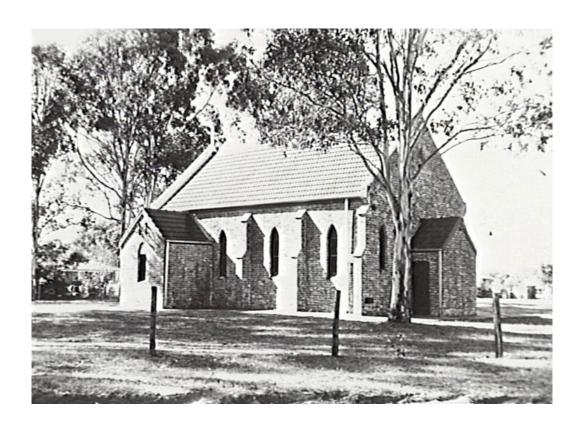
Mulgoa & Wallacia Rural Villages Study



December 1999
PENRITH CITY COUNCIL



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1. INTRODUCTION

1.1 Study Purpose

The villages of Mulgoa and Wallacia are located in the Southern rural areas of the city of Penrith. Of unique significance to the city they remain a legacy of the smaller communities from which Penrith derived its origins and the villages retain strong connections with early pioneers who initiated settlement of the area.

That they still reflect this heritage is due to the remaining historic buildings, properties, family associates and long-term residents and the survival of surrounding rural communities preserved in part by restricted development opportunities.

The uniqueness of these villages is further drawn from their setting within the landscape. Mulgoa Village lies within a valley where remnant vegetation provides an attractive landscape whilst evidence of occupation provides a valuable cultural heritage. Wallacia Village, set against the backdrop of the Blue Mountains Escarpment and on the banks of the Nepean River also presents an environment of high aesthetic quality.

The natural and cultural qualities of the villages, together with pressures within Western Sydney for new urban and rural/residential growth, create a situation where it is not unreasonable to expect pressure for expansion of Mulgoa and Wallacia with the growth of the Sydney metropolitan area.

Such pressures may become more pronounced as a consequence of recent Government announcements to sewer the villages, and perceptions within the community that this will facilitate further development within and around the villages. If these pressures are allowed to exert themselves there is potential for the unique qualities of the villages to be compromised.

Council's objective is to maintain and enhance the City's rural and urban harmony and specifically to conserve and enhance the unique cultural and natural heritage qualities of the villages.

Council resolved to prepare a Strategy for the villages of Wallacia and Mulgoa that will provide direction to Council, the community and public authorities, as to the most appropriate means of conserving and enhancing the unique qualities of the villages of Mulgoa and Wallacia. Council considered that a strategy should be prepared for both villages due to their similarity in location, size and composition, water source and proposed sewerage scheme.

1.2 Study Tasks

To facilitate the preparation of a strategy a list of study tasks were set. In summary the tasks were to:

- Review relevant planning studies and existing statutory planning controls;
- Identify and consult with community groups in respective villages;
- Identify unique characteristics of the villages that contribute to its conservation value;
- Identify potential threats to conservation of the villages;
- Examine threshold services and facilities for villages;
- Identify opportunities for village enhancement; and
- Prepare a Rural Villages Strategy for Mulgoa and Wallacia.

Preparation of the strategy has commenced in advance of Penrith's City-wide Rural Lands Review. The strategy findings and recommendations will be exhibited for public comment which will then be developed into specific village Local Environmental Plans. When adopted by Council the new Local Environmental Plans will be incorporated into the Rural Lands LEP. The approach taken to community consultation with Mulgoa and Wallacia has provided a firm base for examining and understanding other rural villages in the Penrith Local Government Area.

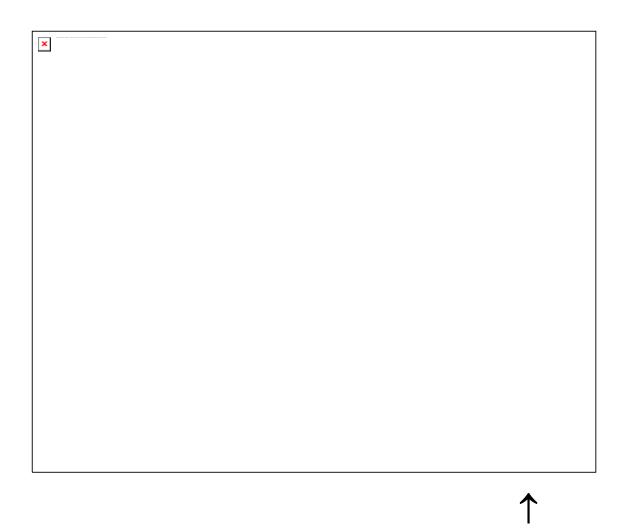
To assist in the preparation of the strategy, Council appointed consultant Douglas Sanger Pty Ltd to facilitate the community consultation phase of Council's study.

1.3 Study Area

The focus of the study has been to examine the village areas of Mulgoa and Wallacia, with village boundaries defined primarily by the 2(c) village zoning under Penrith Planning Scheme Ordinance (PPS). It is not possible however to review the future of these villages without giving broader consideration to the 'edges' of the villages. The villages continue to form an important service role to their surrounding rural communities.

Importantly the villages of Mulgoa and Wallacia are set within a rural context and both are distinctly separate from surrounding urban areas and other villages.

Figure 1: Location of Mulgoa and Wallacia Villages



2. BACKGROUND

2.1 Relevant Planning Studies

The studies reviewed to prepare the strategy are listed fully under References. The key studies that apply to both villages are discussed below:

2.1.1 Rural Lands Study, Penrith City Council, February 1982

This study examined all rural land in the Penrith Local Government Area (LGA). It reviewed the key planning documents applying to rural land at that time – Interim Development Orders 73 and 93.

This study acknowledged that the lot size controls (40 ha minimum) under IDO 73 and 93 had little impact on preventing fragmentation of land, as the controls were implemented too late. It also suggested that the controls were unsuccessful in maintaining rural production in the area. The study commented on rising property values within the Sydney region and argued that this process also influenced the number of applications seeking consent to subdivide at that time.

The study found that (in 1982) there was between 4.8 and 6.3 years supply of rural and rural/residential properties available for residential occupation and identified areas where future demand could be accommodated in attractive rural landscapes without compromising the environment.

In relation to the village study areas, it was concluded that areas adjacent to Mulgoa and Wallacia were suitable for low-density residential development at various densities depending on the availability of utility services and the preparation of development control plans.

2.1.2 Local Environmental Study – Mulgoa and Wallacia Villages, Penrith City Council, February 1984

The Local Environmental Study (LES) was intended to be the basis for a Local Environmental Plan (LEP) for the villages of Mulgoa and Wallacia. The LES assessed the need, desirability and potential for expansion of the villages and provision of low-density residential areas.

