From the Outside Looking In
The Future of Sydney's Rural Land

Background Issues and Workshop Outcomes









May 2004

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PREFACE

OVERVIEW OF WORKSHOP STRUCTURE AND EXPLANATION OF DOCUMENTATION

The attached paper is an updated version of the previous background issues paper, and now incorporates the outcomes of the workshop held in February. This document now replaces the previous document which was posted on the website.

While most of the document remains the same as the previous background paper, the workshop outcomes have been inserted as Chapters 3 and 4. A list of those invited to the workshop is attached as Appendix II and the "butchers paper" notes have been attached as Appendix III.

The main identifying themes of the Workshop (within chapters 3 and 4) have been extracted for ease of reference.

The participants at the workshop were specialists, experts, practitioners and community members. They represented a wide cross-section of organizations and viewpoints. They were invited to discuss their perspective and views on the future of rural lands. Some participants came from interstate.

Their views are now being presented at a wider public forum, to be held on 21 May 2004.

The workshop consisted of the following themes:

- Session 1: Scanning our world *(Context setting session in which all workshop participants shared their perspective on key trends and drivers influencing Sydney's rural landscape.)*
    - Present – what present trends and drivers are influencing Sydney's rural landscapes?
    - Future – what future trends and drivers are likely to influence Sydney's rural landscapes?

- Session 2: More enduring and resilient landscapes for Sydney *(Resilient enduring landscapes reflect a co-evolutionary mutually dependent partnership between community and country. Country as a partner that allows community to develop by using its natural resources and ecological services; in return community includes country in its developments to a common future)*
    - What would Sydney's rural lands look like as enduring sustainable landscapes?
    - What would be the nature of the partnership between community and country that would enable this desired future for Sydney's rural lands.

- Session 3: Capacity stocktake
    - What capacities do we, as a society, have to achieve more enduring, sustainable landscapes for Sydney?
    - What capacities don't we have, but must develop?
    - What other barriers and constraints much impede progress toward our ideal?

- Session 4: Thematic solutions *(participants selected one of the following thematic groups to identify potential solutions which would better accommodate their particular sectoral interests within the common desirable future: Integration, Urban Expansion, Sustainability of Agriculture in Sydney, Biodiversity and Environmental Management, Water Quality and Quantity, Lifestyle and Landscape, Social and Cultural Aspects of Farming.*)
    - Governance issues (statutes, policy, planning, participation)
    - Knowledge issues (research, education)
    - Economic issues (innovative economic approaches)
    - Broader social/communication issues (relating to better harnessing a multiplicity of values and understandings around rural landscapes)
- Session 5: Specific and collective action and Where to next? *(this session distilled out the solutions generated in Session 4)*
    - What actions can be taken as a result of this workshop to progress the solutions in the short, medium and longer term.
    - Who will assume the responsibility to pursue the actions agreed?

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Chapter 1: Introduction

Introduction.

The rural land on the fringe of Sydney has competing demands being placed on its use. Rural land has 3 productive components. It is a source of food and fibre, a biodiversity resource and a place for people to live. These relate to the three components of ESD in the following graphic:

Source of Food and Fibre	➔	Economic
Biodiversity Resource	➔	Environment
Place to live	➔	Social Equity

There is a need to find the balance between all three of these components.

The importance of the rural lands of Sydney has been recognised by the various planning instruments prepared over the years. This is evidenced from the following quote from Denis Winston's book on the County of Cumberland Plan:

> *"The County is a small area and not particularly rich from the growing point of view, yet in 1947 it produced three-quarters of the State's lettuces, half the spinach, a third of the cabbages and a quarter of the beans; 70 percent of the State's poultry farms were in the County and more than 18 percent of Sydney's milk came from the County; the preservation of the farms and market gardens is therefore of considerable importance for the well-being of Sydney as well as for the economy of the State.*
>
> *Rural production in the county has always played an important part in supplying food for Sydney, the advantages of proximity to the largest market in Australia more than compensating for the somewhat poor soil conditions."* (Winston (1957), p49)

The same figures and sentiments are evident today and are acknowledged in the Strategic Plan for Sustainable Agriculture in the Sydney Basin and the current Metropolitan Strategy Shaping Our Cities its companion document for Western Sydney – Shaping Western Sydney. The importance of the rural lands have been addressed in various planning strategies and instruments that have been prepared over the years. However, it is considered that the need for urban growth has taken precedence over the values of the land for its rural values. A recent land use survey conducted for the Department of Infrastructure, Planning and Natural Resources has found that 77.8% of all rural lots are used for rural residential use and that 76.6 % of all lots are less than 3 ha in size. The land is needed to accommodate the expanding population of the Sydney region which is made up of urban and rural residential uses. This pressure to provide living areas is putting a squeeze on the use of the land for agriculture and biodiversity. The land available for these use is becoming scarce as we reach the foothills of the Blue Mountains.

This issue has been the subject of discussion for many years by farmers, planners, Councillors, State Government Agencies and academics. The opportunity of a Community Grant offered by the University of Western Sydney was taken to fund the conducting of a workshop to bring together practitioners working the diverse fields dealing with the rural lands of Sydney to discuss and outline some solutions to this issue. This report has been prepared for a one day forum discussing the outcomes of a 2 day workshop of practitioners designed to draw out issues and pose some solutions for the future of rural land on the fringe of Sydney.

The aim of the project was to address the complexity of planning issues in the Sydney Basin at two levels: overall strategic planning and the implementation of policy at the local government level. The proposed mechanism was to implement a planning approach termed deliberative planning. Deliberative and participative practices include inquiring and learning together in the face of conflict and difference, coming to see issues in new ways leading to action together, practical public action (Forester, 1999). The concept encompasses the use of participatory planning processes and action research where the key ingredients are cycles of planning, implementation and evaluation; linking theory and practice; aiming to bring about change; and democratising the process through addressing issues of power. Reflection and learning of all participants is an essential component.

Deliberative and participative planning practice involves practical public action in messy political circumstances, and the micro politics of practice. It involves how to do planning in a messy politicised world through the plural and conflicting experiences (stories) of differently affected citizens and stakeholders, and the consideration of values.

This process addresses complex, messy issues, through the participation of the community and a wide range of stakeholders, so that the multiplicity of perspectives is included in the debate. The process is multidisciplinary and innovative, encompassing community development, environmental management, and planning. Unlike the one-off consultation process used by many government agencies have used consultation, the process involves community representatives in an ongoing participative process. This process was used because of the obviously complex nature and competing interests in the planning for the future of Sydney. The future of rural lands and agriculture in the Sydney Basin is embedded in planning for urbanisation.

The importance of maintaining farming around large cities is being increasingly recognized in Europe, the U.K. and the USA. The spaces described as outer urban, peri urban or the fringe however, pose particular difficulties for planners. Jean & Calenge (1997) noted that these areas are seen by ruralists as creeping urban sprawl, distorting their field of study, and town specialists neglect these areas as a type of extremely undeveloped part of urbanity. Jean & Calenge argue that these spaces cannot be treated in isolation for they form part of a complex spatial system, which results from influences facing the infrastructure, notably economics and from the actions of the inhabitants. *"These areas concentrate the states of a vanishing rurality and a spreading urbanity. The spoils are grabbed and formalised by various actors, mainly political, in a very variable and often conflicting manner*." Thus, these spaces are neither urban nor rural. In Sydney, the complexity is further increased by the large numbers of farmers from culturally and linguistically diverse backgrounds who generally operate small family farms, and who have lacked an effective political voice.

The initial aim was to achieve a balanced planning approach, in order to secure sustainable agriculture in the fringe of the Sydney Basin.

A research group was established with the following members:

- Frances Parker, University of Western Sydney
- Ian Sinclair, Edge Land Planning
- David Mason, NSW Agriculture
- Peter Herborn, University of Western Sydney
- Andrew Docking, NSW Agriculture

- Michael Druce, Department of Infrastructure, Planning and Natural Resources
- Lynne Saville, Hawkesbury Food Program, Hawkesbury District Health Service
- Sheryl Jarecki, University of Western Sydney

The planning group recognised that the future of agriculture in the Sydney Basin was embedded in the broader issue of the future of rural lands in general, not only the future of agriculture, although this is an essential component. Further, it wanted the process to add to the debate, and to "move forward", and that even if "we don't have the answer" to such a complex issue then we can at least attempt to develop a mechanism to "produce the answer". The planning group was unanimous in its desire to produce some positive action, rather than merely "talk about the issues". Some members of the planning group were of the view that the relevant planning instruments are available, but the implementation, and the political will aren't.

An important question underpinning this process is "where do we want to be in 25 years time, what sort of city do we want Sydney to be? In general the planning process appears to have considered the needs of urbanisation first, with the future of agriculture, and the rural lands as a residual or "remnant" issue, if it is considered at all. The planning group wanted to highlight the need to consider agriculture and the rural lands in the same way as urban issues are currently considered, so that the planning process is integrated and balanced. This led to the title of the Workshop and the Public Forum- *From the Outside Looking in: The future of rural lands in the Sydney Basin.*

The broad aims of the workshop held in February, 2004 were to obtain an understanding of how a wide range of other people (stakeholders) see the issues, and to obtain some possible solutions in finding a way forwards through developing alternative scenarios, to identify what knowledge and information is available, and gaps in our knowledge. Experts from a wide range of backgrounds were invited to participate in the workshop, which was facilitated by Mr Peter Davey, former CEO of the Hawkesbury Nepean Catchment Management Trust. It was widely recognised that we needed to engage in and with the political process to bring about change.

A comprehensive background issues paper was prepared and distributed to Workshop participants, and is included in the information developed for the public forum. The workshop consisted of the following themes:

- Integration
- Urban expansion
- Sustainability of Agriculture in Sydney
- Biodiversity and environmental management
- Water quality and quantity
- Lifestyle and landscape
- Social and cultural aspects of farming

Although this project has developed the view that the future of agriculture in the Sydney Basin is part of the future of the rural lands, given the value of agriculture and the policy issues surrounding it is important to provide further background information on some relevant initiatives.

Agriculture in the Sydney Basin.

Value of Agriculture

The estimated farm gate value of agricultural production in the Sydney Basin is over one billion dollars p.a., and generates over 4.5 billion in economic activity (Gillespie & Mason 2003). This represents 14% of NSW agricultural production. Much of the production is on small family farms. Poultry contributes $1.2 billion p.a. to the Sydney Basin, and cut flowers one billion, which is almost 100% of NSW cut flower production. The Basin produces 40% of the value of NSW vegetable production, and 90% of Sydney's perishable vegetables. (Gillespie & Mason 2003)

Sustainable Agriculture in the Sydney Basin

In 1998 The Hon Richard Amery, Minister for Agriculture in launching the *"Strategic Plan for Sustainable Agriculture-Sydney Region* noted *"Sydney is under an increasing spotlight both nationally and internationally. Government and non-government institutions are planning for its future. The community consultation process* [as presented in the plan] *has validated sustainable agriculture and associated lands as credible and worthy components of the mixed pattern of human activity and land use by recognising its potential to contribute a great deal to the socio-economic and environmental sustainability of the Sydney region. This is illustrated by the increasing recognition of these components and their benefits in planning documents such as the Metropolitan Strategy"*. Most of the objectives of the Strategic Plan relate directly or indirectly to the need to recognise the importance of agriculture in the planning process, such as in the zoning of land, reducing conflict over land use, the recognition that agricultural land in the Sydney region is a finite resource, and that growth management of residential and industrial land uses in the Sydney region needs to be balanced with the necessity to maintain agriculture, and that the planning profession, state agencies and local government need to recognise the biophysical, social and economic values of agriculture.

In March 2002 participants at the conference *"Securing sustainable agriculture in the Sydney Basin" (*organised by NSW Agriculture) highlighted that a key issue in securing the sustainability of Agriculture in the Sydney Basin was that of urbanisation and planning. However, there is also a need to provide housing for the increasing population of Sydney. One view is that agriculture can be moved, however, there is a need to recognise the social and economic value of agriculture, and the existing community in the area. Further land release in the Liverpool and Marsden Park areas have been announced recently, both of which are significant agricultural production areas, particularly for vegetables and poultry. This follows the development of the North West sector, specifically Kellyville and Rouse Hill, where productive farms have been subsumed by urbanisation, which in turn has inadequate infrastructure, particularly transport and roads, for the increase in urbanisation. Thus, the issue of balanced planning which is responsive to community development in the fringe encompasses the new residential estates and their location.

Land use planning involves two tiers of government: State Government and Local Government. Local government is of particular relevance for individual farmers, as it is local government's responsibility to approve development applications.

Another key issue impacting on farming has been the increasing importance of environmental regulations, and water reform policies such as those regulating on farm

dam construction. There is now increasing recognition of the importance of pollution in the South Creek catchment, which covers a third of the Sydney Basin. However, it is not clear to what extent these regulations effectively address environmental concerns, leading to better environmental practice. By way of example, agriculture is perceived as harming the environment, and there are often difficulties in farmers removing trees, and yet there appears to be little conservation of woodlands in the new estates, and individual blocks are too small to sustain large trees. Thus, the environmental effects of urbanisation compared with agriculture appear to have received relatively little attention in the public domain, or in the planning process.

Most Councils in the fringe have undertaken rural land use studies. Some Councils have conducted environmental audits of agricultural premises. However, there is little consistency between local government areas, with farms on opposite sides of the road but in different local government areas being treated differently, depending on the regulations, and most importantly, the practice of the specific Council. Furthermore, there appear to be few guidelines and little transparency or consistency in the decision making process in matters such as approval of development applications to build farm buildings, or to farm.

Despite the rural land use studies, and the Strategic Plan for Sustainable Agriculture the implementation process to effectively address agricultural land use and planning is either non existent, and/or lacks transparency, particularly for the industry and individual farmers.

Premier's Task Force into Market gardening by people of non-English speaking Background in the Sydney Basin

A 1995 report by Parker & Bandara focused on the market gardening sector in which 90% of farmers are from culturally and linguistically diverse backgrounds. It highlighted increasing pressure and regulation of the industry and the almost total marginalisation of the sector from government services. This report triggered the formation by the NSW Premier of the cross-sectoral Premier's Task Force on Market Gardening by People of non-English Speaking Background. One of the terms of reference of the Premier's Task Force was to *"better coordinate land use provisions that recognize the value of market gardening in the New South Wales economy".* However, the final report of the Task Force (NSW Government, 2000) did not address this issue comprehensively. It appeared that the representatives of the then Department of Urban Affairs and Planning considered that the issue would be effectively dealt with by forthcoming regulations.

The Premier's Task Force led to the appointment of a cross-sectoral advisory committee with representatives by NSW Agriculture, NSW Health, the EPA, State and Regional Development, WorkCover, Department of Education and Training, the University of Western Sydney, and the Department of Land and Water Conservation, and various representatives of local government. A project officer was appointed for three years.

Education and Training Plan for Sustainable Agricultrue in the Sydney Basin

This initiative of the NSW Department of Agriculture and the NSW Department of Education and Training was in response to the Strategic Plan for Sustainable Agriculture in the Sydney Basin, and the Premier's Task Force into Market Gardening by People of Non English Speaking Background. It was launched in 2001 by the then

Ministers of Agriculture and Education and Training. At the launch it was announced that $20 million would be allocated over 5 years to address the education and training needs of the sector. Some, particularly grower representatives, however, note that although access to education and training is of critical importance, the key issue which needs to be addressed as not one of education and training alone, but rather the regulation and planning environment and the urbanisation process, rather than technical production issues alone.

The workshop and the subsequent public forum aim to encourage a full consideration of the issues associated with the development of Sydney, specifically the development of Sydney as a sustainable, healthy city. To assist in the process the accompanying documentation consists of a Background Issues paper, and a summary of the outcomes of the Workshop held in February.

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Chapter 2: Development and Planning Issues

2.1. Introduction

The main issues affecting rural fringe areas are the need to preserve the environment, the retention of agriculture and the pressure for subdivision of agricultural areas or the resubdivision of existing rural residential land for more lifestyle living uses. This chapter discusses these issues with the aim of providing a basis for the development of policies for the future.

The increasing trend towards the fragmentation of productive agricultural land is affecting its capability to produce agriculture in a sustainable manner. Once viable farming units are now being made into smaller less viable units and the use changed to residential type uses with no realisation about the impacts of this on such issues as land degradation, rural land use conflict or the cumulative impact of the loss to production of this good agricultural land. This trend is exemplified on the fringe of the Sydney region where the desire for rural living and a productive agricultural hinterland are coming into conflict.

Agriculture on the fringe is becoming more intensive as the value of land increases and hence the need to use it for higher yielding commodities. The intensive agriculture include vegetable growing (in market gardens as well as protected cropping structures such as greenhouses and igloos), nurseries, flowers and turf as well as poultry for meat and eggs. Intensive uses are also being relocated from Council areas that have become urbanised, such as Fairfield, Liverpool and Blacktown to the areas further west.

Figure 2.1 shows the "Cycle of Farmland Conversion" which is taken from book on Farmland Preservation in America. It is significant to note that the cycle is as relevant to the Australian situation as it is in America, signifying that it is an international problem.

Growth management strategies can provide a balance between the pressure of urban and rural residential growth and the need protect this high quality agricultural land from further fragmentation and alienation. Sound strategic planning is best placed to provide for the future of agricultural land. In this respect, planning should start with a detailed study of the rural lands in the area which is focused on preserving the agricultural land and rural landscapes and not on looking at land to be converted to rural residential uses, as has often been the case in the past.

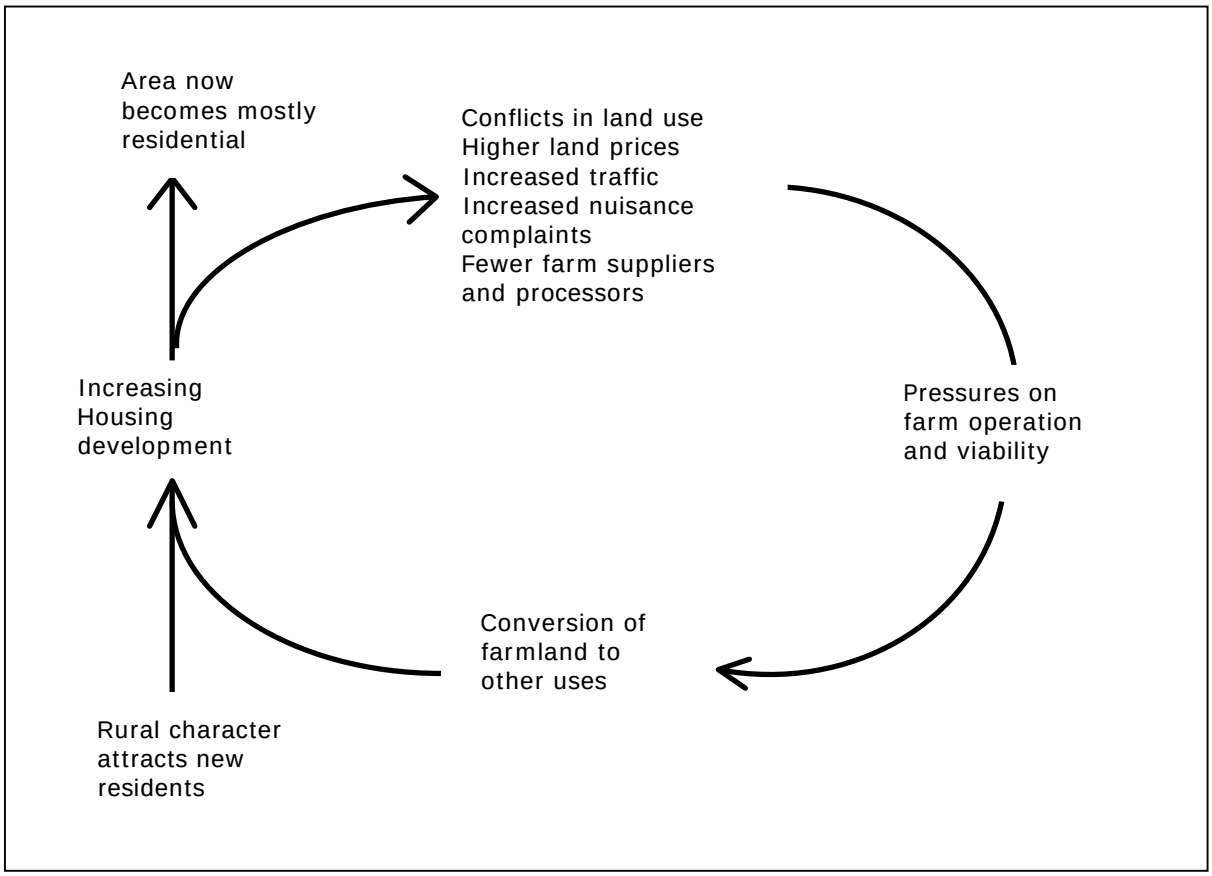


Figure 2.1: The Cycle of Farmland Conversion
Source: Daniels and Bower 1997 p 6

There is a perception in the community that rural land is land that is in a holding pattern awaiting subdivision for urban or rural residential development or converted to some other use. This is not correct. Western Sydney has a vibrant and prosperous rural economy with a diverse community. Agriculture in the Western part of the Sydney region is an important commodity and contributor to the regional economy as well as providing a landscape that creates its own unique character.

In order to understand the many issues associated with rural land, it is first necessary to define the terms rural land and rural character. This is a question that has as many answers as there are people who are involved in rural planning. The crudest definition is that rural land is all land that is not urban. However, that is too simplistic for any definition of rural land. Wide open land, farmland, forests, native vegetation, national parks, mountains, rivers, lakeshores, rural villages and rural residential areas all make up the landscape that we describe as rural. It is not any one landform or land use. It is the mixture of them that evokes the term rural land.

Rural Character is a term that is often misunderstood and misused when applied to rural land. The character of a place is the thing that distinguishes rural land from urban land. Rural character is made up of a number of components – the one thing they have in common is the feeling of openness. They include the following: open spaces, agriculture, grazing animals, market gardening, plantations, cropping, sheds, crop protection structures, artificial housing, vegetation (trees, shrubs and grasses) – both native and exotic, houses and outbuildings, varying topography including rolling hills and steep gorges, rivers and streams. (Sinclair, 1999)

The relevant issues for rural land in Western Sydney can be grouped into 2 broad headings of:

- Environmental opportunities and constraints
- Social and economic factors

Underlying all of the issues is the philosophy of Ecologically Sustainable Development (ESD) and Total Catchment Management (TCM). These issues are shown graphically in figure 2.2. The arrows on the figure show that all of the issues are interrelated and one issue cannot be considered in isolation from the other.

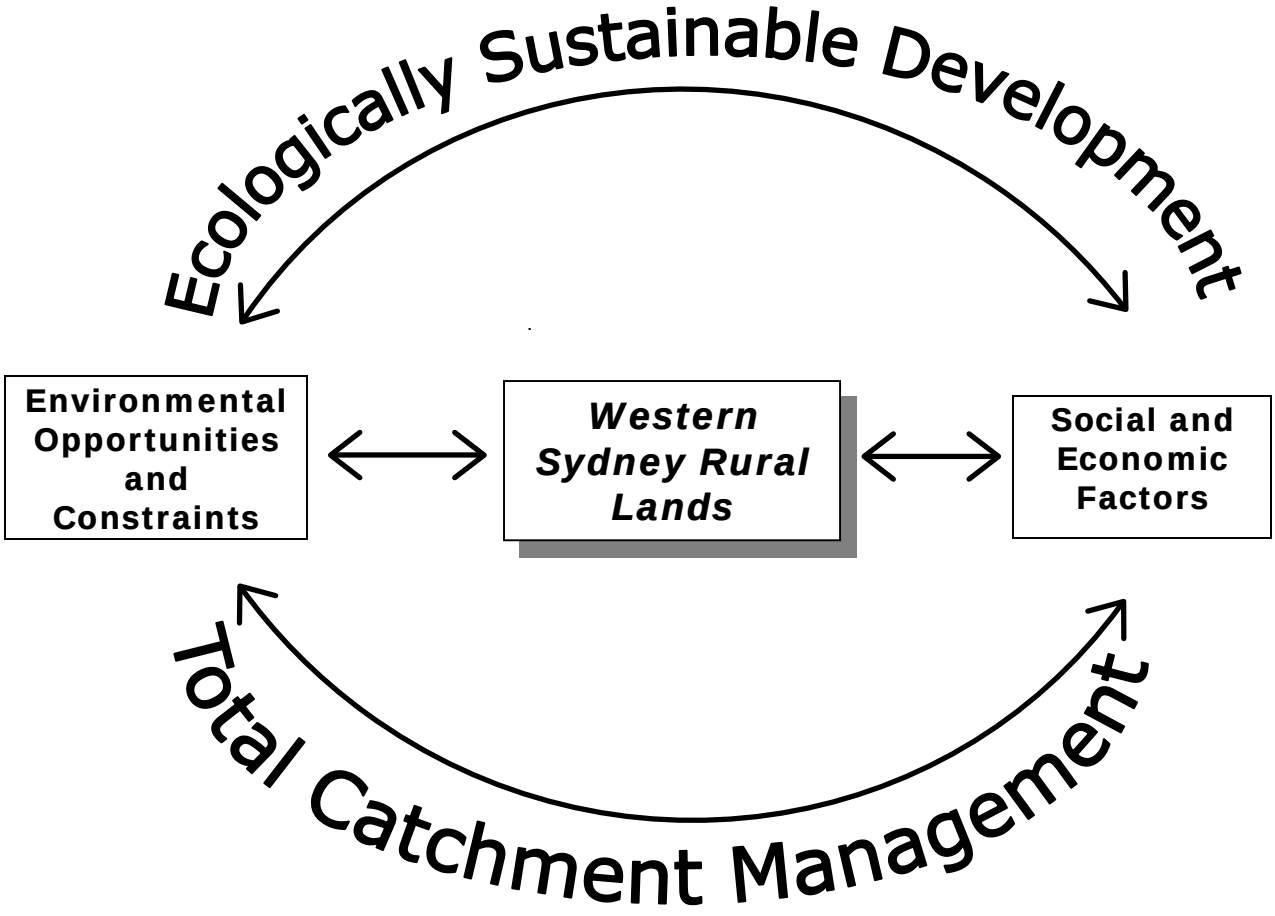


Figure 2.2: Issues and Themes for Western Sydney Rural Lands
Source: Sinclair 2000

2.2. Environmental Opportunities and Constraints

This chapter deals with the environmental issues facing the rural lands of Western Sydney. The sections below discuss the major categories of the environmental issues affecting the rural lands.

