



Planning



NEWCASTLE- LAKE MACQUARIE

WESTERN CORRIDOR PLANNING STRATEGY

The Lower Hunter Regional Strategy: 2006–2031 (Department of Planning 2006) provides the land use planning framework to guide sustainable growth in the region over the next 25 years. It recognises the lands in the Newcastle–Lake Macquarie western corridor as proposed urban, employment and environmental conservation lands. This corridor covers land from Beresfield to Killingworth, including Minmi, Cameron Park, West Wallsend and Edgeworth (See Map 1, Page 2).

The Newcastle–Lake Macquarie Western Corridor Planning Strategy identifies key planning principles and known infrastructure requirements that will guide future urban expansion and conservation in the western corridor. The planning principles take into consideration proximity to existing residential areas and employment lands, site constraints, major transport linkages and regional and local conservation corridors.

The planning principles and infrastructure requirements provide the key considerations in the preparation of environmental studies that accompany rezoning proposals. This planning strategy should also assist councils, landowners and developers in coordinating urban structure elements and infrastructure for sites.

Development projections

The anticipated development projection for the western corridor is 8000 dwellings after taking into consideration site constraints. This represents a potential dwelling yield of around eight dwellings per hectare. This planning strategy recognises a potential 1500 hectares of employment lands in the north (Black Hill) and south (West Wallsend and Killingworth) of the corridor that will provide additional employment opportunities to further strengthen the regional economy. The indicative preferred land uses identified in Map 4 are generally consistent with the Lower Hunter Regional Strategy. Rezoning proposals will be assessed to determine whether the land is suitable for development.

Environmental conservation

The Watagan to Stockton green corridor transects the study area between Black Hill and Minmi and includes Hexham Swamp wetlands and adjoining flood-prone land.

Rezoning proposals that impact on native vegetation and areas of biodiversity value will need to be assessed in accordance with the requirements of the Environmental Planning and Assessment Act 1979 and the Threatened Species Conservation Act 1995. The Department of Environment, Climate Change and Water (DECCW) has a number of tools to formally assess whether rezoning proposals achieve an “improve or maintain” outcome including biodiversity certification and biobanking under the *Threatened Species Conservation Act 1995*.

Rezoning proposals should attempt to conserve key habitat areas for threatened species, and maintain subregional and local conservation corridors. Vegetation offsets should preferably link or adjoin existing conservation areas.

Infrastructure provision

Future development will require supporting infrastructure. Consultation with government departments and agencies that provide infrastructure was undertaken to identify needs specific to the western corridor. Sections four and five of this planning strategy identify the key state and local infrastructure requirements for roads, public transport, power, water/sewer, education, emergency services, health and recreational areas.

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1

INTRODUCTION

The Lower Hunter Regional Strategy: 2006–2031 (Department of Planning 2006) identified lands to the west of Newcastle and Lake Macquarie as proposed urban, employment and environmental conservation lands. This Newcastle–Lake Macquarie Western Corridor Planning Strategy identifies further planning principles, development criteria and infrastructure requirements necessary to implement the actions identified in the Regional Strategy for the western corridor. The corridor planning strategy provides a platform for consent authorities and landowners to apply consistent urban planning/zoning controls for new and emerging communities and coordinate conservation land dedications and infrastructure provision.

1.1 Western corridor strategy area

The area and boundaries of the corridor planning strategy are identified on Map 1 and include land from the New England Highway at Beresfield to the north and Killingworth to the south. This planning strategy

applies to land in both Newcastle and Lake Macquarie local government areas, and also contains part of the Watagan to Stockton green corridor. The Maitland and Cessnock local government areas adjoin the corridor in the north-western boundary of the strategy area.

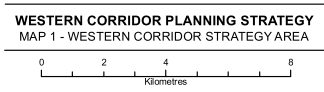
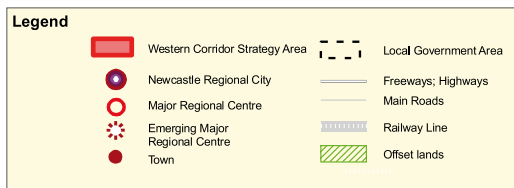
1.2 Objectives

The broad objective of this planning strategy is to identify key planning principles and provide a broad strategic land use framework to guide future urban expansion and conservation outcomes in the identified western corridor area.

The adopted planning principles and infrastructure requirements will become key considerations in the preparation of environmental studies that support rezoning proposals.

introduction

map 1- western corridor strategy area



Source Imagery - Aerial Photo Mosaics 2000; Department of Lands 2005

1.3 Previous studies and strategies

A number of planning studies and reports that relate to the western corridor have been prepared over the past ten years, which vary in their level of detail, purpose and application. A list of some of these studies is provided in the bibliography.

The Lower Hunter Regional Strategy takes into consideration these previous planning reports to identify future urban, employment areas and conservation corridors. Rezoning proposals will need to consider these previous studies and reports as they provide valuable background for the preparation of environmental studies.

1.4 Consultation

An important aspect of preparing this planning strategy has been the involvement of Newcastle and Lake Macquarie City councils in the determination of planning principles and local infrastructure requirements. In addition, representatives from Coal & Allied Industries Ltd, Xstrata and Hunter Development Corporation, being the three main landholders in the western corridor area, have enabled a strategic, coordinated and cooperative approach.