Penrith City Council prepared the LES in February 1984. As the LES preceded both the Regional Environmental Study – Mulgoa Valley (1984) and Sydney Regional Environmental Plan No 13 – Mulgoa Valley (1987) it relied on the outcomes of the Rural Lands Study, 1982.

At the time, Council acknowledged that the pending RES would address matters on a broad scale but pressure, in the form of pending applications for subdivision of land adjacent to the villages, led Council to pursue a path of planning investigations at the local level. The key outcomes of the LES are summarised below:

(a) Form of Development

The LES recommended that future development of Mulgoa and Wallacia Villages should include:

- Provision of open space, by retention and enhancement of large existing dams/lakes:
- Preservation of trees;
- Additional landscape measures, such as the planting of road verges;
- Underground power lines;
- Restriction on the erection of fences along street frontages;
- Restriction on types of materials used in fencing in certain locations, eg around rural/ residential allotments:
- Street layout sympathetic with topography and main landscape features;
- Minimal kerb and gutter and concrete foot-paving, by use of spoon drains and grass verges;
- Provision of pedestrian ways and/or bridle paths.

(b) Village Expansion

Council adopted the LES on 20 March 1984. The study concluded that there was potential for further expansion in the villages in the form of low density residential, and rural/residential development, subject to adequate provision of services (primarily water and sewer).

Potential expansion, as recommended in the LES, was addressed in the context of sufficient water supply becoming available at some future time and the position of sewerage reticulation being further considered.

2.1.3 Regional Environmental Study – Mulgoa Valley, 1984, Department of Environment and Planning

The Regional Environmental Study (RES) examined the Mulgoa Valley, including the village of Mulgoa. The study area extended south to meet with the entry to Wallacia. Wallacia village was not included in the RES.

The RES for Mulgoa Valley sought to conserve the unique features of the valley environment against pressure from competing land uses and development that might threaten the valley's rural character and heritage value. The study also examined the historical growth of the valley and influences of both Aboriginal and European habitation.

One of the key purposes of the RES was to resolve the apparent conflict between conservation and development pressures within Mulgoa Valley and in particular to:

- Identify and assess items of heritage significance;
- Assess the landscape quality of the area;
- Identify and assess land use pressures;

 Recommend appropriate planning options for the development of the Valley, with particular regard to conservation issues.

The key points of the RES are summarised below:

(a) Catchments

The eastern section of Mulgoa Village sits almost wholly within one subcatchment boundary between Mulgoa Road and Mulgoa Creek. The north-western side of the village is within a subcatchment edged by Mulgoa Road while the south-western portion is within a separate catchment.

(b) Historic Landscapes and Curtilages

There are a number of heritage items within the valley. The RES identified historic curtilages for the Valley and areas where activities should be controlled around those items.

The curtilages that influence the edges of Mulgoa village are those of Fernhill and Winbourne. The Fernhill curtilage affects land to the north of St Thomas Lane. Winbourne affects land to the west of Mulgoa Road north of the Sydney Water pipeline and south of the existing village edge. In these areas the RES recommends the existing historic character be conserved.

Mulgoa village and the areas to the east of the village are not identified in the RES as being significant in either heritage or cultural terms.

(c) Visual Quality

Mulgoa village sits within a valley floor of the broader Mulgoa Valley. Around the village undulating hill land occurs to the west of Mulgoa Road and east down to the Mulgoa Creek edge.

(d) Natural Landscape

To the north of the village around St Thomas is open forest, to the west and east is predominantly scattered trees on undulating grasslands. Only along Mulgoa Creek is more significant land identified. Along this area creek and gully vegetation predominates.

(e) Development Options

The RES provided options that allowed for development to occur which minimised the impact of development on the integrity of the rural and historic character of the area. The study identified areas of scenic quality, conservation priorities and areas with development potential. In terms of the village, the RES made the following recommendations:

 Rural residential development in the valley is considered to be inconsistent with conservation objectives for the valley;

- Any form of recreation in the valley should be oriented towards the historical significance and natural qualities of the valley;
- The preferred direction for expansion of the village would be to the east where the potential visual impact would be less significant.

2.1.4 Review of Sydney Regional Environmental Plan 13 – Mulgoa Valley, 1991, McKenzie Land Planning Services

At the time of gazettal of Sydney Regional Environmental Plan (SREP) 13 several issues were deferred for further examination. The objective of the 'McKenzie' study was to provide recommendations relating to those deferred matters together with resolution of the following planning issues:

- The appropriateness of the boundaries of the Environment Protection Zone;
- The potential for rural residential development east of Mulgoa village;
- An appropriate boundary between the REP and Penrith LEP 188;
- Whether the REP adequately controls traffic generating development;
- The appropriateness of the range of land uses permissible under SREP 13 in terms of tourist and recreation activities and the compatibility of such development;
- Assess the appropriateness of the range of uses permissible in Mulgoa Village in terms of potential impact.

Having regard to issues of particular relevance to the village, the study noted that there was some potential for development east of Mulgoa Village, however, there were a number of development considerations that had to be resolved before any further subdivision could occur. The then Water Board advised that reticulated water supply would need to be provided to any new development. In addition, the likely level of nutrient and pollutant discharge to local watercourses from 'envirocycle' systems versus a reticulated sewerage system needed to be investigated.

The Board advised that if 'pollution' was greater under the 'envirocycle' system it was recommended that the development not be permissible until such time as a reticulated system could be installed and made available to development. The option of a reticulated sewerage system meant that development densities could vary to a greater degree than might otherwise be the case. However, the report recommended that the final form of development should maintain a rural/village character.

The report concluded that development of the village area was constrained because of water and sewerage service limitations and that there was a need to enhance the visual boundary of the village and adjacent rural areas in some locations by appropriate landscaping. It was also recommended that a program be adopted which would lead to the development of a village masterplan, as it was considered that the village should become the focus of future commercial, tourist and recreation development.

2.1.5 Fauna and Flora Corridors Study, 1996, Penrith City Council

The Fauna and Flora Corridors Study is an information database relating to fauna and flora in the Penrith Local Government Area. The study provides a framework for managing and assessing land use in association with natural bushland areas.

Maintaining the flora and fauna of the Mulgoa Valley and Wallacia area is important in retaining the rural landscape and providing a sustainable environment for recreation, living and agricultural purposes.

The study suggests the application of biodiversity principles to assist in managing Penrith's flora and fauna. In summary these principles require:

- Valuing areas of native vegetation for biodiversity;
- Conserving and enhancing fauna and flora;
- Maintaining large areas of native vegetation by preventing fragmentation of land;
- Linking native vegetation;
- Integrated planning and management practices;
- Minimise disturbance to natural areas from development activities.

The study recommended that:

- Council prepare a Local Environmental Plan and Development Control Plan to protect fauna and flora corridors and biodiversity.
- Council activities promote biodiversity conservation.
- Biodiversity conservation be coordinated with adjoining Councils.
- In relation to the villages of Mulgoa and Wallacia, riverine/stream corridors are suggested for the Nepean River, Jerry's Creek and Mulgoa Creek and flora/fauna corridors for natural bushland in the vicinity of St Thomas Church, Jerry's Creek and Mulgoa Creek.
- Development within flora and fauna corridors should be limited.
- Disturbance of natural bushland by development should be minimised. Bushland may influence and potentially limit the location of future development.
- Where future subdivision is permitted it should take into account land management activities such as bushfire control, weed control and land stability.