2.2.1. Water Quality and Quantity

The rural lands of Western Sydney all drain into the Hawkesbury River system and the Georges River system. The quality of the water is an issue that has been highlighted by the Healthy Rivers Commission as one of the major issues for the future of the

entire Hawkesbury Nepean Catchment. The Hawkesbury - Nepean River also floods and affects the land in the Camden, Penrith and Hawkesbury areas the most.

Water for stock and domestic use as well as the quality of water leaving the uses within the rural areas are both as important as each other.

Water is used by intensive and extensive agricultural uses, rural residential and extractive industries that are located throughout the rural areas. Of these, the agricultural uses would be the largest users. A great number of these use water that has been extracted from creeks and streams or from groundwater. It is noted that some of these uses also utilise the reticulated water supply provided by Sydney Water. These water users require a licence to extract the water both from the above ground sources as well as the groundwater. There is currently a moratorium on extraction of water from the Hawkesbury river system for new water users. The security of water is therefore an important issue for the future of the rural lands.

Water quality within the rivers has been measured by the EPA The EPA measurements found that the water quality in certain waterways is significantly under stress and impacted by development. It does not meet objectives for ecosystem protection, primary recreation or harvesting fish, particularly during wet weather. The water is generally suitable for stock watering and crop irrigation. The main source of pollutants is run-off from both urban and rural development and may include sewage overflows. It should be noted however, that some of the creeks within the catchment have very good water quality but these are mostly creeks that have very little development in their catchments.

The security of water is a major issue for agriculture and other rural pursuits. The Department of Infrastructure, Planning and Natural Resources have placed a moratorium on extraction of water from the river because of the water quality problems and the fact that they did not have any way to control the amount of water that was being extracted. This is a contributor to the current problems being faced by the river and was highlighted as a concern by the Healthy Rivers Commission. The Farm dams policy has implications for the continuation of agriculture in the region because of the limitations on the amount of water that can be harvested for irrigation of crops.

2.2.2. Land Degradation

Land degradation is related to the water quality. The Western Sydney Regional State of the Environment Report has identified land degradation as a key issue. It states that the current activities that may result in land degradation are primarily those leading to dryland salinity, erosion and land contamination.

Contaminated sites are a result of past land management practices and land uses that leave sites contaminated with agricultural chemicals, residues of industrial chemicals and unknown impacts from old landfill sites.

Soil erosion occurs when soil is disturbed as a result of the land development process. This leaves soil bare and exposed to rainfall and run-off. The slope of the land will lead to an increase in the amount of soil erosion, "The impacts of soil erosion are mostly felt away from the site where the erosion has occurred and causes sediment buildup and high turbidity in streams. In the case of agricultural soils, the erosion is

also an issue when scarce fertile soils are lost. Eroded sites are also susceptible to weed invasion." (WSROC 2000 p63)

Soil erosion and sedimentation is an issue, which intensifies, as the uses become more intensive. Of particular note is the intensive plant growing using soil based agriculture such as market gardening, which becomes problematic when the lots get smaller. It has been noted a high proportion of intensive plants are on lots of 2 ha, and on these lots, it is difficult to contain the soil and nutrients, as well as having enough land to grow the crop. It also becomes an issue for the more steeply sloping land and the construction of dwellings particularly rural residential uses which tend to be on smaller lot sizes.

It is therefore evident that agricultural uses contribute to land degradation and there is a need to ensure that it is properly managed. It should be pointed out that urban and rural residential uses also contribute to land degradation.

Soil erosion becomes more of a problem with the dispersive clay soils. The clays stay in suspension in the water for longer periods and cannot be trapped by conventional sediment controls.

Most Councils have Sediment and Erosion Control DCPs that refers to this issue. It requires the proponent to erect appropriate sediment control devices to ensure that the sediment does not leave the site. The effectiveness of this DCP has not been tested and the development of indictors of sustainability will help to do this.

2.2.3. Native Vegetation and Biodiversity

> *"The significance of biological diversity is often expressed in terms of the 'ecosystem services' provided by plants and animals; that is, the role of biological diversity in maintaining the physical environment and food chain on which humans depend. That the functioning biological systems are essential to maintain water quality, the cycling of nutrients, the quality of the atmosphere and formation of soils. Also the cultural spiritual and economic days are by diversity are being increasingly recognised."*(WSROC 2000 p115)

The status of biodiversity is different in the sandstone ecosystems in the north, west and south from the shale ecosystems associated with the Cumberland plain in the east of the region. The Western Sydney Regional State of the Environment Report states that there are 220 plant species and over 80% of the pre-European vegetation cover in the sandstone areas. In this area approximately 90% of the known communities are considered to be adequately conserved. In contrast to this, the Cumberland plain supports only 26% of the pre-European vegetation cover. Currently 9 of the 18 Cumberland plain vegetation communities are considered to be endangered. (WSROC, 2000, p113)

At a regional level, 51 plants and 52 animals are listed as rare to threatened. (WSROC, 2000, P113). The sandstone areas, because of the larger species diversity have the bulk of these species.

Habitat linkages are an important part of the biodiversity of the region. They provide for the movement of animals from one are of biodiversity to another. Habitat linkages are often bisected by roads and also are located on private land. Photo 2.1 shows a

habitat linkage crossing a road in Lower Portland in Baulkham Hills Shire, and photo 2.2 shows habitat linkages over private land in Llandilo in Penrith City.

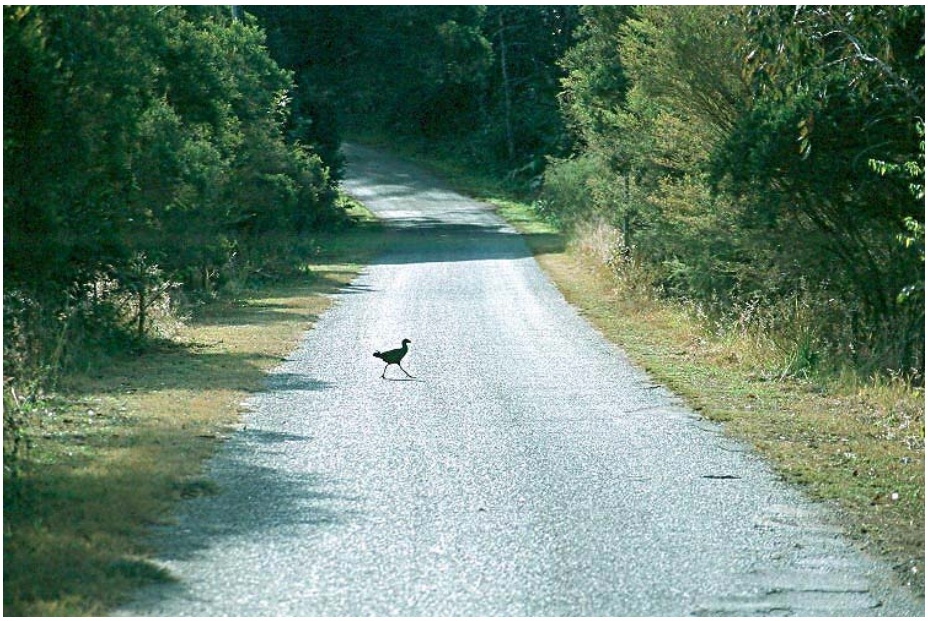


Photo 2.1: Wildlife Linkage
Date of Photo: June 2001

Photo 2.2: Wildlife Linkage on private land
Date of Photo: December 1999

The clearing of land is an issue more for the clearing of understorey plants than wholesale clearing of trees. Property owners often wish to 'clear the scrub' to avoid bushfires or just to make their properties look better. However, this can have just as much, and in some cases, a more dramatic impact on biodiversity than the clearing of large trees because of the habitat that it provides.

The National Parks and Wildlife Service has prepared a study and series of maps into the native vegetation of the Cumberland Plain Western Sydney.

Rural residential uses are considered to have a major impact on biodiversity, especially in those areas which have a high number of smaller lots with large areas of habitat, like Londonderry in Penrith City and Annangrove, Kenthurst and Glenorie in Baulkham Hills

2.2.4. Landscape Character

The predominant rural character of the Western Sydney rural lands is created by the numerous rural activities, large lot sizes, vegetation and ridgeline roads. The rural lands provide constant variety in landform and landuse from north to south and east to west. Changes to landuse generally arise from topography, which is evident through the high proportion of rural activities contained on ridges and plateaus with the majority of bushland being contained to steep valleys.

The individual localities within the rural lands each evoke a rural atmosphere. Areas like Camden, Luddenham, Maraylya and Wilberforce are easily identifiable as rural given the cleared pasturelands, fencing and rural activities evident from the major roads. River Interface areas particularly in the north of the area such as Portland and Sackville are less obvious as being rural. Their agricultural activities are on a smaller scale being mostly contained to orchards on the river flat areas with the majority of the locality being dense bushland.

The rural character is fully appreciated when compared to the intense residential development in areas like Rouse Hill - Kellyville, Glenmore Park and Cecil Hills which has formed a hard edge to the rural lands. The visual contrast is significant as there is no transition between the two landuses. Transitional areas may include vegetated buffer zones and should be considered as a means of enhancing the landscape character.

The retention of roadside vegetation is an issue which may require future negotiations with service providers. Other controls which may be considered for retaining the rural character include:

- Planting controls for screening undesirable elements and incorporating buffers to significant environmental communities,
- Building controls for siting and advertising,
- Planning controls for lot sizes, the design and siting of residential dwellings and ancillary buildings, in relation to the visual amenity of road corridors.

It is important to recognise the visual amenity of open paddocks, dense creekline vegetation, unimpeded distant views to the Blue Mountains and the broad expanse of the Hawkesbury River as a visual resource. The rural lands of Western Sydney are one of the few areas close to Sydney where there is opportunity for experiencing such a unique environment.

2.2.5. Bushfire Hazard

The large number of rural residential properties as well as the vast areas of native vegetation and the various topographic landforms combine to create a bushfire risk

The bushfire risk within the Western Sydney is outlined in the individual Council's Bushfire Risk Management Plans. It uses a strategic approach in the application of management policies, procedures and practices for dealing with bushfire risks. Its main aim is to deal with the hazards before they have an adverse effect upon the community values as well as preparing a community for the possibility of the bushfires.

The protection of the identified community assets is a key issue as is the preservation of biodiversity within the rural lands.

Managing the bushfire risk is noted as the key factor in dealing with the bushfire hazard. One of the management options is risk avoidance and therefore, land that is prone to bushfires should not be rezoned and subdivided where an adequate fire protection zone cannot be established. This is especially so for land that is on the sides of the many gullies that run in a general east-west direction.

The bushfire season commences in late spring and usually is finished by autumn. A dangerous bushfire season is most commonly associated with two or more of the following factors in combination:

- Occurrence of an extended drought period;
- Lower than average rainfall through winter;
- Persistent north to north westerly winds in late spring and through summer;
- Prolific grassland fuel occurrences from strong growing season the previous summer; and
- High ignition potential during school holiday period.

The major sources of ignition of bushfires within the Shire are escapes from burning off, power line cables, arson, car dumping and lightning.

Hazard reduction burning is usually carried out in the autumn and winter months and is in accordance with the Bushfire Management Committee's Annual Fuel Reduction Program.

Photos 2.3 and 2.4 show the devastating effect of bushfires. Photo 2.3 shows the remains of a house in Warragamba in the December 2001 bushfires and photo 2.4 shows the remains of a semi-trailer parked beside Old Northern Road at Glenorie in the December 2002 bushfires.

Photo 2.3: Bushfire Destruction in Warragamba
Date of Photo: December 2001

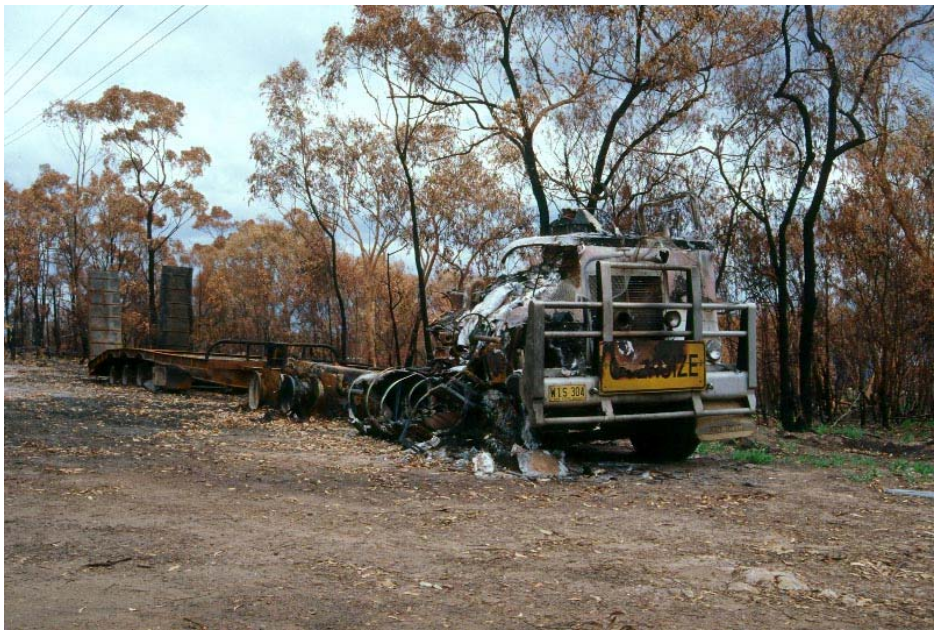


Photo 2.4: Bushfire Destruction in Glenorie
Date of Photo: December 2002

2.2.6. Flood Prone Land

The major flooding in occurs on the Hawkesbury and Nepean Rivers. It affects different areas in different ways. Areas like Hawkesbury, Camden and Penrith LGAs are more affected because of the low lying land and intense settlement patterns. Other areas like Baulkham Hills are not as affected because of the sparse amount of settlement along the river which only affects a small number of houses and commercial caravan parks. The State Government is preparing a Flood Study and has completed flood mapping. The major impact on the future of the are is one of isolation in times of flood because of access roads being inundated.

Flooding in the rest of the region is limited to localised flooding of the various creeks and drainage lines. It is of particular impact where roads cross these creeks and they can be inundated and closed for periods of time. This can cause short term isolation.

Most Councils have established a Floodplain Management Committees to prepare a floodplain management plan under the provisions of the new floodplain management manual. This will ensure that the Council has considered the issues of flooding including the probable maximum flood in all future planning for the rural lands. This is particularly important for those uses along the Hawkesbury River and particularly the tourist uses that may wish to expand their operations.

2.2.7. Salinity

Salinity can be a symptom of environmental change resulting from natural processes as well as human impacts. It can also exist without any interference. In western Sydney it is an existing process that is exacerbated by human activity, particularly European farming techniques, land clearing and urban development. It is the result of past and present land management practices, which have dramatically changed the way water is cycled through the environment. The salinity in Western Sydney does not occur on the sandstone areas.

A detailed Salinity Hazard Mapping project has been undertaken by the Department of Land and Water Conservation and it was released in draft form in December 2000. The map that accompanies the document shows that salinity is present and has the potential to occur in all of the creek lines, particularly South Creek. A study was carried out on salinity in the South Creek Valley and published by the Department of Land and Water Conservation in August 1997. This study highlighted the issue in the south creek catchment. Its main recommendation was to make good planning decisions to minimise or eliminate the impact of rising watertable and salinity. There is a need to adopt a catchment approach to the issue.

> *"There are a number of simple actions which everyone can take to help reduce the impact of salinity. These include retaining existing tree cover and prevention of over watering parks and gardens. Other recommendations include growing native plants and mulching gardens.*

The State Government has recently released the NSW Salinity Strategy which is aimed at reducing the land affected by salinity over the next 10 years. The Strategy highlights the following things that can be done to slow down salinity:

- Protect and manage native vegetation;
- Use land so less water goes into the watertable;
- Use water more effectively and efficiently;
- Make better use of land affected by salt; and
- Focus efforts on priority salinity hazard landscapes.

The basic message to be learnt about salinity is not to unnecessarily clear vegetation or change drainage patterns which is one of the major causes of a rising water table that, in turn causes salinity. Other issues to consider include the overgrazing of stock, land degradation and development on sloping land.

2.2.8. Contaminated Land

This issue is related to the previous use of land. It is an issue because of a lack of understanding of the issue in the past. It is important to recognise in rural areas because of the potential health risks to future residents of the land, especially that land which is to be used for rural residential rather than continue as purely rural.

The State Government has recently released a State Environmental Planning Policy (SEPP 55) which sets a procedure to be followed for both development and rezoning issues.

Councils have guidelines on contaminated land that explains the issue. The guidelines have been prepared to outline the objectives, standards and procedures for the assessment and remediation of contaminated land and land suspected of being contaminated due to the past land uses or land fill. The guidelines are based on "Managing Land Contamination – Planning Guidelines" prepared by DUAP and NSW EPA.

2.2.9. Weeds

Weeds are one of the most serious threats to Australia's natural environment and primary production. They can destroy the native species, contribute significantly to land degradation and reduce farm and forest productivity. The National Weeds Strategy has identified the problem and states that the cost of weeds to Australia is approximately $3.3 billion per annum. The New South Wales weeds strategy estimates the value of control and lost production at $600 million per annum. Both the National and State strategies identify funding, education and better coordination of control programs as being important.

A weed can be described as an unwanted plant. It has been estimated that 17 % of Australia's flora consists of exotic weeds. In fact, of the 200 plants that have been declared noxious nationwide, nearly half were introduced as ornamentals or for other reasons. They have an impact on primary production as well as invading bushland and waterways. The problem is getting worse, not better, as settlement of the land has created favourable conditions for them to spread.

Weeds are becoming a problem to the community at large as they invade the urban and rural environment and the bushland. This is due in part to the expansion of urban areas as well as the increasing amount of rural residential uses and hobby farms with absentee landlords. These create favourable conditions for the weeds to prosper. There is an increase in the nutrient levels with on-site effluent disposal and the location of development (both urban and rural residential) near to bushland causing weed invasion. This weed invasion occurs through the nutrients killing the vegetation as well as "garden escapes" where weeds overgrow into the bushland. Weeds can also grow on the exposed earth as the subdivision is being developed.

Weeds are voracious. They can be water or land based - some can be both! Water based weeds especially can be a major problem. Two such examples are Alligator Weed and Salvinia. Both are introduced species and most people know Salvinia as the plant that is in a lot of fish tanks. Both Alligator Weed and Salvinia can grow to such a thickness that it can be walked on! When it covers the entire waterbody it kills all other plant and animal life.

There are other plants that are not declared noxious but can be just as invasive. A good example is Kikuyu, which is a grass on many backyards. It thrives in nutrient rich situations such as at the end of a septic irrigation area. It is also one of the most common "weed invasions" into bushland.

There are outbreaks of weeds all throughout the rural lands of Western Sydney. They occur in drainage channels and creeks as well as in areas of native vegetation.

There is a need therefore to consider the preparation of Weed Management Plans for developments that have the potential to cause the spread of weeds by clearing large tracts of land or that generate effluent in sufficient quantities that may kill native vegetation which then allows for the weeds to invade the bushland.

2.3. Social and Economic Factors

2.3.1. Land Use

There are a variety of land uses within Western Sydney. They include urban, agricultural, native vegetation, rural residential, extractive industries, commercial and light industrial uses. They all have an impact on each other as well as the environment. Finding the balance between these often-competing desires is the key to planning for rural land uses.

Land use in other Council areas are also important and there is a need to consider the uses as well as the controls on land use adjoining the area when making an assessment of future development options. This is particularly important if the adjoining LGA has a large minimum lot size and a smaller one is being considered. It is also important for the establishment of biodiversity linkages.

A recently completed project for the Western Sydney Regional Office of the Department of Infrastructure, Planning and Natural Resources by EDGE Land Planning has been a comprehensive land use survey of all rural land in the following 9 Council areas: Baulkham Hills, Hawkesbury, Blacktown, Fairfield, Penrith, Blue Mountains, Liverpool, Camden and Campbelltown. The study was limited to these areas because this is the area administered by that office of the Department. However it is representative of the other 4 Council areas of Gosford, Wyong, Hornsby and Wollondilly and it is considered that the land use patterns would be similar for these areas.

Land Use

The land uses within the study area are diverse. They can be classified into 9 broad categories (which are defined in Appendix 1) as follows:

- Rural Residential
- Intensive Plants
- Intensive Animals
- Extensive Agriculture
- Vacant Cleared
- Native Vegetation
- Extractive Industries
- Public Use
- Village

There are a total of 42,377 lots within the rural lands that were counted in the landuse survey. This included the village areas of within each Council area. However, for the purpose of the following discussion, the village areas have been excluded, as

they are not considered to be rural land per se and the inclusion of them skews the percentages of the land uses because there are so many of them. Also excluded are the areas of native vegetation. These have not been counted because of the large number of lots of varying size as well as the land that is in the National Parks and Nature Reserves. When these are taken out there are a total of 32,807 lots in the study area.

The overall landuse for the area is shown in Figure 2.3 and Table 2.1 below. Map 2.1 shows the spatial representation of the land use. It can be seen that the largest landuse (in terms of the number of lots) is rural residential with 78.3 percent of all rural lots having a residential use as the major use of the property. Intensive Plant uses are the next most dominant with 6.8 percent. Land that is vacant is 4.9% and this is the third highest. Then it is Public Uses, Extensive Agriculture, Commercial, Intensive Animal uses and extractive industries.

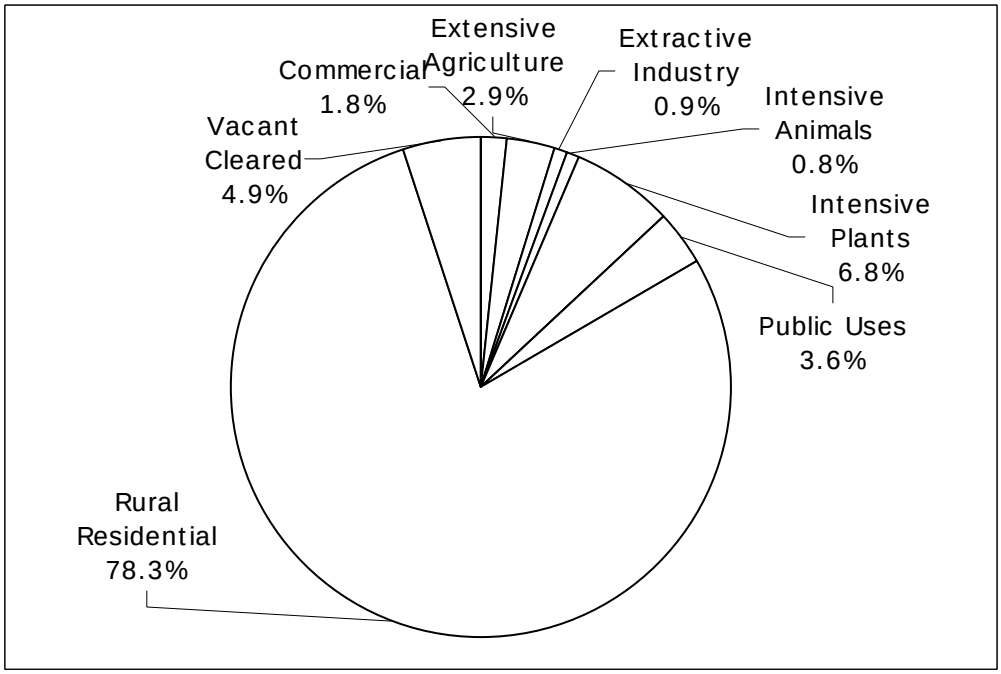


Figure 2.3 Land Use

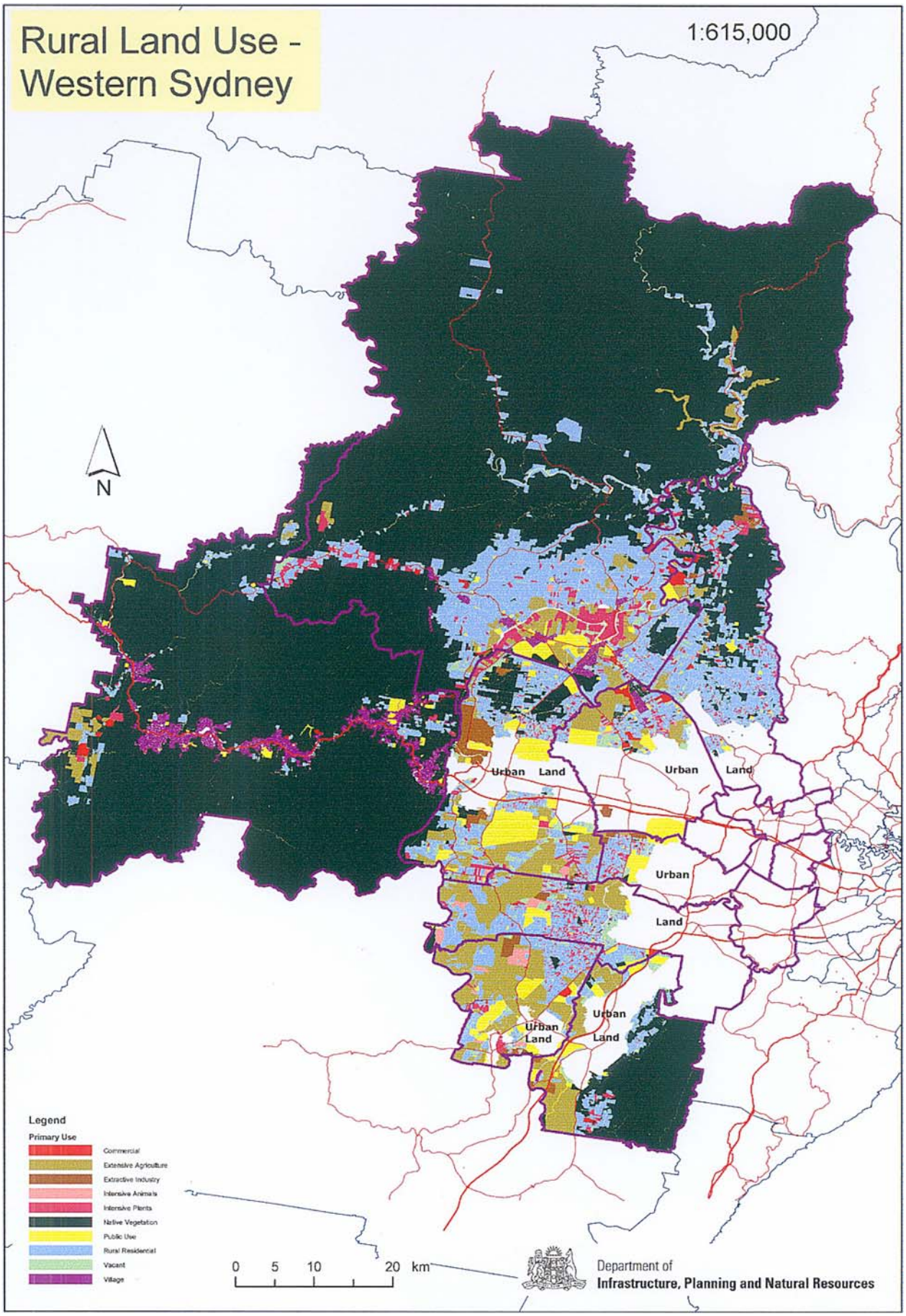
Table 2.1: Number of Primary Land Uses

Land Use	Number of Uses	Percentage of Total
Rural Residential	25,676	78.3
Intensive Plants	2,226	6.8
Vacant	1,620	4.9
Public Uses	1,195	3.6
Extensive Agriculture	944	2.9
Commercial	575	1.8
Extractive Industry	295	0.9
Intensive Animals	276	0.8
T O T A L	**32,907**	**100.0**

The landuse survey has revealed the variety of uses in the rural area. They can be categorised in to agricultural uses, non-agricultural uses and rural residential uses. Table 2.2 lists the variety of uses observed in the rural areas.