2

Planning framework

2.1 Lower Hunter Regional Strategy

The Lower Hunter Regional Strategy applies to five local government areas: Newcastle, Lake Macquarie, Port Stephens, Maitland and Cessnock. It aims to ensure that adequate land is available and appropriately located to sustainably accommodate the projected housing (115,000 new dwellings) and employment (66,000 new jobs) needs of the region's population over the next 25 years.

The Strategy recognises the part of the lands in the western corridor as proposed urban, employment and environmental conservation lands that will be subject to more detailed planning investigation and analysis.

The Lower Hunter Regional Strategy outlines key housing and employment actions. The corridor planning strategy complements that document

by providing more detail on implementation. This includes ensuring future rezoning proposals are consistent with the identified urban footprint and the design of new release areas incorporates sound neighbourhood planning principles.

Neighbourhood planning principles (page 5) have been implemented in this corridor planning strategy. Section 6.2 outlines development criteria and actions for these principles.



Neighbourhood Planning Principles

- A range of land uses to provide the right mix of houses, jobs, open space, recreational space and green space.
- Easy access to major town centres with a full range of shops, recreational facilities and services along with smaller village centres and neighbourhood shops.
- Jobs available locally and regionally, reducing the demand for transport services.
- Streets and suburbs planned so that residents can walk to shops for their daily needs.
- A wide range of housing choices to provide for different needs and different incomes. Traditional houses on individual blocks will be available along with smaller, lower maintenance homes, units and terraces for older people and young singles or couples.
- Conservation lands in and around the development sites, to help protect biodiversity and provide open space for recreation.
- Public transport networks that link frequent buses into the rail system.

Source: Lower Hunter Regional Strategy: 2006–2031 (NSW Department of Planning 2006)

2.2 Directions for local planning

The Minister for Planning has issued a set of directions to local councils regarding the preparation of new local environmental plans (LEPs) under section 117(2) of the *Environmental Planning and*

Assessment Act 1979 (EP&A Act). A number of these section 117 directions will apply to future planning proposals in the corridor. Section 117 Direction 5.1 titled 'Implementation of Regional Strategies', requires rezoning proposals to be consistent

with the Lower Hunter Regional Strategy, its vision, land use strategy, policies, outcomes and actions.

Future rezoning proposals will need to be consistent with the Lower Hunter Regional Strategy, as well as this corridor planning strategy.

2.3 Rezoning process

Most of the undeveloped land within the western corridor is currently zoned 7(c) Environmental Investigation under the Newcastle Local Environmental Plan (LEP) 2003, or 7 Conservation or 10 Investigation under the Lake Macquarie Local Environmental Plan 2004.

The process of rezoning land through amendment of a local environmental plan may be initiated by the Minister for Planning or local councils. Where the Minister has initiated the rezoning process, the Minister may appoint the Director General, or some other person or body prescribed by the regulations, including a joint regional planning panel to be the relevant planning authority (RPA). Where the



council has initiated the rezoning process, the RPA will be the council.

A council can rezone land through the plan-making provisions of Part 3 of the *EP&A Act*. To outline the process, the council's resolution to prepare a draft local LEP is first forwarded to the Department of Planning as a planning proposal. The Director General of the Department will decide whether the proposal should proceed, whether a local environmental study is required and/or stipulate any specific matters that need to be addressed in preparing the draft plan. The Department's Planning Circular PS 09-015 outlines the new rezoning (gateway) process. The guide to preparing local environmental plans (Department of Planning 2009) explains the new procedures in more detail.

The Minister for Planning may also rezone land by listing an area as a state significant site in Schedule 3 of the State Environmental Planning Policy (Major Project) 2005. In doing so, the Minister will establish a new planning regime for that site. Prior to listing a state-significant site, the Minister may initiate the investigation into a proposed rezoning and request the Director General to make arrangements for the preparation of a state significant site study

to support the proposal. A state significant site must be of state or regional planning significance because of its social, economic or environmental characteristics.

The Department of Planning's guideline for state-significant sites under the Major Projects State Environment Planning Policy (SEPP) may be viewed on the Department's website at www.planning.nsw.gov.au.

2.4 Rezoning considerations

The environmental planning studies that accompany the request for rezoning must address state environmental planning policies, regional environmental plans, the Lower Hunter Regional Strategy, this planning strategy council strategies/studies and other relevant legislation. The Minister's section 117 directions only apply to planning proposals amending local environmental plans and do not apply to potential state-significant sites.



Land use constraints

There are many constraints within the corridor, ranging from steep topography, mine subsidence, flooding, significant vegetation corridors and riparian zones, all of which require careful planning to maximise dwelling and employment land yields while also protecting important conservation values and minimising risks to life and property.

Comprehensive environmental studies that accompany rezoning proposals will further explore these land use constraints identified on Map 2 and, where

possible, propose solutions such as the remediation or avoidance of mine subsidence areas and identifying vegetation conservation areas.



3.1 Mine subsidence

Mine subsidence districts cover large areas of the western corridor and may affect the type of development permitted. Mine subsidence has not been mapped due the variability of this constraint. Consultation with the Mine Subsidence Board through the rezoning process will determine the extent of subsidence risk and appropriate scale, density and type of development.

