

Regional Community Engagement Project for Natural Resource Management

FINAL REPORT

Kent-Frankland – Central and Albany Hinterland – North

RCE Project: 08SC-C04k

Report Prepared by

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and

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Project Steering Committee

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Wilson Inlet Catchment Committee Inc.



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EXECUTIVE SUMMARY

Natural resource management requires strong community engagement to achieve effective implementation of best management practices for conservation and sustainable use of all natural resources. The importance of recognising a wider definition of natural resource management to include air, water, energy, wood and fibre, and mineral resources has provided the incentive to explore the extent to which communities in rural and urban areas are able to identify the issues and explore ways to improve the management of all natural resources. This project was one of nine community engagement projects throughout the South Coast Region of Western Australia sponsored by South Coast Natural Resource Management Inc under the Federal Government's Caring for our Country programme with the objective to seek a greater community awareness of natural resource issues and identify appropriate actions for best management practice. The project has increased the understanding and involvement in resource management of the various sectors of our community, especially those not previously engaged in this activity.

The project region was located in the Shire of Plantagenet and included the southern half of the Stirling Ranges and northern parts of the Porongurup Range. The participating organisations have been the Wilson Inlet Catchment Committee and the Oyster Harbour Catchment Group, which have successfully engaged land owners in the project area for over 15 years. The project started in November 2008 and concluded in September 2009.

Project inputs include the Caring for our Country grant through South Coast Natural Resource Management Inc of \$108,400, in-kind contributions (time and travel) by community group volunteers on the Project Management Committee of \$22,400 and other un-costed in-kind input by people in the community.

The target groups for engagement were commercial businesses, community groups, especially conservation, sporting and recreation groups, urban landholders, peri-urban landholders, small farm owners and the local Aboriginal community. Many of these groups have not been previously engaged in NRM activities. The objective was to determine the Natural Resource Management (NRM) issues and threats relevant to these groups and to assess their current and potential capacity to participate in projects aimed at ameliorating these issues/threats. Every effort was made to increase the level of personal responsibility residents would take for their impact on the environment. Target groups and activities were recognised as having the potential to significantly raise the participation and awareness of residents within the Shire of Plantagenet.

An initial task was to produce a Community Profile of the Shire of Plantagenet based on the information provided in the Australian Bureau of Statistics 2006 census. A community profile was constructed which identified the social and economic demographics of the shire. Surveys assisted identification of the business activities in the region, which showed that most were locally owned and support the community by employing local workers and sourcing products from the region where possible. The major exception to this is the plantation timber industry which is a major economic driver in the region.

A series of community workshops and information sessions were planned to find out how people respond to the opportunity to increase their knowledge about resource issues and their appropriate management. Only one of these workshops achieved its objective, the others failing due to lack of attendance. It was found that engagement took place most effectively at the one-to-one level or with existing community and sporting groups through contributing at their normal meetings.

Project activities were aimed at increasing community engagement in NRM but were implemented with mixed success. The failure of 3 of 4 planned community workshops appeared to be due to apathy in the community toward involvement in such events, a dislike of this type of event, and an unwillingness, or inability, to communicate ideas or consider opportunities in group meetings across the spectrum of resource management.

Project outcomes included contact with 32 peri-urban land managers, undertaking 10 activities, of which 5 were small gatherings where NRM information was disseminated and discussed, 118 new contacts made primarily due to one-on-one visits being made to residents or businesses, and 5 strategic alliances were cultivated. Two project proposals were developed which achieved their

objective, and 10 other projects were identified, for which 4 had objectives established and discussion held with those who would be involved.

A number of resource issues were identified which include environmental weeds, preservation of biodiversity, sustainable living, carbon sequestration, recycling, management of waste disposal, feral animals, and sustainable development. Other less developed issues were dieback, peri-urban fertiliser use, Indigenous involvement in land management and best management practices for small lot landholders. As the largest landholders in the region, the plantation timber companies were encouraged to take a more active role in managing invasive plants, pest control and management of remnant native vegetation on the properties they own.

Key achievements during the project include successful use of the one-on-one engagement method, participation at regular meetings of community groups and consultation with small groups on specific issues identified by the group. The attributes of the successful meeting with the Porongurup Community have been identified showing that this type of meeting has its appropriate use. The increase in awareness of NRM issues, included use of residential solar electricity generators, adoption of sustainable lifestyle practices, awareness of environmental weeds, and biodiversity preservation in peri-urban settings. Over 120 new members of the community have been indoctrinated in NRM issues leading in many cases to modification of households and lifestyles. A number of businesses were engaged resulting in changed practices.

The primary lessons learned involve the method required to achieve effective engagement with the community, and the realisation that there is an interest by the community in a wide range of issues which can be legitimately identified as natural resource issues. Difficulties of communication within community groups need to be recognised and accepted if effective engagement is to occur. Strategies to overcome these difficulties need to be formulated at the beginning of any project seeking to engage the community. A significant proportion of the community have little or no interest in changing their attitude towards NRM issues.

The most effective approach to community engagement in NRM issues is through the activities of long-lasting, adequately-funded, catchment groups, such as WICC and OHCG. This is supported by the effectiveness of past activities of these organisations, as recognised by State and National awards, and summarised in the Introduction to this report. It is impossible to effectively engage with some NRM stakeholders (e.g. Indigenous individuals and groups) via short-term projects.

A set of recommendations have been developed for consideration by the NRM community groups which have catchment areas within the Shire of Plantagenet. Ten potential projects have been identified, and a wide range of specific resource issues recognised which provide an incentive for action.

Acknowledgments

South Coast Natural Resource Management Inc initiated, developed and facilitated the project at all stages providing general direction as well as technical and administrative support. Ms Louise Hillman, Mr Justin Bellanger and Mr David Broadhurst were instrumental in ensuring the project was clearly defined, appropriately administered and adequately resourced. Ms Louise Duxbury, Ms Dorothy Redreau and Craig Carter, from Greenskills, have contributed to the project with advice and support.

Funding for the project was provided through South Coast Natural Resource Management Inc within the Federal Government's Caring for our Country NRM programme.

The project management committee included representatives of Wilson Inlet Catchment Committee, Mr Arthur Patterson (chair) and Mr Joe van Vlijmen, and the Oyster Harbour Catchment Group, Dr. Andrew Turk and Mr David Williamson, supported by Mr David Broadhurst (SCNRM Inc). The financial administrator for WICC and OHCG, Mr Tom Zwartkruis, supported the committee.

There have been many people in the community who have made the activities of this project a reality. Ideas have been generated, opportunities identified and new horizons explored through discussion and encouragement to indicate ideas developed over many years. There has been

good interaction with other community engagement projects in the South Coast region which has provided a cross-fertilisation of ideas.

Advice and information has been provided by many groups and organisations, but particular thanks go to:

- The Wilson Inlet Catchment Committee
- The Oyster Harbour Catchment Group
- South Coast Natural Resource Management Inc.
- Staff at the Shire of Plantagenet
- Government agencies operating in the region
- The businesses, community groups, sporting clubs and individuals of the Shire of Plantagenet



Wilson Inlet Catchment Committee Inc.



Regional Community Engagement Project for Natural Resource Management

FINAL REPORT

INTRODUCTION

Natural resource management requires strong community engagement to achieve effective implementation of best management practices for conservation and sustainable use of natural resources. Since the development of Landcare in the 1980's the concept of natural resource management has been focused on biodiversity conservation and regeneration of native flora and fauna as well as the recognition that management practices are needed for farmland to control erosion, salinity, soil degradation, invasive plants and water quality decline within a sustainable farming system. There are many success stories which show the effectiveness of these practices. The generally accepted definition of natural resource management (NRM) is *the ecologically sustainable management of land, water, marine and biodiversity resources for the benefit of existing and future generations and for the maintenance of the life support capability of the biosphere. It does not include mineral resources.* (ref: South Coast Strategy for NRM – p19) There has been acknowledgement that a broader definition of natural resources should include air, energy, and the urban environment as well as wood, fibre and soil mineral resources in both the rural and urban environments. The use, and misuse, of these natural resources impacts on the environment in a number of ways. The most obvious example is the management of the waste products of communities.

The importance of recognising the wider definition of natural resource management provided the incentive to explore the extent to which communities in rural and urban areas are able to identify issues and explore ways to improve the management of all natural resources. South Coast Natural Resource Management Inc. has supported 9 community engagement projects throughout the South Coast Region to seek a greater awareness of the issues and identify appropriate actions for best management practice. These projects have increased the understanding and involvement in resource management of the various sectors of our community, especially those not previously engaged in activity, as well as those who are current natural resource management practitioners. The project has evaluated how the engagement of these various sectors in the community could translate into meaningful long-term change in resource management practice.

During the latter half of the project period, the health problems for the Community Engagement Officer resulted in a decrease in the amount of time and effort that could be put into the planned activities. As a consequence, a number of the objectives were not fully developed or achieved. The main effect was in the formulation and implementation of proposed projects, which in most instances could not be developed beyond the initial ideas obtained through engagement with the wide range of groups and individuals in the project area. The project management committee has sought to document in this report the very good work done during the first 6 to 8 months of the project period, and identify the potential issues which were being pursued when the officer's health required a limitation on the work he was able to carry out. Much of the text comes from the reports and documentation achieved by the Project Officer prior to his health problems occurring.

Regional Natural Resource Management in the Shire of Plantagenet

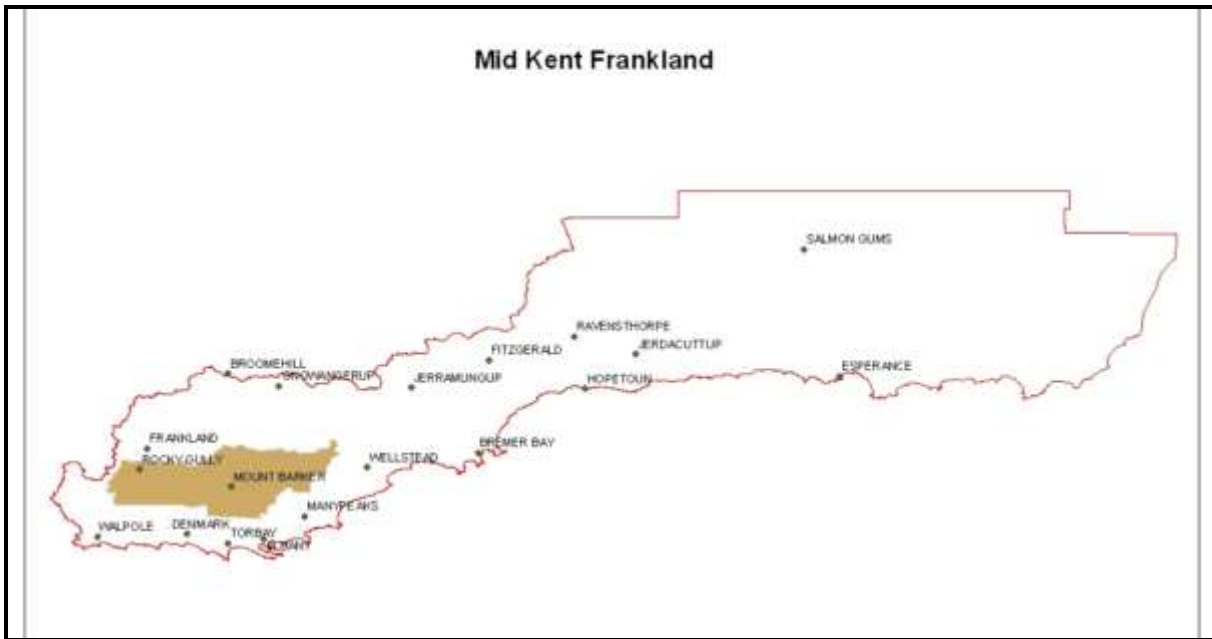
One of the 9 community engagement project areas in the south coast of WA was located in the Shire of Plantagenet and includes the southern half of the Stirling Ranges and northern parts of the Porongurup Range. It is referred to as the Kent Frankland – Central and Albany Hinterland – North. Its location is shown in Figure 1. This covers an area of 4790 km² with a population of 4484 people. The project has been managed jointly by the Wilson Inlet Catchment Committee Inc (WICC) and the Oyster Harbour Catchment Group Inc (OHCG). The geographical area covered by

the project includes areas within both the Kalgan River and the Denmark-Hay/Kent River catchments in which NRM issues have been managed on a catchment basis by the two groups for over 15 years.