Table 2.2: Variety of Rural land uses.

Agricultural Uses	Non-agricultural uses	Rural Residential Uses
Market gardening	Service Stations	Dwellings
Orchards	Hardware Stores	Dog kennels
Poultry for meat	Caravan Parks	Truck activities
Poultry for eggs	Farm Produce stores	Earth moving
Nurseries	Research Establishments	contractors
Hydroponic Lettuces	Manufacturing	Horses
Irrigated cropping	Warehouses	Home based
Mushrooms	Churches and Schools	businesses
Dairying	Cemeteries	
Cattle	Light industrial uses	
Horse studs	Auto electrician	
Alpacas	Car Wreckers	
Deer	Tourist facilities	
Aquaculture	Veterinary Surgeons	
Turf Farming	Retirement Villages	



Map 2.1: Western Sydney Land Use

Lot Size

An analysis of the lot sizes has been carried out. This was done to provide an indication of the fragmentation of the land and to provide a picture of areas where there was a dominance of small lots.

The lot sizes ranges for each individual Council area are provided within Appendix 2. The lots counted do not include village or native vegetation because they would not provide a proper representation of the total lot distribution of privately held rural land. The total lot size analysis for the study area is provided below in figure 2.4. Map 2.2 shows the distribution of the lot sizes throughout study area.

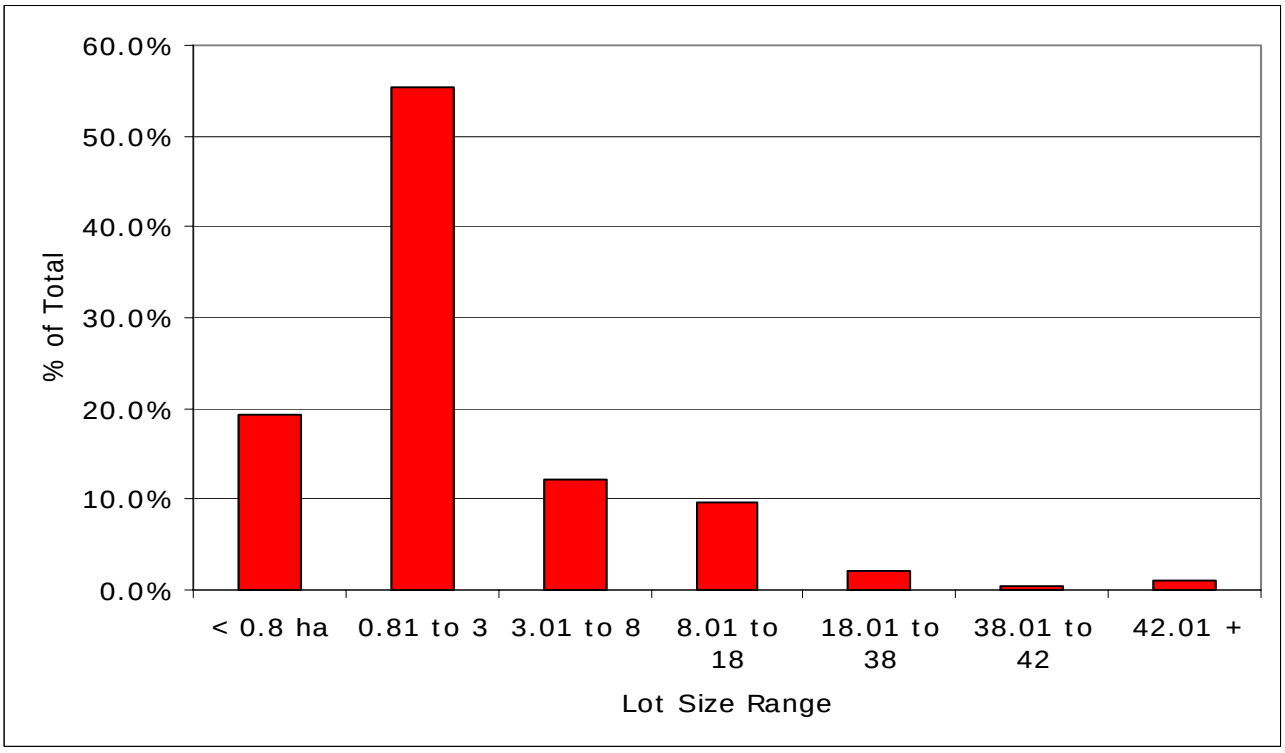
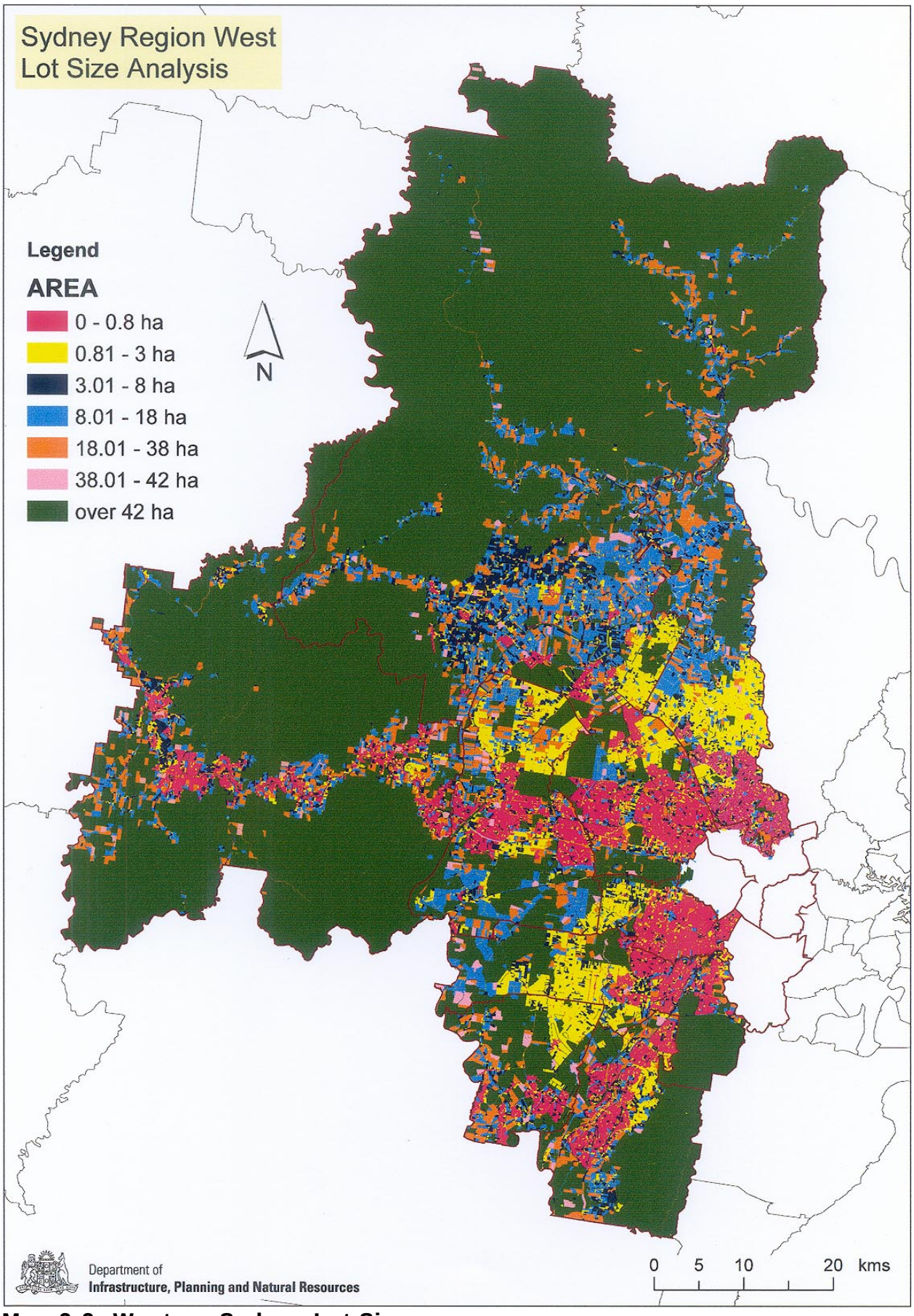


Figure 2.4: Lot sizes analysis

From these it can be seen that there is a dominance of lots in the 0.81 to 3 hectare range being mostly around the 2 hectare size. There is also a large number of lots less than 0.8 ha, most of which are in the 4,000 m^2 category. Therefore the total percentage of lots less than 3 ha is 76.6%. It is significant to note that there are very few lots greater than 8 ha (13.2%).

It is also significant to note that the smaller lots are located adjacent to the urban areas, which can act as a constraint to the future development of the land due to this fragmentation.

The predominance of lots in the 0.8 to 3.0 ha range is common in all Council areas. Some, like Blue Mountains, Camden, Hawkesbury and Penrith have approximately 20 to 30% of the lots in the less than 0.8 range with the rest having between 10 and 15 % of lots less than 0.8 ha in size. Hawkesbury and the Blue Mountains have the highest percentage of lots in the ranges greater than 3ha.



Map 2.2: Western Sydney Lot Sizes

Land Use by Lot Size

The land use data has been cross referenced with the lot sizes to show the proportion of land use that is within each lot size range. Figure 2.5 shows the results of this analysis. The major land use categories of rural residential, intensive agriculture (combining intensive animals and plants), extensive agriculture and vacant land have been shown and the others have been grouped together (extractive industry, commercial, and public uses).

Figure 2.3 shows that, as expected, in the lot sizes below 8 ha the highest proportion of uses is rural residential. There is also the majority of intensive agriculture on lots of 0.8 to 3 ha. It should also be noted that there are a number of rural residential uses on lots of 8 ha and above, which is approximately 10% or 3,000 odd lots. These are also scattered between productive agricultural uses which can lead to some instances of rural land use conflict. It is also an indicator of the desire for rural lifestyle living, which is discussed, in the next chapter.

This graph serves to verify the trend of increasing rural residential uses, particularly on larger lots that have been used for agriculture in the past. It also signals the decline in agricultural uses on the fringe of Sydney. However, it also must be noted that there are some agricultural uses that are starting up in the region.

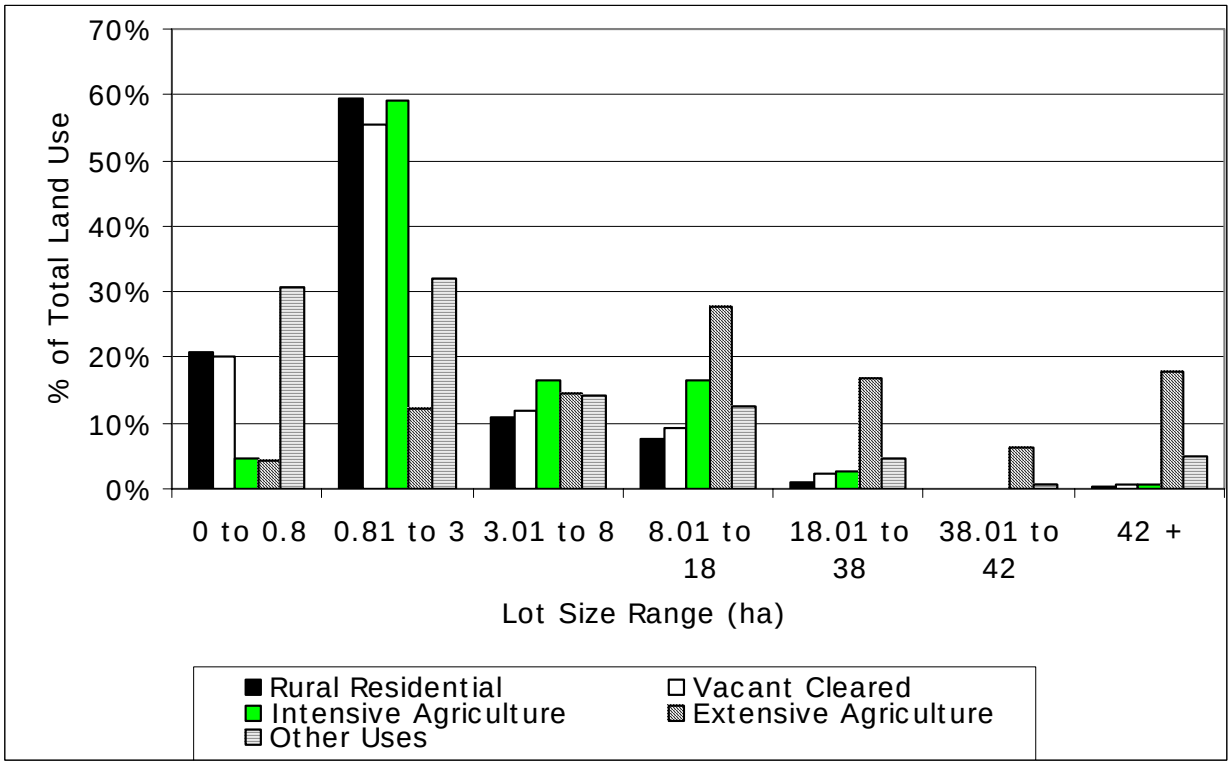


Figure 2.5: Land Use by Lot Size

Rural Residential Use

The rural residential uses have been sub categorised into the following secondary uses:

- Dwelling – there is only a house on the lot.
- Horse – there is a house plus a horse or horses observed on the property.
- Truck - there is a house plus a truck usage (bobcat, builder, plumber, etc)
- Home Business – a home business is run from the property and there is a sign advertising this.
- Dog Kennel – there is a house plus dog kennels and there is a sign advertising this.

The total breakdown of this is presented in Figure 2.6, which shows the dominance of the straight housing use, but it is significant to note that there are a number of horse and truck uses. It should be noted that there is a total of 25,976 lots in this category across western Sydney. It also needs to be noted that these figures are considered to be conservative as they were observed when the land use survey was carried out and not all uses are apparent from the road.

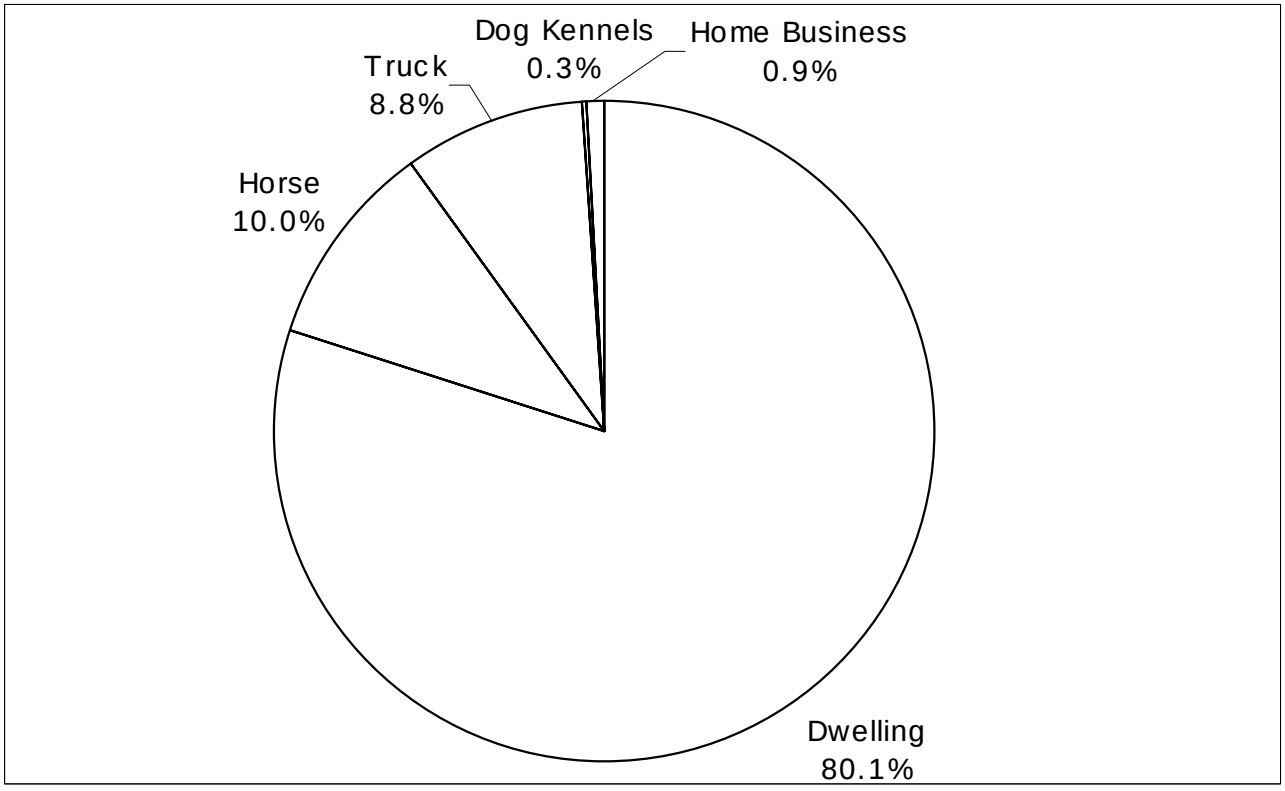


Figure 2.6: Rural Residential Uses

2.3.2. Agriculture

The protection of high quality agricultural land within the Sydney region is an issue paramount to the future planning of the region if it is to continue to grow its own fresh food and produce. Agricultural production in the Sydney region is an important part of the economy as well as providing a rural hinterland. It is the LGAs located on the fringe of Sydney which produce a significant proportion of the fresh produce both consumed and produced in New South Wales (especially perishable commodities). The main agricultural produce grown in Sydney's urban fringe is perishable vegetables, poultry, nurseries, flowers and cultivated turf. There are also considerable dairies, orchards, horse studs and spelling properties as well as goats, deer, alpacas and other traditional forms of agriculture.

NSW Agriculture has valued agriculture in the Sydney region as being worth approximately $1 billion (Gillespie and Mason, 2003). (This figure did not include the horse bloodstock industry which can be conservatively valued at a further $1 billion).This represents 12% of the total value for NSW and it is grown on 1% of the land. (Gillespie and Mason, 2003). However, this figure for the total value is a conservative figure. In a recent study by the University of Western Sydney Hawkesbury titled the "Impact of Rural Subdivision on Agriculture", detailed analysis was carried out of the value of production for Wollondilly and Hawkesbury Council areas. This found that the value for Hawkesbury was $211 million and Wollondilly $360 million. As these are only 2 of the agricultural producing Council areas in Sydney it can be said that the figure of $1 billion is an underestimation. NSW Agriculture have also outlined that there is 77,000 ha of land in the region that is devoted to agriculture farmed by 2,000 farmers. The average size of farms is 40 ha compared to 1,454 for the State. Using 1997 ABS Agriculture Census values of production, the average return per ha for farmers in Sydney is $5,433 compared to $136 per ha for NSW. (NSW Agriculture 2003, p1).

Analysis has been carried out of the Australian Bureau of Statistics Agricultural Census to give an indication of the relative value of agriculture in the Sydney region compared to other regions of New South Wales. This research has shown the dominance of the Sydney region for intensive agricultural commodities such as perishable vegetables, poultry, nurseries, flowers and turf. This information has been graphed to show the relative differences between the regions and highlights the importance of Sydney.

Vegetable production occurs in all regions of NSW. The Murray and Murrumbidgee regions produce the highest percentages of total vegetable production (24% and 31%) respectively. The Sydney region contributes 20% of the total vegetable tonnage produced in NSW. (See Figure 2.7) However, when one breaks vegetable production rates into perishable commodities, (those commodities that perish quickly when harvested and therefore need to be located close to the market they serve) a different picture emerges. It can be seen from figure 2.8 that the Sydney region produces 100% of the State's Chinese cabbages and sprouts, 80% of fresh mushrooms, 91% of spring onions and shallots. The Sydney region also accounts for 40% of the State's total area devoted to nurseries, 55% of flower production and 64% of the total area under cultivated turf (See Figure 2.9). Poultry production in the Sydney region accounts for 48% of the State total. Figure 2.10 illustrates this and shows that the Sydney region is where the most of the various types of poultry products originate (these being chickens, ducks and turkeys for meat as well as egg production).

Agriculture occurs in all of the fringe Council areas of Sydney. Their contribution to selective commodities is shown in Figure 2.11.

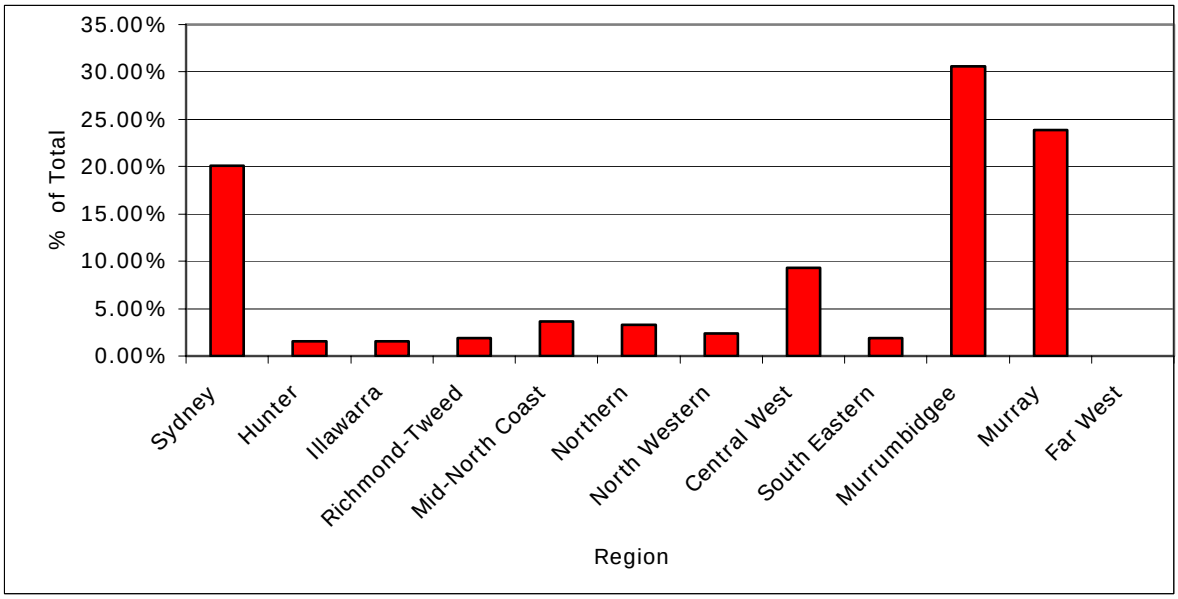


Figure 2.7: NSW Total Vegetable Production, 1997
Source: Sinclair, 2003

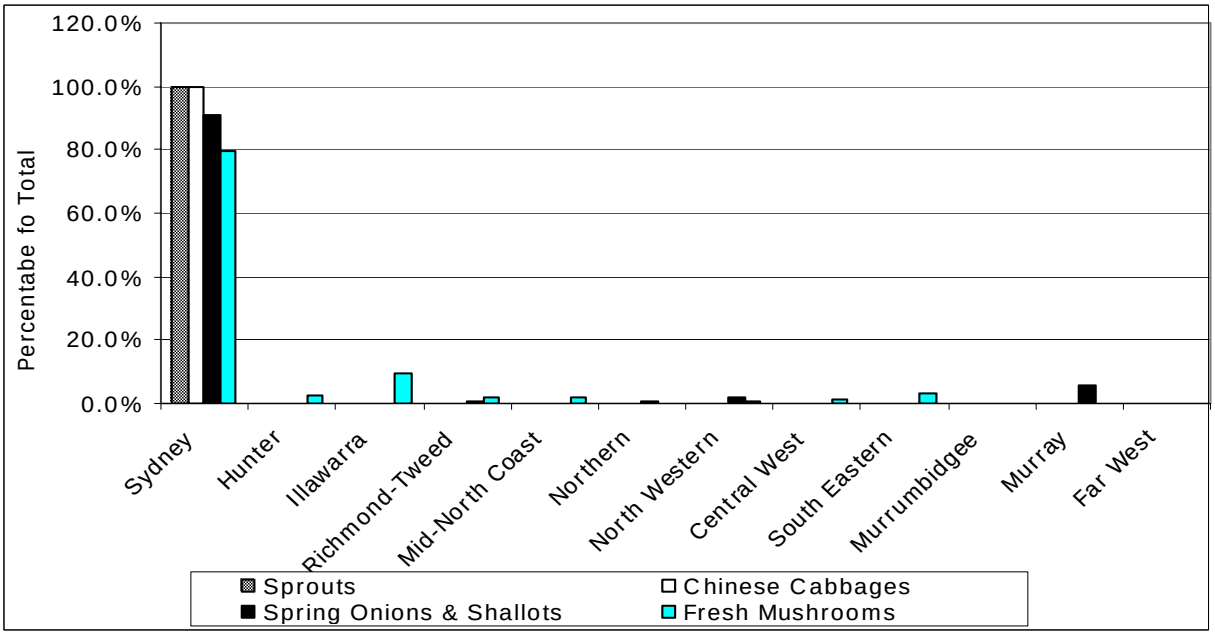


Figure 2.8: NSW Perishable Production, 1997
Source: Sinclair, 2003

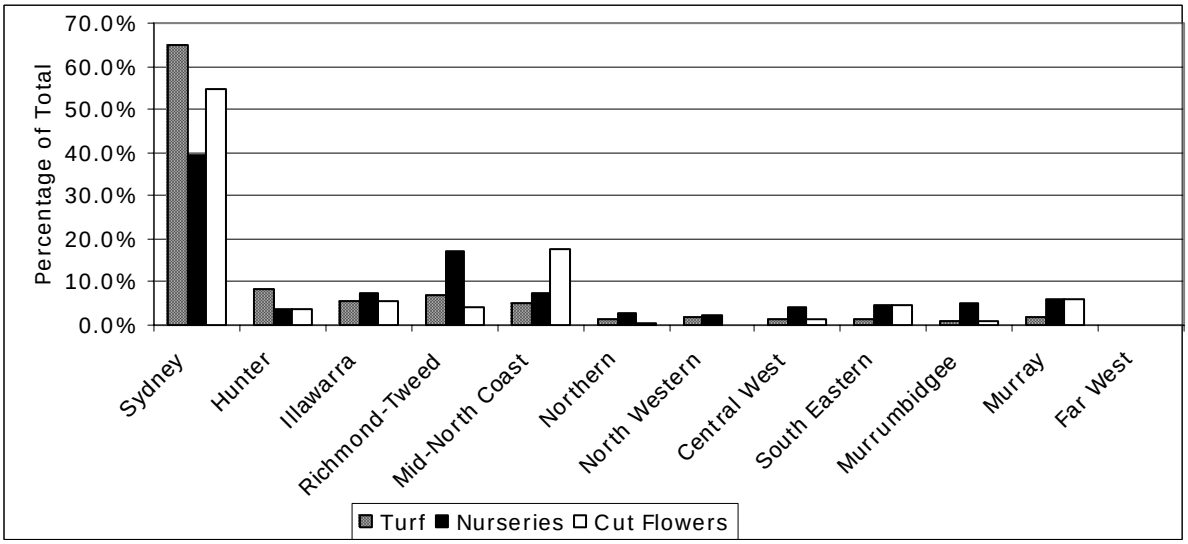


Figure 2.9: NSW Nursery, Flowers and Turf Production, 1997
Source: Sinclair, 2003