SUSTAINABLE
AFFORDABLE
PROSPEROUS
LIVEABLE



3.2 Flooding

Map 2 identifies known flood-prone lands subject to the one per cent flood (commonly referred to as the 1 in 100 year flood) within the western corridor area. Detailed flooding and hydrological analysis will determine the extent of flood-prone land and the impact of localised flooding on identified urban investigation areas, likely to occur within riparian corridors. Planning proposals will need to be consistent with the Minister's Section 117 direction dealing with flood prone land (Direction 4.3).

3.3 Significant vegetation

The Newcastle–Lake Macquarie Western Corridor Planning Strategy area contains over 3,500 hectares of native vegetation including areas of significant biodiversity value. It also contains existing conservation reserves such as Pambalong Nature Reserve, Blue Gum Hills Regional Park, and the adjacent Hunter Wetlands National Park.

The Watagans to Stockton green corridor is identified as a high priority regional conservation area within the Lower Hunter Regional Strategy and the Lower Hunter Regional Conservation Plan (LHRCP). The LHRCP identifies areas with high conservation value, which provide habitat for a number of endangered ecological communities and threatened flora and fauna. The plan proposes a range of mechanisms to protect and manage these areas for the future, including new conservation reserves.

Rezoning proposals which impact on native vegetation and areas of biodiversity value will need to be assessed in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* and the *Threatened Species Conservation Act 1995*. The overarching goal for conservation in NSW is that biodiversity and

other environmental values of soil, water quality and salinity, must be 'improved or maintained'. This means the gains for biodiversity must be greater than or equal to any losses resulting from clearing or other forms of degradation of biodiversity values. The Department of Environment, Climate Change and Water (DECCW) has tools to formally assess whether rezoning proposals achieve an 'improve or maintain' outcome including biodiversity certification and biobanking under the *Threatened Species Conservation Act 1995*.

Rezoning proposals should attempt to conserve key habitat areas for threatened species and maintain subregional and local conservation corridors. Vegetation offsets should preferably link or adjoin existing conservation areas. Where impacts cannot be avoided, further mitigation and offset measures should be investigated. Where biodiversity offsets are proposed, early consultation with DECCW and the relevant planning authority is recommended. Further information on potential conservation mechanisms and offsetting principles is contained within the LHRCP.

The planning strategy also recognises the importance of maintaining the Green Entry Statement along Newcastle Link Road connecting to Blackbutt Reserve, the F3 Sydney to Newcastle Freeway and George Booth Drive (Map 2). The width of the Green Entry Statement will be determined by flora and fauna and visual impact assessments.

3.4 Slope

The topography of the western corridor varies with the potential residential land along the Newcastle Link Road having slopes greater than 20 per cent whereas the potential employment land around West Wallsend is relatively flat. The

development of slopes greater than 20 per cent, although not an absolute constraint, requires alternative development and construction techniques.

3.5 Bushfire hazard

Urban development within the western corridor will need to provide the required Asset Protection Zones in accordance with the Planning for Bushfire Protection guidelines: (NSW Rural Fire Service 2006). Planning proposals will need to be consistent with the Minister's section 117 direction dealing with bushfire protection.

