indicates there is less percentage of populations than the State who are meeting the dietary guidelines for daily intake of fruit and vegetable consumption and undertaking sufficient physical activity. There are some positive indicators where guidelines are being partially met that could be explored as an asset and built upon in planning of future work to increase consumption of fruit and vegetables and participation in physical activity.

Occupational physical activity is reported much higher in the Southern Mallee than that of the State but is in line with other rural areas; this is most likely due to the environment being utilised for agricultural purposes. Buloke and Gannawarra LGA's are noted as having more of the population in occupations that is heavy labour or physical work; this may have an impact on the physical activity levels reported in these two LGA's.

Across the Southern Mallee males are less likely to meet the dietary guidelines for fruit and vegetable intake than females; this is consistent with the state. At the local level data on physical activity broken into gender is not available; this would be of value if available to see if there is a trend in regards to gender and local government area as seen for fruit and vegetable intake. Marrying this also with the body weight data, type 2 diabetes and indicators for social determinants may show a trend for gender and local government area. Further understanding of enablers and barriers for nutrition and physical activity per gender may assist in initiatives being developed to better target male and females and address the barriers.

Preventable health conditions are overall reported higher than the State and following the trends of increase in prevalence, along with the data for nutrition and physical activity leads to the assumption a relatively high portion of Southern Mallee populations are not adopting healthy lifestyle choices that may prevent or reduce the impact of the preventable health conditions.

The exploration of several social determinants of health does shed some light on the impacts for Southern Mallee communities in regards to nutrition and physical activity that could flow on to poorer overall health and wellbeing.

The SEIFA 2006 confirms the majority of Southern Mallee catchment has a relatively high level of disadvantage; the data for Southern Mallee relating to health factors does indicate following the usual trend of disadvantaged populations being more vulnerable to poorer health outcomes.

Food access across the Southern Mallee is available in most communities in some form and in most instances fruit and vegetables are available. The cost of food certainly changes across the catchment with it being more expensive in Gannawarra and Buloke LGA's than Swan Hill. Further assessment on smaller community stores would be useful to fully understand access and cost particularly for fruit and vegetables and what community members do when there isn't the access.

Food insecurity is reported less in Southern Mallee than the State but the reasons for food insecurity are markedly higher across the Southern Mallee catchment and in some instances significantly so in Buloke and Gannawarra. While the prevalence of food insecurity is lower than the state the high prevalence of the reasons for food insecurity brings these forward as considerable.

The Victorian Healthy Food Basket Surveys has been able to provide some advice toward the barrier of cost and we do know that there is a variance in cost where some Southern Mallee LGA's are paying a much higher price for food and fruit and vegetables. Further information on a budget formula recommended for families would assist in knowing what the impact the cost of food is having on Southern Mallee families.

The information on transport gathered in this report does show transport limitations is an increasing issue in Southern Mallee communities and significantly so for Buloke and Gannawarra LGA's, this correlates with a reason for food insecurity. More information is required to be gathered to understand the reason why there has been such a dramatic increase in transport limitations as reported from 2007 and 2011; is this related to aging populations, impacts of climate or low income or are there other reasons.

Interestingly with transport Southern Mallee catchment is on a par with the State in regards to cars per dwelling. Buloke LGA is below the State, Gannawarra and Swan Hill in using a car or as a car passenger to travel to work, but as the data shows more people work from home in Buloke which is most likely due to the rural environment and people living and working on farms.

In regards to understanding the other reasons of food insecurity, (quality, variety and cultural appropriateness), in the Southern Mallee catchment other methods of data collection would be required to gather this information; if this was to be undertaken there may be an opportunity to gather more data on fruit and vegetable consumption and the enablers and barriers.

The mapping activity has shown that current health promotion activity in the Southern Mallee includes a vast array of programs and initiatives with the majority for physical activity often with a nutrition component included and are time specific programs. On face value the majority of programs that are being run are by one organisation rather than in an integrated health promotion model (a range of agencies and or sectors).

There are a couple of examples of programs that are coordinated with a view to a longer term approach; these are the Victorian Health Promotion Achievement Program for Schools and the VicHealth Healthy Sporting Environments program, which marry better into the integrated health promotion model where implementation includes a mix of health promotion interventions and adopts a systems change direction as articulated in the current Victorian Health and Wellbeing Plan.

It may be valuable to assess the programs that are being delivered in the Southern Mallee catchment against the integrated health promotion continuum to better understand what we are doing and explore how we may be able to strengthen this work so there are greater benefits to either the target group and/or health of the populations.