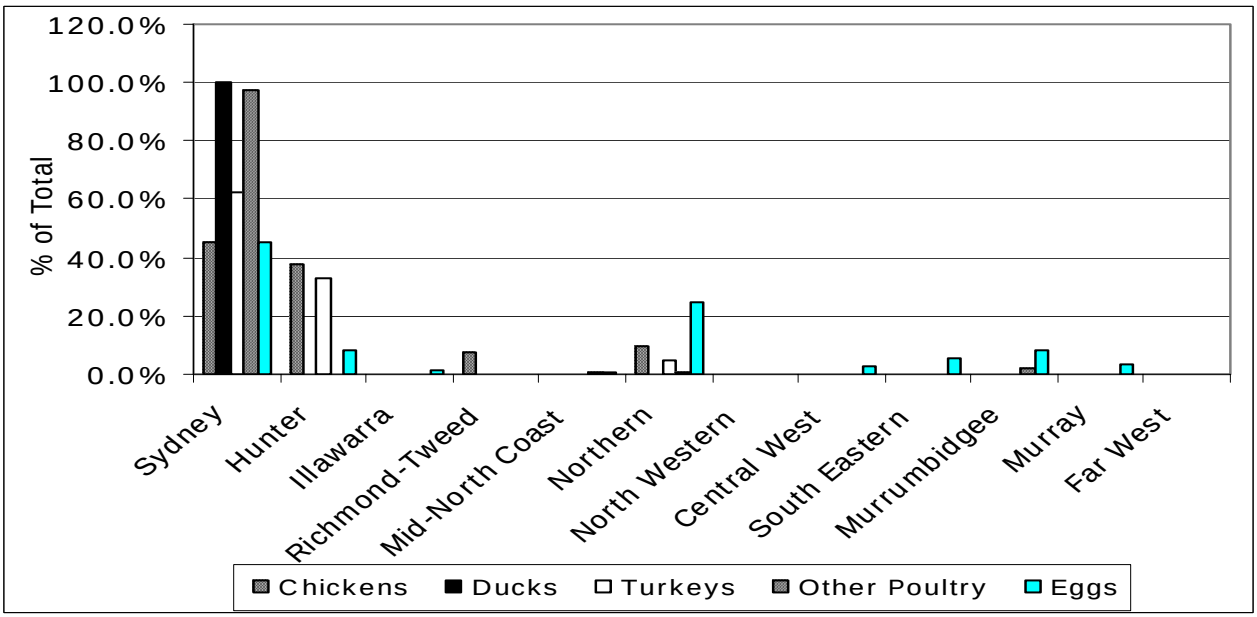


Figure 2.10: NSW Poultry Production, 1997
Source: Sinclair, 2003

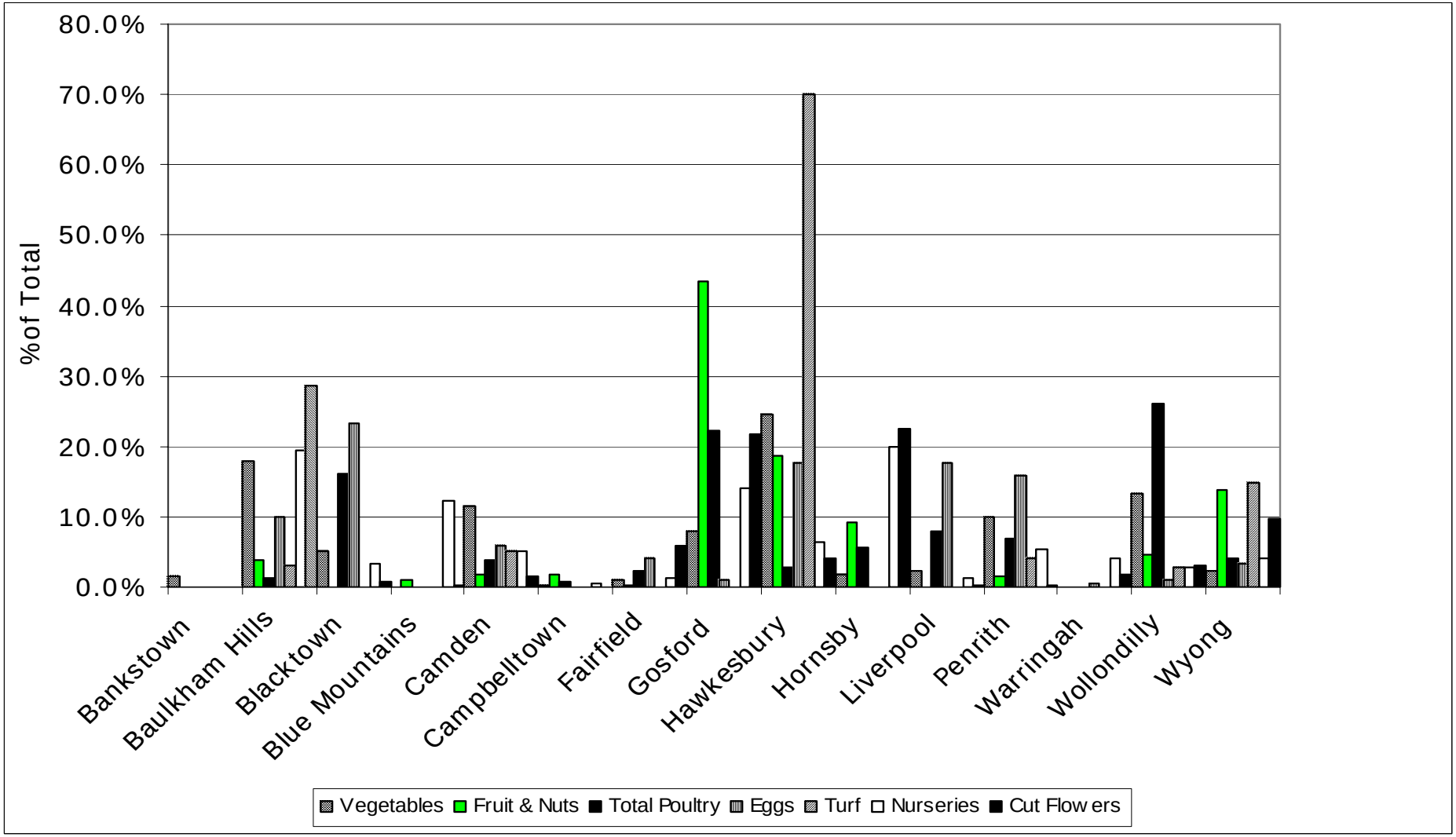


Figure 2.11: Agricultural Production for each LGA in the Sydney Region, 1997
Source: EDGE Land Planning, 2001

Agriculture on the fringe is becoming more intensive as the value of land increases and hence the need to use it for higher yielding commodities. Intensive uses are also being relocated from other Council areas that have become urbanised. Anecdotal evidence is that a number of the farmers carrying out intensive forms of agriculture in the Councils in Western Sydney have relocated from farms in the Fairfield, Liverpool and Blacktown areas that have been urbanised over the past 10 to 20 years.

As shown in the land use by lot size analysis in chapter 2, most of the intensive agriculture is practiced on lots in the 0.8 to 3 ha range, which is considered to be unstainable because of the potential to create rural land use conflict and lack to area to adequately deal with soil and water management on the property. This can be seen in photo 2.5.

Photo 2.5: Intensive Agriculture on small lots
Date of Photo: April 1999

The urbanisation of Sydney's agricultural lands, especially those used for intensive plant growing has to be considered in the wider context of Sydney's food supply. In Blacktown, for example, there is a total of approximately 400 ha of intensive plant uses and in Liverpool, there is approximately 700 ha of intensive plant uses. It is noted that both of these areas are being investigated for potential urbanisation (North West Sector and Bringelly Urban Investigation Areas) and the relocation of this agricultural use should be considered. It is possible that the loss of the number of uses could have an impact on the supply of fresh food into the Sydney markets as the Sydney region produces the greatest amount of perishable produce in the State as noted above.

For agriculture to remain on the fringe of Sydney, it must become sustainable. Sustainability in this context embraces the concept of Ecologically Sustainable Development or ESD.

Sustainable agriculture, from a land use planning point of view, must embrace environment, economics and social concepts (ESD). A definition of sustainable agriculture therefore is as follows:

> *"use of land … which can be maintained and managed so that the land remains*
> - *environmentally sustainable (that is, environmental pollution and land degradation arising from the use is minimised);*
> - *socially sustainable (that is, land use conflict and loss of amenity of the surrounding area arising from the use is minimised); and*
> - *economically sustainable (that is, there is a capability of making a net farm profit from the use"* (Sinclair, 1999)

A use may be economically sustainable, that is it makes a living for the farmer, but it may be on a lot that is not large enough to allow it to manage the nutrients or odour and may have an impact on the amenity of the neighbourhood. It is therefore unlikely to be sustainable. Unsustainable practices include market gardening on small lots, hydroponics on small lots, overgrazing of land by cattle and the loss of topsoil through erosion. Photo 2.6 shows a good example of this from Llandilo in the Penrith Council area. The three separate market gardens in the middle foreground are planted from boundary to boundary with no buffer strips and there is also no buffer between the creeks. There is no way to manage the soil and water on the three farms.

Photo 2.6: Example of non-sustainable agriculture
Date of Photo: December 1999

Agricultural land uses on the fringe of metropolitan areas are becoming more intensive. The fringe of the metropolitan areas is also where a large amount of the population growth of Sydney is occurring. This is a similar situation in United States of America where considerable research has been carried out and literature written on the subject. The issues facing fringe metropolitan areas in United States are similar to those facing the fringe of Sydney. Daniels and Bower in their 1997 book titled *Holding our Ground - Protecting America's Farms and Farmland* make the following observation:

> *"In the rural and urban fringe, the sharply defined boundaries between cities and countryside are being blurred by two types of development. The first is the continued wave of large residential and commercial projects as population centres expand. The second … features scattered homes and commercial strips held together by highways. In between the houses and stores, there are often large open spaces of farmland, forests and idle land. This dispersed development has greatly increased the confrontation between farmers and non-farm neighbours."* (Daniels and Bower, 1997 p 4)

They go on to highlight the well-known problems that both types of development have created. These are as follows:

1. Developers bid up land prices beyond what farmers can afford and tempt farmers to sell their land for development.
2. The greater number of people living in or next to the countryside heightens the risk of confrontation between farmers and non-farmers.
3. Complaints increase from non-farm neighbours about manure smells, chemical sprays, noise, dust and slow-moving farm machinery on commuter roads.
4. Farmers suffer crop and livestock loss from trespass, vandalism and dog attacks. Stormwater run-off from housing developments washes across farmland, causing erosion, and competition for water supplies increase.
5. As farmers become more of a minority in their communities, nuisance ordinances may be passed, restricting farming practices and in effect making farming too difficult to continue.
6. As farms are developed, farm support businesses are pushed out. Remaining farmers stop investing in their farms as they expect to sell their land for development in the near future.
7. Open space becomes hard to find, the local economy changes, and rural character fades.
8. At the same time newcomers to the countryside value farmland for:
   - the open space and scenic vistas
   - protecting air and water quality
   - wildlife habitat
   - the sense of rural character

> *"Ironically, newcomers can destroy the farms and farmland that they value. And farmers have often sowed the seeds of their own decline by selling of road frontage for house lots to urban refugees. Most of these newcomers still work and shop in the cities and suburbs, some are retired, and others may commute to work through their computers. But they tend to see rural land as an amenity and a place to live, not as productive farmland."* (Daniels and Bower, 1997, p 5)

Daniels and Bower have also highlighted what happens with farmland on fringe of metropolitan areas. They have described this as the cycle of farmland conversion which is reproduced as figure 2.1.

The preparation of effective land use planning and growth management strategies is required to ensure that the appropriate balance is achieved in order to reach the goal of sustainable development. "Planning is without doubt the most important

factor in realising the potential of those social, economic and environmental investments and benefits. Land suitable for agriculture is no different to species of flora or fauna. Once gone it is lost forever." (New South Wales Agriculture 1998 p 8)

> *"Prime agricultural soils represent the highest level of agricultural productivity; they are uniquely suitable for intensive cultivation with no conservation hazards. It is extremely difficult to defend agricultural lands when their cash value can be multiplied tenfold by employment for relatively cheap housing. Yet the farm is the basic factory - the farmer is the country's best landscape gardener and maintenance workforce, the custodian of much scenic beauty. The market values of farmland do not reflect the long-term value or the irreplaceable nature of these living soils. An omnibus protection of all farmland is difficult to defend; but protection of the best soils in a metropolitan area would appear not only the sensible, but clearly desirable." (McHarg, 1992 p 60)*

Photo 2.7 shows an example of intensive plant growing at Maroota, which is a common form of intensive plant growing.

Photo 2.7: Intensive Plant Growing
Date of Photo: December 2000

2.3.3. Non-agricultural uses

The non-agricultural uses observed include the following:

- *Service Stations* are located throughout the rural area and in some cases have become defacto general stores.
- *Truck activities and earth moving contractors* occur throughout the rural lands.
- *Farm produce stores and hardware Stores* are scattered throughout the rural lands but are not very numerous.

- *Manufacturing, welding and other light industrial uses* are scattered throughout the rural lands, mostly in the 0.8 to 3 ha areas.
- *Schools*. These have been established over the past 10 to 15 years and can cause some traffic problems as well as effluent disposal.
- *Auto electricians and Mechanics* are also scattered throughout the rural lands, mostly in the 0.8 to 3 ha areas.

These uses can cause problems with the amenity of the area by way of the impacts on the adjoining land and land in the vicinity. Examples are the schools which have generated more traffic on the roads, which it could be argued are not suited to the rural area. Truck and earth moving activities can cause problems with noise, especially if they are located next to purely rural residential uses.

Photo 2.8 shows the petrol station and general store at Maraylya.

Photo 2.8: Service Station and General Store at Maraylya.
Date of Photo: December 2000

2.3.4. Ethnicity of Farmers

It is estimated that there are in excess of 2000 market gardens in the Sydney Basin, of which 95% of the farmers are from non-English speaking backgrounds (NESB). These backgrounds cover a range of nationalities, which include the "older" farming communities of Maltese, Italian, Dutch, German, Lebanese and Eastern European nationalities such as Polish, Czechoslovakian and Yugoslavian. The "newer" farmers include Chinese, Cambodian, Vietnamese, Iraqi, Korean, Japanese and Singaporean. Many have come from situations of war or civil unrest. These farms produce over 80% of the fresh vegetables in the Sydney Basin

Other agricultural activities such as orcharding, turf growing, dairy farming and nurseries tend to be predominantly by farmers of English speaking backgrounds, although there are small numbers of NESB farmers within these industries.

The influx of farmers from other countries has brought about the introduction of many new and exotic crops. Many of these crops have been developed by the various migrant groups solely through their own initiative and entrepreneurial spirit. These include, inter alia, Lebanese cucumbers, a wide range of Chinese vegetables, cherry tomatoes, snake beans, hairy melon, Asian herbs, and many more.

For many migrants, farming as an occupation is seen as one way of earning a living without the need to speak or write English. Given the short crop rotation, it is possible to earn an income within a few months of commencing farming, thus housing, clothing, feeding and educating the family without the need for social security.

NESB farmers are the most impacted on with regard to planning issues as they are not included in the communication loop. The main reason for this is that many lease land from landholders who are keen to see the land developed for housing. In some instances, whole communities have been "wiped out" by the planning process as the farm land was seen as "vacant land". A prime example of this is the Kellyville area which was home to some of the most productive farmland in Sydney.

With respect to the "older" NESB farming communities, common threads are:

- Better established and usually own land.
- Many farms employing workers from outside the family.
- They grow vegetables, flowers and poultry.
- 1st generation are winding down farming operations as 2nd and 3rd generations choosing not to farm.
- 1st generation – still speak mainly mother tongue. Many have problems reading or writing English and speak broken English.
- 2nd generation – equal in both languages. Some semi-literate in both languages. Difficulties in understanding spoken or written technical language.
- 3rd generation – mainly English speaking. They read and write in English and speak broken mother tongue. Technical English difficult for many. This generation moving off farm in large numbers.

Many of these farmers in "older" farming areas which are now being developed for housing have been forced to either move further a field or agree to develop their farmland for residential development. A number of farmers who have chosen to move further west rather than live in the middle of a housing development are now finding that these newer areas are targeted for residential development.

With regard to the "newer" farming communities, the common threads are:

- Land ownership is a problem. It is estimated that about 50% of Chinese and less than 5% of other nationalities own land (Parker & Jarecki, 2004).
- They are mostly family farms. Some with only husband and wife farming and others with children (after school) and extended family. Few can afford to employ outside workers.
- Farms range from 2 – 10 hectares and farming is done in the ground and in poly houses.
- Highly intensive – beds lie fallow for very short periods. Crops rotating every 8-12 weeks, shorter in summer.
- High agricultural inputs
- Produce up to 90% of specific crops for sale at Sydney markets.
- Very few who speak English at conversational level. Fewer are able to understand technical English
- This sector has a low uptake of social security services and no access to community charities, who appear to be unaware of this "demographic".
- Experience extreme difficulties in accessing information on range of issues dealing with farming and/or social aspects.

Many of the issues experienced by NESB farmers stem from:

- Low levels of baseline information about farming, as many of the farmers practised other professions in their country of origin.
- Very little bilingual agricultural extension work undertaken with growers.
- Very little relevant information in farming community languages.
- Increasing regulation and enforcement with little community consultation and education prior to implementation of new regulations. Access to farmers mainly undertaken through grower associations. However, only 40% of growers belong to grower associations. All grower associations are run by volunteers (themselves farmers), with no funding and little time.
- Local government interaction with NESB farmer is becoming increasingly problematic as a result of increased enforcement of planning regulations which can appear to be discriminatory as NESB farmers are the main group of farmers "on the move" in the Sydney Basin. Few Councils make use of accredited interpreters or the Telephone Interpreting Service.

Dealing with issues and problems experienced by NESB farmers requires an "all of government" approach. Specific farming communities have specific needs which are not being addressed. Whole communities are being pushed further and further a field without any regard for social, economic or financial welfare of these communities.

There appears to be little regard to the impacts on food supply should agricultural land be taken over by development. It would appear that the reasons for agriculture being located where it is, is not taken into account when planning where

further development will take place. With farms being moved onto more and more marginal lands and housing development taking place on prime agricultural land, it is envisaged that within the foreseeable future, very little viable farming will be undertaken in the Sydney Basin.

2.3.5. Tourism and Recreational activities

Tourism in Western Sydney is linked to the River and to rural pursuits in a small way.

Tourism is a growth area in the rural sector of the Western Sydney economy. Uses include bed and breakfast and farm homestay as well as golf courses and resorts. These types of tourist operations can be compatible with rural uses of the land because of their low scale and intensity. They also help to maintain the openness of the rural landscape. There are a number of properties with substantial heritage buildings which could be used for tourist related uses, such as guest houses, restaurants and resorts, subject to conservation of the heritage qualities of the building and its setting. These also have to have regard to the environmental attributes of the site and ensure that they do not have any detrimental impact. Some of the current uses may not meet these environmental standards and this can be an issue, particularly if they wish to expand. Hawkesbury Harvest is an example of a growing tourism sector

Economic development is perhaps one of the most important parts of any rural land. If the land is not able to make a profit, it will cease to be 'productive' and the pressure will be placed on it to be subdivided and the use changed. The provision of data on the economic contribution of the rural lands to the total economy is very important. It follows that strategies to ensure that the rural areas remain economically sustainable are also important.

Photo 2.9: Caravan Park along the Hawkesbury River
Date of Photo: June 2001

2.3.6. Extractive Industry

Extractive industries in Western Sydney are important to the entire Sydney region because of the fact that it has one of the last known resources of construction sand. Most of them are located in the Penrith Lakes area in Penrith Council area and Maroota in Baulkham Hills Shire.
This is a complex issue because it has many impacts – clearing of vegetation, impact on the surface and ground water quality and quantity, noise of the operations, noise of the trucks, impact of the trucks on the road surface and the traffic management and safety in the area. All of this has to be weighed against the fact that it is a major (and one of the last) resources of construction sand for Sydney. It also is one of the many causes of rural land use conflict, however it should be noted that in some cases, people who move in knowing the extractive industry is in place, complain about it. This has an impact on the economic sustainability of the extractive industry.

Photo 2.10 shows the extent of the Maroota sand extraction area from the air.

Photo 2.10: Extractive Industry at Maroota.
Date of Photo: August 2001

2.3.7. Urban Growth

In any discussion of rural land on the fringe of a large metropolitan area such as Sydney, it is necessary to consider the issues of urban expansion. The newly developing urban areas on the fringe of Sydney were once rural land, and much of it was productive agricultural land.

> *"Continued growth in outer areas generally involves environmental costs that can include increased air and noise pollution from motor vehicle use (where other transport options are not available); increased water pollution of local waterways; loss of agricultural land; and loss of remnant vegetation. Growth in the outer (or 'fringe') areas is also generally accompanied by increased costs in the provision of services."* (EPA 2000, pp 38 to 39)

The NSW State of the Environment Report provides data on the distribution of the net dwelling stock increase from 1993-94 to 1998-99. This is reproduced as table 2.3. It is significant to note that the outer ring suburbs have dropped from 42% to 28% of the new dwellings and that the middle and inner rings have increased from 32% to 53% of new dwellings. The increases in residential development within the metropolitan urban footprint are made up of a mixture of the redevelopment of former industrial sites (brownfields development) and medium and high density development.

Table 2.3: Distribution of Sydney's net dwelling-stock increase

Year	Inner ring		Middle ring		Outer ring (established areas)		Outer ring (UDP areas)		Total
	Number	%	Number	%	Number	%	Number	%	
1993–94	2,676	12.8	3,931	18.8	5,478	26.2	8,824	42.2	20,909
1994–95	5,507	22.3	4,544	18.4	5,334	21.6	9,309	37.7	24,694
1995–96	5,286	22.9	5,956	25.8	5,171	22.4	6,672	28.9	23,085
1996–97	5,690	25.6	5,224	23.5	5,023	22.6	6,290	28.3	22,227
1997–98	5,841	25.8	4,663	20.6	5,094	22.5	7,041	31.1	22,639
1998–99	8,795	32.0	5,694	20.7	5,384	19.6	7,633	27.7	27,506

Source: EPA, 2000 p 40

In a recently released book on the changing patterns of settlement in Australia, Bernard Salt makes the observation that Australians are pursuing a lifestyle pattern of living which he says is luring people to the coast. It is considered that the lifestyle push is also happening in the fringe metropolitan areas like the rural areas of Baulkham Hills, Hawkesbury, Penrith, Camden and Liverpool Council areas. This is evidenced by the high numbers of rural residential uses in these areas as well as the number of horses and home businesses. In the last 20 to 30 years, the highest growth rates have been achieved by fringe LGAs. The Population Growth Database 2001 prepared by KPMG shows these areas as having high growth rates and are amongst highest growing Councils in Australia.