3.6 European and Aboriginal heritage

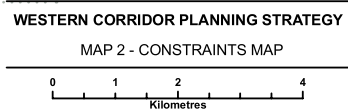
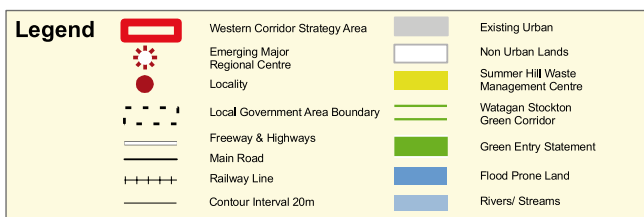
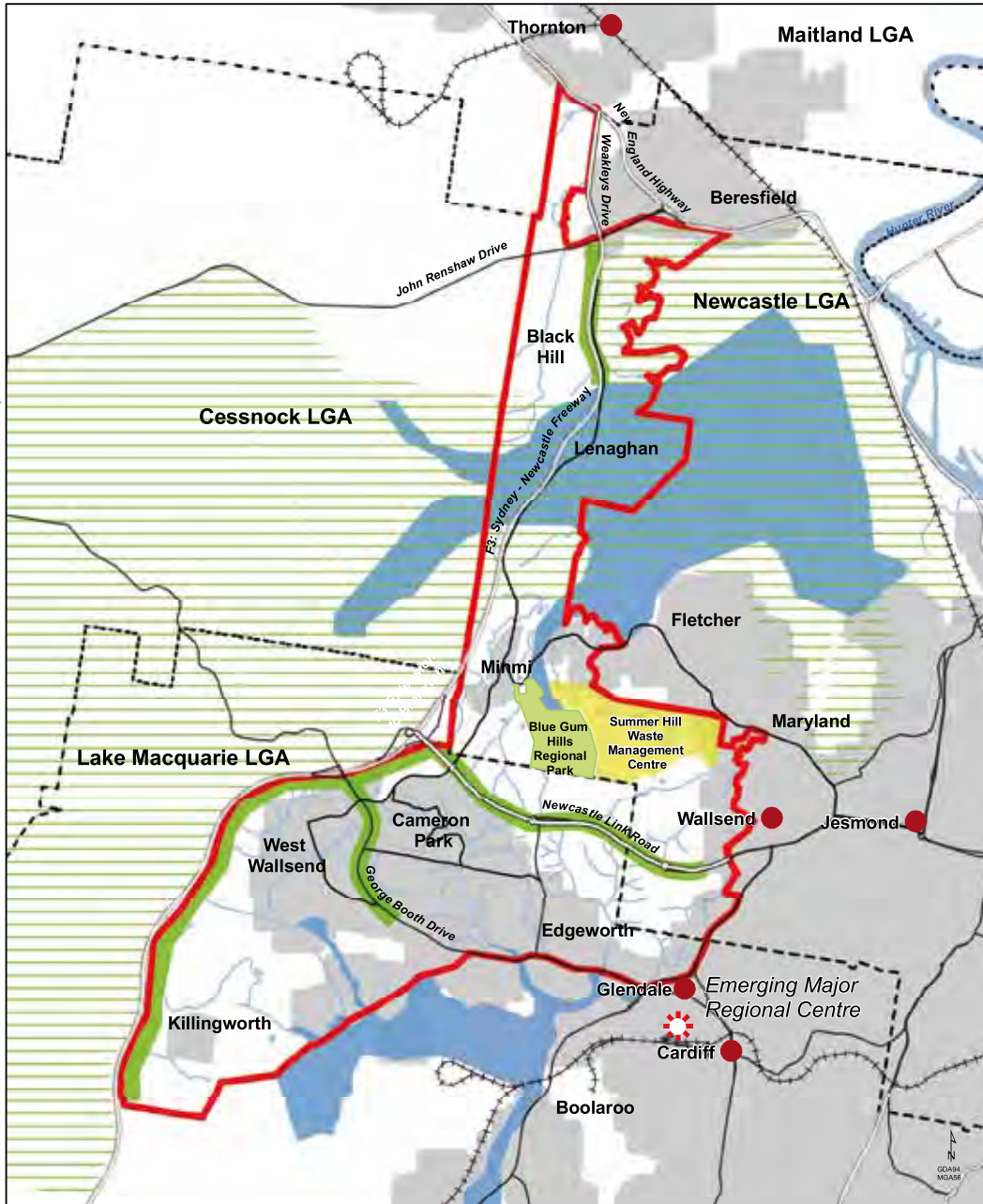
Minmi has a number of heritage items of state and local significance identified by Newcastle Local Environmental Plan 2003. Urban development will need to respect the heritage character of Minmi and be sympathetic to the listed heritage items by complying with relevant heritage design requirements. Killingworth, Barnsley and West Wallsend may have heritage significance, which needs to be further investigated as part of the rezoning process.

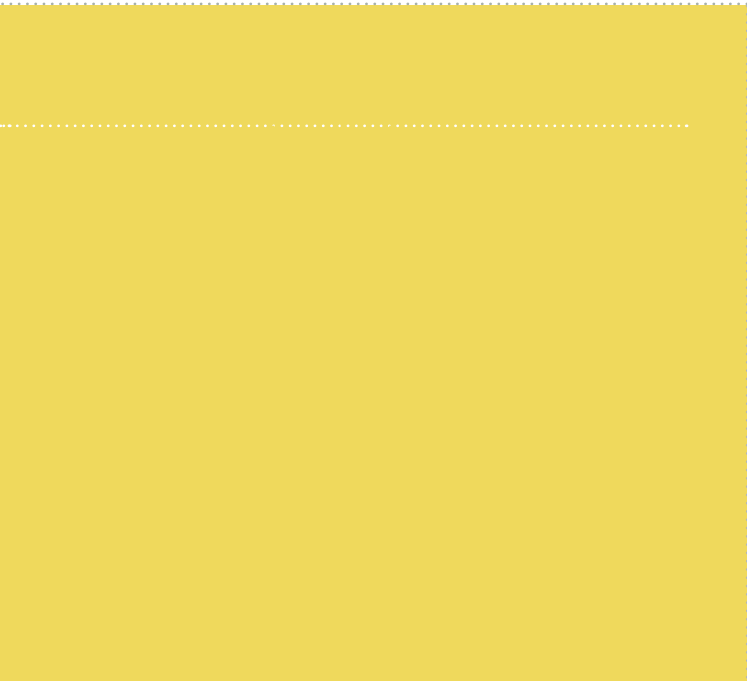
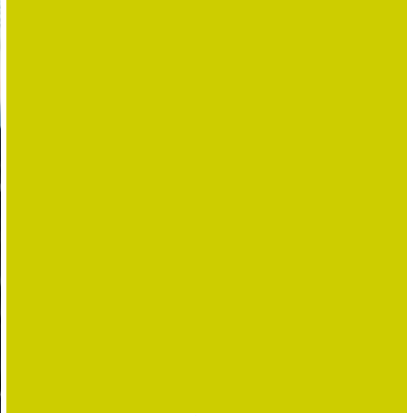
The Hunter Region has many significant relics and places that are important to Aboriginal people. Archaeological studies and consultation with DECCW and local Aboriginal land councils will identify any significant items within the western corridor during the rezoning process.