There is a very strong platform available in the Southern Mallee for integrated health promotion with many sectors involved in some form and bringing a great deal of knowledge. Sharing and building this knowledge and skills further of those involved, including program planning, evaluation processes, impacts of social determinants of health and partnerships should support a stronger prevention system in the Southern Mallee.

Moving health promotion activity to a stronger integrated health promotion position should assist with a better link to local policy and planning development and implementation that could support physical activity and nutrition rather than is the current case of mostly broad health and wellbeing statements. There is a need for a better understanding of sector involvement in this area and how the local work can inform, influence and support health and wellbeing policy.

Utilising and building the evidence and assets available in the Southern Mallee, such as physical assets identified in the GIS mapping, skills and knowledge of the health promotion sector, data and strong partnerships and planning is essential to ensuring health promotion is undertaken in a manner where systems and settings and interventions are addressed as per the direction of the Victorian Public Health and Wellbeing Plan.

RECOMMENDATIONS

The following recommendations have been developed to see the progression and completion of a strong evidence base for nutrition and physical activity. This evidence base is important to the work that is considered and undertaken so limited resources are best utilised and future work will be more likely to see healthier communities.

The recommendations recognise the importance of continuing to learn and the strength strong partnerships play in facilitating change and positive outcomes.

Problem definition

It is evident to really understand the physical, social and environmental factors of Southern Mallee communities and catchment that are having a negative impact on the consumption of nutritious food (fruit and vegetables) and sufficient physical activity more information is required. Without a complete evidence base that covers the social determinants of health interventions and strategies cannot be most effective and sustainable.

- Reflect on each component of the Mapping Report and continue to gather evidence and answers
- Explore who else (external organisations) who may be able to assist and contribute to this work
- Collate the evidence for each LGA and Southern Mallee catchment to clearly show who is most vulnerable to poor nutrition and inadequate physical activity, barriers and enablers, assets and liabilities

Capacity building

To assist with SMPCP members in improving and adapting their health promotion practice to be as skilful as possible ongoing capacity building in integrated health promotion should occur. There is already a vast amount of knowledge within the catchment; further developing the skills of these people will enhance the potential of the system to prolong and multiply health effects and to address the underlying determinants of health.

- Develop a set of strategies that will enhance the skills of the Southern Mallee Health Promotion workforce following the guiding principles of Victorian Integrated Health Promotion: A practice guide for service providers
- Build the capacity of Southern Mallee Health Promotion workforce to address the broader determinants of health

Partnerships

The Victorian State Government are clear that the prevention system needs to be strengthened through governance and leadership, information systems, financing and resource allocation, partnerships and workforce development. A strong partnership in integrated health promotion which is able to work within the continuum of partnership (networking, coordination, cooperation, collaboration) as required will have more success in the preventative and restorative role in health and wellbeing of the communities.

- In progressing work regarding nutrition and physical activity SMPCP members and associate members identify others who could contribute to integrated health promotion activity
- Build interdependent systems to address issues and opportunities, sharing resources and making commitment recognising capacity

CONCLUSION

SMPCP Promoting Healthy Lifestyles Nutritious Food and Physical Activity Mapping exercise and report has commenced the task of really understanding nutrition and physical activity in the Southern Mallee. For SMPCP Member and Associate Members to truly make inroads into preventing chronic disease through physical activity and nutrition a complete and robust evidence base is needed. The information in this report has looked at the more obvious aspects of nutrition and physical activity and in doing so has brought to the fore other determinants that need to be explored further to truly have a solid evidence base where by SMPCP members and associate members can make informed decisions regarding the direction of future work in the area of nutrition and physical activity.

In relation to the objectives and strategies that have directed the mapping activity progress has been made.

We do know that Southern Mallee populations are mostly regarded as disadvantaged and therefore more susceptible to health inequalities that can be somewhat alleviated if healthy lifestyle choices are made. Preventable health conditions are most prevalent in Southern Mallee and in particular people who are overweight and obese. Fruit and vegetable consumption meeting the dietary guidelines and sufficient physical activity is mostly below the State average. Females rather than males in the Southern Mallee are more likely to be sufficiently active and meet fruit and vegetable guidelines.

Throughout the Southern Mallee there are many assets that are and can be utilised to work toward improving the health and wellbeing of individuals and populations. Several areas have emerged that really require further information to 'unpack' the issues, influences and impacts before possible solutions can be considered.

We know that in the majority of communities across Southern Mallee where there is a substantial population there is mostly access to nutritious food (fruit and vegetables) via either a supermarket or general store and we have identified a couple of communities where fruit and vegetables are not consistently available.

Other options for access to nutritious food are intermittent, seasonal or require participation or contribution and not available in every community. Examples of these other options are community markets that operate periodically, community gardens and road side stalls. These are assets toward food access but have limitations in consistency. Consideration how to include these opportunities as an asset in securing food access could be explored further.