> *"Australians at this time preferred the space, the openness, the very 'newness' of suburbia. Many still do and will continue to do so over the early decades of the 21st Century. Put simply, most Australians like low-density living, and they have the space and geographical resources to pursue this lifestyle. Australians still prefer the quarter-acre block, the carport and the barbeque area.* (Salt, 2001 p4)

The Rouse Hill Development Area has been planned to cope with this urban growth for the next 10 to 15 years. Once this has been fully developed, there will be a need to find new areas for housing. The Government are currently investigating land in North West Sydney which adjoins the Rouse Hill Development area as well as land at Bringelly, in the South West of Sydney. This brings in the question of the existing 2 ha areas and the possibility of converting them to residential use. There are a number of issues that have to be considered here. The major one is the cost of the land. Anecdotal evidence is that a 2 ha lot with a house on it now sells for approximately $1.5 million, where as 5 years ago this land was less than $300,000.

This rise in price has been a reflection of the lifestyle choice of people to live in the bushland setting on a large lot. The price of the land makes it difficult for developers to purchase a number of lots and develop them for residential development. Add to this the topographical, ecological and bushfire constraints and it could be that these areas will be kept as lifestyle areas because of the lack of this type of housing in Sydney. If they are to be used for residential development, the timeframe for the conversion to urban is likely to be considerably longer than for current land releases.

The pattern of settlement is of major importance for the future of rural land because of the potential for it to impact on the current uses of the land. Settlement includes the rural villages, rural residential uses as well as the minimum lot size for the agricultural holdings. It is especially important for the potential growth of the villages, which needs to be managed so that it does not have a detrimental impact on the sustainability of the agricultural uses or the landscape, heritage and biodiversity conservation value. The villages are an important part of the rural community. They provide places where people can do convenience shopping. They also provide educational, health and other basic services as well as a focal point for community activities.

2.3.8. Rural Residential

Rural residential development is the use of rural land for primarily residential purposes. The main source of income is not from a pursuit carried out on the land. Most rural residential dwellers move there for lifestyle rather than for the land's productive potential. As a result of this and the lack of an agricultural pursuit, the household does not have any affinity with the productive potential of the land and therefore does not usually understand the issues associated with agriculture. This lack of understanding often leads to rural land use conflict with the adjoining or near agricultural uses. (Sinclair, 2001)

The main thing that separates urban housing from rural residential housing is the size of the lots and distances between the dwellings, which create a sense of openness. Rural residential development, broadly speaking has two types:

> *"Rural Urban Fringe development is that style of development, which is within the servicing catchments and in close proximity to an urban centre. It may have reticulated water and in fact may have reticulated sewerage although most effluent disposal will be on site. It will also have a garbage service. The lot size is generally in the range of 4000 square metres to 2 hectares and it is in "estate" style of development. At the smaller lot size, it is more akin to residential than rural residential and therefore, lots of less than 1 ha are considered to be large lot urban.*
>
> *Rural Living development is a residential use of the land within a rural environment. It is not necessarily near an existing urban centre and does not have reticulated water or any other form of service, which would generally be provided in a rural urban fringe zone or urban centre. The lot sizes are generally 2 hectares and larger".* (Sinclair 2001)

The rural urban fringe areas are the 4000 m^2 to 1 ha estates at Windsor Downs in Hawkesbury, Cranebrook in Penrith and Grassmere in Camden. It also includes the

large areas of 2 ha lots in the southern parts of Baulkham Hills and Hawkesbury, the northern parts of Penrith Council, most of the Fairfield area as well as the eastern parts of Liverpool and Camden.

The rural living areas are to be found on the larger lots in the western parts of Baulkham Hills and Hawkesbury, the southern parts of Penrith and the Western parts of Liverpool and Camden.

A number of these, both rural living and rural urban fringe are used by the owners as their place of business. This is particularly so for tradespeople and professional people in single practitioner consultancies who run home offices. The evidence from this Study that 8.6% of the rural residential uses have a horse and 9.8 % have a truck and 0.9% have a home business confirm this. This is further backed up by analysis of the 2001 Census of Population and Housing which has revealed that the percentage of the employed population who work at home is 8.6% for the rural areas and 3.8% for the urban areas of the Sydney statistical division. (Sinclair, Bunker and Holloway, 2003, p5)

These lots are "… inhabited by an essentially urban population … in these pleasant homesteads dotting the landscape … the new country residents are commuters and weekenders rather than farmers." (Auster and Epps, 1993, pp 77-78)

Rural residential development has both positive and negative impacts. It provides a choice of housing and therefore should be provided but in appropriate areas which do not take away good quality and productive farmland as well as areas of high biodiversity value.

On the positive side it provides for a lifestyle choice for a number of people. It also provides for a place of business for residents who run home offices and for tradespeople who need land to store plant and equipment as well as supplies. It can also contribute to the local economy. Anecdotal evidence is also that the newer purchasers of rural residential lots have a higher income and more time to devote to the local schools and community groups.

The negative impacts can be broken into financial, community and environmental.

There have not been any recent studies into the costs of providing rural residential development in Australia. However, a study in the United Kingdom compared clustered and dispersed growth. This found that overall, the annual costs would be one third higher for the dispersed settlement pattern than a concentrated one. The study also found that, in terms of public costs, a scattered settlement pattern is 395% more expensive for capital and 236% for ongoing costs than a concentrated one.

There are community costs associated with rural residential development. They include the provision of services and facilities to the areas that are normally located some distance from towns and villages.

The environmental costs associated with rural residential development are connected with the initial development and ongoing use of the land. During construction of a rural residential area, especially rural urban fringe development, there can be clearing of native vegetation and soil erosion and land degradation. It

is acknowledged that this is a an impact of development generally, however it can be more extensive in the case of rural residential development because the lots are a larger size and clearing can be more extensive.

The ongoing impacts of rural residential development stem from the onsite effluent disposal, soil and water management and domestic pets. Most rural residential development has onsite effluent disposal and this can be a concern if there is not sufficient land available for disposal. There is also a concern about the cumulative impact of having a large number of onsite systems in one area as can occur with rural urban fringe. There can be impacts on adjoining bushland from the nutrients coming off the site as well as from weeds. In addition, native wildlife can be eaten by domestic pets.

The building of houses in the rural area can have an impact on the landscape, especially when the land is hilly. The introduction of a number of new buildings can detract from the landscape quality of an area.

Rural residential development can also cause rural land use conflict if it is located in close proximity to intensive agricultural uses. Siting the house too close to the agricultural uses can cause this.

Photo 2.11 is of Orchard Hills in the Penrith Council area illustrates the issues. There is a rural urban fringe subdivision of 4000 m^2 lots which is separated from the urban area which can be seen in the foreground. You can also see the houses interspersed with the agricultural uses and the proximity of the rural residential development to the creeklines and native vegetation.

It can be seen therefore, that rural residential development creates a demand on the services provided by the Council and other Government agencies. To ensure that it occurs in an efficient manner, it should only be permitted if it is close to an urban area where the services and facilities are located. Overall, it is considered that the negative impacts can outweigh the positive ones.

Photo 2.11: Rural residential impacts

Date of Photo: August 2001

The rural residential uses are mostly scattered throughout the study area. One feature is that they are usually new houses and are also large houses. Photo 2.10 shows the mixture of rural residential uses and intensive agriculture.

Photo 2.12: Mix of Rural uses in the Schofield area
Date of Photo: August 2001

Photo 2.13 shows a house that has been built in the midst of the mixed rural area of Leppington.

Photo 2.13: Housing in the Mixed use area

Date of Photo: April 2003

The other conglomerated rural residential area is characterised by whole estates of rural residential use with no intensive agriculture. These are at Denham Court in Campbelltown and Liverpool, and one part of the Bringelly area known as Kelvin Park as well as Windsor Downs in Hawkesbury, Cranebrook in Penrith and Grassmere in Camden. The houses in these areas are of a considerable size (up to 1000 to 2000 m^2 of floor area). Photo 2.14 shows this housing in Denham Court.

Photo 2.14: Rural Residential Housing in Denham Court
Date of Photo: April 2003

In Liverpool Council rural lands, there is provision in the LEP to allow for detached dual occupancies and both of the houses are very large as can be seen from Photo 2.15.

Photo 2.15: Dual Occupancy in Liverpool

Date of Photo: April 2003

There are also a number of uses that have a truck associated with them. They are builders, backhoe operators, plumbers, tipper trucks, bobcats and so on. These are located in these 2 ha areas because of the ability to have the trucks as well as a large shed to house the truck as well any materials, something that is not a realistic option in the urban areas (they are also prohibited from parking in residential areas). They can cause some rural land use conflict with the adjoining rural residential uses, due to the noise of starting the truck in the early hours of the morning. Photo 2.16 shows a typical truck use.

Photo 2.16: Rural Residential Truck Use
Date of Photo: April 2003

Horses are also common on rural residential lots. They are an indicator of a lifestyle use of the land because of the recreational aspect to horse riding. They too need to be on a larger lot of land of around 2 ha and larger. Horses also have the potential to cause land degradation if they are housed in small areas as grass cannot grow because of the constant movement of the horse. Photo 2.17 shows a horse on a rural residential lot in Bringelly.

Photo 2.17: Rural Residential Horse Use
Date of Photo: April 2003

2.3.9. Rural Lifestyle

Living in rural areas is becoming a housing trend in western Sydney. People are moving from the urban parts to have a larger block of land and live in a rural environment. In consultations carried out in rural fringe areas, these people cite this as their main reason for moving to these areas and they also state that they do not want to see the area becoming urbanised. In addition, they are building large and expensive houses.

In a recently released book on the changing patterns of settlement in Australia (*The Big Shift*), Bernard Salt makes the observation that Australians are pursuing a lifestyle pattern of living which he says is luring people to the coast. Whilst this statement is agreed with, experience from studying rural and fringe metropolitan areas like Penrith, Camden, Baulkham Hills, Liverpool, Bellingen, Cessnock, Great Lakes, Maitland, Shellharbour and Shoalhaven has shown that this shift is not just to the beach but also to the rural hinterland of the Metropolitan and coastal areas. So, it is more accurate to call it a move to 'lifestyle living'

This desire for rural living has been a trend that has increased in the last 20 years of the 20th century. "The thing that most drives Australians to a particular location is the values that are held by the community. And of course, in the later decades of the 20th century, Australian values changed to embrace a beach lifestyle." (Salt, 2001, p 5)

The rural hinterland basically extends to a 2 to 2.5 hour driving time from the outskirts of the Newcastle – Sydney – Wollongong Metropolitan area. This means that it extends from Nowra and Jervis Bay in the south to Bathurst and Mudgee in the west and to as far north as the coastal settlements in Great Lakes such as Hawks Nest – Tea Gardens and Foster – Tuncurry. These people are moving to the towns as well as to small to medium sized rural holdings. These range in size from 2 ha to 40 ha and they will also usually have some cattle and maybe a few horses or live in a bushland setting.

People are moving to these areas because they are either retiring or work for themselves or have negotiated flexible working arrangements with their employers. In short, they choose to be where they like the rural peace and quite or coastal serenity rather than being close to work.

In the last 20 to 30 years, the highest actual growth rates have been achieved by these fringe LGAs. The latest Population Growth Database 2001 prepared by KPMG shows that the coastal and fringe metropolitan areas are growing at relatively high rates and that most of the top 60 LGAs with the rapid growth rate are on the coast or fringe metropolitan areas.

This desire for lifestyle living is also having an impact on the way we plan for the future of Sydney. There are a number of areas that are currently subdivided into 2 ha lots such as Leppington – Catherine Field, Llandilo – Londonderry and Annangrove – Kenthurst – Dural. In these areas there is a large amount of rural residential usage of the land (land use surveys have shown that this is 70 to 80% of the total uses). The houses are also large and in some cases opulent to the extent that they could be called 'start-up castles' to borrow a phrase being used in the USA. The traditional mindset of the residents and some planners has been that these areas will eventually become residential.

It is considered, however, that this may not be the case. Community consultation carried out in these areas has shown that the people move there to 'get away from the city' and 'escape the rat race' and to have 'a large block amongst the bush'. They are moving there for lifestyle reasons. They also say that they do not want to see any more urban subdivision in the area. Add to this the price of the land – 2 ha in Austral sells for approximately $1 million and it makes it difficult for developers to land pool, as well as Council and Government purchasing it for community and recreation facilities. Lastly, as this study has shown, there are not many of these areas left, so it could be that they stay as 2 ha blocks. Traditionally, as urbanisation has occurred, these people have moved to other areas which have a fragmented subdivision pattern and mixture of intensive agriculture and rural residential uses

2.3.10. Healthy Lifestyles

Good food and nutrition are being promoted as a way to a healthy lifestyle. This is a key issue as it helps to add to the overall health of the community. NSW Health and Local Government has been establishing food projects in Western Sydney. Notable ones are the Penrith Food Project and the Hawkesbury Food Program as well as one being established in the south west around Bankstown.

Food projects change aspects of the food system to make access to healthy food easier, and increase people's value for healthy food. By retaining a viable local food supply, and improved access to fresh, full flavoured seasonal food, there is potential to reduce the distance of food miles travelled.

The Hawkesbury Food Program (HFP), based on the Penrith Food Project, aims to develop multi-strategy approaches to food and nutrition in the Hawkesbury Local Government area. It aims to improve the health and well being of the community, by strengthening links between the community and local food production, improving access to, and consumption of safe, nutritious, seasonal affordable food to reduce the incidence of diet related diseases such as coronary heart disease,

stroke and some cancers. It uses a community development approach for all the strategies.

In many instances 'food' has been the entry point for the evolution of other community development and social support initiatives, consequentially the HFP has generated a strong sense of community goodwill supporting social capital.

Many of the strategies developed by the HFP, such as Food Barn, and the Farmgate Trail projects evolved to become their own entities, and provide models which may be adopted by other communities working towards sustainability, community food systems, re-skilling, wellness and local employment.

There has been on-going promotion of increased consumption of fresh, seasonal, local fruits and vegetables, working collaboratively with the community and HFP partners. Program objectives include policy development, community participation, education and training, collaboration, and planning.

Intervention strands are based on Community Nutrition strategies including:

- Increased access to locally produced foods for local people
- Food security for low income families
- Utilising a 'settings approach' to food and nutrition and,
- Collaboration with other organisations and communication strategies.

Links between farmers and consumers have been strengthened through:

- The Hawkesbury Cuisine group formed to link local restaurateurs with local growers facilitated growers selling direct to local restaurants
- Collation of data base of growers, food outlets and local businesses interested in participation in Farmers Market, home delivery and/or participation in the Farmgate Trail
- Co-ordination of resources, networking, support and collaboration of Farm Open Days, and to facilitate the initiation and community development of Hawkesbury Harvest, and on-going promotion
- Hawkesbury Harvest Farmgate Trail map development and extensive distribution
- Initiation of the local Farmers Market
- Promotion of local grower's farm fresh home delivery service distributing over 50 boxes per week to the local community.
- Hawkesbury Skills compiled a Hawkesbury agricultural database, grower/retailers directory
- Production of the 'Seasonal guide to Hawkesbury fruit and vegetables' calendar with NSW Ag.
- Participation in Sydney's Fresh Fruit Bowl to establish links between 'Healthy Catchments, Healthy Food Healthy People'
- Membership of the Hawkesbury Nepean Growers Service Providers Group.

2.3.11. Villages

There are a number of villages located in Western Sydney and they are as follows:

- Wisemans Ferry
- Lower Portland
- Glenorie
- Kenthurst
- Dural
- Round Corner
- Wilberforce
- Freemans Reach
- Glossodia
- North Richmond
- Kurmond
- Kurrajong
- Bowen Mountain
- Agnes Banks
- Londonderry
- Mulgoa
- Luddenham
- Wallacia
- Bringelly
- Cobbitty

There are also a number of areas that have a shop or group of shops but no residential area surrounding them and thus cannot be classified as a village. These areas do, however, play a vital role as a focal point for the community which lives in the surrounding area which is usually predominantly rural residential.

In order to understand the relationship between the settlements, it is appropriate to adopt a hierarchy of settlements. This should be based on the facilities provided in the settlement and the role that it plays, rather than purely population. The shopping facilities that are available are a good starting point. There are three basic shopping trips:

- *Convenience shopping* relates to the daily shopping needs of bread and milk as well as newspapers and emergency purchases not done at other times.
- *Weekly shopping* is for the basic food and household shopping needs and is usually done in a chain supermarket.
- *Comparison shopping* is the shopping trips done for larger items of household and personal items such as whitegoods, furniture and clothing.

2.3.12. Rural land use conflict

The presence of agriculture and non-rural land use in the one location can often generate conflict due to their potential incompatibility. Agriculture can affect adjoining small rural lots, which are used essentially for residential purposes. Similarly, the presence of small rural lots creates an adverse influence on the continued operation of the agricultural enterprise. The issue of rural-urban conflict can arise when there is no separation between incompatible uses, let alone the misunderstanding, which may exist about the purpose and character of a district. Land use conflicts may arise in such situations through noise, odour, farm chemicals, light, visual amenity, dogs, and stock damage and weed infestation, to name just a few.

Land use conflict can occur between forms of rural land use. In this case, the conflict is usually between rural residential uses and intensive plants and intensive animal uses. Photo 2.18 shows how the uses are mixed.

Photo 2.18: Rural Land Use Conflict at Leppington
Date of Photo: April 1999

This conflict adds to the conversion of an area from rural to rural residential use as the agricultural uses are forced to move because of the conflict. It is a paradox that people will move into a rural area because of the open spaces and agricultural uses and then when the agriculture starts to smell or the noise of the tractor or pump is too loud, the rural residents complain and the agricultural use is forced to alter its operations. This causes the agriculture to become less economically sustainable and the use changes to a residential one as the farmer sells up and moves out. This is shown by anecdotal evidence and experience of the consultant working in fringe metropolitan and rural areas as well as discussions with planners and farmers in the USA.

Rural Land Use Conflict is currently occurring in the areas where there are smaller lots (less than 3 ha) and the mixture of rural residential and intensive agricultural uses. Ideally, it would be good to have the intensive agricultural uses cease well before the urban development occurs because the conflict will become more intense if there is urban development next to the intensive agriculture. It is significant to note that the 5 Council areas with the highest number of rural residential use (Hawkesbury, Penrith, Liverpool, Baulkham Hills and Camden) also have the highest number of intensive agriculture and also have the highest number of lots in the 0.8 to 3 ha range. This issue has the potential to pose a problem with the change to urban usage, if not dealt with.

2.3.13. Emerging Social Issues

Work done for the Penrith and Baulkham Hills Rural Lands Studies by Heather Nesbit Planning has provided a snapshot of the emerging social issues in these areas. It is considered that these emerging social issues are also present in the rest of the region. The work included consultation with key community spokespersons together with analysis of ABS Census data, has been used to identify the following key social issues for rural residents.

The key social issues identified for the rural lands are:

Isolation and remote location of high need residents

Although many choose to live in the rural lands and enjoy / expect some level of isolation, this situation can have significant negative impacts on those who do not have the resources/networks to cope. In particular, isolation is a major disadvantage for the following groups living in the Rural Lands:

- older Non-English Speaking Background (NESB) residents who do not want to leave their homes/families but have poor access to services and often health/mobility problems;
- older residents who are long term residents who now live alone due to the death of their spouse and/or their children have left the area;
- permanent caravan park residents who primarily live in the Wiseman's Ferry area distant from any services and/or support networks;
- residents with a disability including parents with young and older disabled children;
- NESB residents with poor English language skills particularly those involved in agriculture; and
- single parent families who have limited local support networks.

Lack of public/community-based transport

With limited bus services to the rural lands, many residents have difficulty in accessing services within and outside the rural lands. Running viable private bus services in the area is difficult (if not impossible) when clients often have specialised service needs. However, the lack of transport links strongly to isolation and inability to access services. This issue is particularly difficult for specific groups in the community such as:

- households without a car (136 rural households in 2001 in Baulkham Hills Shire);
- youth who need to get to sporting/community activities and entertainment during holidays, weekends, nights; accessing work opportunities and higher education etc. Many rely on parental transport which is not always possible;
- women/men who may not drive or live in a one car household;
- residents with a disability who need specialised transport;
- children particularly accessing school by bicycle or walking; and
- older residents who may find it difficult to drive to busy centres such as Castle Hill/Baulkham Hills.

Pressures on rural amenity and lifestyle

Many residents have moved to/live in the rural lands because of its rural environment and association with agriculture. For many it enables employment from home (12% of employed residents in the rural lands work from home compared to 5% in the entire LGA); it provides an attractive environment for families; enables employment in rural industries; and provides closer links to the natural environment. But for many, this amenity and lifestyle is under pressure with issues such as traffic volumes, loss of local agriculture, conflicts between neighbours, tourism pressures etc. These issues will continue to exist unless

measures are taken to support, protect and enhance this rural amenity and lifestyle that is a key value of the rural lands.

Poor access to Council, State and Federal government services

Many government services rely on residents physically accessing services at major centres. If people live in remote and/or isolated communities, access to services is more difficult particularly for those specific groups in the community who need extra support. This issue is of major concern for residents of the rural lands as limited public transport, long distances, conflicting government service boundaries and lack of significant local centres makes servicing difficult. For Council services, access to library and community/recreation services is poor for rural residents. For State government services, such as Home and Community Care, disability services, transport and NESB programs, rural residents are significantly disadvantaged. This has resulted in many services and facilities in the rural lands being built/funded/managed on a voluntarily basis by local rural residents with little support from government agencies. Care needs to be taken to support and enhance this strong community identity of self-reliance and self-support while also ensuring that services are delivered effectively and efficiently to rural residents. It is also important that this identity is not lost as changing work patterns and lifestyles of rural residents may threaten its continuation.

Lack of communication networks and decision-making processes

Compared to other rural areas, the rural lands have significant community information links provided through various networks and newsletters. However, some localities are not covered by this communication network and / or are not involved in its activities. Particularly, for Council decision-making processes, many residents consider that they are not consulted by Council. Equally, for some groups in the community, these communication networks may not be appropriate eg youth may not read local community newsletters. This issue is particularly important for Council information with many rural residents not receiving local commercial newspapers such. Strong communication networks are an important component of any sustainable community and additional strategies are required to address this issue. All rural residents, like urban residents, must have effective access to government and community decision-making processes and information.

Level of community infrastructure provision in villages

Recreation and community facilities are an important component of a sustainable community. They provide public places which people can use to meet, socialise and recreate. They are one of the key building blocks of social capital. The provision of adequate and appropriate community infrastructure needs to be considered for the rural villages. Many, but not all, have a public hall and park but are these at a reasonable level to facilitate community activities? Other facilities may also be required such as shared pathways, improved playgrounds, leisure facilities for youth, better equipped community buildings etc. This is an important issue which will again support the self-reliant structure of the rural lands. Photo 2.19 shows the Kenthurst community hall which is an old building and not suited to all of the uses that occupy it.

Photo 2.19 Kenthurst Community Hall
Date of Photo: June 2001

Poor recognition of the built and cultural heritage

The Rural Lands house many heritage buildings and sites but there is little recognition of this through interpretative signage and/or information. The long Aboriginal and European history of the rural lands needs to be protected and enhanced.

2.3.14. Infrastructure

The provision of infrastructure is an issue affecting the human settlement of rural land. It includes the following services:

- Electricity
- Reticulated Water
- Roads
- Sewerage in Villages
- Community services

Electricity and telephone are not provided by Council but by semi-Government and private companies.

Roads are the responsibility of Council for local Roads and the RTA for regional and state Roads. The Council has a program to improve the standard of the rural roads throughout the Shire and budgets money each year to upgrade them.

Sydney Water is not proposing to upgrade the existing water supply to the rural areas.

Community service infrastructure has been discussed in the previous section.

The implications of this is that it is likely to be costly both in dollar and environmental terms to undertake any forms of development in the rural lands. This is not to say that it cannot happen, just that all of the issues dealing with the preservation of agriculture, environmental and economic considerations will have to be investigated and assessed.

Chapter 3: The Workshop

3.1. Introduction

A 2 day workshop was held to discuss the issues and provide some solutions to them on 9 & 10 February 2004 at UWS Hawkesbury.

3.2. Workshop Participants

The workshop participants were drawn from a wide range of disciplines. The list of attendees and invitations can be found at Appendix II. They ranged from Council officers, to Government Agency representatives (DIPNR, NPWS, EPA), farmers, rural residential dwellers, academics and consultants.

The participants were divided into 6 groups:

- Urban Expansion
- Sustainability of Agriculture in Sydney
- Biodiversity and environmental management
- Water quality and quantity
- Landscape and Lifestyle
- Social and Cultural aspects of farming

3.3. Workshop Process

The workshop was facilitated by Mr Peter Davey, the former CEO of the Hawkesbury Nepean Catchment Trust. It was broken into 5 sessions which are outlined below.

3.3.1. Session 1 – Scanning Our World

This is a context setting session, enabling the workshop participants to share perspectives on the key trends and drivers influencing Sydney's rural landscapes.
The session was in 2 parts:

- PRESENT – What present trends and drivers are influencing Sydney's rural landscapes?
- FUTURE – What future trends and drivers are likely to influence Sydney's rural landscapes?

3.3.2. Session 2 – Developing More Resilient Enduring Rural Landscapes

Resilient, enduring landscapes reflect a co-evolutionary, mutually dependent partnership between 'community' and 'country'. Country is a partner that allows community to develop by using its natural resources and ecological services; in return community includes country in that developments, toward a common future.
What would Sydney's rural lands look like as enduring, sustainable landscapes?
What would be the nature of the partnership between community and country that would enable this desired future for Sydney's rural lands?

3.3.3. Session 3 Capacity Stocktake

- What capacities do we (as a society) have, to achieve more enduring, sustainable landscapes for Sydney?
- What capacities don't we have, but must develop?
- What other barriers and constraints might impede progress toward our ideal?

3.3.4. Session 4 – Thematic Solutions

Given the collective work previously undertaken, each thematic group was asked to identify potential solutions which would better accommodate their particular sectoral interests within the 'common desirable future'.

These potential solutions might range across:

- Governance issues (statutes, policy, planning, participation);
- Knowledge issues (research, education);
- Economic issues (innovative economic approaches);
- Broader social/ communication issues (relating to better harnessing our multiplicity of values and understandings around rural landscapes).

3.3.5. Session 5 – Specific And Collective Action

This session was used to distil out the solutions generated in session 4 into those which are common or complementary and those which are relatively unique to a particular theme. It would also further refine the solutions and identify:

- What actions can be taken as a result of this workshop to progress the solutions in the short, medium and longer term?
- Who will assume responsibility to pursue the actions agreed?