3.7 Other constraints

The Department of Planning and/or the council may also identify other constraints on a case-by-case basis that require an assessment of the potential impacts.

map 2- constraints map





Transport and infrastructure

This chapter outlines the main infrastructure requirements for the western corridor, which have been established through consultation with the relevant government and agency infrastructure providers. A summary of the likely requirements and land criteria are provided in Table 1.

The Lower Hunter Regional Strategy recognises that contributions may be sought to fund state infrastructure required as a result of development. The Department of Planning circulars explain state and local infrastructure levies in more detail.

4.1 Transport

The Lower Hunter contains an important transport network of national significance. It includes one of Australia's busiest seaports, the main northern and north coast railway lines, F3 Freeway, Pacific and New England highways and the largest regional city in New South Wales.

The Lower Hunter Regional Strategy recognises the importance of an efficient

transport network. It will support the regions logistics and export role while maintaining a sustainable urban environment.

4.2 Roads

The western corridor includes the F3 Freeway, which is part of the national highway network that links Sydney and Queensland via coastal and inland routes. The F3 Freeway and the efficiency of connections and interchanges are integral to the development of the western corridor.

The northern part of the western corridor (Black Hill) has already established itself as an important employment node, taking full advantage of its access attributes. This locality has three major access opportunities—the F3 Freeway, New England Highway and John Renshaw Drive.

The main connections to the proposed residential areas from the F3 Freeway are from the Newcastle Link Road and George Booth Drive. Existing roundabouts along the Newcastle

Link Road will provide access to the proposed new residential areas as outlined in Map 3 (Access Infrastructure map). Any new access points will require Roads and Traffic Authority (RTA) approval.

The southern part of the corridor containing potential employment lands around the Killingworth area has access to the F3 via George Booth Drive and the Newcastle Link Road, albeit through existing and future residential areas. A potential and more efficient transport interchange with the F3 Freeway near Killingworth has been identified as a likely need requiring further investigation. In addition, an opportunity exists to link this new interchange with the Cardiff Industrial area, which also needs to be further investigated. The potential location of the interchange is also shown on the map

The RTA assisted in the preparation of this map, which outlines the likely requirements and access linkages needed to establish a functional and effective



traffic network. The RTA has reinforced the need to maintain an efficient network by limiting direct access onto some major arterial roads.

The proposed improvements are consistent with the needs identified in the Lower Hunter Regional Strategy and include the works in Table 1.

In addition to these physical linkages, planning principles related to access have been established. See Table 2, Chapter 5.

4.3 Rail

A new bus and rail interchange is proposed as part of an emerging major regional centre at Glendale. The proposed bus and rail interchange should improve public transport efficiency and decrease the community's reliance on private motor vehicles. The proposal includes commuter parking.

Table 1. RTA road work

Black Hill	F3 link to Raymond Terrace over Hunter
Black Hill	New access points off John Renshaw Drive
Hunter Expressway	F3 to Branxton link
Newcastle Link Road	New F3 off-ramp
Newcastle Link Road	Utilise existing access points/roundabouts
Killingworth/West Wallsend	Investigate possible new interchange

While the national rail corridor is external to the western corridor, the Lower Hunter Regional Strategy identifies a large area to the northwest of the corridor for 'future freight hub and employment lands'. This freight hub proposal identified the possible need for a rail freight bypass through parts of the corridor.

The Freight Hub Hunter Study (NSW Premiers and Cabinet 2009) investigated the feasibility of the freight hub and identifies three rail bypass options. The preferred rail bypass options A & B are identified on Map 3 and option C was deleted in response to the NSW Premier's further advice. The Freight Hub Hunter Study can be viewed on the Department of Premier and Cabinet website. Future investigations of a possible

F3 interchange to access the employment lands around West Wallsend and Killingworth to the south, need to consider these rail bypass options.

4.4 Bus services

The corridor is serviced by three bus operators: State Transit (Wallsend to Newcastle), Sugar Valley Coaches (Edgeworth/Killingworth) and Hunter Valley Coaches (Thornton/Maitland).

Urban development within the western corridor will ultimately change the urban boundary of the city of Newcastle and Lake Macquarie. Such changes will probably require adjustments to bus services in the future. The planning principles in this corridor strategy include increasing the use of non-car transport.