Whilst the majority of the study area is broad-acre farming, there are small-lot developments primarily associated with life-style lots, hobby farms and tourism. Peri-urban areas are found in association with the towns of Kendenup, Porongurup, Mount Barker and Narrikup. The land in and around Kendenup was developed in the early 1920's as an extensive subdivision of 20, 40 and 80 acre (8, 16 and 32 ha) blocks intended for horticulture, though, by the 1940's, most were amalgamated into larger holdings for grazing and cereal production.

A historic low level of engagement in NRM has been identified with land holders in the urban and peri-urban areas, with life stylers and hobby-farmers, with owners of feed-lots, with industrial and commercial enterprises, with Indigenous heritage areas, and with sporting and recreation groups. A medium level of engagement with NRM has been possible with local government, schools, and timber companies but there is a reticence for implementation of management activities. The project sought to achieve greater engagement by these people, groups and organisations.

Figure 1: Location of the Kent Frankland – Central and Albany Hinterland – North project area within the South Coast of Western Australia



Participating Organisations

The Wilson Inlet Catchment Committee (WICC) and the Oyster Harbour Catchment group (OHCG) have been engaging mainly the farming community within the project area for about 15 years, successfully completing many significant projects. Both WICC and OHCG have recently been recognized for their efforts with WA Landcare Awards. OHCG won the National Alcoa Community Group Award 2008-09. WICC won the Dept of Water River Rats Living Streams Award and the Murray Darling Basin Commission River Care Award. WICC was a finalist in the National Landcare Awards 2008-09 and won the Toshiba Community group award at the 2009 West Australian Landcare Awards.

WICC is a community based NRM body in the Albany Hinterland with offices in Mt Barker and Denmark. WICC's vision is to leave a sustainable environmental heritage for future generations. It promotes responsible NRM in the Wilson Inlet Catchment.

OHCG is also a community based NRM body in the Albany Hinterland focussed on the Kalgan River catchment with an office in Mt Barker. OHCG's vision is to have prosperous, vibrant rural communities for present and future generations within the Oyster Harbour Catchment. OHCG coordinates and facilitates NRM to all stakeholders within the Oyster Harbour catchment.

WICC and OHCG support the community and other stakeholders in a wide range of NRM activities, including the planning and implementation of on ground works; the coordination of trials, research and education; and the provision of a forum for NRM issues. The activities undertaken by the two groups have been developed after extensive community consultation. These actions have the greatest community support and likelihood of implementation to reduce the nutrients in the estuaries and manage land and river salinity providing the best environmental benefits for the resources used.

WICC and OHCG have been managing a diversity of on-ground NRM activities with landowners in the catchments since the early 1990's. Projects have been implemented in locations which range in size from 10's to 100's of hectares. Projects have been funded by NHT, Envirofunds, Southern Incentives, Community Water Grants, Lotteries West, and some corporations like Leightons and Santos. The catchment groups are involved in all areas of integrated catchment management: including Landcare; River Care; and Bush Care, achieving results with landholders and stakeholders on the ground. On ground activities include fencing remnant and riparian vegetation, revegetation, designed surface water management, improved pastures to control salinity and water logging, soil amelioration, invasive species management, biodiversity conservation and innovative plant species trials.

Both community groups have established Strategic Catchment Projects (Upper Hay and Middle Kalgan) which have operated for 4 years to achieve major implementation of best management practices for the management of salinity, nutrient mobility and associated issues. These are multi-landowner activities (110 landowners have been engaged) involving both improved farming practices, expansion of perennial pasture systems and biodiversity restoration and revegetation.

Other activities have included invasive weed management, strategies for roadside conservation, annual all-night feral animal shoot, field days to demonstrate management practices, engagement with school education programmes and support for perennial pasture trials on the school farm.

Building and maintaining new and existing partnerships and networks has been a high priority for WICC and OHCG. A joint activity of relevance to small landholders has been the collaboration with the Shire of Plantagenet which has provided space in the shire depot for a conservation tool shed which houses equipment available for the community to use in NRM projects. The equipment includes: fencing tools, revegetation tools ripper moulder, seed and seedling planter, weed control equip, spray equip, spray unit, 4wd spray bike. This partnership builds community capacity.

WICC and OHCG provided the landowners in the catchments with \$2.9 million over 2005-07 for on-ground work for a variety of activities. With this funding, hundreds of kilometres of fencing have been erected to protect waterways, re-vegetation works and remnant vegetation. Hundreds of hectares have been re-vegetated with local native plant species, thousands of hectares of deep-rooted perennials have been established and various supporting activities, demonstrations and trials have been established. The two groups currently have approximately 280 landholders directly involved in NRM projects, and a large number of other community members engaged in a diversity of activities, such as weed removal in Porongurup and other public reserves.

OHCG has evolved beyond the simple provision of funding or technical assistance to landholders throughout the catchment. They have identified a need for "real" community capacity building and are now offering active community members nationally recognized training to assist in NRM activities in their local areas. This includes training in safe handling of chemicals, chainsaw operation and servicing, Senior First Aid and weed identification and control. This training has been further supported with equipment and chemicals being made available free of charge. This has enabled small community groups to tackle activities such as weed control much more safely, more efficiently and on a larger scale hence building community capacity. Small groups in the catchment who have specific objectives are encouraged to affiliate with OHCG which can assist with grant applications, and provide advice and resources.

WICC has been implementing the Wilson Inlet Nutrient Reduction Action Plan (WINRAP) since 2003. This is the guiding plan to protect Wilson Inlet from the effects of excess nutrients. The priority area is the Young Siding flood plain in the lower catchment which has a network of drainage that expedites nutrient export into the inlet. It is characterized by peri-urban or small land holders who may be developing a small farming enterprise or after a rural lifestyle. Engaging these land holders in Young Siding has been challenging as many landholders work off farm and do not have sufficient time or skills to undertake NRM projects. However, about 70 landowners have been engaged, achieving significant results.

A major fire in the Porongurup National Park and some 3000ha of surrounding farmland in the summer of 2007 provided a major threat from enhanced weed growth. The OHCG has managed the Post Fire Environmental Weed Project to map the weed infestation and demonstrate control methods in more than 150 ha within a 5km radius around the park. It has been important to engage the land owners to undertake invasive weed control before the infestations become too extensive to successfully control. Collaboration with the Department of Environment and Conservation (DEC) has been an important component in the project to manage the threat of weed growth to the biodiversity in the National Park. The Porongurup area is characterised mainly by many small land holdings (viticulture, life-style lots, hobby farms, tourism) surrounding the National Park. The project has been so successful that it was extended and achieved weed control measures for over 240ha.

COMMUNITY PROFILE

The Shire of Plantagenet is a rural local government district located in the Great Southern region of Western Australia, with its main urban centre, Mount Barker, being 357 kilometres south of Perth and 50 km north of Albany. It encompasses an area of over 4790 square kilometres and includes segments of the Kalgan, Hay, Denmark, Kent and Franklin River catchments. The urban centres of Mt Barker and Kendenup, and the rural villages of Narrikup, Porongurup and Rocky Gully, have a total population of the shire being 4484.

Historically, much of the Shire of Plantagenet was cleared by free settlers, or as war settlement blocks and established as grazing, cropping and orchard land. It has evolved from this beginning into a region with a diverse range of agricultural and tourism industries including; viticulture, plantation forestry, cattle/sheep grazing, cereal cropping, aquaculture, intensive pig/poultry production, and tourism.

The Shire of Plantagenet has a mediterranean climate of hot dry summers and cool wet winters with an average annual rainfall of between 500mm in the north east of the region and 800mm in the south west, although rainfall has generally been unreliable in recent years. Two mountain ranges are found in the region, the Porongurup Range and the Stirling Ranges. Both are national parks and represent significant and unique flora and fauna biodiversity reserves.

While it remains a productive and ecologically rich region, decades of land clearing and inappropriate land management have led to significant environmental degradation. Huge tracts of land are affected by salinity, water logging, erosion, nutrient runoff, invasive weeds and feral animals. Environmentally responsible land practices have gradually been adopted by landholders in the region, but there has been little emphasis placed on changing individual lifestyle attitudes towards embracing personal responsibility for the environment: There is little to no alternative energy produced in the region; waste management and recycling facilities are minimal and basic; many urban and peri-urban landholders are ill informed or unaware of the negative impact their households have on the local and global environment; and existing groups that aim to ameliorate environmental threats are not always operated in a regionally coordinated manner.

Appendix 1 presents details of ABS census data, the business profile, and social infrastructure for the region.

Social and Economic Demography

Population age distribution in the region (see Fig 2) is fairly standard for a community in a developed nation, with approximately 45% of residents being over the age of 45, 30% aged 20-44 and 25% aged 19 and under. The average age is 41. This may place some strain on public resources in the future should the average age continue to rise.

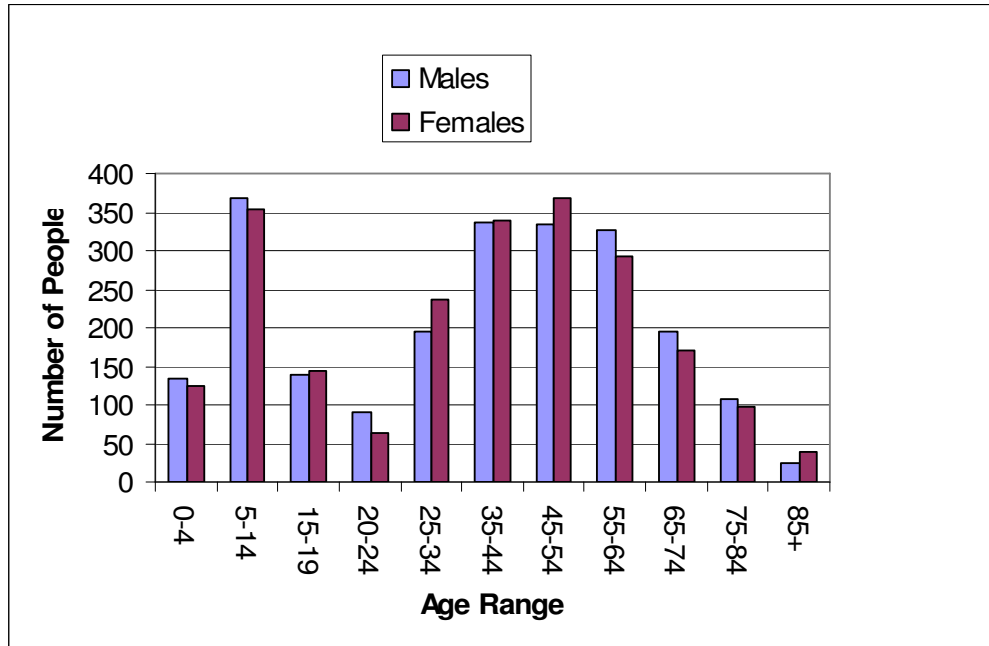
The primary commercial centre of Mt Barker has a population of 1761. The Kendenup area has a significant population with 1290 residents. Narrikup, Porongurup and Rocky Gully have small rural villages each with a population less than 520. There is an increasing amount of land surrounding these towns which has been subdivided into peri-urban lifestyle blocks, a trend set to continue with 12 new subdivisions planned representing over 300 new properties.

The majority of income and employment is derived from primary production (grains, livestock, horticulture, viticulture, and farm forestry), manufacturing, retail trade, public utilities and administration, or construction and fabrication. Health care, social assistance, education and training, administrative and support services employ nearly 400 people. Other businesses are generally goods and services providers driven by the main industries. The 2006 census recorded that 2014 people were engaged in gainful employment and the unemployment rate was 4.6%. 59% of the labour force are full-time employees.

While the average income (\$395 per week) of the residents of the Shire of Plantagenet is lower than the national average (\$466), low unemployment rates coupled with good provision of public

service amenities mean the majority of residents are stable, healthy and financially sustainable. Serious crime rates are low as is homelessness. It could be said that while a low proportion of individuals are classified as financially prosperous, most are comfortable.