3.4. Workshop Outcomes

The detailed workshop outcomes are listed in Appendix III. The term complementary complexity can be used to describe the outcomes. There are some recurring themes that can be drawn out of them which are as follows (in no particular order of importance):

- Vision
- Lobbying
- Biodiversity
- Identify Champions
- Group to take it forward
- Scenic Rural Landscapes
- Balance lifestyle, agriculture and conservation
- Information and information sharing
- Connecting with City
- Community engagement
- Communication Strategies
- Permanency of Agriculture
- Funding for Projects

- Data Gathering and research
- Identify Integrated Value of Rural Land
- What are the Consequences of business as usual.
- Incentives and Regulatory Mechanisms
- Natural Resource Management
- Scenario Development
- Governance - Institutional Arrangements for Managing.

Chapter 4: Complementary Complexity

4.1 Introduction

As outlined in chapter 3, the outcomes of the workshop can be described as being complementary and complex. By this we mean that they are all linked together.

The outcomes can be broken into the following broad groupings which are provide in no particular order of importance:

- Education
- Urban Growth Management
- Social and Cultural aspects of farming
- Lifestyle
- Security of Tenure
- Sustainability of Agriculture

The following is a summary of the key issues for each of these groupings, it is by no means meant to be a definitive list and is designed to show the complementary complexity of the issue.

4.2 Education

Education has 2 components. The first is the need to educate the community – both urban and rural – about the values of rural land and the second is the need to provide some training for the Council and State Government Agency staff as well as the farmers and Councillors.

There is a need for education of the community about the values that the rural land has to offer. This includes the people who live in the metropolitan area as well as those who live in the rural land. There is a need to make the link from 'the gate to the plate' and inform people that the rural land around Sydney has other values than merely being land in waiting for subdivision to urban uses.

It has been noted that there is a need to educate Council officers and elected representatives as well as State Government Agency officials about the issues of farming and biodiversity management. There is also a need to provide education and training for farmers. By doing this, it may provide people with a better understanding of the issues that have to be addressed.

4.3 Urban Growth Management

The Sydney region is currently growing at a rate of between 40,000 and 50,000 people each year. There is a need to provide land for this expanding population. It is anticipated that a large amount of the rural land on the fringe of Sydney will be needed for future urban development as the City grows and expands. However, there is also a need to ensure that the urban growth is sustainable and does not necessarily use up land that is currently being used to grow food.

There is a need to consider the rural land in Western Sydney in the context of NSW in a strategic sense. It is also considered that a number of scenarios should be

tested and not just the urbanisation option. These scenarios should include the following:

- Total urbanisation
- Smart Living
- Green West
- Business as Usual

Each of these scenarios should be tested against a series of consequence indicators which could include land take, water usage, biodiversity loss, social capital, energy use, infrastructure costs, water quality, natural hazards, costs of production and green house credits.

This scenario testing should be done as part of the review of the Metropolitan Strategy. It should include a set of development principles which would encourage a diversity of development types. The true cost of infrastructure should also be included. There is also a need to accommodate the role of agriculture in the metropolitan strategy.

To ensure that the urban growth management and the future of Sydney's rural land is sustainable it should include a suite of mechanisms both regulatory and incentives. The incentives can include green levies, Land Trusts, Development Agreements, transfer of development credits and other financial incentives.

A set of constraint maps is also needed and these should be continually updated to ensure that they are representative of the contemporary issues.

4.4 Social and Cultural Aspects

The social and cultural aspects of the rural land are an important but often misunderstood part of the rural lands of Western Sydney. It therefore needs to be communicated in a more cohesive and effective manner. This communication with the farmers is needed because of the fact that a large number of them are from a non English speaking background and do not have a good command of the English language. There is a need therefore to provide interpreter services and to conduct training in the use of chemicals and other aspects of farming.

Farmers markets are a good way to promote the social and cultural aspects of farming. There are some successful markets in Sydney at present but more could be established.

The concept of urban agriculture and community gardens in new and existing urban areas is also a positive step in promoting the social and cultural aspects.

4.5 Lifestyle

The large number of rural residential uses has been discussed in the previous chapter. It is provided in two different spatial categories – scattered and conglomerated. The scattered rural residential uses are on a variety of lot sizes and the conglomerated ones are mostly less than 3 ha in size.

The rural residential uses are mostly scattered throughout the rural lands of Western Sydney. One feature is that there is a mixture of new large houses and older style houses. This has been discussed in the previous chapter.

The conglomerated rural residential area is characterised by whole estates of rural residential use with no intensive agriculture. These are found in Camden (Grassmere, Ellis Land and Kirkham), Campbelltown (Denham Court), Liverpool (Kelvin Park), Penrith (The Vines and Capitol Hill) and Hawkesbury (Windsor Downs). The houses in these areas are of a considerable size (up to 1,000 to 2,000 m^2 of floor area).

There are also a number of uses that have a truck associated with them. They are builders, backhoe operators, plumbers, tipper trucks, bobcats and so on. These are located in these 2 ha areas because of the ability to have the trucks as well as a large shed to house the truck as well any materials, something that is not a realistic option in the urban areas (they are also prohibited from parking in residential areas). They can cause some rural land use conflict with the adjoining rural residential uses, due to the noise of starting the truck in the early hours of the morning. If these areas are to become residential, there will have to be some provision made for these people because these size lots are not being created anymore. The land use survey also showed that the number of truck uses was not as high in the newly created rural residential areas (Windsor Downs had 5% trucks and Denham Court 2% truck uses). For this reason, it is not considered that the provision of rural residential uses will provide for the replacement of the truck uses. One other option is to provide a centrally located 'truck farm' where the trucks can be parked, serviced and cleaned. The drivers would drive to the area each day.

The general trend towards lifestyle living and the provision of future areas needs to be considered. It is noted that a number of the existing rural residential areas are being considered for urbanisation and that there are people who live in these areas that are likely to be displaced. This has been the trend in the past as these 2 ha areas have been urbanised, the people have moved further out. It is considered, however, that this may not be the case in all circumstances. Community consultation carried out in Baulkham Hills Shire and Penrith City as well as anecdotal evidence has shown that the people move there to 'get away from the city' and 'escape the rat race' and to have 'a large block amongst the bush'. They are moving there for lifestyle reasons. They also say that they do not want to see any more urban subdivision in the area.

4.6 Security of Farming Tenure

There is a need to provide some security of tenure for farmers. The infrastructure on a typical market garden, for example, can cost in the hundreds of thousands of dollars. For the farmer to invest in this and to be able to get a return on the investment, they need to be able to be sure that they can farm the land and not be subject to rural land use conflict which can lead to restrictions being placed on the ability to farm the land due to the proximity of rural residential and urban development. In order to achieve this sense of permanency, there needs to be a suite of regulatory and non-regulatory controls. These basically include appropriate zoning of the land in company with a series of incentives.

The State Government have prepared policies for the preservation of agricultural land. Foremost amongst these is the Policy for Sustainable Agriculture in NSW, which amongst a number of policies states that land use planning should be used to avoid rural land use conflict that may jeopardise the sustainability of Agriculture. There is also a Strategic Plan for Agriculture in the Sydney Basin, which provides a range of policy initiatives to ensure the sustainability of agriculture in the region. The Department of Infrastructure, Planning and Natural Resources has prepared the Sydney Metropolitan Strategy titled Shaping Our Cities. This document is broad ranging aimed a providing a framework for the planning of the entire Sydney region. From the point of view of agriculture, it aims to minimise the spread of the Sydney Region and conserve its resources, which includes agriculture. In the case of agricultural land in Western Sydney, the more detailed Shaping Western Sydney has a policy to "protect the sustainability of agricultural production in Western Sydney". Amongst its recommendations are to "encourage Councils to prepare Rural Lands Studies to identify land for long-term agricultural production" and to "investigate the implementation of agricultural industry zones in Western Sydney".

Zoning of land entails placing restrictions on the use of the land by way of statute. It is practised in Australia as the principal method for controlling the development of land. It is a system where land is designated for a principal use and uses that are considered not to be suitable or compatible with the principal use are prohibited. There is also the ability to require certain uses to submit an application for use of the land, which is then assessed having regard to a set of published assessment criteria.

A number of Councils in the region have either introduced zoning to protect high class agriculture land and agriculture or are in the process of doing so. Zoning the land to preserve it for agriculture was introduced in Wollondilly Shire Council in 1996 and Hornsby Council in 2000. Hawkesbury Council has recently exhibited a draft LEP to create an Agricultural Protection zone on the Richmond Lowlands and other high class land in the LGA. Camden Council are in the process of preparing a draft LEP which will protect the high class land in the Municipality. Penrith Council has adopted a Strategy for its rural lands which recommends the creation of an agriculture zone among many others. Baulkham Hills Shire Council has adopted a land use planning regime as part of its Rural Strategy and is proceeding to prepare a draft LEP to preserve its rural land.

So it can be seen that that the development of policy and introduction of zones to preserve the agricultural land has occurred and is occurring. The preparation of zonings and policy actions to preserve agricultural land in Western Sydney are, however only part of the answer. Incentives and education are also needed.

Incentives can take 4 forms: density bonuses for specific uses, purchase of development rights, transferable development rights and rate rebates.

i. Density bonuses can allow for an increase in the density and a clustering of subdivision on a particular part of a property whilst keeping a larger part aside for low intensity agriculture such as grazing. It is not appropriate for intensive forms of agriculture because of the potential for rural land use conflict.

ii. Purchase of Development Rights involves a farmer selling the development rights of the farm to a government or non-government organisation. In return a covenant is taken out over the land to ensure that the land is only used for

agricultural purposes. The purchase of development rights can also be used to require soil and water cycle management to be undertaken on the property. The property is inspected at regular intervals to ensure that it is being used properly.

iii. Transfer of Development Rights occurs where land is declared to be in a preservation zone and is to be kept for agriculture. The development rights to this land can be purchased by developers who wish to gain an increase in the development potential of land declared to be in a development zone (usually an urban area). It can also operate where land is given a certain amount of 'development credits' according to the size and these can then be traded on the open market.

iv. The amounts of money paid by farmers for the Council rates is one of the largest single non-production based outlays for the farming business. The amount of rates charged is based on the value of the land. In the rural areas on the fringe of Sydney it is evident that as the land becomes more desirable for a rural residential lifestyle, the value increases and this has a corresponding increase in the amounts of rates that the farmers must pay. However as this cost to the farming community has increased there has not been a corresponding increase in the value of the production and therefore this is causing an economic hardship for the farmers. One way to compensate the farmers for this is to offer a rate rebate. This could be as much as one quarter of the current rate or even one tenth. This would have a corresponding impact on the other ratepayers of the Council area in that their rates would increase. However, it must be recognised that the amount of rates payable by farmers is 1.5 to 2 times the amount of rates paid by people who live in the residential areas (Edge Land Planning, 2003). To qualify for such a rebate, the farm should be in an agricultural zone, which would signify the importance of the area. It is considered that the issue of preserving agricultural land is an issue of significance for the entire Sydney region and not just the rural land. Therefore funding for this rebate should be provided by the State Government and not left for the Local Councils. It is noted that rate rebates are provided in a number of Council areas on the fringe but that these are 25 to 30% rebates, which are not very significant. Whilst it is recognised that flood prone land might not have as high a value because of the limitations on use and subdivision, this alone will not stop the land's value from rising. Whilst advice should be sought from a valuer, it is anticipated that the value and correspondingly the rates will still rise for flood prone land.

Work done for the Baulkham Hills Rural Strategy has found that generally speaking, the rural land has a higher value than the residential land. This means that the rural ratepayers pay a higher rate than those who live in the urban areas. This showed that the highest rates are payed by those who have an extensive agricultural use of the land who live on the largest holdings and who are also the most isolated from the urban areas. ($1262) The next highest is rural residential ($1258) followed by intensive agriculture ($1040) then urban ($726). It should be noted also that the extensive agriculture and intensive agriculture uses obtain the rural rebate (which is a 25% reduction on the residential rate). It should also be noted that the ratepayers who pay the residential rate receive the most services (garbage, sealed roads, better access to community facilities, etc). If the farmers were given a 90%

reduction (i.e., they pay 10 % of the current rate), the research showed that it would cost each rate payer an additional $10 per year.

Purchase of Development Rights and Transfer of Development Rights exist in the United States. Of the two, Purchase of Development Rights is the more successful. Both are applicable to the Australian situation with the issues of Transfer of Development Rights already in existence for heritage sites in the City of Sydney. A variable of transfer of development rights could be considered where each farmer is allotted a 'credit' which is based on a certain number of credits to be related to the area of the holding. These credits could then be traded on the open market to be used for increases in density in adjoining Council areas that have a range of higher density developments.

4.7 Sustainability of Agriculture

In order to achieve a more sustainable agricultural sector, there is a need to consider the following:

- **Information Gathering and presentation**. Information needs to be provided on all aspects of agriculture including the dollar value of commodities, tourism, alternative crops, etc. This then needs to be communicated to the public through an effective communication strategy.
- **Governance Solutions**. This includes the need for leadership and vision for the agriculture that is grown in western Sydney. This includes information for decision makers on what sustainable agriculture is. There is also a need for good strategic planning for agriculture on a regional basis that identifies the best agricultural land preserves it. Rural residential development also needs to be regulated.
- **Social Community Solutions**. A communication strategy and community engagement process is needed so that people can see agriculture as a positive rather than a negative aspect of the landscape. This will help to develop the connection between the farming community and the urban community.
- **Knowledge Solutions**. There is a need to provide better knowledge about agriculture. This follows on from the previous point. It includes general community engagement as well as higher level research and information sharing. One aspect is good data about the range if uses and could be prepared as a 'green map' of the region.
- **Economic Solutions**. There is a need to provide some form of economic incentives for farmers to continue. This can include rewarding farmers for sustainable production and not subdividing their land. Also land trusts can be set up to purchase the development potential of the land. Farmers markets are seen as a good mechanism of providing economic benefits for farmers. So too is the supporting of agritourism and other complementary land uses. There is a need to encourage farmers to plan for retirement and not rely on the subdivision of the farm as their superannuation. State and federal government funding of natural resources is also seen as an economic solution for sustainable agriculture. These economic solutions can be done in partnership with property management plans to ensure that the farmer is practicing sustainable farming.

4.8 Natural Environment

There is a need to seek funding to undergo a project of creating visual 'paper and/or film' scenarios of what Western Sydney will look like if the current rate of development continues. The scenes would be provocative, perhaps revealing four to five new cities of the size of Canberra – i.e. an ongoing sea of houses - with an adverse effect on human health, transport, housing, water … and biodiversity via bushland destruction. The project would be designed to inform and educate the general public on what is inevitable for future generations unless major change is made. This project should be undertaken by a neutral party, such as a mainstream NGO. It should not be government. It is hoped that the action will lead to a community groundswell and community-led action.

The action would involve initiation via seeking funding and establishing sufficient ongoing rolling moneys and preparing the scenarios, exhibiting not only the worst case but also what can be achieved with public commitment.

There is a need for bottom-up actions flowing on from the above project. The idea of a 'Landcare' equivalent was raised – i.e. a movement with a catchy title such as 'ruralcare' that would development its own expertise in grantsmanship. The source of funding should be the Commonwealth. In the context of biodiversity, the Commonwealth is a signatory to the Biodiversity Convention and the National Biodiversity Strategy.

The potential role of Natural Resource officers should be used in terms providing presentable and accessible information to members of the public.

There is a need for a suite of mechanisms to support biodiversity conservation, ranging from regulation to promotion, incentives and provision of advice.

There is a also a need to improve the kudos of local government elected representatives, with increased payment upon completion of satisfactory training courses, including opportunity for biodiversity conservation and relevant laws.

Elected local government representatives should be made more accountable. This might be achieved via:

- Publishing more information on controversial and biodiversity unfriendly decisions
- Recording the votes of individual councillors
- improving minute taking and
- Providing ready accessibility of decision-making information to the general public.

A regional biodiversity strategic plan for the rural lands west of Sydney should be prepared. The concept of a biodiversity-oriented REP received much attention. Such a mechanism would provide a framework for council LEP-making. If the provisions of an individual LEP are sufficient, the REP need not apply. Otherwise, a REP is recommended due to its potential regulatory teeth in combating vegetation clearance when other mechanisms are insufficient. Prosecution for breach of the LEP, however, should lie in the hands of an independent authority.

Chapter 5: Conclusion

The issues to be addressed when considering the future of Sydney's rural land are complex and multifaceted. They are also competing. However, to ensure that there is a sustainable future for the rural land there needs to be a balance between the often competing desires for urban and rural residential living, biodiversity habitat and a source of food production.

The aim of this project was to involve the stakeholders in providing for a sustainable future for the rural lands of Sydney. The information presented in this document and the detailed outcomes from the workshop has provided an insight into the complementary complexity of the rural lands. Some common themes run through the possible outcomes and are as follows:

- The need for a Group to take it forward
- Vision
- Lobbying
- Identify Champions
- Connecting with City
- Communication Strategies
- Funding for Projects
- Data Gathering
- Enduring rural landscapes
- Identify Integrated Value of Rural Land
- What are the Consequences of business as usual.
- Incentives and Regulatory Mechanisms
- Natural Resource Management
- Scenario Development
- Governance - Institutional Arrangements for Managing the landscape.

One key aspect has been the need to consider the land for its own values and not just land in waiting for urban development. There is a need to consider it from the outside looking in and not the inside looking out. By doing this we can grow food and grow houses and have a more sustainable future.

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Appendix 1 – Land Use Survey Methodology

A major component of this study has been a land use survey of all of the land within the rural parts of the Shire. The purpose of the land use survey is to gain an indication of the land use trends.

The preparation of a land use survey is one of the most important components when zoning rural land. Each parcel of land within the rural lands has been inspected and given a land use designation. This has been entered into Council's Property Information database and mapped using a GIS.

The first step was to identify a set of spatial boundaries which would form the basic level of data representation. The geographical localities were used. This has two benefits, the first being that the area is generally mapped and can be identified easily and secondly it is easier for the public to understand the data once it has been collected and published.

The next step is to identify the categorisation of the land uses to be surveyed. The land use has been categorised into primary and secondary land use categories. The primary land use categories are as follows:

- Rural Residential
- Intensive Plants
- Intensive Animals
- Extensive Agriculture
- Vacant
- Commercial
- Extractive industry
- Public Use
- Village
- Native Vegetation

Definitions of each use which were used for the purpose of identifying the land uses are as follows:

- *Rural Residential* means a house on a lot that is greater than 1 ha generally, and is in a rural environment where the main source of income is from other sources than agriculture use of the land.
- *Intensive Plants* means the growing of vegetables and ornamental plants for commercial gain using the application of irrigated water and includes market gardening, protected cropping structures, orchards, vineyards, and other similar uses.
- *Intensive Animals* means the rearing of animals using a feeding method other than natural grazing and includes poultry and piggeries mainly.
- *Extensive Agriculture* means the growing of plants using natural rainfall or the rearing of animals using grazing as a feeding method. It also includes the growing of fodder crops and irrigated pasture.
- *Vacant* land is land that is mostly cleared of native vegetation and which does not have any dwellings or other structures on it.
- *Commercial* uses are uses that are used for a commercial or industrial type of use and which do not have any dwellings associated with them.
- *Extractive Industry* means a use that extracts material from the land and includes sand and clay mining and quarrying of sandstone and other stones.

- *Public Uses* mean a use that is commonly used and or operated by a public authority or associated body. It includes community facilities, golf courses and Government owned uses of the land
- *Village* includes a cluster of houses on small lots in the range of less than 1000 m^2 and up to 4000 m^2 and which have a general store or other commercial uses in close proximity
- *Native Vegetation* means a lot that has no dwellings or structures on it and which has the majority of the land covered in native vegetation.

The detailed categorisation is presented in the following table:

LAND USE SURVEY CODES

PRIMARY Description	Code	SECONDARY Description	Code
Rural Residential	RR	Dwelling	DW
		Home Business	HB
		Horses	HO
		Truck	TR
Vacant	VA	Cleared Land	CL
Native Vegetation	NV	Native Vegetation	NV
		National Park	NP
Intensive Plants	IP	Christmas Trees	CT
		Flowers	FL
		Hydroponics	HY
		Market Garden	MG
		Mushroom Compost	MC
		Mushrooms	MU
		Nurseries	NU
		Orchard	OR
		Orchard Netted	ON
		Protected Cropping	PC
		Turf	TU
		Vineyard	VN
Intensive Animals	IA	Cattle Feedlot	CF
		Dairy Goats	DG
		Deer	DE
		Fish Farm	FF
		Goats	GO
		Piggery	PI
		Poultry	PO
		Research	RS
Commercial	CO	Abattoir	AB
		Accommodation	AC
		Boating	BO

PRIMARY Description	Code	SECONDARY Description	Code
		Bus Depot	BD
		City Farm	CA
		Caravan Park	CP
		Car Uses	CU
		Club	CB
		Compost Making	CM
		Dog Training	DT
		Golf Course	GC
		Golf Driving Range	GD
		General Store	GS
		Hotel	HL
		Industrial Use	IN
		Junk Yard	JY
		Manufacturing	MF
		Machinery Sales	MS
		Office	OF
		Publishing	PB
		Petrol Station	PS
		Preschool	PL
		Recreation	RN
		Rural Produce	RP
		Restaurant	RS
		Sawmill	SW
		Sand and Soil	SS
		Shop	SH
		Tourist Facility	TF
		Timber Yard	TY
		Veterinarian	VT
		Weighbridge	WB
Village	VI	Village	UR
		Industrial Use	IU
Extractive Industry	EI	Brick Works	BW
		Clay / Shale	CS
		Coal Washery	CW
		Sand Mining	SA
		Sandstone	SN
Extensive Agriculture	EA	Dairy	DA
		Forestry	FO
		Grazing	GR
		Horse Stud	HS
		Irrigated Lucerne	IR
		Mixed Uses – Airport Site	MU
		Research Station	RE
Urban	UR	Urban Area	UA

PRIMARY Description	Code	SECONDARY Description	Code
Public Use	PU	Army Base	AB
		Airport	AP
		Air services	AS
		Bushfire Brigade	BF
		Botanic Gardens	BG
		Cemetery	CY
		Correctional Centre	CC
		Church	CH
		City Farm	CI
		Club	CB
		Dog Centre	DC
		Depot	DP
		Equestrian Facility	EQ
		Electricity Substation	ES
		Girl Guides	GG
		Gas	GA
		Government Department	GD
		Hall	HL
		Land fill	LF
		Model Park	
		Motor Racing	MR
		National Park	NP
		Open Space	OS
		Observatory	OB
		Playing Field	PF
		Pound	PD
		Pony Club	PB
		Regional Park	RP
		RAAF	RF
		Race Track	RT
		Railway	RL
		Recycling Depot	RD
		Public Reserve	PR
		Retirement Village	RV
		Riding for Disabled	DR
		Rifle Range	RA
		SES	SE
		Showground	SG
		School	SL
		TAFE	TA
		Telephone Exchange	TE
		Tourist Information	TI
		Vehicle Inspection	VC
		University	UN
		Waste Depot	WD
		Water / Sewerage	WS
		Water Canal	WC

PRIMARY Description	Code	SECONDARY Description	Code
		Water Filtration Plant	WF
		Water Pipeline	WP
		Water Reservoir	WR

There are 3 components to the carrying out of the land use survey as follows:

- Preliminary identification of land use.
- Study area inspection.
- Data entry and mapping.

Preliminary identification of land use occurred in the office prior to the field inspection. Aerial photography was used to identify the land use. The major things to be picked out are extensive Agriculture, intensive plants (particularly vineyards), Horse Studs, dwellings on small lots, vacant land, lots which are totally covered with native vegetation, and extractive industries. Only one major land use was identified. An assumption can be made that a dwelling house rural residential uses except where they are vacant. An assumption was also made that lots less than 20 ha which did not have an intensive agricultural or commercial, industry, public or government use were rural residential.

This information was entered into the database using the coding that has been identified for the primary and secondary land uses.

The study area inspection was carried out by windscreen survey of all of the roads within the rural parts of the Shire. This was done to check the primary land use categories and also to enter secondary ones that could not be identified from the aerial photos. As each road is driven on the land use is clarified against the preliminary identification. Signage, which gives an indication that the property may be use for a secondary use such as a home business or a commercial use was also noted.

The data was entered into the Council property information database using the coding. However this was not always possible because of the lack of street numbering in the database and only those uses, which could be identified from the database, were entered. This did not affect the integrity of the data as the primary uses are the ones used in the identification of the land use designations.