Council is currently in the process of implementing these recommendations.

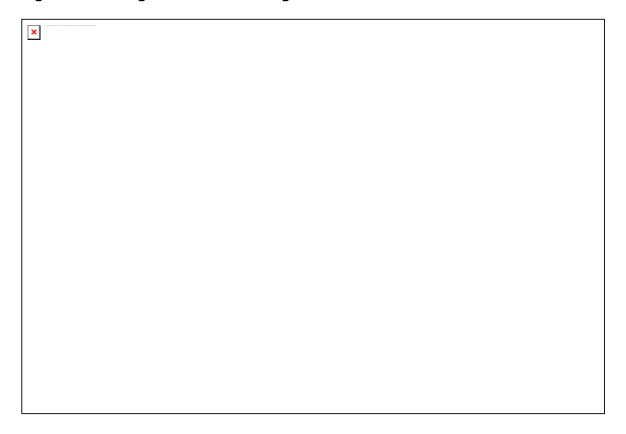
2.2 Current Planning Controls

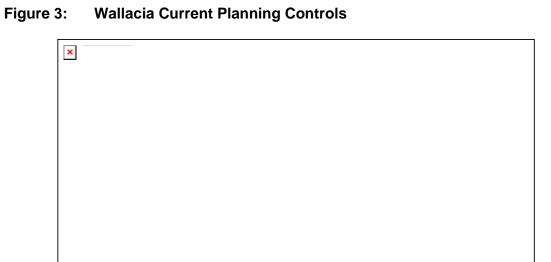
Few new planning controls have been introduced to Mulgoa or Wallacia Village since 1960. In 1987, the villages were excluded from REP 13 – Mulgoa Valley and in 1991, the valley and both villages were excluded from LEP 201 – Rural Lands.

More recently, Mulgoa and Wallacia were excluded from the Residential Strategy (1997) and resulting Residential LEP – Urban Land (1998). The Residential Strategy does however have relevance in considering demand for housing in the Penrith area and the recently gazetted Residential LEP provides some direction having regard to planning controls Council applies to residential development.

The current planning controls applying to Mulgoa and Wallacia villages and surrounds are discussed below. The current planning maps for Mulgoa and Wallacia are provided in Figures 2 & 3.

Figure 2: Mulgoa Current Planning Controls





2.2.1 Penrith Planning Scheme Ordinance, 1960, Penrith City Council

The Penrith Planning Scheme Ordinance (PPS) amended the County of Cumberland Plan. PPS was the first document of its type and provided a comprehensive plan for the Penrith LGA. It has been amended many times since its implementation and now applies to few locations. One of the key remnants of this plan is the 2(c) Village zone applying to rural villages such as Llandilo, Luddenham, Londonderry, Wallacia and Mulgoa.

The villages were provided with a zone distinctive to other residentially zoned land in the LGA. The 'village' zone provides for a broad range of non-residential land uses.

The land use table for 2(c) is shown below:

Zone No. 2(c) village

1. Permitted without development consent in Zone No. 2(c) village:

Dwelling-houses other than semi-detached or terrace buildings

2. Permitted only with development consent in Zone No. 2(c) village:

Any purpose, other than a purpose included in Item 1 or 3 of the matter related to this zone

3. Prohibited in Zone No. 2(c) village

Bulk stores; generating works; industries other than rural industries and industries specified or carried on in places specified in Schedule 1; institutions; liquid fuel depots; mines; roadside stalls; sawmills; stock and sale yards; warehouses.

Schedule 1

Aerated waters and cordial manufacture; boot and shoe repairing; bread, cake and pastry manufacture; builders' supplies establishment; builder's yard; cabinet making; car repair station; carrier's establishment; cycle and motorcycle repairing; dressmaking; dry cleaning and dyeing; electrician's workshop; farrier's workshop; fuel merchant's establishment; laundry; milk distributing depot; painter's workshop; plumber's workshop; radio mechanic's workshop; rubber vulcanising and tyre retreading works; service station; signwriter's workshop; tailoring; toymaking; undertaker's establishment; veterinary surgeon's establishment; and any home industry not specified above.

2.2.2 Revision of Penrith Planning Scheme - 2(c) Village zone and 3(c) Neighbourhood Business zone

Other planning instruments have gradually replaced the Penrith Planning Scheme Ordinance. Major planning instruments now apply to industrial and residential land in the Penrith area. The 2(c) village was excluded from Council's Residential Strategy investigations in 1997 and the recently gazetted Urban Land LEP as the villages were considered to have a different type of residential character to the urban parts of the Penrith LGA.

The provisions of PPS are now some 30 years old and do not reflect modern planning practice for land regulation and environmental management. In particular, the types of land uses and the names for land uses listed in Schedule 1 are outdated. The range of uses in Schedule 1 was prepared in the 1960's to respond to standards of that time.

Reviewing the current landuse provisions has been carried out by observing existing village landuses, consulting the community about their visions for the villages and considering contemporary planning practice.

2.2.3 Interim Development Order 93, 1980, Penrith City Council

IDO 93 previously covered most rural areas of the LGA and introduced environmental matters to be considered when assessing development in rural areas. Most of IDO 93 was repealed in 1991 by Local Environmental Plan No. 201.

The Rural 1(a)1 zone under this plan still applies to some land on the edges of Wallacia village. This zone allows agriculture without consent, a range of other rural land uses with Council consent and imposes a minimum lot size of 40 hectares.

2.2.4 Sydney Regional Environmental Plan No. 13 – Mulgoa Valley, 1987

Sydney Regional Environmental Plan No 13 (SREP 13) applies to land within Mulgoa Valley and is a regional planning instrument that replaced the local planning controls of IDO 93. SREP 13 applies to Mulgoa valley but excludes Mulgoa Village. Land to the north of Wallacia is subject to SREP 13 but the plan does not apply to Wallacia village.

The SREP introduced conservation orders for heritage buildings such as Fernhill and St Thomas Church. The plan also introduced matters relating to heritage curtilages and vistas, scenic quality, cultural heritage, flooding and hydrology.

SREP 13 aims to ensure that development of Mulgoa Valley maximises the benefits and conservation of its resources especially its rural landscape and heritage resources without adversely affecting the rural setting of Mulgoa Village.

SREP 13 aims to:

- Identify and conserve heritage items;
- Protect ecology of the valley;
- Identify and protect Mulgoa Nature Reserve;
- Conserve the rural landscape of the valley;
- Protect the setting of Mulgoa Village within the rural landscape;
- Allow compatible development;
- Protect and utilise tourism and recreation potential of the valley;
- Protect agricultural capability of prime agricultural land; and
- Enable rural residential development where consistent with the conservation of the rural and natural landscape, heritage and agricultural qualities.