Figure 2: Social demographics for the Shire of Plantagenet showing age distribution from the 2006 census for a population total of 4484. (Source: ABS)



Over 1000 members of the community donate time and effort to various volunteer and philanthropic organisations, many of these volunteers are members of several groups. Approximately 320 people within the community are currently members of groups that focus on ameliorating traditional NRM threats. This represents less than 10% of the total population and suggests there is scope for activities and projects that aim to engage new people in NRM issues that may not have previously been addressed in a cohesive way.

Business Summary

The majority of businesses in the region have between 3 and 5 full time equivalent employees. Only 4 have more than 20.

A list of 65 businesses in the region is profiled in Appendix 1. This is not an exhaustive list and does not include the numerous wineries, or the places providing tourist accommodation. Most businesses are locally owned, and support the community by employing local workers and sourcing products from the region where possible. The major exception to this is the plantation timber industry. There are several investor-based companies focussing on the production of timber for export paper pulp which have operated in the region for about 15 years. Combined, they are the largest landholders and indirectly one of the biggest employment drivers in the area.

Residents not employed by one of the businesses listed in Appendix 1 generally work under one of the following circumstances:

- Self employed agricultural producer;
- Seasonal horticultural work such as vineyard labourer or fruit picker;
- Travel outside the Shire of Plantagenet for work, generally to Albany.

METHODOLOGY

The project commenced at the end of November 2008. The initial focus was establishing the breadth of natural resource management issues which were relevant to the region. It was identified at the beginning of the project that the target groups would be businesses, community groups, urban landholders, peri-urban landholders and small farm owners that had previously not been engaged in NRM activities. The objective was to determine the NRM issues and threats relevant to these groups and to assess their current and potential capacity to participate in projects aimed at ameliorating these issues and threats.

The interests of target groups were identified by:

- Community information evenings
- Visits to households, businesses and properties
- Discussions with individuals, particularly in the course of creating the community profile

Engagement took place most effectively at the one-to-one level and allowed for evaluation of the individual's enthusiasm and capacity to develop new ideas. During the course of these activities information was disseminated in the form of written articles, presentations and the formation of discussion groups.

During the early stages of the project there was frequent liaison with other regional community engagement officers which helped to refine the approach to the different target groups and make improvements to the methodology. This sharing of ideas helped with planning of workshops, gaining of information from various organisations and recognising the range of ways of promoting activities within the community. A two-day Community Engagement Project workshop was organised by South Coast NRM to facilitate understanding of the project requirements (quantifying project impacts, data entry, future project developments, etc) and developing a team approach by officers across the South Coast Region.

A major task in the early stages of the project was to produce a Community Profile of the Shire of Plantagenet based on the information provided in the Australian Bureau of Statistics 2006 census. This profile shows the current population demographics of the region, and identifies the activities of government and non-government organisations in the region. This provides a benchmark for determining change in community participation, knowledge and attitude toward natural resources and their management into the future.

A series of community workshops and information sessions were planned and advertised to find out how people respond to the opportunity to increase their knowledge about resource issues and their appropriate management. The workshops sought to provide a forum for discussion within communities on specific subjects and, as a consequence, open up informal discussion within the community to explore ideas and management options. Other strategies were evaluated to determine the best approach to increase community engagement in, and knowledge of, natural resources and their management.

It was obvious from the initial contacts with the community that non-traditional natural resource issues were of particular interest in the region. Alliances with these individuals and groups were promoted to establish the key concerns and evaluate their ideas for management. As a consequence of these activities a number of small projects focused on specific community issues and concerns were developed into activities as potential projects.

Projects were developed with the community, both by groups and individuals, to encourage action on management issues which were considered to be achievable. There was planning for an evaluation survey at the final stages of the project but this did not occur due to the ill health of the Project Officer. For the same reason the collation of data into CatchPlan has not occurred.

Project Engagement Activities:

An integrated and coordinated program of activities were planned and implemented as opportunity allowed, each aimed at achieving the following objectives:

1. Improvement of the understanding and involvement of small (peri-urban) landholders, groups, businesses and other sectors of the community who have historically had a low level of engagement in natural resource management.
2. Undertake activities involving peri-urban land managers and other sectors of the community to ameliorate NRM threats that have arisen through inappropriate practices.
3. Seek funds for and develop new projects to address NRM threats that also increase involvement by sectors of the community to implement the projects.
4. Develop new strategic alliances involving non-NRM sectors to enhance their capacity to assist with the implementation of sustainable NRM practices (i.e. recreational groups, special interest groups, peri urban and urban householders etc.)
6. Initiate the development of a NRM network involving local government, land managers, commercial. businesses, industry and community groups.
7. An evaluation to determine if and how the engagement of the community translated into meaningful long-term practice changes was not completed due to the ill health of the Project Officer.

Targets of the Community Engagement Project

The primary goal of the Community Engagement Project (CEP) was to increase the level of personal responsibility residents take for their impact on the environment. This was achieved through increasing awareness of the impact individuals, households and businesses have on the environment and developing solutions that ameliorate these impacts.

The following list highlights target groups and activities that were recognised as having the potential to significantly raise the participation and awareness of residents within the Shire of Plantagenet. There was particular focus on those who have never previously been engaged in NRM activities.

1. Strong community groups are already established in the volunteer emergency services, recreation, health and agriculture sectors. These established groups provided an avenue to disperse information and develop environmental NRM projects of interest to the members of these groups. This engagement was an efficient and effective method of increasing the level of participation within the region.
2. A lot of interest was shown in private solar energy generation. Community workshops, promotion by government rebates/grants, and tours of households that have already adapted to sustainable energy helped promote an expansion in this field of non-traditional NRM.
3. Existing community groups that focus on controlling invasive weed species were promoted and expanded to embrace interested individuals who were not currently engaged.
4. Local nurseries were encouraged to remove potential weed species from their sales list and were provided with information on local provenance flora species to improve the quality of revegetation projects within the region.
5. The community college facility provided an excellent avenue to disseminate information to school children. Not only did this promote future involvement in environmental NRM issues, but it was a good method of getting information out to their parents.
6. Businesses involved in the fabrication and construction industry were contacted directly to discuss changes that could be made to their operations to encourage recycling, waste reduction and efficiency.

7. The plantation timber companies, as the largest landholders in the region were contacted and encouraged to take a more active role in managing their natural assets. This had particular focus on weed management, pest control and management of remnant native vegetation on the properties they owned.
8. The Shire of Plantagenet was encouraged to become an active partner in activities that ameliorate NRM threats. Increasing the Shire's capacity for recycling, waste management, preservation of Shire managed reserves and information services were the foci of discussions.
9. Several self-sufficient, sustainable households were identified. These needed to be promoted as demonstrations of what changes can be made to reduce the impact most households have on the environment.
10. Property developers in the region were encouraged to take a minimal disturbance attitude to development. Where possible developers were encouraged to include biodiversity preservation, waste management and efficient building regulations in their development proposals.
11. Development of an education package was planned for distribution to small landholders. It should include information on the best practices in stock management, fertiliser use, soil health, pest control and native vegetation management. Water and energy conservation information should be included.
12. Where sufficient interest was shown in any aspect of environmental NRM, the interested individuals or groups were encouraged to formalise the group and create an ongoing activity. New and existing groups need to communicate with each other to increase their effectiveness.

Project Inputs

Project inputs include the Caring for our Country grant through South Coast Natural Resource Management Inc of \$108,400. This funded 10 months of employment of the Project Officer, Mr Murray Hollingworth. The in-kind contributions in the form of time and travel by community group (OHCG and WICC) volunteers on the Project Management Committee was \$22,400. There were other un-costed in-kind input by people in the community which included people who attended meetings and workshops, person-to-person discussions with the Project Officer, and interviews with business personnel providing advice on project activities.

PROJECT OUTCOMES

Summary of the Project Deliverables

The project was given a set of deliverable tasks which were pursued. The outcomes from the activities are listed below:

1. Develop and implement strategies to increase community engagement in and knowledge of NRM:

Strategies to engage and increase knowledge and participation in NRM activities were developed after consultation with the community. Implementation of these strategies has had mixed success. Four community information workshops were scheduled and promoted using advertisements in the local newspaper and with a pamphlet delivered by mail. However, this strategy failed 3 times out of 4. This may be due to the significant degree of apathy in the community, as interest in the subject matter of these workshops had been confirmed with the other strategies that have been used to engage the community. One-on-one consultation with residents proved to be a very successful strategy, as were small personal group meetings.

2. New peri-urban land managers contacted and inducted into NRM issues affecting the local area and sub region:

32 peri-urban land managers were contacted. The NRM topics of interest for these peri-urban land managers included a desire to become self-sufficient, installation of solar electricity generators, rehabilitation of areas of their property, removal of invasive weeds and use of native flora in their gardens.

3. Activities undertaken that involve new peri-urban land managers and other sectors of the community in ameliorating NRM threats that have arisen through inappropriate practices:

10 activities were undertaken of which 5 were small gatherings where NRM information was disseminated and discussed. These events were attended by people who demonstrated an interest in a particular topic and were personally invited to the meeting by the RCEO.

Four community information evenings were planned, organised and advertised. The lack of response meant only one of these activities, held at Porongurup, actually took place. This environmental information evening was very successful, for a number of reasons summarised later in this report. Information regarding environmental weeds, sustainable living, alternative energy and the availability of Government rebates and grants was presented. At the end of the gathering everyone who attended was asked to commit to one action or lifestyle change that would have a positive impact on the environment. A telephone follow up confirmed that the majority of participants had made positive alterations to their practices.

4. New contacts and/or referrals provided to assist people working in the NRM sector:

118 new contacts were created through this project. The majority of these came from visits made to residents by the Project Officer.

5. New projects developed with community that result in an increase in the engagement of the community of interest, lead to an increase in knowledge and skills relating to the project and have benefits to sustainable use and/or management of our natural resources:

Two project proposals were developed which achieved their objective. These were the Mt Barker Golf Club Revegetation and Weed Control Project, and the Earthmoving and Small Business Oil Recycling Project. 10 other projects were identified for which 4 had objectives established and discussion held with those who would be involved. For the other 6 projects the proposals were not developed beyond an indication of the opportunity presented using project titles.

6. An evaluation to determine if/how the engagement of the community has translated into meaningful long-term practice change:

An evaluation has been achieved using the periodic reports provided to the Project Management Committee, and to South Coast NRM. Due to the poor health of the project officer in the latter

stages of this project, the planned evaluation survey of individuals who have participated in the project was not undertaken. A major question in the surveys was intended to measure whether there had been an action of lifestyle change that ameliorated a threat to the environment. There is clear evidence provided in this report that there has been action by many individuals (eg energy projects), groups (eg golf club) and businesses (eg oil recycling) to deal with the identified NRM threats. It is unfortunate that the Shire of Plantagenet find it difficult to give the leadership required to achieve meaningful long-term practice changes in natural resource management.

7. New strategic alliances involving non NRM sectors to enhance their capacity to assist with the implementation of sustainable NRM practices:

Five strategic alliances have been cultivated during the course of the project. These include earthmoving contractors, sports clubs, local businesses and local government departments, and a local Indigenous group.

Natural Resource Management Issues Identified

During the course of the project a number of resource issues were identified in the project area (the Shire of Plantagenet). These are not matters which could be resolved in the short period of the Community Engagement Project. However, the list provides a starting point for the development of specific projects within the region.

Environmental Weeds – There are several groups that already focus on controlling invasive weeds. These include the Friends of the Porongurup Range and the Kendenup Bushland Management Group. Rather than start new groups, there is the opportunity to expand the capacity of existing groups. South Coast NRM Inc has retained an invasive weed facilitator to help create a regional approach to weed control and assist applications for federal funding. The Shire is also potentially an interested but inactive partner. The Porongurup Weed Project has been given funding for a further 2 years through the Caring for our Country initiative of the Federal Government.

Work with local nurseries to stop the sale of plants known to be weeds in private gardens and public lands should be given high priority in the future.

Preservation of biodiversity – Seed banks and stores of other propagation material, (local provenance plantations) can be established at several points in the Shire of Plantagenet to provide some security for local floral diversity. Publicity of the biodiversity in the region needs to be developed to give awareness of the richness of the local native flora. Kendenup has a specific opportunity in this regard as a “hotspot” for biodiversity.