Appendix II – List of Invitees to the Workshop

Mr Michael Druce	DIPNR
Mr Stephen Driscoll	DIPNR
Ms Kerry Brew	DIPNR
Mr Pat Gilchrist	Urban Development Institute of Australia
Mr Nic Juradovich	Planning Institute of Australia
Mr Kerry Robinson	Landcom, Director Special Projects
Mr Bob Verhey	Local Govt Assoc
Mr Alex Gooding	WESROC
Mr Scott Woodcock	Institute of Sustainable Futures, U.T.S.
Mr James Barrington	Hornsby Shire Council
Mr Simon Kinchington	BHSC
Mr Ian Reynolds	General Manager, Blacktown Council
Ms Sharon Fingleton	Fairfield Council
Mr Roger Neathercote	Penrith City Council
Mr Malcolm Ryan	Hawkesbury City Council
Mr Chris Lalor	Camden Council
Mr Ken Sullivan	Wollondilly Shire Council
Ms Gail Connoly	Campbelltown Council
Mr Paul Grimson	Blue Mountains Council
Prof Ian Burnley	UNSW
Ms Sue Gleeson	HNCF
Mr Mick O'Flynn	Manager, Sydney Local Govt
Mr Colin Kandan-Smith	Senior Project Officer, WSROC
Mr Rik Whitehead	NSW Ag
Ms Jan Davis	QLD Fruit and Veg Growers
Mr David Coleman	Agric. Envt Officer, NSW Ag
Dr David Hall	NSW Ag
Ms Ann Muir	NSW Ag
Mr Andrew Kennedy	NSW Ag
Mr John Wilson	
Dr Frank Kelleher	UWS
Mr Robert Woog	UWS
Prof Peter Cornish	Farming Systems, UWS
Mr Robert Spooner-Hart	Director, Centre for Hort. & Plant Sciences, UWS
Mr David Trewin	DEC (EPA)
Mr Ed Biel	Farmer
Mr Eddie Galea	Farmer
Mr Ivan Glover	Penrith Valley Oranges
Mr Sal Russo	Cut Flower Assoc
Mr Rowan or Mr Gavin Moore	Dairy Farmers
Mr Ian Kininmonth	WA Dept of Ag
Mr Peter Houston	AFFA, SA
Mr Eric Brocken	Organic farming
Mr Fred Haskins	HNCF
Ms Sue Martin	BHSC
Mr John Maquire	Orchardist
Mr Kevin Wale	NPWS
Mr Derek Steller	NPWS
Ms Rebecca Coventry	NSW Ag
Mr Tom Grosskopf	DIPNR
Mr Tim Gilbert	DEC (EPA)

Ms Jocelyn Powell	HNCF
Allen Kearns	CSIRO
Mr Phil McManus	
Mr Geoff Bell	Camden Council
Mr Max Hatherley	HNCF
Mr Roy Lawrie	NSW Ag
Mr Trevor Gibson	NSW Ag
Ms Barbara Baginska	DEC(EPA)
Mr Marwan el-Chamy	DIPNR
Ms Catherine Gillespie	DIPNR
Dr Basant Maheshwari	UWS
Mr Steven Riley	UWS
Mr Stuart White	UTS, Instit for Sustainable futures
Mr Norm Lewis	Sydney Water
Mr Malcolm Hughes	SCA
Ms Elizabeth Hanlon	SCA
Ms Jenny Smith	HNCF/River Forum
Mr Jolyon Burnett	CEO, Irrigation Assoc of Aust
Ms Jane Moxon	Director of Programs, Social Development and Envt
Dr Ho Dang	NSW Ag
Mr Joe El Boustani	Greenhouse growers
Ms Vivienne Strong	WSAHS
Ms Fiona Luckhurst	Nepean Migrants Resource
Ms Tessa Bayrante	Macarthur Migrants Resource
Ms Lyn McDonald	
Ms Christina Lee	Vietnamese Growers Assoc
Penrith Council Rural Liaison CD worker	
Ms Joyce Ma	WSAHS
Ms Jane Adams	
Ms Olivia Barnes	NSW Farmers Market Co-ord.
Ms Teresa Perram	BHSC
Ms Lilly Virgea	
Ms Jane Vassallo	
Mr Dennis Merchant	SARAPLT
Dr Richard Lamb	Univ. of Sydn
Prof Bill Randolph	UWS urban frontiers programme
Prof Brendon Gleeson	Griffiths Uni, QLD
Ms Kim Ferguson	Hills Community Aid
Dr Andrew Kelly	University of Wollongong
Mr Peter Williams	University of NSW
Mr Ken Smith	NPWS

Appendix III – Workshop Outcomes – "Butchers Paper" Notes

9 and 10 February 2004

**"FROM THE OUTSIDE LOOKING IN
THE FUTURE OF RURAL LAND IN SYDNEY"**

DAY 1

Facilitator: Peter Davey

Session 1: Scanning our world *(Context setting session in which all workshop participants shared their perspective on key trends and drivers influencing Sydney's rural landscape.)*

- Present – what present trends and drivers are influencing Sydney's rural landscapes?
- Future – what future trends and drivers are likely to influence Sydney's rural landscapes?

Introduction

This is a problematic and international issue. This session harnessed insights and innovative ideas and lateral thinking. There have been numerous papers and workshops. It is not just a matter of rural lands and agriculture, but the future of the city and NSW. Does Sydney continue to grow in isolation and how does this affect the rest of the State.

Present Trends (Needs to be considered in an historical context as well as understanding the perspective of the various stakeholders rather than solely the accuracy of the statements)

- Property Market – Urban sprawl (urban juggernaut)
- Ownership of Land – lack of knowledge of those moving onto rural land –education needed.
- Expectations of rural lifestylers not always in tune with agriculture.
- Lack of certainty – no security of tenure for people who want to continue to farm – pressure from development.

- Ownership – people moving in have increased ignorance of and management of systems not in tune with natural land managers. "Taking over no idea of best management practice and values – lack of expertise to manage for future.
- A private Trust has been established to protect rural land. One major issue subdivision Hornsby Hawkesbury and Wollondilly, security of tenure not the major issue, but complaints force agriculturists out of operation.
- Need covenant in place to protect agriculturalists.
- High proportion of migrants arrive in Sydney Basin. Needs to be addressed by government.
- Ignorance of value of agriculture to Sydney Basin. Agenda hidden otherwise.
- Terminology of wording used in planning of ESD – time definition no. 1 used not sustainable. ESD is a motherhood statement rather than a true process.
- Driest continent – real limits in growth – where will water come from.
- Agriculture increasingly coming up against sustainability issues – smaller lot sizes – more issues – Larger lot sizes in Sydney allocated to intensive agric.
- Better capacity in planning to accommodate both rural and urban conflict.
- Improvements in technology may make smaller lots more sustainable.
- Interactions may decrease under influence of technology, i.e. better capabilities to deal with intensive agriculture.

- Subdivision – urban and rural
- Expectations of people who move in – not in tune with agricultural rural landscape
- Lack of certainty for subdivision, farming, lifestyle, etc. Rural land use conflict
- Concern that decisions made by Council planning staff frequently overturned by councillors
- Dubbo strategy worked - political will needed
- Better worded LEP's needed as clear, economic tools to support zoning
- clear vision for real cost in maintaining an urban area – need schools etc
- Planning plus tools to implement
- State planning policy being developed for agriculture. Need certainty of future from state govt. Numbers in rural land less than in urban areas.
- Sustainability of landscapes and biodiversity is important, but we need to consider water supply, lot size for agriculture.
- More difficult for farmers to comply with increasing regulation eg voluntary notification
- Participants in farming changing dramatically language tenure issues.
- Agricultural production more and more industry (factory) based – no need for soil based agriculture.
- Cultural / historical baggage, planning systems which were developed in England have been adopted here. Rural planning uses the same tools designed for urban areas.
- Need a lot more than planning tools have to go beyond traditional tools.
- Councils prefer development – more rates.
- Huge subsidy paid for development – higher costs to council, but no studies made.
- Can't plan for agriculture dynamic industry.
- Planning complex – look at considerations to development of Bringelly that DIPNR is looking at.
- Political power of developers to shape our land and the decisions made for it. Pressure from developers – DIPNR talking about 200,000 lots in Bringelly – not people – extending urban footprint dramatic impact on rest of urban areas not only rural vehicle movements, infrastructure funding etc.
- Development industry provides information for policy. Starting to see emergence from ag sector but it is behind the development industry.
- Bringelly is looking at range of options. All involve retention of agricultural land as part of exercise. Need to view as complementary/symbiotic. Need for agricultural lands to cope with by-products of the urban world. Eg. waste
- Provide info to strategy decision makers.
- Power: political will needed to keep agriculture in Sydney Basin – enormous influence from developers.
- Argue better cases – govt and developers push the subdivision agenda.
- Farmers have more expenses as costs increasing but income going down.
- Want to sell off land.
- Many people coming in from cities wanting to move to rural land.
- Rate based subdivision should do away with rate revenue gathering
- Protection of agricultural lands will be part of the SW urban release complementary land uses rather than competing land use
- Consultation with existing land users - sometimes farmers biggest advocates for land change.
- Current use of govt land by agriculture – rumoured not to return to agricultural use.
- Values beyond economic
- Now starting to talk about personal values.
- Quality of life value
- Govt depts have large role to play. Created a picture for the future. K
- Integration of visions and values then solutions come to fore.

- Not very good at teasing out peoples values –particularly rural landscape – not all equal or complementary
- Agency polices conflict.
- Need broader range of planning tools
- Zoning not only answer
- Testing range of scenarios
- Maybe look at taxation
- Planning based urban system – don't talk about rural development
- Same issue in other areas eg central coast.
- Now to 2027 need 6,000 ha of agricultural land – J Wilson demographic pressure by 2050 will be gone – Newcastle University.
- If pressure is finite compared with war to be waged in perpetuity, then process important.
- WSROC growth will peak over next 10 years. – Dictate the extent of urban development eg SW sector'
- Speculation – many ethnic farmers lease land – cost a lot of money to set up infrastructure.
- Don't know what is going to happen
- Many farmers do not own land.
- Everyone has right to lobby govt against political donations.
- Growth necessary and inevitable Paradigm.
- Adopted culture – measure performance – otherwise not addressing issue
- Lack of vision - affects security of land 50-100 years time.
- 2020 – vision is no agriculture left in Sydney Basin as per government ministerial advice
- Financial value – heritage, tourism - potential for agriculture to expand on these.
- Keep up with regulations – fresh care etc.
- Expend capital.
- Environmental Aspects.

- Many issues, same as in 10A – some lessons to be shared holistically – need to look at loss of resources – population.
- What are economic and other resources rural area contributes.
- Drivers for change – fresh food, water, jobs, - the benefits not quantified – direct or indirect benefits.
- Caution against generalisation eg 'all farmers what to sell their land'.
- Issue of transition – development doesn't take place overnight.

- True cost not factored in – not sustainable development eg Rouse Hill $300,000 per block - TOO COSTLY told to REDO figures.
- Sydney water, lifestyle costs taken into account, extra truck movements, economic impact if agriculture outside region.
- Political will – ministerial advice that agriculture will be out of the Sydney Basin within 10 years. If key agencies not supportive it is very difficult to maintain rural lands.
- Consultation - southwest Bringelly – exclude farmers (Planning – not intended to be a comprehensive process)
- Amortisation of costs of Developing the farm if it's future is uncertain – speculation.,
- Many farmers are not land owners.
- Mineral values
- once rural is concreted gone – not likely to go back to agricultural use.
- Penrith lakes on class 1 agricultural land.

Session 2

Session 2: More enduring and resilient landscapes for Sydney *(Resilient enduring landscapes reflect a co-evolutionary mutually dependent partnership between community and country. Country as a partner that allows community to develop by using its natural resources and ecological services; in return community includes country in its developments to a common future)*

- Agri Tourism
- Hawkesbury Harvest model for other communities - initiate connection – rural – urban
- AFMA
- Vision Urban Food Production.
- Community gardens – Farmers Markets Sydney – in regional hubs
- Agricultural produce demand movement
- Consumer producer alliance School/aged care edible gardens
- City Gardens – median strips
- NSW Ag
- Consumer Producers Regional branding / tourism
- Partner Lend Lease Rouse Hill - Agricultural Market to farm connection s industry and developers
- Urban expansion
- Winners/losers
- Equitable planning system
- Land agreements – conservation agreements – cost benefits - production benefits.

- Soils – 200 years of agricultural use and still good. Environmental concerns are overdone
- Visions for enclaves of agricultural land (operations) Even in urban areas
  Community wants them and supports their existence.

- Wider community likes knowing rural lands are there
- people visit – have a relationship with them.

- agri tourism - link with Sydney residents, know that agriculture exists, appreciate visiting, large towns, integrated with agriculture.
- Utilise the urban environment eg lettuce grown in parks, community gardens, old peoples homes.
- Process
- Winners / losers
- Well managed production areas.

- UK Allotments - Aim – permanent agricultural zoning – tenancy for agricultural purposes
- Set up similar to industrial zones in instruments? Need system set aside for agricultural use.. Individuals / community farms
- Shared machinery
- Planned community gardens
- Rural residential stakes - several hectares
- Vision Brigadoon
- No weeds farmland
- Think about food growing adjacent to city – Synergy.
- Direct Sales
- Consumers producers alliances.
- City people to contribute to ownership of food production land.
- Intensification of agriculture rural (DIPNR) amenity versus rural production
- Rural landscape more for protection rural character/amenity rather than production.

- Promotion – green space
- Values rather than agricultural production District from commercial agricultural production.
- Where will water be sourced for agriculture in Sydney Basin.
- Demand management for water for increasing population versus demand management water for agricultural production
- True water supply H20 real cost supply – the drier - stormwater –reuse
- River groundwater systems
- Alternate supplies.
- Future agriculture in Sydney will be more dependent on true H20 quality requirements
- H20 for agriculture sourced from secondary

- Changes in land use. – complete set of dev processes – include for water
- NORB tests – from agriculture– other and reverse – rural residential?
- Implementing 'door' or 'window' taxes for large houses
- Be honest about what is there now and accept it and manage it – Have exclusive zoning.
- Non 'viability' for agriculture does not mean that it is automatically subdivided for rural residential or urban development
- It is Residential development Market
- Protection of rural lands
- Urban areas adopt a rural locality like adopt a road – urban communities – values of market. – best quality agricultural lands – gives options for intensive or other agriculture

- Urban communities, valuing food production areas as much as other values.
- In Victoria one of developers has become sponsor of local farmers markets
- Mechanism – those who don't want to farm rural land to be in touch with those who do farm land to appreciate ''their' value..

- Landcare Protecting of impact of global warming – coastal strips will be the best – values may change back to agriculture being more valuable.

- Haven't looked needs of farmers – extension services – good to see Hawkesbury food program extended.
- Obligatory protection of some agric and rural lands – Classed 1,2,3.
- Each school in Sydney should study rural land management -
- Extend to best agricultural/biodiversity land within each local govt area.
- If developing reuse of water - needs land to go onto. Needs larger area than have at present
- Rural Land - Agriculture not only use – has strong biodiversity values.
- Global warming impacts on water in HN and NSW.
- Area for food production – coastal strips -
- Next generation 'poor' generation
- Hawkesbury Basin – Lungs of Sydney – flying foxes can reduce farmer income by 35% If developers had to pay real cost ?
- Public subsidy for farmers losing incomes through development
- Problems with designating areas for specific industries can cause problems disease can wipe out whole industry.

- Potential that coastal land in NSW will be more valued as agricultural production than as urban strip.
- Subsidies compensation for loss – incentives for farmers
- Rural residential not suitable for
- Common property air, clean water,

- Is the spread of agriculture a safeguard, rather than concentrating it all in one area.
- Distance, food, miles.
- Consider sharing resources, rural residential cooperatives for growing UWSH Wine growing
- Creative opportunities for peri urban cluster houses around

- Community Title issues in Wollondilly Shire at present

- Vineyards in Hunter achieve high tourism
- Agriculture in policy framework locally and State
- Legitimate land use
- Clarification Sydney region & footprint may allow central west to determine its priorities.
- Micro climate inbuilt potential to expand
- Greenhouse effect, – difficult to predict growing areas for Sydney region. Increased understanding climate change, niche markets.
- Predict better future.

- Would like to see policy for Sydney included in central west planning – would benefit whole of NSW
- Planning should be state wide not Sydney centric.
- Need greater understanding – climate – production, climate change impacting far west entrepreneurs. Once land gone can't get it back.
- Biodiversity conservation must be part of all strategies or we will suffer long term.
- Conservators and farmers must work together – can't be unfair.
- Scenery/amenity – need to decide what is important.

- Biodiversity Conservation share integrate to all planning – education for culture change – biodiversity loss
- Biodiversity conservation beyond the responsiblei8ty of farmer
- Community needs to support this
- Rural landscapes –com- custodians of biodiversity.
- FP Vision of equity for growing food eg Asian growers proximity, adjacent to city.
- Need to emphasise local production . However labour is exploited because we don't pay true cost agriculture.'
- CSA is important global economy biodiversity organic farming
- Pay fair price is exploiting a glut
- Liaise with slow food movement
- All are responsible for biodiversity
- Ws agric business awards – fewer applicants each year – need to be encouraged.
- State view – state comparisons
- Other alternatives to Sydney
- Integrate biodiversity also into rural landscapes as are other values
- infrastructure & overhead cost of small acreage in Sydney Basin costs equivalent to broadacre farm" how can this be reconciled?
- Or most NESB growers costs are low because they do not cost their labour.

- Importance of 'farm gate to plate'
- Bringelly – WHY
- Most Important
- Changing mindset of politicians and bureaucrats that advise them.
- Link agric /place and research
- Research linkages to Agricultural Land Eco Systems'

- Match land use to land type eg crops provide economic biodiversity/environmental benefit.
- Need greater diversity of mechanisms
- ? corporate sponsorship
- ? green trust
- Alternative superannuation for farmers

- Manage biodiversity in the rural landscape
- system to make it work
- Transferable development rights or credits
- Payment for ecological services

- Expectation by farmers /others that land price will increase because of urban expansion
- Farmers want protection from rural/urban conflict.

- Enduring rural landscapes Protection
- Protected cropping in plastic igloos – O H & S impacts.

- Rates System
- If they cannot subdivide
- Subdivision not a right but may receive rate rebate.

VISION

Rural Lands have a generally agreed value and identity eg. SA Hills

- Ecological, economic, social, environment

    - Integrated into the environment
    - Social, environmental and economic
    - Community embracing, valuing and being involved

    - Clear delineation between rural and urban
    - Sustainable agriculturally, environmentally
    - Management of urban expansion
    - Changed institutional arrangements
    - Get rid of silos

    - Permanency of ag land
    - Education and incentives.

    - Rules and bottom up approach

    - Intrinsic values – water quality.

    - Need support of urban city

    - Resource allocation and redistribution to protect ag production in Sydney region. (taxation, rates, resources)
    - Support validity of rural lands

- Meaningful community consultation of planning documents
- Explain documents plain English.

- Perception urban/rural needs (Research to id. Scenarios if ag is lost from Sydney Region.
- Need to understand and be familiar with planning tools and legislation available
- Avoid trap of doing research at expense of not taking a decision. Adaptive Research

Session 3: Capacity stocktake

- adequate knowledge, expertise for protection
- Accessible information
- Information sharing all levels government.
- Worldwide problem.

Need

- Skills to collaborate intersectorally
- Research into aspirations of ruralness and naturalness
- Political will
- Clear direction
- Common agenda
- Practical capacity to integrate existing knowledge
- Knowledge dynamics, legislation,
- Implement potential interventions
- Support urban community
- Credible reliable information
- Adaptive management
- Participatory learning

Barriers and constraints

- Need rigorous research
- Need more ag data
- NSW Ag tried to cost value of ag in sydne$1 B
- Horrendously complex issue difficult to quantify
- Participatory research
- Adaptive research h management
- Resilience in ag difficult to predict
- Climate change and impacts

- Elicit support urban community sense of open space and naturalness
- Sense of more than ag open space
- Green amenity
- Vision of village clusters and rural landscape
- Urban quarter acre block appropriateness
- Drawbridge urban consolidation

- Options'urban ag interface
- Uninformed community apathy may not be their fault
- Lack of community engagement
- Barriers
- Water and other infrastructure
- Institutional mindset
- Engaging and involving the community disconnected community
- Alienation lack of understanding we do not have a right to do what we want
- quantify lifestyle costs
- Infrastructure.

Capacity Needed

- Lack of economic tools
- A new Cumberland Plain Plan

- Link to grower organizations
- Diverse groups mushroom, flowers, etc.
- Facilitation between govt. and growers
- Equitable ear to government
- Rural people proactive
- Bring in other groups rural research
- Get growers / rural research talking
- Need leadership – trigger changes – champion
- Poor planning mechanism concerning decision making p planning staff overturned by councillors. Political will Dubbo strategy worked

- State planning policy for ag
- Better worded LEP
- Clear, economic tools to support zoning –cost in maintaining an urban area. Schools etc.,
- Clear planning vision for Sydney basin
- Better system to inform ministers
- Difficult to compete with building industry – economical data

- Encourage financiers to invest in other than housing
- Comparison between urban impacts vs ag impacts
- Cost of the loss of ag land or houses on flood plains

- Zoning with political will.

Capacity

- Restructure of DEC DIPNR will provide good , greater capacity to address the rural land issues more holistic approach

- Framework grower organizations Hawkesbury harvest

- Influence create change
- Aust wide farmers markets

- Expertise in govt non go of knowledge of the lack of interaction between ag and other communities
- Sydney water catchment held up council decision at Wollondilly
- Zoning can work
- EP &A Act has capacity to enact the vision

- Need for honesty about the status of rural lands – use of water for ag.

- Eg opportunities drinking water catchment

- Best land for ag and best land for housing
- Salinity – flood.

DAY 2

Facilitator: Peter Davey

The Integration group comprised of those participants who had an interest in all areas of discussion.

Themes identified from previous day's workshop

Identity
Integrated
Sustainable

Symbiosis
Informed Decision Making
Thriving
Awareness
Education
Valuable

Priorities
Quality of all Life
Diversity and Beauty

Equity
Natural
Understanding
Weed Free
Certainty
Profitable
Ecosystem Health
Security
Adequate Water
Community / Subsidiary
Advocacy
Level Playing Field
Vision
Good Information Marketing

TOP VISION THEMES

- Integrate Agriculture with Community
  Relationship
  Consumer
  Producer
  Experience
  Equitable Planning

- Utilising a Sustainable Agriculture Resource
- Managing natural resources efficiently - including re-use
- Incorporation of biodiversity

- Urban Agriculture
- Community Gardens, Parks, Reserves, Rail, etc.
- Industrial zones for agriculture

- Rural Lands
- Hone Identify

- Keep tradition of farmland surrounding city.
- Protected good quality agriculture land

- Variety of planning mechanisms to provide for agricultural production.
- Stale-wide view
- Open minds of Governance - Ministers – Agencies
- Development Credits
- Use of Section 94 to purchase land biodiversity services
- Taxation based, pollution transfer systems.
- Superannuation for growers
- Some growers cannot get pension
- Federal government assumes farmer can subdivide
- Farmers cannot live on 3 hectares in Sydney and get pension.

REFLECTIONS ON OUTCOMES OF DAY 1

- Link with Development Objectives - Work with Industry - WIN-WIN

- Similarities with Cumberland Plain Recovery Plan
  - Bushland would be conserved - doable
  - Most Cumberland Plain bushland is within Rural Lands – possible need to engage with the
  - - - Urban community
  - Give the bushland and identity

- Using the Media needs to be managed
  - Need to be strategic working with the media.
  - Media positive to Farmers Markets to assist farmers.
  - Must have your arguments developed eg. To present at the Forum

- Communication Strategy
  - Audience, key messages, how to let the message across.
  - Thoroughness of your argument.

- Limitation of amount of Housing
  - eg for housing - Agriculture 10% Urban 90%
  - Planners want to take 5% from Agriculture to service more Urban.

- Task to demonstrate that the inevitable urbanisation is not sustainable, cost prohibitive.
  - Alternative is far cheaper, less environmental damaging
  - Promote ancillary agriculture values

- Fragmented nature of the audience
  - Who is going to Champion the Cause?
  - PlanningNSW view is that rural-ness = rural residential
  - How are these managed to get good outcomes from this land use.

- Media to promote the Cause
  - Some group / sponsor to coordinate
  - Green levy
  - Something that is doable

- Have a good argument with sound basis.
  - Connection between the rural dwellers and the planners
  - Challenge - How do we engage this group?

- Rural Resource
  - Package of benefits (smart growth - USA)
  - Smarter living
  - Limitations to growth - physical
  - Accommodate growth
  - Maintenance of the rural character
  - How do you manage subdivision to maintain rural character?

- Monopoly of the developers
  - Biggest asset for the farmers is the media.
  - Fresh argument
  - Sydney farmers better off than across the range
  - eg. 1-100 year drought - still water issues
  - Agri Tourism
  - Education / training - needs coordination

- Feeling of inevitability of losing agricultural land in Sydney - but we need to continue the fight.

- Farming practices are changing
  - Farmers want subdivision
  - Inevitability of urbanisation
  - Intensive agriculture is not wanted by city
  - Is the future 'garden' agriculture and rural landscape

- Is Agriculture changing and some types not wanted?
  - People swayed by money
  - Need to ascribe a value to the rural landscape
  - Willingness to pay to preserve the rural lands
  - Opportunities for the use of the rural lands
  - Cannot rely solely on the economic value
  - Cannot ascribe a monetary value to all things

- Rural Lands provide a buffer to Urban
  - Agri tourism
  - Lifestyle

- Need to do the costs of alternatives ie cost of food
  - Cost models can often lead to more argument eg economic value of farms.

Session 4: Thematic solutions *(participants selected one of the following thematic groups to identify potential solutions which would better accommodate their particular sectoral interests within the common desirable future: Integration, Urban Expansion, Sustainability of Agriculture in Sydney, Biodiversity and Environmental Management, Water Quality and Quantity, Lifestyle and Landscape, Social and Cultural Aspects of Farming.*)

Given the collective work previously undertaken, each thematic group should now be asked to identify potential solutions which would better accommodate their particular sectoral interests within the 'common desirable future'. These solutions might range across:

- Governance issues (statutes, policy, planning, participation)
- Knowledge issues (research, education)
- Economic issues (innovative economic approaches)
- Broader social/communication issues (relating to better harnessing our multiplicity of values and understandings around rural landscapes)

Specific and Collective Action (Break up into Interest Areas)

This session would distill out the solutions generated in Session 4 into those which are common relatively unique to a particular theme. It would also further refine the solutions and identify:

- **What actions can be taken as a result of this workshop to progress the solutions in the short, medium and longer term?**

Who will assume the responsibility to pursue the actions agreed?

URBAN EXPANSION

Population Growth

Rate of Growth - Research / Policy

- WSROC Study shows less rate growth for Western Sydney than DIPNR.
- Eastern Sydney also growing
- Councils / Roc's disagree with DIPNR projections. Debate still to occur.
- Take up rates of zoned lots less than conservative.
- Community resistance to urban consolidation
- Cut migration to coastal areas - resistance from certain sectors of community.
- Now developing land that 'we' had previously rejected.

- Future (+ 20 years) will be developing land that we currently reject.

- Two perspectives inform policy decisions very differently.
  1. Growth will continue and is inevitable.
  2. Growth will peak then it will decline.

- How long (timeframe) do we need to plan for?
  - 20 years
  - 50 years
  - 100 years

- Influence of Federal Policy eg.
  - Immigration
  - Border control

- Inner City lifestyle versus need for space - paradox within Aust Psych.

- If urban expansion is to occur how is it best 'designed'.

- Denser urban centres, environment smart designs.

- Network of cities - impact on Natural Systems.

- Perception by Government that a 'critical mass' Is required so as to pay for necessary infrastructure.