Zone No. 1 - Rural Conservation

This is the main zone under SREP 13 that applies to land surrounding Mulgoa and north of Wallacia. For most areas under the zone, subdivision into lots smaller than 20 hectares is prohibited.

The objectives of this zone are:

- To conserve the rural, heritage and natural landscape of the valley;
- To provide for the development of agricultural, residential, tourist and recreational land use which are compatible with the rural and natural landscape and heritage of the valley;
- To protect the visual amenity of the valley;
- To avoid the fragmentation and alienation of prime agricultural land;
- To maintain the low density of rural settlement; and
- To allow for the development and maintenance of the Warragamba- Prospect water supply facilities.

The following uses are permitted **without development consent** in this zone:

Agriculture (not involving the erection of any buildings); water supply facilities on land owned by the Water Board.

The following uses are only permitted with development consent in this zone:

Any purpose other than a purpose prohibited or permitted without development consent.

The following uses are **prohibited** in this zone:

Advertising structures; amusement parks; bulk stores; car repair stations; commercial office space; drive-in theatres; extractive industries; general stores; heliports; industry (other than rural and home industries); intensive livestock keeping; junk yards; liquid fuel depots; mines; motor showrooms; offensive and hazardous industries; poultry farming establishments; residential flat buildings; saw mills; service stations; shops; stock and sale yards; transport terminals; warehouses; waste disposal.

SREP 13 requires a number of matters to be specifically considered when assessing applications for development. These matters are in addition to matters to be considered under the Environmental Planning and Assessment Act, 1979 and other relevant legislation. For example, the SREP requires the consent authority to:

- Maintain a low density of rural settlement, protect the visual and scenic amenity and prevent fragmentation of inherently productive agricultural and environmentally sensitive land in Mulgoa Valley
- Consider the impacts of development in relation to ridgetops, heritage items, services, the rural character of the valley, bushfire risk, clearing of vegetation, agricultural viability, archaeological material, views from Mulgoa Road, the rural setting of Mulgoa village, flooding risk and hydrology
- Consider the impacts of road widening on the present rural character and function of Mulgoa Road

2.2.5 Proposed Amendments to SREP 13 – under consideration by Council

The proposed amendments are intended to increase controls over land uses of questionable compatibility with the area. In addition, the growing community concerns about inappropriate development proposals will also be addressed.

The basis of the proposed amendments is to build on the principle that the Mulgoa Valley area should be primarily conserved for viable rural activities and rural lifestyle opportunities that do not adversely affect the amenity of the area and preserve the characteristics of the area.

The proposed amendments to SREP 13 aim to:

- Restrict certain inappropriate development;
- Provide opportunities for land uses that will protect and enhance the heritage, cultural and landscape qualities of the area; and
- Provide for attached dual occupancy within Zone No 1.

The draft plan and proposed amendments were placed on public exhibition. Affected landowners and authorities were notified of the amendments. A number of submissions were received about the proposed amendments.

Council has yet to decide on the proposed SREP 13 amendments. Following further consultation with the community a report will be made to Council to determine this matter.

2.2.6 Local Environmental Plan 201– Rural Lands, 1991, Penrith City Council

This plan (LEP 201) applies to most of the rural land in the Penrith LGA. LEP 201 is accompanied by the Penrith City Rural Development Control Plan (DCP) which provides advice and guidelines for applications for rural development.

The DCP sets out Council policy for conservation and development including dams, dog breeding, poultry farming, tree preservation and location of building on rural allotments. The general aim of LEP201 is to "...encourage the proper management, development and conservation of valuable natural and man-made resources within the rural lands of the City of Penrith."

In Mulgoa Valley, LEP 201 is overridden by the provisions of REP 13 that apply to land within Mulgoa Valley. The provisions of LEP 201 generally cover rural land outside Mulgoa Valley.

In Wallacia, land to the east is subject to LEP 201 and zoned either Rural 1(a) - General or Rural 1(c) - Rural/Residential. Open space and environment protection zones to protect the river edges and natural vegetation cover land between the village and the Nepean River. Land to the north of Wallacia village is subject to REP 13 - Mulgoa Valley.

Dual Occupancy - Dual occupancy may be the conversion of an existing dwelling, extension of an existing dwelling, or the construction of a new building containing two dwellings. Under LEP 201 only attached dual occupancy is permissible in zone 1(a). Zone 1(c) of LEP 201 permits detached dual occupancy.

Subdivision - Subdivision under Zone No. 1(a) is restrictive and is intended to prevent land fragmentation and maintain agricultural productivity referred to in the plan objectives. The minimum lot size is 40 hectares.

Subdivision under Zone No. 1(c) permits lots adjacent to Wallacia village to have minimum areas of 4000m2. Northumberland Green and Montelimar Place are zoned 1(c).

2.2.7 Revision of LEP 201 & IDO 93

Council has resolved to review its rural land policies and controls. The process involves the formulation of a Citywide Rural Lands Study to deliver strategies for rural resources, hazards, conservation and rural settlement. It will provide a Rural Lands Local Environmental Plan and Rural Lands Development Control Plan to replace LEP 201 and IDO 93 and other existing rural plans.

Preparation of the villages strategy has commenced in advance of Penrith's City-wide Rural Lands Review. The strategy findings and recommendations will be exhibited for public comment which will then be developed into specific village Local Environmental Plans. When adopted by Council the new Local Environmental Plans will be incorporated into the Rural Lands LEP. The approach taken to community consultation with Mulgoa and Wallacia has provided a firm base for examining and understanding other rural villages in the Penrith Local Government Area.

2.2.8 Local Environmental Plan 1997 Liverpool City Council

The zoning of this land within Liverpool Local Government Area (immediately adjacent to Wallacia) was reviewed. The zoning provisions under the Liverpool LGA are consistent with those occurring in Penrith LGA.

At the current time, no revisions to the Liverpool LEP affecting the Wallacia suburb are proposed however the outcome of the Sydney West/Badgery's Creek Airport proposal may however influence the future planning for this area.

Wallacia (South-west) - The majority of land on the western side of Greendale Road to the Nepean River has been classified as environmentally significant by Liverpool Council. This provides similar protection to land within the Penrith LGA adjacent to the Nepean River and along the western edge of Wallacia.

Wallacia (South-east) – Part of Northumberland Green Estate is located within the Liverpool LGA and zoned 1(c) Rural – Environmental Protection. This zone is intended to provide a physical and visual boundary to urban development whilst preserving the rural character and scenic landscape qualities of the area. Outside this area land within Liverpool LGA is zoned 1(a) Rural. This zone is intended to protect agricultural potential, ensure rural development does not generate unreasonable demand for public services and maintain the rural character and scenic landscape qualities of the locality.