Sustainable living – This activity was aimed at responsible water use, private use of solar and wind power, reducing electricity use, food production, private waste management, environmentally friendly house design, and similar actions. Workshops that demonstrated how people can cheaply and easily reduce the impact their household have on the environment were held at several of the Community Engagement Project sub-regions across the South Coast Region, and their reports should provide guidance on developing projects in this area.

Several people have already expressed interest in installing their own small wind turbines or solar panels but are frustrated by their inability to find information on suppliers and installers in the region. Much of this information is of a proprietary nature which need not necessarily provide all the facts needed by people to make a decision in selection of a suitable system. A community workshop may be successful in identifying those who are genuinely interested in producing their own power, particularly while the subsidies from the government are available. While a group discount on the purchase of these products seems unlikely, a group installation discount could be arranged if enough interest is shown.

A local couple has built a house that is designed to cause minimal environmental disturbance. It is basically self sufficient for power and water. In addition they grow their own vegetables and recycle waste water. They appear to be willing to have small groups come and have a look at what they have done.

Carbon sequestration – While there is no official carbon trading/sequestration scheme currently endorsed by the government, people can still voluntarily offset their carbon emissions by paying a small fee for their car or home that goes towards planting local revegetation projects. If promoted properly, this has great potential but needs to be managed by an expert in the field.

Recycling – The Shire of Plantagenet has a very poor history of garbage disposal and recycling. Initial discussion with the shire officials about the proposed new waste disposal facility did not progress as hoped. This did not produce an outcome which could be used to encourage the community into a greater use of recycling and waste minimisation.

Feral animals – The ‘Red Card for the Red Fox’ is an established feral control program in the region. Opportunities for resource management officers to participate in this program should be achievable. This could include organising a series of workshops with the local DAFWA bio-security officer, and should include training for landholders to be accredited to handle baits.

Sustainable Development – There are currently 12 housing subdivisions taking place within the Shire of Plantagenet representing more than 300 new urban or peri-urban blocks. This provides the opportunity for collaboration with the Shire of Plantagenet development officer and land developers to provide guidelines that encourage minimal environmental impact in these developments. The use of bio-diversity corridors in rural small-lot development should be encouraged with developers.

Other Issues not developed – these include dieback, peri-urban fertiliser use, involvement of Indigenous people in land use planning and decision making, and best management practices for small landholders.

Summary of Community Environmental Desires, Concerns, Actions and Project Opportunities

The engagement with the community has resulted in identifying a suite of environmental desires, concerns and actions which could provide the basis for on-ground NRM project activities. Twenty items are listed here:

- A bus tour of existing solar and sustainable households.
- Weed/feral control projects focusing on *E. globulus* plantations next door to farms in the Denbarker, Narrikup, and Rocky Gully area.
- Improvements to the waste management and recycling facility.
- An information package that includes small farm management, weed control/prevention guidelines, information on available government rebates, sustainable living guide.
- Actions to limit runoff from new developments on Mt Barker Hill.
- Assemble a good revegetation species guide by area and land type for the Shire.
- On the east-south east edge of Mt Barker there is an area where a group of peri-urban landholders are interested in improving the creek that runs through their properties.
- Actions to limit runoff generated by septic sewerage systems in Kendenup with its shallow soils. The shire has imposed a limit to the number of houses which can be built per hectare to allow for adequate drainage of water from the septic in winter.
- Development of a Kendenup town bush land management plan including fire management plan.
- Formation of a Bush Walkers and Biodiversity Group – some people would like to learn about plant identification, native seed collection and plant propagation.
- Continuing interest in the landcare work and incentives offered in the Upper Hay project. There is need to establish a focus for management in the area as action appears to be determined in isolation by individual landholders.
- Actions to limit the use of bush tracks throughout West Narrikup and Denbarker for illegal horticultural enterprise.
- Support for the Rocky Gully community to be involved in all NRM issues.
- Development of a list of suitable local native garden species, mainly for the peri-urban area on the south-west side of Mt Barker and in Kendenup.

- Actions to limit chemical use and spray drift by vineyards and tree plantations.
- Improvement (mainly weed control and revegetation) of the bush surrounding the soak opposite the BP Roadhouse and the caravan park in Mount Barker.
- Dieback control and walk trail improvement around Mt Barker Hill.
- Actions to limit washouts and impediment to ground water flow caused by Shire roads.
- Actions to limit transport of weed material by plantation harvesters and utility service providers.
- Increased involvement of local Indigenous individuals and groups in NRM activities and decision making.

New Projects Identified

In the course of engaging the community, 12 projects were identified as having the potential for development based on the positive contacts made with individuals and groups in the Shire of Plantagenet.

The Mt Barker Golf Course revegetation and weed control project was fully developed and the initial year of activities successfully completed by the Mount Barker Golf Club. A second project (oil recycling) was formulated and discussions held with 6 businesses. Despite this project not being fully documented and funded, the promotion of the concepts resulted in 4 businesses taking up the proposal and implementing effective recycling of waste oil.

Four project proposals were initiated with objectives identified and discussion held with those who would be involved. Limited documentation was achieved and potential for success confirmed.

For the other 6 projects the proposals have not developed beyond an indication of the opportunity presented using project titles. These titles give some direction as to what areas of activity may be usefully pursued in the future. The list of titles follows:

- Sustainable Household Demonstration Project
- Peri-Urban Nutrient Management Plan
- Kendenup Small Landholder Bush Preservation Project
- Plantation Timber Weed Control Project
- Plantagenet Road and Rail Reservations Project
- Shire of Plantagenet Waste Management and Recycling Plan

Development of New Projects:

The two successful projects undertaken during the Community Engagement Project are described as follows.

Project 1: Mt Barker Golf Club Revegetation and Weed Control Project

The project identifies strategies and management plans to ameliorate threats to the ongoing health of native bush habitats within the Mt Barker golf course. The proposal aims to control the spread of invasive *Acacia* species, particularly *A. iteaphylla* through areas of native bush at the Mt Barker Golf Course and adjoining properties, and to replace introduced *Eucalyptus* species with local provenance species in the native bush between fairways. Concern was indicated for some native species, particularly canopy plants (eg. *Eucalyptus marginate*), which have been dying out from natural attrition. The use of the course had meant that natural regeneration was affected.

Strategies were identified to engage golf club members in achieving an increased awareness of the issues and to disseminate knowledge on how to ameliorate the threats. A small information session was organised as part of the agenda for a club meeting. Information pamphlets were provided at the club house for members. Local labour sources and volunteers were engaged to manually remove invasive *Acacia* species. Club members agreed to provide the ongoing

monitoring and manual removal of *A. iteaphylla* plants as they germinated. Local labour sources and volunteers carried out the work to plant local native species in areas requiring revegetation.

The majority of actions recommended in the project were executed using labour and materials donated by volunteers. External funding for this project was therefore not required. In the project proposal it was recommended that an initial investment of approximately 20 hours labour from a community based Environmental Engagement Officer (EEO), or equivalent employee, would be required to initiate the project, set out project guidelines/targets and engage interested community members into participating in the project. An ongoing investment of 10 hours per year for a further two years would involve the monitoring of the impact of the project and an assessment of further action required. The cost of the labour was estimated at \$1440.

The initial in-kind investment involved 120 man hours volunteer time, 3 hours bull dozer hire, site preparation for 0.5ha revegetation and the provision of 1000 seedlings. The value of the in-kind contribution was \$5,500. Ongoing investment was identified as 20 hours volunteer time/year and 200 seedlings to replace losses.

The expected outcomes include:

- The engagement of potentially 60 (more realistically 20) community people in an Environmental NRM activity. This includes those who would increase their awareness of all NRM issues and increase their capacity to undertake actions that ameliorate threats to the environment at their own properties.
- The complete removal of *Acacia iteaphylla* plants from the Mt Barker Golf Course.
- The removal of all introduced *Eucalyptus* trees and their successful replacement with local native flora.
- Maintenance of fauna habitats and biodiversity on the property.

The initial phase of the project has been successfully completed without need for any external financial contribution.

Project 2: Earthmoving and Small Business Oil Recycling Project

Contact with commercial firms and the Shire of Plantagenet involved with machinery and motor vehicles identified that waste oil products were not being disposed of appropriately and the impact on the environment where disposal occurred was unacceptable.

The objective of the project was to manage waste of all types from these engineering enterprises, though the most immediate opportunity was in the appropriate disposal of waste oil and oil products.

The methodology was to approach the Shire and local businesses to establish what methods could be used to manage all forms of waste. Given the delays by the Shire in establishing a fully developed, integrated waste management facility for all waste, including recycling, it was very difficult to engage the business community in appropriate management of their waste products. Some businesses had found an outlet for scrap metal which they used as there was some financial incentive. The other potential product for recycling was oil.

Investigations revealed that an oil recycling business, PANS, in Busselton was interested in supporting the recycling of oils for the Plantagenet region. Six businesses were approached about becoming involved in recycling waste oil.

Before the project could be developed further, 4 of the businesses indicated that they had begun recycling waste oil.

There is potential for this project to be developed fully for recycling a wider range of waste products. It is known that at least one community group has used scrap metal collection and recycling as a fund raising activity.

Projects Proposals with Limited Documentation:

The four project proposals with limited documentation were as follow:

Project 3: Plantagenet Revegetation Guidelines

The Shire of Plantagenet contains a diverse and valuable range of native flora. The history of clearing and intensive agriculture in the region has led to a large proportion of the landscape being ecologically degraded. The residents of the Shire have recognized the importance of restoring cleared and degraded land to healthy bush through revegetation. Since the 1980's landholders have been establishing sites of revegetated bush. These revegetation projects generally aim to use the most appropriate local species and provenance plants, but there has never been a comprehensive, easily accessible list of exactly which species are best suited to specific locations and conditions.

The project aims to provide a list of local plants, suitable for all revegetation applications, including: large scale rural revegetation projects, peri-urban revegetation, household gardens and amelioration of land affected by salinity, erosion, and water logging.

The size and diversity of the Plantagenet Shire means it is necessary to divide the region into 7 sub-regions when classifying plant species as 'local'. These sub-regions are Rocky Gully, Denbarker, Martigallup, Kendenup, Woogenellup, Porongurup and Narrikup.

Appropriate species for each sub-region can be identified on the basis of their suitability for a particular habitat and soil type. These habitats are classified as well drained gravel and loam, deep sand, fresh water swamp or salt water swamp.

The action required for this project is to engage a suitably qualified person to document the plants suitable for use in revegetation projects within the region. It is known that Greenskills has a person who could undertake this task. No estimate of cost has been determined.

The Kalgan River Stewards group (Secretary: Maureen Cremin) has obtained a licence to collect native seed and have been propagating their own seedlings for revegetation work by volunteers along a section of the Luke Pen Walk in the lower reaches of the Kalgan River east of Albany. This group could provide valuable advice on how they have achieved their success.

Project 4: Bushwalkers and Biodiversity Project

This project was identified through a personal contact of the Regional Community Engagement Project Officer with the Wildflower and Photography Group linked to the Banksia Farm in Mount Barker. The group indicated a desire to generate and develop the interest of people in the community, and raise their level of knowledge about, and involvement in, natural biodiversity.

They expressed their desire to;

- Engage the WA Herbarium staff to provide knowledge and advice about native plants in the region, especially in aiding identification of the wide range of species present.
- Develop skills in the members in the identification of native species.
- Teach the methodology for identification and cataloguing of species, including the characteristics of the location of plants.
- Assist with obtaining seed collection licences
- Provide advice and encouragement for propagation of native species through learning about the techniques required for success.

The project actions would be to determine and implement ways in which these interests could be encouraged and developed.

Project 5: Mt Barker Small Landholders Environmental NRM Project – South East

Community consultation had determined that there is a group of small landholders in Mt Barker concerned about the health of a small creek system intersecting their properties. The main concerns are the presence of invasive weeds, lack of biodiversity and historical damage done to the system through grazing. The Community Engagement Officer was unable to follow-up this opportunity during the period of the project.

Project 6: Making the Shire of Plantagenet Plastic Bag Free

This project has the objective of working with all businesses (small and large) in Mount Barker to establish the environmentally appropriate alternatives to the use of plastics bags for holding goods at the point of sale. There would be a large benefit if the major retail outlet in Mount Barker, Mount Barker Co-Operative Ltd (involving the Super IGA supermarket and Mitre 10 hardware store) could provide a lead in this objective. The objective has been achieved in other rural towns in Australia who could provide guidance on the processes they undertook to achieve the objective.