Food security is not reported as a significant issue in Southern Mallee catchment but the reasons for food insecurity are strongly noted in statistical information; these barriers are cost, variety, quality, transport and not having culturally appropriate foods particularly in Buloke and Gannawarra.

- ~ There is a considerable difference in cost across the catchment in being able to purchase a healthy food basket with communities in Gannawarra and Buloke paying more than communities in Swan Hill
- ~ Transport limitations have significantly increased between 2007 and 2011, cars are the most common form of transport with most dwellings having one or two cars

Further information is required to answer the questions regarding variety, quality and culturally appropriate food. We need to know more about why food does cost more in some communities, what is an appropriate portion of income to be spent on food and are incomes covering the cost of rural living. Transport also needs further answers, why has the prevalence of transport limitations increased so much since 2007 to 2011?

Physical activity is mostly well supported through program activity and organisations providing opportunities to improve and increase physical activity levels. There are a mix of accredited physical activity programs and social opportunities most operating as directed by an organisation. We have been able to show the access of physical activity spaces in Gannawarra communities by Geographical Information System mapping and it would be ideal to have this completed for Swan Hill and Buloke to know the assets in the communities.

For organisations barriers to providing a service or program are resources including funding, time and program leaders and when delivering a program the barriers are transport, childcare and insufficient numbers or referrals.

The current method of health promotion delivery for nutrition and physical activity is not broadly meeting an integrated health promotion approach; the focus is mostly for the individual and not inclusive of population. There is certainly a strong health promotion foundation in the Southern Mallee as far as expertise and knowledge which with collaboration, capacity building and a strong evidence base could steadily adjust to adopt a much more robust integrated health promotion approach. The move toward this should assist with limited resources and also enable health promotion covering the continuum of integrated health promotion.

NEXT STEPS

SMPCP Promoting Healthy Lifestyles Committee members will have opportunity to view and provide comment on SMPCP Promoting Healthy Lifestyles Mapping Report – Physical Activity and Nutrition.

It is possible that this report can continue to be developed if actions are taken to further build a comprehensive evidence base for physical activity and nutrition. Further work could be undertaken utilising tools such as the VLGA Municipal Food Security Scanning Tool, Liveable and Just Toolkit or following direction of other like work.

In July 2013 [Victorian Population Survey 2011 – 2012 – Selected preliminary survey findings](#) were released to assist with planning processes of local governments and other organisations. The preliminary findings do indicate some change ranging from positive to negative and vice versa varying across the catchment. Continuing to view preliminary and final data summaries would be a suitable initiative to support ongoing monitoring of change in regards to nutrition and physical activity and identifying anomalies in data that is being presented in such reports.

It is expected that this report will be taken forward through SMPCP Strategic and Operational Plan 2013 – 2017. Information that may be added, such as data updates and further evidence will be done so with contribution and approval of SMPCP members and associates utilising an open and inclusive process.

This report will be reflected upon in developing the next SMPCP Strategic and Operational Plan 2013 – 2017 where decisions on what should be progressed in regards to physical activity and nutrition be made. It should also be noted that this information does connect with other areas of SMPCP work such as social inclusion, chronic disease management and mental health and wellbeing.

DEFINITIONS, TOOLS and RESOURCES

Social Model of Health

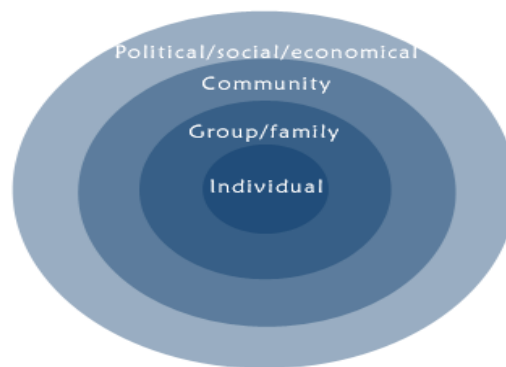
The Determinants of Health

A social model of health is a framework for thinking about health. Within this framework, improvements in health and wellbeing are achieved by addressing the social and environmental determinants of health, in tandem with biological and medical factors.¹ Underpinning and supporting this conceptual framework is the Alma Ata declaration and the World Health Organisation definition of health:

*Health is a complete state of physical, mental and social wellbeing, not merely the absence of disease or infirmity.*²

Planners of services that aim to improve health and wellbeing and reduce the burden of preventable disease, need to be concerned not only with the individual context or factors, but also with the context of broad public policies and environmental influences, group and family influences and the community context.³ It is not possible to decide how best to support the improvement of health without understanding this context as illustrated in Figure 1.⁴

The context of health



Social Model of Health

In practice, working within a social model of health means investigating what determines health and wellbeing or the determinants of health, including:

The social gradient: People's social and economic circumstances affect health throughout life. A continuum exists from the disadvantaged to well off rather than a binary effect at the extremes.