3. VILLAGE SERVICES

Since sewerage is not currently available to Mulgoa and Wallacia, on-site wastewater treatment systems have been used. The most common types are:

- Septic tank with on-site disposal, usually an absorption bed;
- Septic tank with effluent pumped out to a road tanker for disposal;
- Aerated wastewater treatment units with on-site disposal.

3.1 Septic Tanks

A septic tank provides a very basic form of wastewater treatment. Septic tanks do not remove bacteria, viruses or nutrients to any significant extent. Problems can occur where effluent overflow, designed to be absorbed within a trench, rises to the surface instead of percolating into the soil. The efficiency of septic systems of this type is determined by how well the effluent percolates into the soil at the site. Currently there are 167 known septic tanks located within the Mulgoa and Wallacia area.

3.2 Pump-out Septic Systems

Pump-out septic systems have a septic tank similar to that used for absorption systems, but a pump-out contractor collects the effluent in a holding tank for storage prior to collection. The holding tank is pumped out on a regular basis and transported to an appropriate disposal site. Like the absorption system, the pump-out septic tanks need to be de-sludged every three years to maintain efficient operation of the system. The collection of effluent in a holding tank eliminates many of the contamination problems associated with absorption bed systems, however environmental health problems do exist with illegal pump-out disposal or effluent removal systems which have been installed to reduce the volume of pump-out required.

3.3 Aerated Wastewater Treatment Systems

Aerated wastewater treatment systems produce an effluent of similar quality to secondary treated effluent. The effluent produced by these systems is applied via a sprinkler system to an irrigation area. It is then evaporated, transpired by plants or percolates through the soil. Aerated wastewater treatment systems rely on vegetation to utilise effluent. The irrigated area needs to be sized carefully and the vegetation selected to ensure uptake of water and nutrients is balanced with the output of the system. Otherwise run-off will occur.

The percolation of effluent into soils is efficient in regions with an arid to semi-arid climate. Most areas within the Sydney Basin do not fall into either of these categories. Even when they are sized appropriately for local conditions and correctly installed, maintenance of these units is important. Mechanical or electrical failures in aerated systems need to be rectified promptly, otherwise untreated wastewater can leave the system. Regular de-sludging is also necessary. Like septic tanks, these systems need to be protected from bleaches and other household chemicals that are toxic to the micro-organisms employed within the system.

3.4 Sydney Water Priority Sewerage Program

(a) Pricing of Backlog Sewerage – An Issues Paper, 1997, Independent Pricing and Regulatory Tribunal

The Backlog Sewerage Program was established by the Water Board to prioritise the provision of sewerage to urban properties that were connected to a reticulated water supply, but were not connected to a reticulated sewerage service. Mulgoa and Wallacia were <u>not</u> included in the program at this stage.

The paper opens by acknowledging the importance of providing sewerage for the protection of the environment and maintaining public health. The substantial cost of providing this public benefit is the focus of the issues paper and suggests there should be "fair and reasonable sharing of the costs".

(b) Pricing of Backlog Sewerage – Sydney Water Submission to the Independent Pricing and Regulatory Tribunal, 1997, Sydney Water

The tribunal found that Mulgoa, Wallacia and Silverdale contain around 1300 lots and are within proximity to the sensitive Nepean River. The tribunal recommended environmental investigations to consider the upgrading of the existing reticulation and sewerage treatment infrastructure in the neighbouring community of Warragamba as well as to consider the requirements of the three villages for improved wastewater management.

The tribunal concluded that extensive environmental investigations and community consultation would need to be undertaken prior to identifying the preferred option for improving waste water management in each community and determining final costs and their impact on beneficiaries.

The report examined financial implications for schemes under consideration for each of the areas. Most importantly this submission sought to include Mulgoa and Wallacia, and others areas (outside the Penrith LGA), in the Priority Sewerage Program.

(c) Sydney Water – Community Newsletter March 1998

The newsletter reported that Sydney Water had been asked by the NSW Government to explore the options for sewering the villages. Sydney Water identified six broad options for a possible sewerage treatment system. The steps of the process involved:

- 1. Identifying most appropriate technical solutions
- 2. Understanding community concerns through consultation
- 3. Preparing an Environmental Impact Study (EIS), to identify the most suitable option

(d) State Government Announcement - July 1998

In July 1998, the State Government announced that residents in Silverdale, Mulgoa and Wallacia would not have to pay to have their properties connected to the sewerage system. The Government determined that the cost for sewering the backlog areas would be covered by the State Government and Sydney Water through the Sydney Water common sewerage charge.

(e) Sydney Water – Community Newsletter March 1999

This newsletter outlined that a preferred option for the sewerage scheme was recently selected following community consultation and an options evaluation study. An environmental impact statement for the proposed sewerage scheme is nearing completion. Sydney Water anticipates that the EIS will be released for public exhibition in November 1999. The EIS will explain the decision making process, key reasons for selecting the preferred option, environmental impacts, how these impacts will be managed, and the next steps towards implementation.

(f) Preferred Village Sewerage Scheme

The preferred scheme involves a sewerage collection system that will collect waste water flows from Mulgoa, Wallacia, Silverdale and Warragamba and transfer the waste water to a new Sewage Treatment Plant (STP) to be built on Sydney Water land north of Warragamba, on the corner of Silverdale Road and Nortons Basin Road. The existing STP at Warragamba will be taken out of service. The main features of the preferred option include:

- Provision of a sewerage system (mostly below ground) within the villages of Mulgoa,
 Wallacia and Silverdale:
- A new STP north of Warragamba off Nortons Basin Road;
- A transfer pipeline (mostly below ground) from Mulgoa to the Sewage Pumping Station (SPS) in Wallacia for transfer of sewage from Mulgoa and Wallacia to the new plant; and
- A transfer pipeline (mostly below ground) from Warragamba and Silverdale.

The proposed sewerage scheme is planned to service the existing village areas of Mulgoa and Wallacia as part of the State Government's Priority Sewerage Program. The scheme will be designed to serve the full development potential of the existing zoned urban village areas. The scheme is proposed to be funded by way of a State Government subsidy of 25% of capital costs, with the remaining cost being funded by the wider community by an increase in the common sewerage charge. The cost of connecting individual properties to the sewerage system will be the responsibility of the property owner. The remaining 75% of the cost of the scheme will need to be met by the wider community. This will result in an increase in the common sewerage service charge to recover the cost of the scheme. This price increase will need to be approved by IPART.

In the event that the villages strategy identifies development potential outside the existing village areas, future developers will be required to pay the full cost for the provision of services. Sydney Water will put in place a Development Services Plan (DSP) to recover these costs. A DSP is a document that explains, details and

calculates the charges to be levied on developments which utilise Sydney water services. Also the subsidy will not apply to any redevelopment within the existing zoned village areas. Full cost will be paid by the developers. Only the existing lots in the villages at the time the scheme is approved will receive a subsidy. After a determination by Sydney Water is made to proceed with the scheme, all further connections will pay a developer charge.