As a consequence of the planning for this project it was found that two of the businesses approached in Mount Barker had stopped using plastic bags and replaced them with environmentally friendly shopping bags.

PROJECT ACHIEVEMENTS

Key Achievements Highlighted

Forms of engagement that succeeded:

- One to one relationships and engagement particularly with urban/peri-urban landholders.
- Attendance and participation at regular meetings of community groups.
- Participation in activities with established community groups such as the Mount Barker Golf Club and the Porongurup Progress Association.
- Consultations with small groups in regard to specific issues.

A successful strategy

Having identified the Porongurup community as a project target group, a successful workshop was organized. The outstanding success could be attributed to:

- Collaboration - The workshop was organised in collaboration with strong local community groups.
- Advertising – The workshop was promoted through the local weed action group, pamphlets were mailed to all residents, posters were placed on all community access notice boards and the workshop was advertised in the local newspaper.
- Content – the content of the workshop was tailored to community needs according to earlier research into the specific interests of the community.
- Community attitude – the Porongurup community is a dynamic, environmentally conscious, proactive and receptive target audience.
- Venue – the proprietors of the local shop provided a comfortable, relaxed and informal venue (with awesome food!), which facilitated effective group interaction.
- Commitment – Participants were requested to make a “soft” commitment to applying some of the learning from the evening in their own homes. A telephone follow up confirmed that the majority of participants had made positive alterations to their practices.

Changes Identified during the Project

Large community workshops and information evenings have proven generally unsuccessful as methods of engaging the community and increasing awareness of Environmental NRM issues in the Shire of Plantagenet. However, small personalised gatherings and one-on-one consultations between community members and the Engagement Officer have been well received and led to an increase in awareness and participation in NRM issues. Six specific issues have emerged from this process as follows::

- Use of residential solar electricity generators.
- Adoption of sustainable lifestyle practices.
- Awareness of environmental weeds.
- Awareness of suitable native garden plants.
- Restoration of riparian zones in a peri-urban setting.
- Biodiversity preservation and management in peri-urban settings.

Over 120 new members of the community have been indoctrinated in NRM issues and know they can personally make a difference by modifying their households and lifestyles. Key areas of interest included alternative energy, reducing water and power use, and reducing reliance on chemicals.

Examples of activities that resulted in attitude and behaviour changes

1. **The Potter household.** A personal visit was made by the Community Engagement Officer (CEO), booklets and information on sustainable living and alternative energy were passed

out and discussed. As a result of this visit 2 parents and 4 children gained an increased knowledge of NRM issues and began switching appliances off at the wall, reducing the length of their showers, looked into the possibility of installing solar hot water and solar panels, started an organic vegetable garden, and separating their rubbish for recycling. In addition the Potters have begun to fence off, revegetate and control weeds in the length of creek that runs through their small property. These activities were confirmed by a follow up phone call by the CEO 3 months after the visit. It also led to the CEO visiting the owners of the adjoining properties to discuss similar issues and present the possibility of creating a small project to improve the quality of the creek running through the area.

2. An evening was spent with 6 residents of Rocky Gully discussing resource conservation issues, alternative energy resources and the availability of government subsidies. This has led to the families represented at the gathering adopting energy saving practices within their households. This was also confirmed by a follow up phone call.
3. The CEO attended a meeting of the Mt Barker Golf Club. During that meeting a short presentation was made and it was determined that the members would like to undertake a small weed control and revegetation project at the Golf course. Not only was the Project successfully started, over 20 people who attended the meeting took home the documentation provided.
4. The Porongurup Information Evening. 30 residents of the Porongurup region attended a catered information evening where guest speakers made presentations on NRM issues. As a result everyone who attended stated they had an increase in knowledge of the issues discussed. Two residential solar power systems have been installed by people who attended the evening.
5. A number of businesses were engaged and changed their practices as part of the project:
 - Two earthmoving businesses started recycling their used sump oil through "Ponds Oil" recycling.
 - A number of businesses in Mount Barker were briefed and prepared to change their recycling habits once the Shire facilities became available to them
 - A number of businesses in Mount Barker have undertaken to reduce the use of non-recyclable plastic bags. At least two business have already made the change

Lessons Learned during Project

Primary Lessons Learned:

1. Engaging the community

The most important aspect of community engagement is the method of interaction with members of the community.

In the Shire of Plantagenet, activities that rely on the usual communication methods to motivate attendance of the public tend to fail. This has been demonstrated in the failure of 3 out of 4 community information evenings in this project and many similar events that were held during projects organised by OHCG and WICC in past years.

The failure of these activities is not due to insufficient publicity, as the CEO constantly encountered proof that people were aware of the activities. It is not due to lack of interest in the subject matter of the activities, as when information on the same topics was presented to individuals one-on-one it was obvious people were interested and willing to become involved in NRM issues. Therefore it is a general apathy and lack of motivation towards community events and a degree of cynicism about how individuals can make a legitimate contribution towards improving the environment on any scale (local, national and global). For these reasons community information evenings are generally not an effective strategy in this region.

Alternative strategies that have proven very successful are;

- One to one discussion with community members **at their residence**.
- Small gathering of people who have demonstrated an interest in a particular topic or range of topics. Everyone is personally invited to these meetings.
- Attending the regular meeting of existing community groups as a visitor where a small presentation is made during the meeting.

2. Breadth of Concerns in NRM issues

There is no doubt that there is interest in the community in a wide range of issues which can be legitimately identified as natural resource issues. Topics of interest cannot be ignored simply because they are non-traditional in nature. So alongside concerns for water logging, erosion, nutrient mobility, salinity, invasive weeds and feral animals, are the concerns for energy production from renewable sources, water resource sustainability, management of waste from factories and farms as well as small businesses and retail outlets, and the impact of urban and peri-urban land use.

3. Effective approach to engagement projects for NRM issues

This project has confirmed that the most effective approach to community engagement in NRM issues is through the activities of long-lasting, adequately-funded, catchment groups, such as WICC and OHCG. This is supported by the effectiveness of past activities of these organisations, as recognised by State and National awards, and summarised in the Introduction to this report. It is impossible to effectively engage with some NRM stakeholders (e.g. Indigenous individuals and groups) via short-term projects. Hence, future projects should be undertaken through the existing catchment groups.

Other Specific Lessons Learned:

- **Length of project:** there was insufficient time to implement all of the projects that could be developed;
- **Working across 2 catchment groups:** to avoid communication problems between the catchment groups a joint catchment steering committee was formed that directly managed the project.
- **Resources:** (staff, financial etc) need to be available to provide incentives for on ground works;
- The **size** of project area, and the population size and distance between population centres will affect the capacity to implement many community programmes such as waste management.
- For activities to be successful they must be advertised extensively using multiple avenues of media.
- There are a large number of families with limited financial resources which impacts on their perceived ability to participate.
- Difficulties of communication within community groups need to be recognised and accepted. Strategies to overcome these difficulties need to be formulated at the beginning of any project seeking to engage the community. Some difficulties may be perceived but not real.
- A significant proportion of the community have little or no interest in changing their attitude towards NRM issues.
- While at first it appears inefficient and time consuming to conduct one to one visits with members of the community, it is a very successful method of creating change and increasing knowledge in the community. It allows a level of personal communication in areas of interest which individuals may find difficult to present in a large group meeting. It is also important to remember that, while only one person may be actively engaged, they will pass on the information to their partners and children.

- Rather than invite members of a club or group to an activity or meeting created by the project officer to engage members, attendance by the project officer at a meeting the group would allow an evaluation of the potential for the group (or members of the group) to participate in NRM activities.

Key Evaluation Question

The key evaluation question asked for this project was: *to what measurable extent the Community Engagement Project has improved the knowledge and participation of small landholders, local businesses and peri-urban residents of non-traditional Environmental NRM issues such as sustainable living, alternative energy, recycling/waste management, biodiversity preservation and invasive species management within the Shire of Plantagenet.*

The project has made a significant step forward in broadening the focus of natural resource issues for which the community are willing to develop management strategies. A specific case in this regard is the engagement of sporting and recreation clubs who enjoy outdoor activities in a range of environments which need improved management. To engage commercial firms in changing waste disposal activities provides a challenge to the wider community to do likewise in the many problems of environmentally appropriate waste management. The potential for community activities has been identified for 18 specific activities covering issues across the diversity of NRM concerns such as environmental weeds, preservation of flora biodiversity, sustainable living, Indigenous involvement, waste management, feral animals, sustainable development of land for housing, and the control of nutrient runoff. There is no doubt that there is an interest by the community in a wide range of issues which can be legitimately identified as natural resource issues. For example, a significant increase has been shown in the interest in private solar energy generation, encouraged by the current debate on climate change and global warming. Discussion in small groups has been found to foster a greater awareness of the opportunities in this industry and the economic and environmental benefits.

The participation of the community in NRM issues requires an assessment of the more effective ways of engagement. The more traditional methods of workshops and field days seeking to gather large numbers of people to participate in a learning and sharing process have not achieved the goal. Rather, the use of one-to-one and small group methods has been a more effective approach and may be a much better use of the time and resources of officers and people with expert advice. An additional method has emerged where the NRM officer attends existing clubs and groups as a visitor at their regular meeting to promote and encourage engagement with issues closely related to the specific objectives of the group.

Project development requires not only ideas, but commitment of resources, which may be totally voluntary in the case of a club. Having identified and cultivated the opportunity for resource management, it has been significant that two projects were completed quite quickly and effectively when the objectives were embraced by the club or business. Some action has resulted in a third project even without detailed planning. The desire to take action is often not the problem. Rather, the actions needing to be completed and the methodology to achieve the desired objective, when identified and communicated, are all that is required to trigger action. The engagement officer becomes a facilitator rather than the person expected to carry out the activities. This was the case for the weed control and revegetation project completed at the golf club, and the change to an appropriate recycling method for waste oil from machinery in several engineering businesses.

RECOMMENDATIONS

Recommendations and future improvements

1. The relationships and projects that have been proposed with community groups and individuals need to be maintained after this project has been completed.
2. The potential projects which have been identified should be further developed and evaluated to achieve the planned NRM outcomes.
3. A working relationship needs to be established with Indigenous groups as there is significant potential for these groups to be actively engaged in environmental activities. Indigenous groups would be more easily engaged in addressing issues which they themselves have identified rather than issues that have been identified for them.
4. The findings of this report and those of other engagement projects which relate to the catchments of the Oyster Harbour and Wilson Inlet should be collated, combined where relevant, and made available to the community catchment groups so that the key findings can be used to develop projects within the catchments.
5. The community desires and concerns identified need to be distributed to the 3 catchment groups who administer NRM in the region of the Shire of Plantagenet.
6. The methods used to engage the community require careful consideration when seeking to disseminate information, foster involvement by the community, increase awareness of Environmental NRM issues, and attempt to achieve changes in management of NRM issues. As the use of large community workshops and information evenings has been found to be the least effective, greater use should be made of the small personalised gatherings and one-on-one consultations between community members and the Engagement Officer.
7. The scope of natural resource issues requiring management needs to be broadened to encompass the range of activities which will manage the use and control the misuse of resources across all sectors of the rural, peri-urban and urban communities. The project has identified activities such as waste management, energy conservation, and recycling which have strong resources management issues.
8. Both Catchment groups (WICC and OHCG) require a full time staff employee with a long term contract for continuing successful engagement with the community in NRM activities.
9. Funding for on-ground activities is essential as an incentive for engaging the community in meaningful activity. It must be recognised that external funding has a significant leverage effect when activities are confirmed as appropriate for management of natural resources.
10. More effort is required in the education of the community in natural resource management. Whilst the schools are an obvious focus for a greater understanding and awareness of the wide spectrum of NRM issues, creative methods are essential to engage the whole community in the education process.