Solutions

- Collaborative resource amongst Western Sydney Councils for design and best practice.

- Better cross linkages between regional organisations.

- Better metropolitan and regional planning.

- Lobbying package - Greenprint / shows funding - win/win.

- Green Levy

- Open space strategy

- Section 94 funds should be used for biodiversity

- Open Space Trust

- Rural Research - need to come up with smarter Strategies than the 1 ha approach

- Get the Cumberland Plain Recovery Plan up! - Core Veg - Not negotiable!

- Collective Psychology at 'Own your own home and space"

- Need to get the 'Rural lands, , open space to the same level.

- Nature of Agriculture - what types?

- Proper value of rural land

- Tele commuting?

- Better research into what are real costs/ benefits. Eg. Infrastructure subsidies biodiversity etc.

Actions

- Developing and testing various scenarios - Also look at Sydney Basin in relation to rest of the State. There is a range of views / perspectives on what urban forms
  - Forming a 'email' group to work up 4 scenarios.
  - WSROC / DIPNR

- Vision
  - Short term - 10-20 years
  - Medium - 20-40 years
  - Long - 0-100 years.
  - Develop these for input into Metropolitan Strategy
  - Set up Vision working group

- Encourage Diversity of Development type
- Establish and communicate a set of 'development' principles.

- As part of Scenario exercise - test 'red' costings, infrastructure / ? services etc.
- SREP or SEPP for Agriculture in Sydney Basin
- Facilitate / participate with Regional organisations, eg. ROC's

- Develop a 'funding' package for protection of Rural Lands. To include:
  - Green Levies
  - Section 94
  - Trusts
  - Development Agreements - (Plan first Levy - WSROC)

- Review / update constraints to develop mapping

- Revisit 'Greenprint' for Sydney.

- Develop 'lobbying' package (for pollies)
  - Economics
  - Social / cultural
  - Environmental
  - Communicate V/E (value the environment) issues to General Public.

- Identify and nurture / support a 'Champion' for Rural Lands

- Create 'Research' partnerships with Academic Institutions.

BIODIVERSITY AND ENVIRONMENTAL MANAGEMENT

Need a CHAMPION
- Predominant in community
- Trendy
- High profile

Target the
- Suppliers of housing
- Purchasers
- Decision makers
- Development industry
- Agricultural sector – NESB in particular

Infrastructure – not just for:
- Roads
- Rail
- Transport
- Water
- Sewage

But also for:
- Corridors
- Habitat
- Refuge
- Buffers

Understanding

Values
- Put up the future options to allow community to clarify its values
- Provide the access to info to allow people to clarify their values
- Create positive emotional connections to the natural environment
- Adopt a rural area – similar to the US concept of adopt a road
- Use the media, eg Kramers road adoption
- Info products for solicitors, real estate agents and councils – send out with rate notices - e.g. Upper Nepean CMC rural living guide

Rural incentive schemes
- Harness community goodwill and energy
- Extend Hornsby RLIP and other schemes
- Taxation
- Documentated – Binning & Young, etc
- Awareness campaign

Scenarios

- The implications of our actions – positive and negative – cost of rehabilitation
- Communicate this

- If we follow this path, what will our future look like
- From the people – bottom up
    - not a govt action.
    - CMA support officers to help facilitate and link between community and govt.
    - Voluntary groups (Landcare) with shared goal

Effective Legislative Process

- SEPP/REP unambiguous statement on biodiversity – establishes clear rules
- Do the crime/do the time
    - focus on rehabilitation (no reward for doing the wrong thing)
    - clear responsibility
    - authority to act
    - all an opportunity to report / all govt agencies to have a responsibility to report
- clarify roles and responsibilities of the players
- local govt (including elected officers)
    - resourcing
    - remuneration
    - conflict of interest
    - accountability
    - efficiency c/f management

LG General Managers

- accountability
- efficiency drives rather than resource management
- meaningful actions not glossy brochures

Specialist Workshop Biodiversity Issue

Only four people attended this group workshop, facilitated by Kevin Wale and scribed by Andrew Kelly. The objective was to translate the themes and goals agreed upon earlier into potentially pragmatic solutions – i.e. 'actions'.

Action One – Scenario Projection Project

The group acknowledged the benefit of seeking funding to undergo a project of creating visual 'paper and/or film' scenarios of what Western Sydney will look like if the current rate of development continues. The scenes would be provocative, perhaps revealing four to five new cities of the size of Canberra – i.e. an ongoing sea of houses - with an adverse effect on human health, transport, housing, water … and biodiversity via bushland destruction. The project would be designed to inform and educate the general public on what is inevitable for future generations unless major change is made.

Who would undertake such a project? Preferably a neutral party, such as a mainstream NGO. It should not be government. It is hoped that the action will lead to a community groundswell and community-led action.

The action would involve (i) initiation via seeking funding and establishing sufficient ongoing rolling moneys and (ii) preparing the scenarios, exhibiting not only the worst case but also what can be achieved with public commitment.

Action – Flow On To Community Groups

The group emphasised the need for bottom-up actions flowing on from the above project. The idea of a 'landcare' equivalent was raised – i.e. a movement with a catchy title such as 'ruralcare' that would development its own expertise in grantsmanship.

It was agreed that the source of funding should be the Commonwealth. In the context of biodiversity, the Commonwealth is a signatory to the Biodiversity Convention and the National Biodiversity Strategy.

The potential role of Natural Resource officers was raised in terms providing presentable and accessible information to members of the public.

Action Three – Suite Of Mechanisms

The group supported the notion of supporting a suite of mechanisms to support biodiversity conservation, ranging from regulation to promotion, incentives and provision of advice.

Action Four – Role Of Local Government Councillors

The group supported improving the kudos of local government elected representatives, with increased payment upon completion of satisfactory training courses, including opportunity for biodiversity conservation and relevant laws.

Action Five

The group supported the notion of making elected local government representatives more accountable. This might be achieved via:

- Publishing more information on controversial and biodiversity unfriendly decisions
- Recording the votes of individual councillors
- improving minute taking and
- Providing ready accessibility of decision-making information to the general public.

Action Six

The group supported the preparation of a regional biodiversity strategic plan for the rural lands west of Sydney. The concept of a biodiversity-oriented REP received much attention. Such a mechanism would provide a framework for council LEP-making. If the provisions of an individual LEP are sufficient, the REP need not apply. Otherwise, a REP is recommended due to its potential regulatory teeth in combating vegetation clearance when other mechanisms are insufficient. Prosecution for breach of the LEP, however, should lie in the hands of an independent authority.

WATER

DEMAND	*SUPPLY*
• influence the lifestyle shows • water pricing – real costs • available and cost effective technology - shower heads - irrigation	• farm dams - more info - "Focus on Farm Dams" • re-use effluent for: - wetlands - gardens • domestic tanks - encourage use for gardens - further develop incentive schemes

LIFESTYLE AND LANDSCAPE / SOCIAL & CULTURAL ASPECTS

Vision

- Information:
- Local Government
- Minister for Western Sydney
- WSROC

- What we have:
- Where it is:
- Consolidate information
- ABS, GIS, DA's, Zonings,

- Leading to: Regional Plan

- Rural Lands: need clear definition

- Define boundaries of WS
- Geographically define
- Campaign identity

- Collate info from LG's/WESROC/ABS/GIS
- Amalgamate $ values
- Understanding what is there.

- Caution re forum so soon
- Needs more definition and work
- Clear package required

- Clear directions articulated
- Put together a structured communication campaign

- Farmers markets:
- Baseline information
- Advocate
- Alternative solution – low cost when established effectively

- initiated farmgate stall at Enniskillen
- overseas visitors

- Planning controls
- Pressure for subdivision

- Urban expansion – all rural land in Blacktown planned for release

- Urban geography/planning GIS
- Crime prevention
- Place management
- Strong interest in local government
- Ag region Bomball -> Harden
- Environmental planner local/state
- Ag opportunities

Planning Tools

- Blacktown – rural lands may not have activity
- Pattern of subdivision back to 1800's
- What is rural land
- What is acceptable
- Critical need for
- Rural – productive
- Unspoken understanding of rural
- Cannot quantify scenic protection, environmental management

<u>What do we want to achieve? (synthesize to basic concepts)</u>

- Issues
- Landowners/previous growers wanting to subdivide
- Many influential
- Camden 8% growth
- Resident surveys – love amenity
- Protected hills landscape protection
- Floodplains – only ag not developed
- Heritage area – heritage incentives
- Broaden arguments ag/lifestyle
- Farm trail, B&B, Art galleries, gardens
- Create 'heritage', eg Kurrajong
- Expansion villages
- Environmental function

- Water quality
- Camden – some practices degraded the land
- Green corridor planned
- Riverstone: Cumberland area
- Planned large allotments
- More than farmland
- Some farmers holding for further development

Constraints

- If land developed – what can the natural resource base sustain?
- Ultimate costs of subdivision
- Costs prohibitive
- Wagga studies natural resource costs of salinity
- Costs to society: loss of amenity
- BHSC McMansions in Rouse Hill – the residents love it – part of cycle.
- Last chance we have to protect rural land
- Farmers used to be in Sydney – kept going west
- Bringelly is last stop west
- Provides employment
- Get locked in planning creep
- Series of compromises
- Engage with grass roots
- Need to inform population of farmers markets
- Environmental management through education
- Urban renewal
- Had to talk about succulent peach, fresh eggs, etc
- Had to talk about farmers $ in pocket
- Talk about real essence
- Planners

Communication

- How to engage community
- Definition
- Structure
- Professional communicators have been engaged but they use standard approaches – often inappropriate with growers.
- level of planning communications – poor in local government

- L&E Court
- what is rural
- Locality statements
- Purpose of zoning
- Planning industry could learn from xxxx

- Clear strategy – firm policy
- Place management – better to manage outside court

- Include ag
- Powerful stats in ag
- Man in street
- Farmers markets – farmgate
- Powerful method – direct connection
- Producer – consumer alliances
- School gardens – reality of food production

- Engage Coles
- Communication strategy – use local farmers (Fred, Ivan, John) as spokespeople.
- Example given of Woolies ads: orange grower eating apple bought from Woolies – have tapped into notion of credibility of growers.
- There are around 300 farmers markets in UK – some of the major supermarkets have farmers days in the supermarket.

- Use producers are spokespeople
- Food is greatest communicator
- Food is the entry point

- Rural areas – green lungs / green space

INTEGRATION

Scenario Development

- Total urbanisation
- Smart living
- Green west
- Business as usual (BAU) to 2020/2050

Test each scenario over time using:

Consequence Indicators, including:

- Land take
- Water use
- Biodiversity loss
- Social capital
- Energy use
- Infrastructure costs
- Water quality
- Natural hazards
- Price of produce
- Greenhouse credits

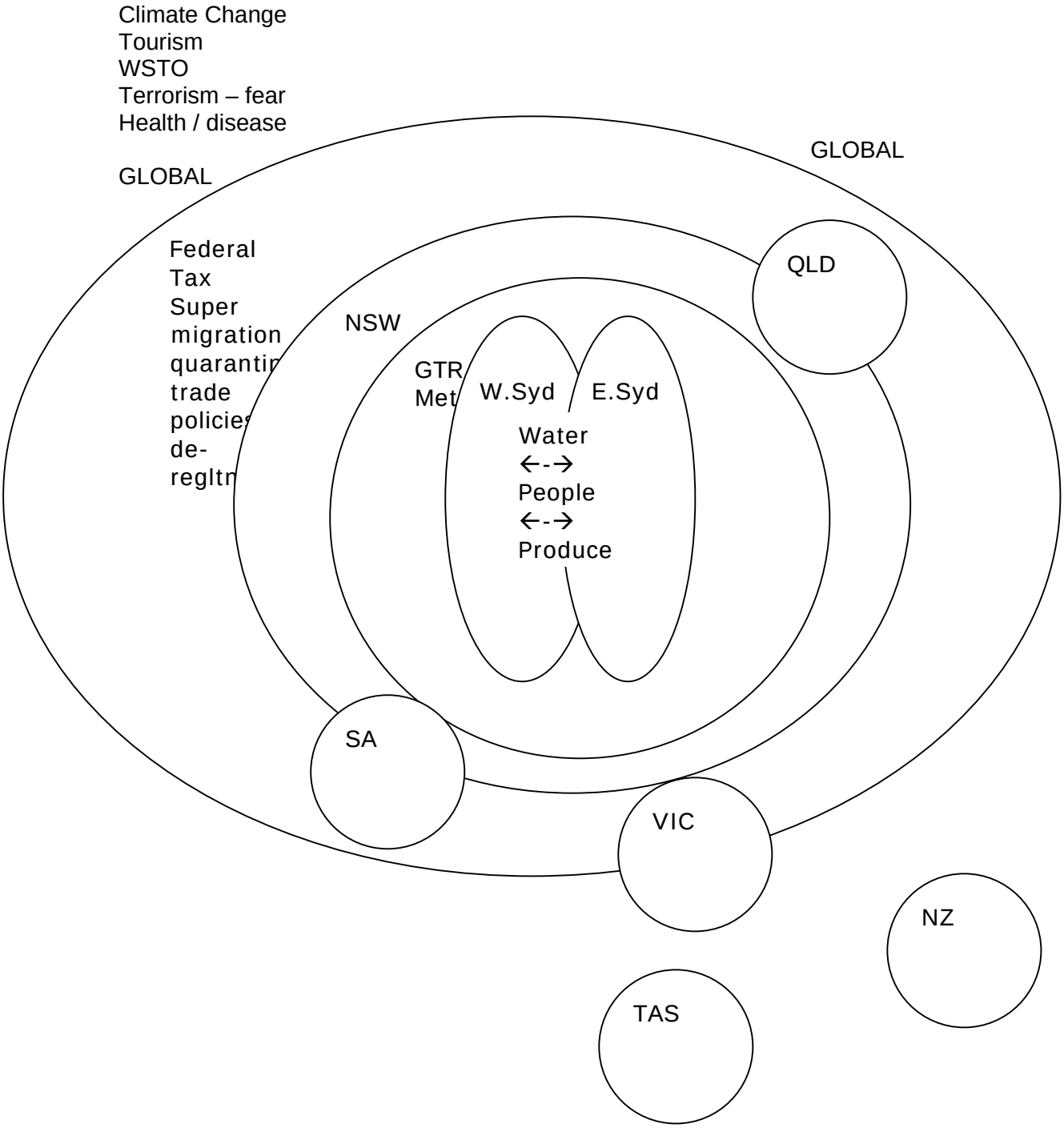
Barriers / Constraints

- Need rigorous research
- Need more ag data
- NSW Ag tried to cost value of ag in Sydney - $1 billion
- Horrendously complex issue
- Difficult to quantify
- Participatory research
- Adaptive management
- Resilience in ag difficult to predict
- Climate change and impacts

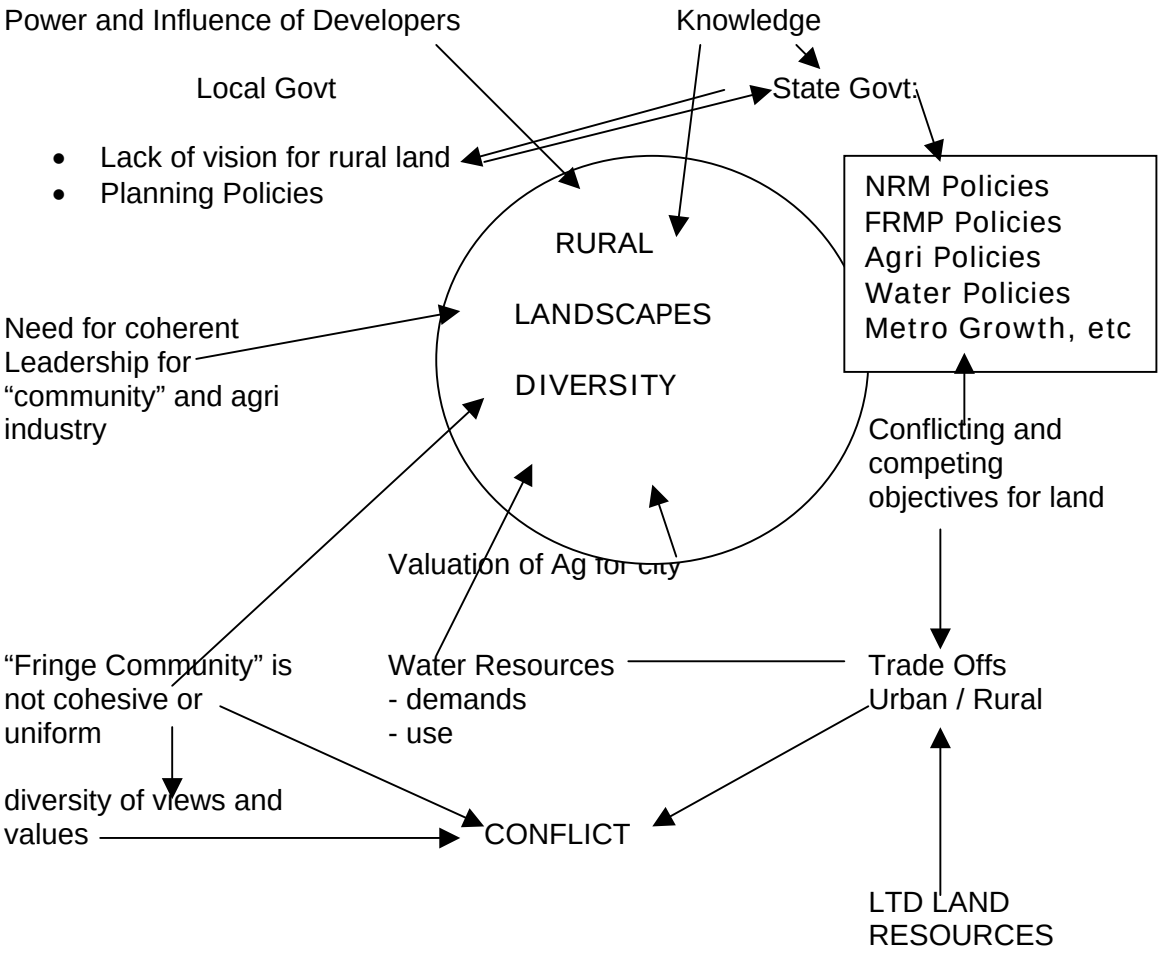
- Elicit support – urban community – sense of open space and naturalness
- Sense of more than ag 'open space'
- "green amenity"
- vision of village clusters and rural landscape
- urban ¼ acre block ?appropriateness.
- drawbridge <-> urban consolidation
- options
- urban ag interface
- uninformed community
- 'apathy' may not be their fault
- lack of community engagement

- Barriers
- Water and other infrastructure
- Institutional mindset
- Engaging and involving the community
- Disconnected community
- Alienation/lack of understanding
- We do not have a 'right' to do what we want
- Quantify lifestyle costs
- Infrastructure

1. System Boundaries



2. Sources and 3. Stresses



4. Strategies

1. Communicating integrated "value" of rural land (agri) in WS (Value = social, economic, enviro)
2. research on different scenarios 2020-2050
3. incorporate vision for rural lands in WS in metro strategy and new NRM policies/acts
4. investigate mechanisms for effective implementation of strategies and solutions (councils and management)

5. Scenarios to 2020-2050

- total urbanisation
- smart living

- green west
- business as usual

6. Solutions And Actions

Short term

1. implementing clear marketing and communication strategy for rural lands in WS
2. education (raising understanding) in whole community
3. continuing professional development of planners, etc.

Medium term

4. incentives and regulatory mechanisms for sustainably using highly productive area.
5. consistent decision making of DA's within NRM context
6. research for scenario development based on gap analysis

SUSTAINABILITY OF AGRICULTURE

- In LG/State there is much documentation re ag.
- EPA rangers on the back of growers
- Growers often seen as 'bad guys'
- Eg horse owners do not have to contain outputs
- No one monitors chemical use in rural residential private owners
- Rural residential – 5 acre areas
- Rural conflicts
- If not planting veg in fertile patch
- Ag-perishables -> perishable soils
- Murrumbidgee Murray only other vegetable growing area in NSW
- Beyond coastal strip
- Could reach point if dairy industry is pushed out that Sydney will need to import all its milk?

Information Gathering And Presentation

- Trends / Requirement Ag

- Values / Social / Environment / Economy

- Alternatives for Agriculture
- Crops
- Tourism
- Ag Forestry

- Current status of Farms
- Sustainability continuum
- Benchmarking (Best Practice)

- Connecting in the Community
- Media
- Markets
- Meetings
- Gatherings
- Work with Local Food Promotion Groups

- Develop Communication Strategy
- Identify Key Message
- Identify Target Audience
- Identify mechanisms

- Strategic / Structure Planning that supports agricultural operations and development.
- Seek Leadership - State government (NSW Agriculture)
- Develop Vision
- Amend EP & A Act to require Strategic Plan preparation + "sign off" by government.

- Farm Profitability / Viability
- Property Management Plan / Environmental Management Systems / Environmental Management Plan
- Realistic prices for goods produced – reflecting environmental cost of production.

- Balanced Growth / Protection - Paradigm (middle ground)
- ie, Pragmatic approach to achieving some further settlement within agreed -constraints to protect and retain important values.
- Other idea
- National / Regional Food Policy - Complementary to other Strategies for Rural - Land Management / Protection.
- Highlighting agriculture as a Food Producer

Governance Solutions

- New rural land purchasers need to know what to expect in the area and rights and responsibilities.

- Sustainable agricultural information presented to Councillors at Local Government Conferences.

- Packages of information regarding Sustainable Agriculture for decision makers (information and policy).

- Security of "tenure" for farmers, ie protection from expansion.

- Strategic planning needs to identify sustainable agriculture and agricultural industries ie structure planning involving key agencies early and involve community
  - Identify best agricultural land
  - Identify lands for effluent re-use

- Buffers around STP's etc to allow re-use

- Long term planning 20-30 years with 5 year review

- Regional Planning (ie cross LGA planning) informing local strategic planning
- REP's improved to guide local planning decisions and tackle permissible development.
- Need specific zoning
- Support for Councils to protect important agricultural lands (from State government).
- Councils supporting initiatives promoting and enhancing sustainable agriculture.
- Sustainability criteria and requirements for rural resident development.
- Agriculture sector involved in Water Reform and water strategy work within the basin.
- Redefine riparian rights in relation to consumption by rural resident development.

Social Community Solutions

- Engage in local community in local solutions (quality of life questions).
- Develop communication strategy and community engagement process.
- Visual representation of what we want and trying to achieve.
- People need to see agriculture as a positive.
- Farm open days to explain operations.
- Overcome community fear of new agricultural development.
- Farmers develop communication strategies with their audience.
- Information to consumers regarding quality of products and farming systems.
- Need to bring urban and rural community together.
- Hawkesbury Harvest captures and promotes sustainable agriculture - being picked up by community.
- Farmers keeping up to date with regulations acting responsibly
  eg participation in training
- Developing a real connection between farmers and local government.
- Needs to be farmer focused and solutions need to support sustainable land management practices.
- Alternate market mechanism to allocate financial resources to private land assimilation of urban waste products.

Knowledge Solutions

- Feed into local community engagement
- Promote broader landscape value of rural lands
- Support farmers towards / along a sustainability continuum.
- Assess and report the trends in agricultural farming systems and the changing needs and communicate benefits such as employment, etc.
- Provide alternatives to farmers for the future.
- Tap into research from Universities, etc.
- Local government in partnership with State government providing Web-based information for farmers.
- Use of Branding and product identification for marketing to consumers.
- Inform local communities of importance of local agriculture.
- Rural resource asset mapping - 'Green Map'
  - Information for visitors eg. Like Hawkesbury Harvest Maps plus include other data.
- Share information about success stories and promote to media and other growers. Eg. What people are doing and what is working?

Economic Solutions

- Reward for farmers for products produced sustainably and with quality.
- Economic exit strategies for industries for closure or relocation.
- Economic benefits to people who do not subdivide (State government and local government).
- Agricultural land buy-up by government Trusts and lease out to new entrants into agriculture.
- Farmers need to remain profitable.
- Security of "tenure" needed for investment in intensive agriculture.
- Marketing of produce critical.
- Government supporting mechanisms for fairer return for farmers.
- Support for farmers markets.

- Supporting diversity in farm business eg. Agri-tourism, farm stay etc.
- Farmers demonstrating commitment to stay on the land and not wishing to subdivide off small lots.
- Farmers encouraged to plan for the long term eg. retirement plans.
- Continuation of targeted Commonwealth and State funding for natural resource management and landcare and cultural heritage management.
- Rural land rates linked to environmental performance of farm management.
- Property management plans and environmental management plans supported and utilised.
- Financial assistance (Eg. Low interest rate loans) to farmers to adopt or comply with new regulations and industry codes.
- Non viability is not a reason / excuse by farmers for subdivision of their land.

Summary

Holistic approach for region – VISION
Incentives for growers, land owners to keep rural land
Promote benefits/rights to local food
Transportation costs – food miles
Food supply – sustenance – farmers markets
Heritage landscapes
Mock up of urban encroachments on ag land
Costs env/social if lost – quantify
Importance of communication – meaningful language, clear, simple messages

<u>OUTCOMES OF THE MORNING (THEMATIC SOLUTIONS) AND AFTERNOON (SPECIFIC AND COLLECTIVE ACTION) SESSIONS WERE AS FOLLOWS:</u>

Main theme points arising from workshop:

1. Resolving Rate Growth Issue / Policy (Domestic / Overseas Migration)

2. Planning Vision(s) - How long do we plan for?

3. How do we best deliver urban growth?
- consolidation / density
- rural residential
- greenfield / MDP / brownfield
- infrastructure
- environmental services / sustainability
- Planning

4. Governance / funding
- linkages
- better metropolitan / regional planning

- Levies

5. Rural / Open Space 'Tool Kit' Greenprint

6. Communication / Values debate

7. Research

CONSISTENT THEMES

- Group to take it forward
- Vision
- Lobbying
- Identify Champions
- Connecting with City
- Communication Strategies
- Funding for Projects
- Data Gathering
- Identify Integrated Value of Rural Land
- What are the Consequences of business as usual.
- Incentives and Regulatory Mechanisms
- Natural Resource Management
- Scenario Development
- Governance - Institutional Arrangements for Managing.