The proposed sewerage scheme will have implications for the Rural Villages Strategy. The proposed sewerage scheme does not create opportunities for village expansion outside the existing village areas. However, in determining appropriate village opportunities the strategy will enable Sydney Water to make appropriate decisions with regard to servicing requirements, including detailed investigation of opportunities for the preparation of a Development Services Plan, where necessary, following the approval of the preferred sewerage scheme.

The proposed sewerage scheme will take approximately five years to complete, subject to satisfactory approval of the Environmental Impact Statement and satisfactory funding arrangements being secured.

3.5 Water

Current investigations have focussed on the availability of sewer to the villages. Water limitations are also an important determinant of further development potential.

Sydney Water has provided initial advice that no capacity exists for additional development outside the village areas. Any additional development would require amplification of water systems to be carried out at the expense of the land developer and scheduled with Sydney Water.

Council is awaiting further details of water availability and limitation to be provided by Sydney Water in response to the strategy's investigations and recommendations.

4. COMMUNITY CONSULTATION

4.1 Community Workshops

Individual letters were mailed to both landowners and occupiers in the villages advising of the community workshops and subsequent outcomes. Following a review of local notice boards and telephone directories key community groups were notified of the community workshops and outcomes, namely:

- Mulgoa Progress Association
- Mulgoa Valley Landcare Group
- Wallacia Progress Association

Landowners in Greendale were also notified following a suburb boundary adjustment that renamed part of Greendale (part of the Liverpool Local Government Area) to Wallacia.

Initial community contact in Mulgoa and Wallacia commenced with a public workshop on 22 March 1998. The workshop introduced the purpose of the strategy, introduced Councillors and Council staff to the community and provided an opportunity to speak with Sydney Water representative Tim McKay about the status of the Priority Sewerage Program. Participants were asked to consider the issues raised by the study brief, ie

- Consider existing and future character of the villages;
- Identify opportunities for enhancement;
- Examine limitations of existing facilities and services;
- Provide recommendations for further action.

Approximately 60 people attended each of the workshops. Further feedback was received from the community in the form of written submissions. Issues raised at the first workshop were noted for further investigation. A flier was sent to all residents/landowners notified of the workshop summarising the whiteboard notes made at the meeting. Copies are reproduced in the Appendices.

Notification of residents and landowners for the second workshop was carried out in the same manner as for Workshop 1. The purpose of Workshop 2 held on 3 May 1998 was to:

- Provide feedback on the comments received at the first workshop;
- Examine limitations of existing facilities and services;
- Develop options for enhancement of the villages.

Sydney Water's representative provided an update of Priority Sewerage Program.

Participants were invited to become members of a reference group to represent each of the village communities and assist Council in preparing the Rural Villages Strategy. Again a flier summarising the key outcomes was produced and mailed to residents and landowners. Copies are reproduced in the Appendices.

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Arising from the community consultation process, one Mulgoa resident approached Council about starting up a community newsletter. The Mulgoa Valley Gazette is a community-driven initiative typical of the village atmosphere prevalent in Mulgoa and Wallacia. The Mulgoa Valley Gazette has provided an opportunity to continue informing the village communities about the progress of the rural villages strategy.

Both the Wallacia and Mulgoa Progress Associations used the workshops to encourage wider membership and increase awareness of the roles of each association.

4.2 Key Outcomes

The workshops and submissions received regarding both Mulgoa and Wallacia reflected common themes. Both communities told Council they wanted:

- Water and sewer connected to the villages;
- To see their villages remain small, retain their country feel and rural outlook;
- Improved appearance of villages and road entries to villages;
- Improvements and solutions to traffic volume, busy intersections and traffic noise associated with major roads;
- A community hall (Wallacia) or a hall with more flexible room layout and airconditioning;
- Improved treatment of Nepean River water quality, appearance, related facilities (eg landscaping, picnic areas);
- A cycleway to link villages to Penrith;
- Improved public transport services.

Mulgoa - Specific issues

- Tourism small to medium scale, to keep Mulgoa economically viable;
- Rural/Residential Subdivisions into parcels of 4000m² and 2 hectares.

Wallacia- Specific issues

- Intersection of Park, Mulgoa, Greendale and Silverdale Roads need to improve safety, appearance and reduce noise from trucks;
- Commercial precinct need to improve appearance of shops and vacant land between shops and Golf Club.

4.3 Village Reference Groups

Reference group members were asked to contribute opinions, provide local knowledge and help draft the strategy document. A questionnaire format was used at the first reference group meeting to stimulate discussion. The format examined specific planning tools that could be used to enhance the 'good' things and control the 'bad' things identified at the community workshops.

The outcomes from each meeting were summarised and mailed back to reference group members. A copy of the Mulgoa and Wallacia outcomes is shown in the Appendices.

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A second Reference Group Meeting was convened to seek comment from reference group members on the draft strategy. A discussion paper was provided to the reference group for review prior to preparation of the final strategy.		

5. MULGOA

5.1 Village Characteristics

The village of Mulgoa is a small township set centrally within the Mulgoa Valley. The valley is recognised as having regional significance and being an important natural feature. Planning investigations carried out on the valley have been used to understand the context of the village within its historic, rural and natural setting.

Figure 4 provides an aerial photo of Mulgoa village and immediate surrounds. Population characteristics of the village are outlined in Figure 5.

The predominant land use in the village is residential dwellings in the form of detached houses. Excluding outbuildings more than 90% of all buildings are detached dwellings. The village is characterised by low scale development.

As can be seen from Figure 5 the population of Mulgoa village has remained relatively stable since 1986. Overall a slight decline in the number of persons occurred since 1986, with a decline of 17 persons between 1986 to 1991 and a decline of 5 persons between 1991 (542 people) and 1996 (537 people). In the same period an increase in the number of persons occurred in all except two age brackets, namely the 5-14 years and 25-39 years age brackets.

5.1.1 Landuses

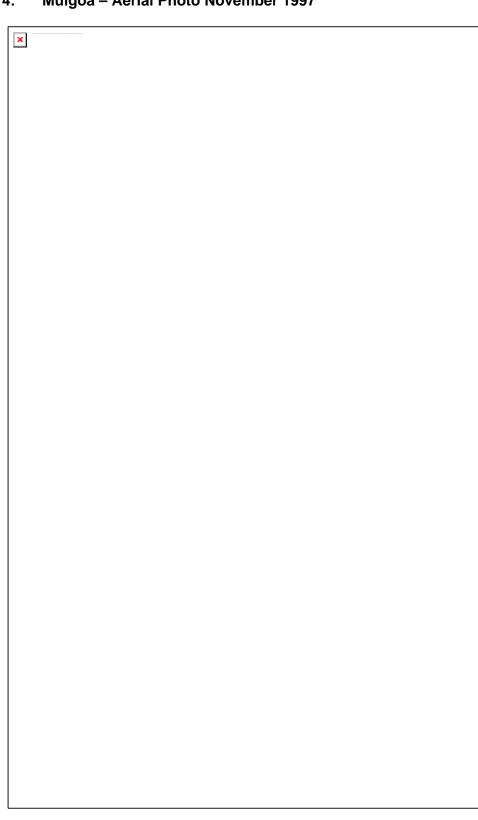
When the RES was carried out in 1984, land around the village of Mulgoa was characterised by grazing land and cleared bushland. The village itself is an urban zone with residential land uses and small centrally located shopping centre that serves local demand. Only one industry was located in the vicinity of the village. A factory producing pickles is located on Vincent Avenue.