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APPENDICES

Appendix 1:

*Commercial, Economic and Social Demography of the Shire of Plantagenet –
A Community Profile*

Appendix 2:

Potential Regional Community Engagement Activities

Appendix 3:

New Projects Developed

APPENDIX 1

Commercial, Economic and Social Demography of the Shire of Plantagenet – A Community Profile



January 2009

Compiled by:
Murray Hollingworth



Introduction

The Shire of Plantagenet is a rural local government district located in the Great Southern region of Western Australia, 357 kilometres south of Perth and 50 kilometres north of Albany. It encompasses an area of over 4790 square kilometres and includes the population centres of: Mt Barker, Kendenup, Narrikup, Porongurup's and Rocky Gully. The total population is 4484.

Historically, much of the Shire of Plantagenet was cleared by free settlers, or as war settlement blocks and established as grazing, cropping and orchard land. It has evolved from this beginning into a region with a diverse range of agricultural and tourism industries including; viticulture, plantation forestry, cattle/sheep grazing, cereal cropping, aquaculture, intensive pig/poultry production, and tourism.

The Shire of Plantagenet has a Mediterranean climate, hot dry summers and cool wet winters with an average annual rainfall of between 500mm in the north east of the region and 800mm in the south west, although rainfall has generally been unreliable in recent years. Two mountain ranges are found in the region, the Porongurup Range and the Stirling Ranges. Both are national parks and represent significant and unique flora and fauna biodiversity reserves.

While it remains a productive and ecologically rich region, decades of clearing, development and inappropriate land management have led to significant environmental degradation. Huge tracts of land are affected by salinity, water logging, erosion, nutrient runoff, invasive weeds and feral animals. Environmentally responsible land practices have gradually been adapted by landholders in the region, but there has been little emphasis placed on changing individual lifestyle attitudes towards embracing personal responsibility for the environment: There is little to no alternative energy produced in the region; waste management and recycling facilities are minimal and basic; many urban and peri-urban landholders are ill informed or unaware of the negative impact their households have on the local and global environment; and existing groups that aim to ameliorate environmental threats are not always operated in a regionally coordinated manner.

This Community Profile of the Shire of Plantagenet portrays the characteristics of communities within the Shire of Plantagenet as they pertain, in particular, to the environment and natural resource management issues.

The specific objective of this document is to record:

- Government agencies and volunteer organisations active in the region.
- Critical issues and change drivers within the community.
- The social and economic demographics of the region.
- Existing social infrastructure.
- Business development and activity.

Natural Resource Management for the Shire of Plantagenet

Caring for our Country is an Australian Government initiative aimed at ensuring our environment is as resilient, well managed, diverse and protected as possible in the face of increasing pressure on our natural resources. Ensuring it can continue to provide the resources and ecosystem services that are essential to support the sustainable growth, prosperity and health of our communities throughout Australia. The Caring for our Country program focuses on providing funding for strategic outcome based projects that address six national priority areas: The National Reserve System; biodiversity and natural icons; coastal environments and critical aquatic habitats; sustainable farm practices; natural resource management in northern and remote Australia; and community skills, knowledge and engagement. \$2.25 billion in funding has been allocated to the Caring for our Country initiative over five years.

South Coast Natural Resource Management Inc. is the peak regional group for environmental natural resource management on the South Coast of Western Australia.

The group co-ordinates and administers funding that has been allocated from the Australian Government and the Government of Western Australia, for NRM activity.

South Coast NRM's role is to prioritise the South Coast region's assets (the things we value) that need protection, rehabilitation or conservation/preservation. With the help of the community, government agencies, local government, organisations and industry, we have developed a framework for managing the future of these assets and our key natural resources.

The Regional Community Engagement Project for the Shire of Plantagenet has increased the understanding and involvement of individuals and groups from various sectors of the community, including current natural resource management practitioners, as well as those not currently engaged in NRM activities. The project has also evaluated how the engagement of the community can translate into meaningful long-term practice change.

South Coast NRM has secured funding from the Caring for our Country program to implement priority activities identified in its Investment Plan and NRM strategy. Part of this funding has been distributed to the existing delivery organisations operating in the Shire of Plantagenet, the Oyster Harbour Catchment Group and the Wilson Inlet Catchment Committee. This has allowed the employment of a Community Engagement Officer (CEO) to provide support, knowledge, information and institutional frameworks to increase the capacity for individuals, landholders, communities, industry and organisations to implement biodiversity conservation, and sustainable resource use and management.

The Wilson Inlet Catchment Committee (WICC) and the Oyster Harbour Catchment Group (OHCG) are the primary community based delivery organisations, responsible for providing advice and securing funding to assist residents of the respective catchments to ameliorate threats to the environment.

The objectives of these associations include:

1. Create an environment of sustainable development;
2. Promote economic, community and environmental well being as part of the Region;
3. Foster co-operative and collaborative arrangements in the sub-region;
4. Foster protection of the Kalgan, Hay and Denmark catchments within the Albany Western Hinterland and hence the environment;
5. Involve the community in catchment planning and management;
6. Consider matters of common interest to members and where practicable to establish common policy;
7. Facilitate co-operative activities of members at a sub-regional level;
8. Identify priorities for promotion of sub-regional initiatives;
9. Sponsor or engage in publishing educational material and research in catchment initiatives;
10. Provide leadership in the Albany Hinterland in developing natural resource management strategies and targets;
11. Promote catchment management in the Albany Hinterland with the aim of reducing eutrophication in our waterways;
12. Promote land use practices that protect our environment: native remnant vegetation; waterways and their tributaries; including recharge areas; and the restoration and maintenance of wetlands;
13. Promote the benefits of biodiversity in our region;
14. Liaise with and facilitate the flow of information between relevant government agencies, community groups, local government, South Coast NRM and landholders within the region;
15. Stimulate the formation of action groups working on the ground;
16. Increase awareness of sustainable management of our natural resources;
17. Demonstrate the links to profitable and sustainable farming practices;
18. Promote ecological integrity in our land use management systems;
19. Assist schools with natural resource management projects and promote other educational opportunities in the community;
20. Encourage the greater involvement of local government in NRM.

* * * * *

Demographic Characteristics of the Shire of Plantagenet

This report has been commissioned by the delivery organisations (WICC and OHCG) of the Regional Community Engagement Project, as a contractual obligation to South Coast NRM, the primary regional delivery group responsible for application and distribution of federal and state funding in the field of environmental sustainability and natural resource management.

The report aims to provide current baseline information about the Shire of Plantagenet and its community. There is particular interest with regard to the community's knowledge and involvement in environmental natural resource management issues, and the need to establish how the Regional Community Engagement Project can contribute to a measurable change in the community's capacity to address critical environmental issues.

Social Demographics

The following statistical data relating to the social demographics of the Shire of Plantagenet has been collated from information supplied by the Australian Bureau of Statistics (ABS).

Age by Sex

	Males	Females	Total
Total persons	2,252	2,232	4484
Age groups:			
0-4 years	134	125	259
5-14 years	368	354	722
15-19 years	138	143	281
20-24 years	90	64	154
25-34 years	195	237	432
35-44 years	337	340	677
45-54 years	334	369	703
55-64 years	328	293	621
65-74 years	196	170	366
75-84 years	108	98	206
85 years and over	24	39	63

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Place of Usual Residence by Age

	0-4 Years	05-14 years	15-24 Years	25-54 Years	55-64 years	65+ years	Total	Mean age
Mt Barker	114	268	208	644	191	337	1761	39
Kendenup	66	213	109	563	203	136	1290	42
Narrikup	33	82	41	208	87	64	515	44
Porongurup	19	56	38	157	58	40	370	42
Rocky Gully	14	28	16	89	23	22	193	38
Takalarup	9	55	22	105	32	22	244	39
Perillup	7	21	7	51	12	12	111	36
Total	261	721	431	1813	625	632	4484	41

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Country of Birth by Sex

	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Australia	1,698	1,640	3,338
Canada	4	0	4
China (excl. SARs and Taiwan Province)(b)	3	3	6
Germany	14	16	30
India	3	5	8
Indonesia	4	0	4
Ireland	10	4	14
Italy	4	3	7
Malaysia	6	0	6
Netherlands	11	19	30
New Zealand	31	44	75
Philippines	7	4	11
Poland	0	3	3
South Africa	9	19	28
South Eastern Europe, nfd(c)	3	0	3
Sri Lanka	3	3	6
United Kingdom(d)	214	239	453
United States of America	3	7	10
Born elsewhere(e)	53	52	105
Country of birth not stated	172	169	341
Total	2,252	2,233	4,485

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Indigenous Population by Age by Sex

	<i>Males</i>	<i>Females</i>	<i>Persons</i>
0-4 years	7	10	17
5-9 years	4	4	8
10-14 years	12	9	21
15-19 years	7	6	13
20-24 years	4	3	7
25-29 years	0	4	4
30-34 years	4	4	8
35-39 years	0	9	9
40-44 years	0	0	0
45-49 years	0	0	0
50-54 years	0	0	0
55-59 years	0	4	4
60-64 years	0	0	0
65 years and over	0	0	0
Total	38	53	91

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Voluntary work for an Organisation by Age

	<i>Volunteer</i>	<i>Not a volunteer</i>	<i>Voluntary work not stated</i>	<i>Total</i>
15-19 years	44	186	50	280
20-24 years	23	122	10	155
25-34 years	121	285	26	432
35-44 years	231	397	48	676
45-54 years	219	433	51	703
55-64 years	206	376	39	621
65-74 years	103	219	42	364
75-84 years	45	130	31	206
85 years and over	9	50	4	63
Total	1,001	2,198	301	3,500

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Family composition

	Families
Couple family with no children	585
Couple family with children	485
One parent families	136
Other families	9
Total families	1,215
Total private dwellings	2,028
Occupied private dwellings	1,715

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Tertiary Qualification by Sex

	Males	Females	Persons
Postgraduate Degree	16	9	25
Graduate Diploma and Graduate Certificate	11	27	38
Bachelor Degree	92	137	229
Advanced Diploma and Diploma	99	153	252
Certificate Level	391	210	601

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Economic Demographics

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Industry of Employment by Age

	15-19 years	20-24 years	25-34 years	35-44 Years	45-54 years	55-64 years	65-74 Years	75-84 years	85 years and over	Total
Agriculture, forestry & fishing	24	25	85	140	139	150	69	15	3	650
Mining	0	3	5	9	8	3	0	0	0	28
Manufacturing	21	17	46	56	54	29	0	3	0	226
Electricity, gas, water & waste services	0	0	0	0	3	0	0	0	0	3
Construction	8	12	17	35	30	20	0	0	0	122
Wholesale trade	0	4	7	15	10	9	0	0	0	45
Retail trade	28	11	21	48	35	25	3	0	0	171
Accommodation & food services	4	0	10	17	18	14	4	0	0	67
Transport, postal & warehousing	0	0	11	18	21	13	4	0	0	67
Information media & telecommunications	0	0	0	0	3	3	0	0	0	6
Financial & insurance services	3	3	6	6	6	3	0	0	0	27
Rental, hiring & real estate services	0	6	3	6	6	6	0	0	0	27
Professional, scientific & technical services	0	0	14	17	15	16	5	0	0	67
Administrative & support services	0	3	0	7	8	7	0	0	0	25
Public administration & safety	0	6	16	20	32	23	0	3	0	100
Education & training	3	6	12	40	48	15	3	0	0	127
Health care & social assistance	4	4	14	39	54	26	9	0	0	150
Arts & recreation services	0	0	0	0	0	0	0	0	0	0
Other services	8	3	13	7	9	4	4	0	0	48
Inadequately described/Not stated	3	8	10	11	8	9	6	3	0	58
Total	106	111	290	491	507	375	107	24	3	2,014

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

**Employment Status by Age
(+15yo)**

	15-19 Years	20-24 Years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75+ years	Total	%
Full-time employed	56	77	177	305	347	230	47	14	1,253	59.3%
Part-time employed	47	21	76	159	129	117	45	7	601	28.6%
Employed, away from work(b)	0	11	24	22	22	17	14	0	110	5.2%
Casually employed	3	4	14	6	11	9	0	3	50	2.3%
Total employed	106	113	291	492	509	373	106	24	2,014	-
Unemployed	9	10	23	18	21	16	3	0	100	4.6%
Total labour force	115	123	314	510	530	389	109	24	2,114	-
Not in the labour force	140	29	99	115	127	201	227	219	1,157	-
Employment status not stated	23	5	22	51	46	29	29	22	227	-
Total	278	157	435	676	703	619	365	202	3,498	

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Weekly Gross Income by Age

	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 Years	75-84 years	85 years and over	Total
Negative/Nil income	95	13	17	26	49	56	17	3	0	276
\$1-\$149	65	11	31	38	50	30	21	15	0	261
\$150-\$249	25	13	41	62	69	126	113	75	19	543
\$250-\$399	28	24	62	97	77	82	87	46	19	522
\$400-\$599	19	46	90	117	120	98	48	22	3	563
\$600-\$799	6	28	75	103	94	70	19	3	0	398
\$800-\$999	3	10	38	60	57	35	8	7	4	222
\$1,000-\$1,299	0	3	32	49	71	53	0	5	0	213
\$1,300-\$1,599	0	0	0	24	23	11	5	0	0	63
\$1,600-\$1,999	0	0	5	14	17	8	3	0	0	47
\$2,000 or more	0	0	4	18	20	12	3	4	0	61
Individual income not stated	39	7	36	68	57	40	41	26	17	331
Total	280	155	431	676	704	621	365	206	62	3,500

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

Weekly Gross Income Distribution

	Plantagenet Shire	Australian average
Median individual income	\$395	\$466
Median household income	\$762	\$1027
Median family income	\$948	\$1171

AUSTRALIAN BUREAU OF STATISTICS 2006 Census

More detailed information relating to demographic characteristics of the Shire of Plantagenet can be found at the Australian Bureau of Statistics website:

<http://abs.gov.au/websitedbs/D3310114.nsf/home/Census+data>

Interpretation of the social and economic demographics for the Shire of Plantagenet

While the average income of the residents of the Shire of Plantagenet is lower than the national average, low unemployment rates coupled with good provision of public service amenities mean the majority of residents are stable, healthy and financially sustainable. Serious crime rates are low as is homelessness. It could be said that while a low proportion of individuals are classified as financially prosperous, most residents are comfortable.