4

transport and infrastructure

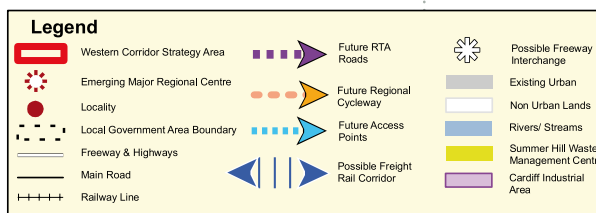
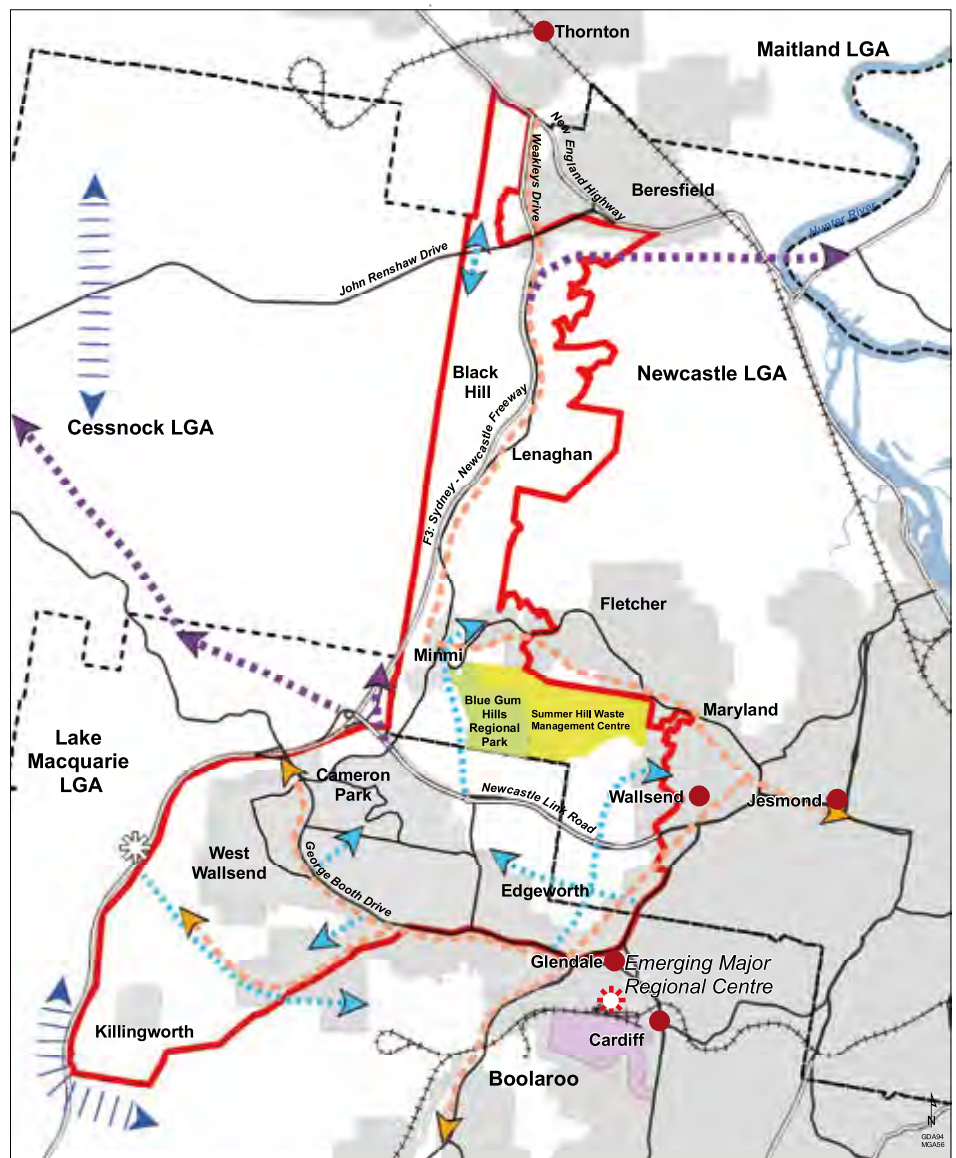
The Ministry of Transport recognises the importance of providing bus services to promote public transport as an alternative and effective transport choice.

4.5 Pedestrian and cycle links

Pedestrian and cycle paths linking local facilities such as schools and shops to new residential areas, will be required for local/short trips. In addition, linkages from new and existing employment areas to residential areas, transport nodes and other pathway networks will provide opportunities for walking and cycling to work.

The regional cycleway network will be expanded (Map 3). This regional route will connect Glendale and the western areas of Lake Macquarie with Wallsend, Minmi, Beresfield, Newcastle University and Newcastle CBD. The continued expansion of this major route is important to strengthen non-car transport opportunities.

map 3- access infrastructure



WESTERN CORRIDOR PLANNING STRATEGY
MAP 3 - ACCESS INFRASTRUCTURE MAP

0 0.4509 1.8
Kilometres



5

Other essential infrastructure

During the preparation of this corridor planning strategy, state and local government agencies were consulted about future infrastructure needs for the corridor and any location criteria. A summary of the information received is provided in Table 2.

5.1 Water and waste water

Hunter Water Corporation provides the area with water and wastewater (sewerage) services. The corporation advised that augmentation of existing infrastructure will be undertaken to service this area and such augmentation may include grey water reuse schemes. The timing and costs can be obtained from the Corporation.

5.2 Utilities

Energy Australia, the main provider of electricity to the area, has identified various improvements to the power

network to facilitate the potential future development within the western corridor. These infrastructure improvements are outlined in Table 2.

Separate consultation with gas and telecommunication service providers will be required to determine their infrastructure requirements.

5.3 Emergency services

The NSW Ambulance Service advised that it requires one standalone facility to cater for the predicted population growth.

NSW Fire Brigades advised that one fire station is required on the northern side of Newcastle Link Road to address needs in this area.

No further land requirements were identified by NSW Police.