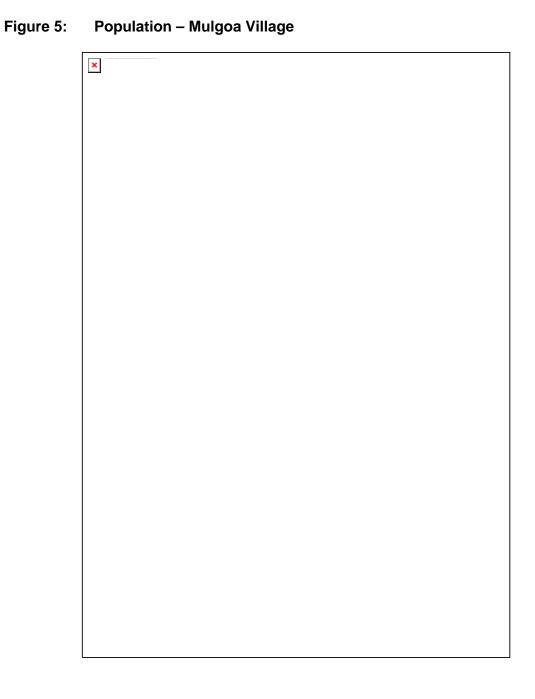
At that time, 40 hectares of urban land existed within the 5000 hectares of Mulgoa Valley. The village itself provided 540 lots of less than 2000m² in area providing more than half of the total available lots within the valley.

In 1984 a number of large land holdings were found within the Mulgoa Valley. Fernhill and Winbourne accounting for the main parcels in excess of 80 hectares. Another 13% of the Valley's total area were between 40 and 80 hectares, with 34% being between 10 and 40 hectares. Land in the latter category is found to the north and west of Mulgoa Village.

Rural lots immediately to the east of the village have a lot size of between $4451\text{m}^2 - 12.7\text{ha}$ with an average lot size closer to 4500m^2 along Winbourne Avenue and 3 ha further east as far as Mulgoa Creek.

The current land use scenario has changed very little. Limited subdivision has occurred and landuse retains its essentially rural content. Recently, development pressure for non-rural land uses have begun to emerge and the availability of sewer has initiated enquiries about rural residential development.





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5.2 Village Facilities

The function of the villages has changed from providing all residents' needs to providing for local needs and convenience items. Larger items are now purchased from larger centres and even weekly grocery items may be purchased at Penrith rather than the village centre.

Shops

The existing shopping centre on Mulgoa Road is well utilised. Mulgoa provides the basic range of shops including: pharmacy, butcher, liquor store, real estate, doctor, supermarket, greengrocer, take-away, service station and post office services. The residents advise that the centre serves the needs of Mulgoa as well as those in Wallacia and surrounds.

Restaurants/Cafes

At the northern end of the village there is a tearoom and at the southern exit to the village is Settlers Restaurant and the Peppercorn Cafe which all seek to cater for tourist trade.

School

The local school caters for mostly local demand. Continued student numbers will rely on a local population of school age children.

Mulgoa Park

This park supports both Mulgoa Hall and the tennis courts. Opposite the park is the fire station and the tea rooms. The park is located at the intersection of two key roads, Mulgoa Road and Littlefields Road, and effectively forms a gateway to the village. It provides an important community focus point for recreation and cultural activities.

Community Hall

The community hall at Mulgoa was considered outdated by residents and failed to provide modern comforts such as air-conditioning. The hall is comprised of one main room, kitchen, toilets (including separate disabled toilet) and storage room. Provision of movable walls for separating the main hall into different spaces would provide for flexibility in usage by more local community groups.

Sporting

The courts are adjacent to Mulgoa Hall and provide small building suitable for some community uses. The courts seem to be well used. Further from the village is Gow Park that provides playing fields for a variety of sports. Provision of a footpath to this Park was sought by residents and is being pursued by Council.

5.3 Development Constraints

Mulgoa is a village within a valley. It sits within the constraints of a significant location that has been given regional recognition and protection via planning processes such as the Regional Environmental Study and Regional Environmental Plan No. 13.

The Regional Environmental Study for Mulgoa Valley established broad development constraints for development around Mulgoa Village. It recognised that land to the north of the village is constrained by heritage curtilages of Fernhill and St Thomas' church. Land to the west of Mulgoa Road provides scenic landscapes composed of large rural holdings such as Winbourne. Land to the south, similarly provides valley vistas and enables views to extend across to Wallacia.

The central village is neatly arranged between Mulgoa Road and Winbourne Road outside this development is of larger lots. Land to the east of the village is less visible to surrounding locations and is not constrained by regionally significant heritage curtilages. Land in this location does have scattered vegetation cover and is undulating in some locations particularly where natural drainage channels occur. Remnant vegetation within this area has been identified as Cumberland Plain Woodland which is listed as an endangered ecological community under the Threatened Species Conservation Act, and this constraint will need to be recognised in identifying development opportunities.

Mulgoa Creek is recognised in the RES and Council's Remnant Vegetation Survey as forming an important visual edge and wildlife habitat within the context of the valley. The RES recommends that aside from these locations, where careful planning will need to occur to provide development sensitive to topography, development could reasonably occur without substantially changing the character of Mulgoa Village.

These constraints are shown on Figure 6. Other constraints to development are sewer and water provision as discussed under the section on services, and environmental, drainage, and heritage constraints, as outlined above.

REP 13 requires Mulgoa Road's character to be maintained and the village character to be protected. Mulgoa village is heavily constrained by Mulgoa Road due to the speed of traffic and conflicts at key intersections such as the Mulgoa shops to traffic related noise.

The study of Mulgoa village establishes key principles for containment of the village by predominantly rural landscapes. The village edges have been determined not by service availability alone but by features such as existing vegetation, landform and cultural heritage. Development opportunities to be explored as part of the strategy preparation process will need to respond to these principles.

6. WALLACIA

6.1 Village Characteristics

Wallacia village exists due to the historical connection with Blaxland's crossing of the Nepean River and development as a local tourist locality. The village character is dominated by the intersection of Park, Greendale, Silverdale and Mulgoa Roads.

Figure 7 provides an aerial photo of Wallacia village and immediate surrounds. Population characteristics of the village are outlined in Figure 8.

The predominant land use in the village is, like Mulgoa, residential dwellings in the form of detached houses. Excluding outbuildings again more than 90% of all buildings are detached dwellings. The village is characterised by low scale development.