The majority of income and employment is derived from primary production, public service, construction and fabrication or the retail trade. Other businesses are generally goods and services providers driven by the main industries.

Most businesses are locally owned. The major exception to this is the plantation timber industry. Several investor based companies who focus on the production of timber for export paper pulp have operated in the region for about 15 years. Combined, they are the largest landholders and indirectly one of the biggest employment drivers in the area.

Population age distribution in the region is fairly standard for a community in a developed nation, with approximately 45% of residents being over the age of 45, 30% aged 20-44 and 25% aged 19 and under. The average age is 41 which may place some strain on public resources in the future as the average age continues to rise.

Over 1000 members of the community donate time and effort to various volunteer and philanthropic organisations, many of these volunteers are members of several groups. Approximately 320 people within the community are currently members of groups that focus on ameliorating NRM threats. This represents less than 10% of the total population and suggests there is scope for activities and projects that aim to engage new people in NRM issues that may not have previously been addressed in a cohesive way.

The primary urban population centre is the Mt Barker town site. Kendenup has a population of about 70% the size of Mount Barker. Porongurup, Rocky Gully and Narrikup are rural villages with populations less than 520. An increasing amount of land surrounding all the population centres has been subdivided into peri-urban lifestyle blocks, a trend set to continue with 12 new subdivisions planned representing over 300 new locations.



Business Profile

The following is a list of businesses in the Shire of Plantagenet with a small description of the services they provide and the number of people they employ. The owners are included as employees for the purpose of the profile. The number of employees relates to full time equivalent (i.e. 2 part time employees working 0.5 FTE each are listed as one employee). Any direct activities undertaken to ameliorate environmental threats by the business (not individual employees) has been noted. Agricultural producers and contractors without employees are not included. This is not an exhaustive list but provides a guide to the range of goods and services provided in the project area.

The majority of businesses listed have between 3 and 5 full time equivalent employees. Only 4 have more than 20. Most are locally owned and support the community they operate in by employing locals and sourcing products from the region when possible.

Residents not employed by one of the businesses listed below generally work under one of the following circumstances:

- Self employed agricultural producer;
- Seasonal horticultural work such as vineyard labour or fruit picker;
- Travel outside the Shire of Plantagenet for work, generally to Albany.

Alex Masson and Co Smash Repairs – Panel beater; 5 employees.

Bandicoot Nursery – Wholesale and retail vegetation nursery; 30 employees; participates as a partner in public revegetation projects, bulk discounts to land care groups, offers advice to customers about suitable plants for biodiversity revegetation.

Banksia Farm – Nursery, tourist destination, tea rooms and a small function centre with an emphasis on native flora; 2 employees; offers advice to customers regarding native plants.

Bankwest Mt Barker – Bank; 4 employees.

Barker Family Daycare – Child care service; 4 employees.

Bendigo Bank – Community Bank; 6 employees

Bohemia Painting Contractors – House painting and decorating; 2 employees.

BP Roadhouse Mt Barker – Fuel station with a café/restaurant; 8 employees.

Carroll State Agencies – Agriculture services; 3 employees.

Cliff Rosman – Building service and maintenance; 2 Employees

GT and JF Couper – Earthmoving, heavy machinery contractors; 6 employees; provides drainage construction services.

Designer Hair – Hair salon; 5 employees.

Duffy's Access Video – DVD hire, key cutting, printing; 3 employees.

Dyson Jones – Wool valuation, broking and services; 3 employees.

F & F Auto Repairs – Mechanic; 2 employees.

Fios Café – Café/Restaurant with facilities for small functions; 4 employees.

Fletcher Electrical – Domestic, commercial and automotive electrical installation and maintenance; 3 employees.

Fulcher Contractors – Earthmoving and transport suppliers and contractors; 4 employees.

Gilberts Winery and Café – Vineyard cellar sales, tasting and café; 3 employees.

Gilberts Wines – winery and cafe, door sales; 5 employees

GSR Rural Services – Agriculture and stock supplies; 4 employees

Kendenup Bulk Haulage – Bulk transport by truck; 2 employees

Kendenup Chicken – Poultry abattoir; 16 employees.

Kendenup Fencing Contractors – Fencing, landcare and re-vegetation; 2 employees

Kendenup Lodge and Cottages – function centre, accommodation

Kendenup Store – General store; 2 employees.

Maleeya's Thai Café and Bamboo Restaurant – Asian restaurant and exotic bamboo nursery; 3 employees.

Iris C Mesmer – Dental surgeon; 4 employees.

Minorba Sawmill – Timber milling and treatment, mainly pine, sells pine mulch, 6 employees.

Monash Electrical Services – Domestic, commercial and appliance electrical servicing and installation; 3 employees.

Mt Barker Auto Electrics – Automotive electrical service; 3 employees

Mt Barker Beauty – Beautician; 3 employees.

Mt Barker Building Service – Residential and commercial building service; 4 employees.

Mt Barker Co-operative limited – The main general store in the region. Includes an IGA, Mitre 10 trade store, bulk fuel distribution; 68 employees; has been willing to donate goods and provide discounts to NRM groups.

Mt Barker Country Bakery – Retail baker; 4 employees.

Mt Barker Country Pharmacy – Pharmacy; 5 employees.

Mt Barker Electrics – residential and commercial electrician; 7 employees

Mt Barker Panel Beaters – Panel beater; 5 employees

Mt Barker Service Centre – Mechanic; 4 employees.

Mt Barker Tyre and Exhaust – tyres, exhausts, on-farm service

Mt Barker Visitors Centre – Tourist information, local craft sales; 2 employees.

Mt Barker Veterinary Hospital – Veterinary hospital doctoring livestock and domestic animals; 6 employees.

Narrakup General Store – Small general store, café and post office; 3 employees.

N.J. Healy and Sons Earthmoving – Earthmoving and transport; 4 employees.

Old Police Station Museum – Historic museum and tourist centre; 2 employees.

Plantagenet Agg Repairs – Agricultural machinery service and repair; 2 employees.

Plantagenet Farm Supplies – farm merchandise, fertiliser, agent

Plantagenet Hotel – Pub, restaurant and hotel/motel; 3 employees.

Plantagenet Meats – Butcher; 3 employees.

Plantagenet Partners – Public accountants; 3 employees.

Plantagenet Sheds and Steel – Steel fabrication, commercial and residential shed construction; 11 employees

Plantagenet Wines – winery, cellar door sales

Porongurup Shop and Tearooms – café, convenience goods, tourism, art, collectables, fuel

Quenby Viticultural Services – Vineyard development and management contractor

Ray While Real Estate – Real estate agency; 7 employees

Ridge Bros (Kendenup) – Delicatessen, liquor store, convenience foods, bakery; 4 employees

Rural Project Services – Forestry and agricultural machinery contractor (spraying, mounding, etc); 22 employees;

Southern Haulage – Bulk road transport and delivery; 50 employees.

Stirling Fencing – fencing, rock drilling

Tank Man – Supply and installation of water tanks; 3 employees.

The Bretzel – Café; 2 employees.

Three Star Petrol – Fuel station; 3 employees.

Tim's Tyres and More – Tyre and exhaust service centre; 5 employees. Used tyres, batteries and oil are sent for recycling.

Wellington and Reeves – Real estate agency; 5 employees

Western Mineral Fertilisers – fertilisers, biological products, seed dressing

Social Infrastructure

The following is a list of the public service providers, government agencies, volunteer groups, recreational groups and philanthropic organisations active in the Shire of Plantagenet. The list is not exhaustive but shows the diversity of facilities and services available in the region. Sports catered for in the region include tennis, golf, cricket, netball, lawn bowls, basketball, football (Australian Rules, rugby and soccer), fishing, darts, shooting, swimming, squash, pony riding, and polocrosse.

Education:

Mt Barker Community College
Mt Barker Primary School
Mt Barker TAFE
Rocky Gully Library

Kendenup Primary School
Mt Barker Kindergarten
Mt Barker Library
Toy Library

Health:

Plantagenet District Hospital
Banksia Lodge
Mt Barker Hospice
Overton Hostel
Home and Community Care (HACC)

Plantagenet Medical Group
Community Child Health Clinic
Langton Hostel
Meals on Wheels
St John Ambulance

Sport and Recreation:

Mt Barker Recreation Centre
Mt Barker Amateur Basketball Association
Mt Barker Cricket Club
Mt Barker Bullets Netball Club
Mt Barker Football Club
Mt Barker Field Hockey Club
Mt Barker Rifle Club
Mt Barker Turf Club
Plantagenet Pony Club
Kendenup Cricket Club
Kendenup Tennis Club
Narrakup Tennis Club
Woogenellup Polocrosse
Stirling Sheep Dog Trial Club

Mt Barker Swimming Pool
Mt Barker Amateur Swimming Club
Mt Barker Bowls and Sporting Club
Mt Barker Fishing Club
Mt Barker Golf Club
Mt Barker Pistol Club
Mt Barker Speedway Club
Narpanup Golf Club
Rocky Gully Cricket Club
Kendenup Golf Club
Kendenup Little Athletics
Narrakup Cricket Club
Mt Barker Tennis Club

Volunteer Groups:

Red Cross
Rotary
RSL
Mt Barker Historical Society
Plantagenet Players KAOS

Apex
Lions
Plantagenet News
Mt Barker Probus Club

Fire and Emergency Services:

St John Ambulance
13 Volunteer bush fire brigades

Mt Barker Volunteer Fire and Rescue
Fire and Emergency Services

Religious Groups:

All Saints Anglican Church
Kendenup Christian Fellowship
Plantagenet Family Church
Uniting Church
Mt Barker Christian Fellowship

Sacred Heart Catholic Church
Mt Barker Baptist Church
Seventh Day Adventist Church
Hall of Witnesses

Agricultural Groups:

Great Southern Wine Producers
WA Farmers Federation

Mt Barker Agricultural Society

Government Agencies in the Shire of Plantagenet:

Most Government agencies are accessible and provide some level of service to the Shire of Plantagenet. The following is a list of Government Departments particularly active in the region

Department of Agriculture and Food
Department of Water
Department of Health
Department of Protective Services
Shire of Plantagenet (Local Government)

Department of Environment and Conservation
Department of Indigenous Affairs
Department of Planning and Infrastructure
Forest Products Commission

NRM Groups:

Oyster Harbour Catchment Group
Wilson Inlet Catchment Committee
Friends of the Porongurup Range
Kendenup Bushland Management Group

Conclusion

The Shire of Plantagenet is a healthy and vibrant community with a long history of successful Natural Resource Management projects. The Regional Community Engagement Project has provided a focus for expanding understanding and activity in natural resource management including alternate energy, waste management/recycling, biodiversity preservation, sustainable households/development and efficient businesses. The non-traditional focus of the project will entice people who have previously not seen relevance in participation to engage in activities that aim to improve our environment.