5.4 Health

Hunter New England Area Health Service identified further expansion of existing community health facilities at Edgeworth and Wallsend and/or new facilities to cater for the additional population.

5.5 Education

The Department of Education and Training advised that the western corridor would require some major infrastructure improvements, including new schools and the expansion of other schools to cater for anticipated growth. The Department's requirements for new school sites are outlined in Table 2.

5.6 Local infrastructure

Newcastle and Lake Macquarie city councils provide local infrastructure for new development. Council can use various funding mechanisms such as s.94 development

GREATER PROPORTION OF JOBS IN MAJOR CENTRES

contributions, rates revenue, special/differential rates and government grants, to provide local infrastructure.

The State Government recently clarified the types of infrastructure determined to be key community infrastructure and those considered additional.

5.7 Infrastructure requirement details

Proponents and infrastructure providers should consider the application of the State Environmental Planning Policy (Infrastructure) 2007 for the provision of infrastructure within the western corridor. The policy aims to facilitate the effective delivery of infrastructure across New South Wales.

Table 2 outlines the infrastructure needs of each provider and details of any location criteria for the siting of infrastructure.

Table 2. Infrastructure needs and location criteria

Infrastructure type	Predicted infrastructure needs	Location criteria
Power	<p>Black Hill—a new zone substation.</p> <p>Link Road residential area north—no requirements.</p> <p>Link Road residential area south—proposed substation at Cameron Park in 2012. A substation in the eastern part of this residential area may be required.</p> <p>Killingworth employment lands—one or possibly two substations will be required.</p>	<p>Substation sites should be in a central location, at least 200 m x 200 m, and where possible sited near existing 132 KV or 33 KV overhead feeder assets.</p> <p>Easements may be acquired or alternatively there may be development restrictions to maintain electricity supply, including buffers to new development. Consultation with Transgrid is required to determine these requirements.</p>
Health (Hunter New England Area Health Service)	Expansion to existing Community Health Centres.	<p>The exact amount of land required is currently not known. This will be confirmed by the area health service.</p> <p>The locations either side of the Newcastle Link Road are confirmed.</p>
Fire	A new facility near Holmesville is already planned for and funded. There is a need for a new station on the northern side of the Newcastle Link Road.	A central site near the roundabout to Summerhill Waste Facility would be ideal to service the predicted growth. A site of 2000 m ² is required.
Roads	<p>Black Hill—RTA has existing approval for a new F3 link to Raymond Terrace over the Hunter River.</p> <p>A new access point to employment lands north and south of John Renshaw Drive, and limiting the number of direct access points off the F3.</p> <p>RTA improvements to the Newcastle Link Road include the proposed new F3 off-ramp travelling south</p> <p>New interchange opportunities in the south of the corridor to access the employment lands has been identified. This requires further investigation.</p> <p>Local access requirements to link existing and new residential areas are identified on Map 3—<i>Access infrastructure map</i>. These proposals utilise existing access points off the Newcastle Link Road.</p>	



Table 2. Infrastructure needs and location criteria- continued

Infrastructure type	Predicted infrastructure needs	Location criteria
Regional Recreation	The 'Blue Gum Hills Regional Park' provides for the regional passive recreation. Proponents adjoining the park should consult DECCW's Park and Wildlife Group about possible embellishment opportunities.	There is a deed of agreement between Council and NPWS to maintain a 50m between park facilities and the Summer Hill Waste Management Centre. No cycleway/pedestrian access will be permitted along the common boundary between the Blue Gum Hills Regional Park and Summer Hill Waste Management Centre.
Cycleways	Map 3— <i>Access infrastructure map</i> identifies the preferred regional cycleway route, linking Lake Macquarie to Wallsend; a new route linking Minmi to Wallsend, and north to Beresfield.	
Rail	Glendale – A new bus/rail interchange (including commuter parking) is proposed as part of the emerging Major Regional Centre.	Glendale
Water/sewer (Hunter Water)	Water—combination of storage reservoirs and/or trunk mains. Sewer—augmentation of existing sewage treatment plants are likely to be required.	If reservoirs are required, suitable land at reasonably high elevations.
Education	Northern side of Newcastle Link Road: <ul style="list-style-type: none"> • an additional 1.35 hectares required to expand Minmi Public Primary School. • A 3-4 ha site required for a public primary school site, with an additional 1 ha required to accommodate students with special needs. . Southern side of Newcastle Link Road: <ul style="list-style-type: none"> • A 3ha site required for a public primary school site and 6ha site for a public high school. • A site of 1-2ha may be required for a school to accommodate students with special needs. 	List of land quality and size requirements available from the Department of Education and Training. Opportunity to co-locate primary school with high school on the southern side (10 hectares).
Ambulance	One stand-alone facility required. A site of approximately 3000 m ² is required.	Preference is along the Newcastle Link road in the vicinity of the Cameron Park or Minmi road roundabouts.
Public transport	Public transport is required for new residents and employment areas.	

5

other essential infrastructures

Table 2. Infrastructure needs and location criteria- continued

Infrastructure type	Predicted infrastructure needs	Location criteria
Local facilities	Recreation areas and facilities Community land and facilities. Arterial and collector roads Road intersection works Drainage.	Additional recreation areas and community facilities required for new communities. Multi purpose centres should be co-located with recreation areas or close to main activity nodes. High order land uses (proposed community services such as schools, community buildings, emergency services and playing fields) shall be given priority over residential development for the use of the flatter land.