Wallacia is naturally constrained to the west by the natural boundary of the Nepean River and its edges. To the south the Northumberland Green Estate forms the boundary and Montilemar Place forms a similar edge to the east. To the north the Wallacia Golf Course provides a man-made landscape of predominantly open space along the village edge.

Outside of this to the east land is separated from the village by rural residential development and vegetation along Jerry's Creek. Retention of rural land is appropriate in this location to provide containment of Wallacia village by rural edges. Lot sizes in this location are like Mulgoa, in that there are existing lots of between 2 hectares and 5 hectares and further subdivision has been limited by existing planning controls.

As can be seen from Figure 8 the population of Wallacia village was relatively stable between 1986 and 1991, with a large increase in population occurring in the period from 1991 (834 people) to 1996 (968 people). The most pronounced increase has occurred in the 40-54 years age bracket with a significant increase occurring between 1991 to 1996. This increase was negated somewhat by a reduction in the number of persons in the 25-39 years age bracket.

Northumberland Green

Following preparation of the LES, Council in 1986 considered a revised application to rezone the land at the southern end of Wallacia village. This rezoning application tested the findings of the LES and the Rural Lands Study (1982) which suggested the land at Wallacia was suitable for rural/residential development subject to provision of services. The rezoning and subdivision application were supported to create the land now known as Montelimar Place and the estate of Northumberland Green.

6.2 Village Facilities

Retirement Units

Regal Oaks provides approximately 70 units for senior citizens. Meeting rooms and other facilities are provided for the Oaks residents.

Shops

Wallacia provides a similar range of shops to Mulgoa. The shops are located at a busy intersection of four major roads and vehicle as well as pedestrian access to the shops can be difficult. A pharmacy and hardware shop were identified by residents as the key uses not provided by the existing shops. The appearance of the shops was also seen as a deterrent to tourist trade and village pride.

Hotel

Wallacia Hotel provides meals and accommodation as well as a liquor outlet. At the rear, the hotel provides a large beer garden that is an attractive feature. It is a key building in Wallacia and attracts large visitor numbers particularly on weekends. It also caters for weddings and other functions.

Sporting

The Golf Club provides the key sporting focus for the village and the course itself dominates the eastern section of the village. The club provides a restaurant and bar as well as catering for functions.

School

Like Mulgoa, Wallacia School is located on Mulgoa Road at the entry to the village. It also caters for local demand.

Blaxland's Crossing

This historic location provides an important gateway to Wallacia. The crossing supports the Nepean River edges with parkland and recreation uses. A caravan park is also located near this area.

Progress Hall

The progress hall at Wallacia was commonly identified as needing improvement. The current structure is located along Greendale Road and in some ways is isolated from the village centre. The hall has been suffering from poor maintenance and recent limited funds for the improvements were directed to the most urgent repair needs. Like the Mulgoa Hall, it has limited flexibility to cater for the needs of different community groups. Air-conditioning is also absent from this hall.

Vacant Land

There is a parcel of vacant land bounded by the golf club, shops and hotel. The land is unsealed and unimproved being currently used for carparking. This land forms a key link between the surrounding uses and significantly influences the appearance of Wallacia Village.



Figure 7: Wallacia – Aerial Photo November 1997

Figure 8:	Population – Wallacia Village
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Table 4 Wallacia Village – Dwelling Tenure – 1986, 1991, 1996

TENURE	1986	1991	1996
Households owned/purchasing	186	233	248
Rental	28	47	43
Other and Not Stated	5	20	15
TOTAL	219	300	306

Table 5 Wallacia Village – Dwelling Occupancy Ratio – 1986, 1991, 1996

DWELLING OCCUPANCY RATIO			
1986	1991	1996	
3.20	2.78	3.00	

Table 6 Wallacia Village – Average Number of Vehicles per Household 1986, 1991, 1996

	AVERAGE NO. OF VEHICLES PER HOUSEHOLD
1986	1.61
1991	1.47
1996	1.73

Place of Last Residence

65.0% of residents in 1996 (or 573 residents) had the same place of residence in 1991. 26.4% of residents had a different address 5 years ago (or 233 persons).

6.3 Development Constraints

Wallacia is constrained by the Nepean River to the west and elsewhere is surrounded by vegetation associated with Jerry's Creek and other creek systems. The golf course provides a barrier to development to the east. Wallacia constraints are shown on Figure 9.

These barriers form a strong edge to the village of Wallacia and provide an important visual backdrop to existing development. The village edges contain the existing village located on higher ground and a village form that provides little opportunity for expansion.

Outside the village edge development opportunity is constrained by the 'valley' associated with Jerry's Creek, local dams as well as significant stands of vegetation. Due to these natural constraints development is considered inappropriate on land to the east, south of Park Road.

The study of Wallacia village establishes key principles for containment of the village by predominantly rural landscapes. The village edges have been determined not by service availability alone but by features such as existing vegetation, and landform. Development opportunities to be explored as part of the strategy preparation process will need to respond to these principles.

7. CONCLUSION

In 1997 Penrith City Council adopted a Residential Strategy which promotes a compact City and defines Penrith's urban growth limits. The Strategy confirms that expected residential growth for at least the next 25 years can be accommodated within the existing and currently planned urban areas, without resorting to take-up of further non-urban land.

The Residential Strategy reinforces one of Council's strategic aims which is to define Penrith's urban growth limits and promote a compact City by identifying and promoting the intrinsic rural values and functions of the City's Rural Lands. One of those functions is rural settlement, which distinguishes itself from residential development in the urban areas, by its setting and relationship with surrounding rural activities.

The purpose of the villages of Mulgoa and Wallacia in the future will be to provide for an alternative to urban living that delivers a harmony with the rural character of Mulgoa Valley. To maintain their intrinsic character and survive the pressures for redevelopment the rural zones around these villages need to limit subdivision, promote rural uses and create a firm edge to contain the villages and separate them from surrounding areas. But they also need to survive by providing for housing an aging population, providing for limited additional housing opportunities and to provide for modern community needs.

The villages will also be important ambassadors for tourism within the city. Tourism provides opportunity to revitalise the villages but can also create potentially negative influences like traffic generation. Successful balancing of these influences is an important component to managing the future character of Mulgoa and Wallacia.

The recommendations contained within the Strategy document allow for limited development potential within and around the villages. Emphasis within the Strategy has been placed on the need to revitalise the villages by means other than planning controls. A successful improvements program will achieve viability for the villages without relying on extensive additional development.

Any expansion will be reliant on availability of services, particularly water and sewer, and in some cases may still be constrained by individual site characteristics. Council support for the development of these areas will be influenced by the outcomes of Sydney Water's investigations. Water provision will be dependent on private funding for amplification of existing systems.

Finally, this process has been an investigation of the possibilities. Implementation of any changes will involve amendments to the existing planning instruments and negotiation with the State Government. This process and the timeframe for service connection may result in a lead-time of some 3-5 years before any potential for expansion may be realised. Village improvements can commence much earlier than this subject to support and funding for social and cultural investigations.

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APPENDICES