APPENDIX 2

Potential Regional Community Engagement Activities

REGION: Kent Frankland – Central and Albany Hinterland – North (Shire of Plantagenet)

In the course of the engagement project a list of environmental issues has been developed which identifies activities which could be considered for development into projects. The potential target group (stakeholders) are identified and range from individuals to companies, with relevant locations being in the range from local to regional. The urgency to engage in these activities is given a rating for its priority (LTP = Long Term Priority).

Environmental Issue	Activity	Target Group	Why is the activity needed	Location	Priority
Environmental weeds	Liaise between existing groups and South Coast NRM weeds facilitator.	Existing invasive weed control groups i.e. Friends of the Porongurup	Increase capacity and co-ordination of weed control in region. Improved funding applications. Improved weed control in region.	Region wide and across all South Coast regions.	Long Term Priority (LTP) High
Environmental weeds	Conduct community education workshops.	Whole community	Increase knowledge and awareness of environmental weeds. Determine public interest of the issue	Region wide. Local venues i.e. Narrikup Hall, Forest Hill Hall, Kendenup Hall, etc.	LTP High
Environmental weeds	Communicate and distribute information to nurseries regarding weed species.	Local nurseries	Stop the sale of potential future weed species.	Nurseries and garden centres in and around Mt Barker.	High
Environmental weeds	Discuss weed control in <i>E. globulus</i> plantations with representatives from the plantation companies	<i>E. globulus</i> Plantation companies	<i>E. globulus</i> plantations represent a major land use in the region. Minimal management has led to spread of invasive weeds through plantations and onto surrounding farm land and native forest Involvement by plantation companies may help them gain environmental accreditation.	Region wide.	LTP High

Environmental Issue	Activity	Target Group	Why is the activity needed	Location	Priority
Preservation of floral biodiversity	Establish 'banks' of seed and propagation material of local provenance flora. Make available to local nurseries	Interested members of the community. Local nurseries	Preserve genetic diversity of species endemic to region. Ensure appropriate provenance plants are propagated	Region wide. Potentially across all South Coast regions	LTP High
Preservation of floral biodiversity	Find/create lists of local provenance flora in several locations across region.	Biodiversity officers. Knowledgeable locals. Herbarium	Create an education tool and record, to increase awareness of the importance of biodiversity.	Region wide	LTP High
Preservation of floral biodiversity	Distribute list mentioned above.	Interested groups and individuals. Nurseries	Help nurseries provide plants for revegetation that are of appropriate provenance.	Region wide	High
Preservation of floral biodiversity	Communicate with the Shire and local landholders about preserving and improving undeveloped road reserves as biodiversity corridors.	Shire. Landholders adjacent to road reserves.	Undeveloped road reserves are an importance resource as biodiversity stores and corridors. They need to be preserved, managed and restored	Region wide	LTP High
Sustainable living (including water/power use, solar/wind power, house design, food production, etc)	Workshops to demonstrate simple, cheap ways people can reduce the impact their household has on the environment.	Home owners. Tenants. Schools	Increase awareness and knowledge with the aim of changing individuals behaviour in a positive way regarding the impact their homes have on the environment	Region wide at suitable venues i.e. Plantagenet Hall, Rocky Gully Pub, Kendenup Country Club, etc.	Medium
Sustainable living	Gather and distribute information on solar and wind generators.	Interested stakeholders. Installers and suppliers of products	Several people have expressed frustration at their inability to find info and a supply of solar/wind generators. Potential group purchase/installation discount.	Region wide	Medium
Sustainable living	Discuss use of pine chips as a low cost, effective mulch with Minorba. Aim to distribute to gardens in area	Minorba manager. Interested residents	Reduce the amount of water used in watering gardens.	Minorba mill. All towns in region	Low

Environmental Issue	Activity	Target Group	Why is the activity needed	Location	Priority
Sustainable living	Group visits to an example of a household that has been built to cause minimal environmental impact.	Schools, groups identified during workshops.	Demonstrate a low cost example of sustainable living.	Kendenup	Low
Waste management	CEO involvement with Shire decisions regarding the new waste management facility	Shire of Plantagenet	Aim to ensure environmental impacts of the facility are considered during planning.	Mt Barker proposed waste disposal site.	LTP Low
Waste management	CEO involvement with Shire decisions regarding recycling of household and business waste	Shire of Plantagenet	The Shire of Plantagenet has a poor history of recycling. This needs to be improved	Shire offices. Region wide	LTP Low
Feral animals	Promote and assist in the 'Red Card for the Red Fox' program.	Rural and peri-urban landholders	Feral animals have an enormous impact on native fauna in the region. The RCFRF program aims to reduce the impact. As an established project, time demands on CEO are minimal.	Region wide and across all South Coast regions.	High
Sustainable development	Provide information (plant lists, construction design, regulations, etc), contacts and liaise with target groups.	Developers. Shire. Prospective landholders.	12 developments that result in over 300 new urban and peri-urban blocks are happening in the region. The impact these developments have on the environment needs to be minimised	Porongurup, Kendenup, Mt Barker	Medium
Indigenous involvement	Communicate with Department of Indigenous Affairs (DIA) and existing Indigenous groups to determine how we can assist in any existing or planned projects	DIA. Indigenous community groups.	Increase aboriginal ownership and participation in projects in the region	Region wide.	High
Nutrient runoff	Provide best practice information and conduct community workshops aimed at small landholders to reduce excess nutrient runoff	Urban and peri-urban landholders	Small landholders contribute a to the nutrient load that contributes to negative ecological occurrences such as eutrophication	Urban centres, rural villages and peri-urban centres	LTP High

APPENDIX 3

New Projects Developed

Project 1: Mt Barker Golf Club Revegetation and Weed Control Project

Project 1: Mt Barker Golf Club Revegetation and Weed Control Project



Introduction:

The Mt Barker Golf course is the premier venue for recreational golf and lawn bowls within the Shire of Plantagenet. It is located approximately 3 km south of Mt Barker on the Albany Highway. The course is within an area of remnant native vegetation that provides a habitat for many species of native flora and fauna.

In general, the golf course is part of a healthy ecosystem and the native vegetation component of the area is in good condition. Previous use and maintenance of the course have led to several threats to the health of the ecosystem in the area. The invasive weed *Acacia iteaphylla* has spread to several areas of the course due to regular disturbance of the soil in the area. Introduced species of Eucalyptus such as *Eucalyptus robusta* and *Eucalyptus botryoides* have been planted along the edges of fairways rather than local native flora. Native species that have a slow regeneration rate, such as *Eucalyptus marginata* are in a slow decline because of the constant foot traffic through the bush.

Document Brief:

This document identifies strategies and management plans that will ameliorate threats to the ongoing health of native bush habitats within the Mt Barker Golf course.

All of the key stakeholders affected by this project proposal are addressed. The action plan is stated and the desired outcomes are identified. The amount of external and in kind funding that will be required has been estimated.

Strong interest in this issue from members of the community with links to the golf club suggest this project will not only prove to be a successful strategy in improving the quality of a relatively small area of remnant native bush, it will also be a method of introducing many people within the Shire of Plantagenet to Environmental NRM issues that they can apply to their own properties.

Key Stakeholders:

- Mt Barker Golf Club members;
- Oyster Harbour Catchment Group (OHCG);

- Wilson Inlet Catchment Committee (WICC);
- South Coast Natural Resource Management Inc. (South Coast NRM).

Issues of concern:

- Spread of invasive *Acacia* species, particularly *A. iteaphylla* through areas of native bush at the Mt Barker Golf Course and adjoining properties.
- Previous use of introduced *Eucalyptus* species to revegetate edges of fairways.
- Some native species, particularly canopy plants, have been dying out from natural attrition. Use of the course means natural regeneration has been reduced.

Objectives:

- Removal of introduced species with particular emphasis on invasive *Acacia* species.
- Remove introduced *Eucalyptus* species.
- Replace these introduced *Eucalypts* with flora native to the region.
- Preserve the quality of remnant vegetation in order to maintain existing wildlife habitats and the level of biodiversity.
- Ongoing monitoring and control of invasive *Acacia* species.

Strategies:

- Engage golf club members to increase awareness of the issues and disseminate knowledge on how to ameliorate the threats.
- Include a small information session in an upcoming club meeting.
- Provide information pamphlets that will be on offer at the club house.
- Use local labour sources and volunteers to manually remove invasive *Acacia* species.
- Ongoing monitoring and manual removal of *A. iteaphylla* plants as they germinate by club members.
- Use local labour sources and volunteers to new local native species.

Funding and Expenses:

The majority of actions recommended in this project can be executed using labour and materials donated by volunteers. External funding for this project is therefore minimal.

An initial investment of approximately 20 hours labour from a community based Environmental Engagement Officer (EEO), or equivalent employee, is required to initiate the project, set out project guidelines/targets and engage interested community members into participating in the project.

Ongoing investment is limited to 10 hours per year of an EEO's time for a further two years, to monitor the impact of the project and assess if further action is required.

The Engagement Officer would be an employee of the OHCG and WICC. Funding for this position originates from State and Federal Governments of Australian and is distributed by South Coast Natural Resource Management Inc.

In kind contribution refers to the value of time and materials volunteers put into the project. Time is valued at \$25/hr. The cost of materials is an estimation based on current market prices.

Funding breakdown

External Funding

Initial investment: 20 hours of an EEO time including on-costs - \$720

Ongoing investment: 10 hours of an EEO time/year including on costs - \$360/year

Total External Funding over 3 years = **\$1440**

In Kind Contribution

Volunteer labour for removal of invasive *Acacia*'s, introduced *Eucalypts* and re-establishment of native flora

Initial investment: 120 man hours volunteer time - \$3000
 3 hours bull dozer hire - \$540
 Site preparation for 0.5ha revegetation - \$450
 1000 seedlings - \$420

Ongoing investment: 20hours volunteer time/year - \$500/year
 200 seeding to replace losses - \$84

Total In kind contribution over 3 years = **\$5494**

The total estimated value of this project over 3 years is **\$6934**

Note: Provision of funding to cover a greater proportion of the total cost will increase the probability of success of the project and speed its implementation.

Proposed Actions:

1. The Environmental Engagement Officer will attend a Mt Barker Golf Club meeting to present this project, ask for feedback and modify proposal, as appropriate.
2. Information on this project and how club members can participate will be put in the club house.
3. Labourers from the Pardelup Prison farm already assist in maintenance of the course. They will be shown what *Acacia iteaphylla* looks like and the most effective method of removal. For small plants this is to pull the plant out by hand. For larger plants a chainsaw is used to cut down the plant and the stump is immediately treated with glyphosate.
4. Members of the Golf Club include an earth moving contractor. A dozer has been offered to remove the introduced *Eucalyptus botryoides* and *E. robusta*, as part of the in-kind contribution.
5. Site preparation for the revegetation of the area where these *Eucalypts* are being removed includes spraying of the area and ripping lines for the planting. This will be undertaken by volunteers.
6. Trees will be purchased from a local nursery with funds from the golf club. Ideally an event with an environmental theme can be held to raise these funds.
7. The trees will be planted during a 'busy-bee' on a Saturday afternoon as most players are at the course on Saturday's and finish their round mid afternoon.
8. For the 2 years following these actions, players and maintenance staff of the course will be encouraged to watch for germinating *Acacia iteaphylla* and to remove them by hand. The *Eucalyptus* species being removed do not tend to easily self propagate in this area.
9. In the second year of the project a second round of revegetation will be organised to replace losses from the first year.

Expected Outcomes:

- The engagement of potentially 60 (more realistically 20) community members of the Mount Barker community in an Environmental NRM activity. This includes an increase in their awareness of all NRM issues and an increase in their capacity to undertake actions that ameliorate threats to the environment at their own properties.
- The complete removal of *Acacia iteaphylla* plants from the Mt Barker Golf Course
- The removal of all introduced *Eucalyptus* trees.
- Successful establishment of native flora in place of the removed trees.
- Maintenance of fauna habitats and biodiversity on the property.