Stress: The individual response to stress can cause physiological changes, which affect health. It is recognised that people's social and psychological circumstances can affect health through stress.

Early life: The effects of early physiological and psychological development, both negative and positive, last a lifetime. The infant is dependent on their circumstances and significant others for both physical and emotional experiences.

Social exclusion: This may be imposed by law, result from economic circumstances or from failure to supply social goods or services. Groups that are socially excluded include the unemployed, ethnic minorities, homeless, pensioners or people with disabilities. These groups experience worse health outcomes than the general population.

Work: Stress in the workplace increases the risk of disease. An imbalance in two aspects of workflow control when work demands are high and an imbalance in effort in relation to reward (income, self esteem or status) – have been identified with negative health consequences.

Unemployment: Unemployment and job insecurity have a negative effect on health. Psychological and social resources are likely to increase in employment and decline in unemployment.

Social supports: Friendships, good social support at home, at work and in the community improve both physical and mental health.

Addiction: While individuals use alcohol, drugs and tobacco, their use is influenced by a wider social setting. Addictive behaviours are generally detrimental to health.

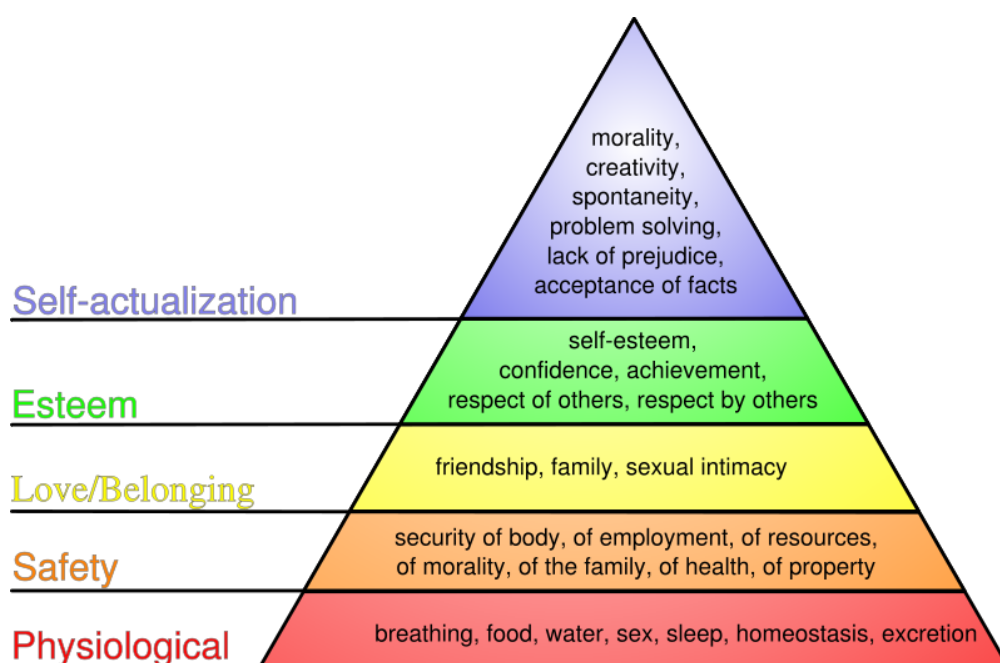
Food: Strong links have been established between nutrition (both under and over nutrition) and a range of diseases.

Transport: Healthy transport means reducing driving and encouraging more cycling and walking, backed up by better public transport.

Hierarchy of Needs

Psychologist Abraham Maslow first introduced his concept of a hierarchy of needs in his 1943 paper "A Theory of Human Motivation" and his subsequent book *Motivation and Personality*. This hierarchy suggests that people are motivated to fulfill basic needs before moving on to other, more advanced needs.

This hierarchy is most often displayed as a pyramid. The lowest levels of the pyramid are made up of the most basic needs, while the more complex needs are located at the top of the pyramid. Needs at the bottom of the pyramid are basic physical requirements including the need for food, water, sleep, and warmth. Once these lower-level needs have been met, people can move on to the next level of needs, which are for safety and security.



State Government of Victoria

[Victorian Public Health and Wellbeing Plan 2011 - 2015](#)

[Victorian Public Health and Wellbeing Plan 2011 – 2015 Summary](#)

Department of Health, Victoria

[Integrated Health Promotion; A practice guide for service providers](#)



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