6

Planning principles

6.1 Introduction

The process to formulate the planning principles for the western corridor considered the following matters and analysis:

- constraints analysis
- existing settlement parameters
- future growth areas and planning principles in the Lower Hunter Regional Strategy
- stakeholder consultation.

Constraints analysis

There are many constraints within the western corridor, ranging from steep topography, mine subsidence, noise, vibration and odour point sources, significant vegetation, flooding and riparian zones. These constraints will require careful planning consideration in order to maximise

dwelling and employment land yields and minimise risks to people and assets.

Three main constraints—steep topography, mine subsidence and significant vegetation have been the drivers for the planning principles in relation to development density, prioritisation of land uses on flatter land and vegetation corridors.

Existing settlement context

The western corridor has three general development areas:

- The northern development area around Black Hill is identified by the Lower Hunter Regional Strategy as part of a future freight hub. The future freight hub covers a large investigation area, primarily located outside the western corridor. The future RTA F3 link to Hexham over the Hunter River is identified

and the Watagan to Stockton green corridor separates the northern employment lands from the future residential investigation area at Minmi.

- The central development area around Minmi, Wallsend and Edgeworth is identified by the Lower Hunter Regional Strategy as a potential residential area on both sides of the Newcastle Link Road, near the main urban centres of Wallsend to the north and Pambulong to the south. Part of the land along Main Road at Edgeworth is identified in the Lower Hunter Regional Strategy as a 'renewal corridor', which encourages higher residential densities. The main employment and retail centre in this locality is Glendale which forms part of the 'Glendale/Cardiff emerging major regional centre'.
- The southern development

URBAN RELEASE AREAS TO BE BASED ON NEIGHBOURHOOD PLANNING PRINCIPLES

area around West Wallsend and Killingworth is mapped as rural and resource lands but is recognised by Lower Hunter Regional Strategy as a possible employment lands area. This corridor planning strategy also identifies a potential residential investigation area near West Wallsend and Killingworth to provide a buffer between the existing suburbs and the possible employment areas. The West Wallsend Colliery and West Side Open Cut mines operate to the south of Killingworth.

Factors within the existing settlement pattern such as retail/local services hierarchy, residential amenity, land use conflict, integration and connectivity, heritage, local vegetation corridors and pedestrian linkages were considered in the formulation of the western corridor's planning principles.

Lower Hunter Regional Strategy

The Lower Hunter Regional Strategy provides the land use planning framework to guide urban expansion and conservation outcomes in the Lower Hunter region.

The following matters in the Lower Hunter Regional Strategy were considered in formulating the planning principles for the western corridor planning strategy:

- Lower Hunter Regional Strategy Map
- employment lands
 - commercial centres hierarchy
 - future freight hub
 - conservation outcomes
 - potential land use conflict– access
- residential development
 - new release areas
 - dwelling projections/density
 - housing mix
 - conservation outcomes
 - neighbourhood planning principles
 - state infrastructure
- renewal corridors
- transport
- Lower Hunter Regional Conservation Plan (DECCW)
- heritage.

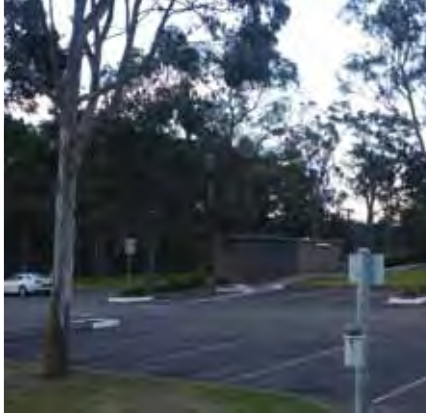
The Indicative Preferred Land Uses Map 4 is generally consistent with the Lower Hunter Regional Strategy's proposed urban expansion boundaries, except where minor amendments were made in response to the constraints analysis, consultation with infrastructure providers and councils, to improve future planning outcomes in these localities.

Stakeholder consultation

Representatives from Newcastle and Lake Macquarie councils, Coal & Allied Industries Ltd, Xstrata and Hunter Development Corporation were involved in the preparation of this planning strategy. Local knowledge, sharing of information, development proposals and concept plans assisted with the formulation of the planning principles for the western corridor. It was important to have the end users assess and provide feedback.

6.2 Planning principles

The Neighbourhood Planning Principles identified in the Lower Hunter Regional Strategy have been adopted by this strategy. Table 3 below outlines the development criteria and actions to implement the Neighbourhood Planning Principles.



NEIGHBOURHOOD PLANNING PRINCIPLE: A range of land uses to provide the right mix of houses, jobs, open space, recreational space and green space

DEVELOPMENT CRITERIA

OUTCOME: Land uses shall be located to minimise land use conflict, create efficient transport and access to jobs and activities, and provide safe living environments.

ACTION

- Future land use shall be generally in accordance with Map 4—Indicative preferred land uses. Chapter 7 provides further explanation of the preferred land uses.

OUTCOME: New development shall minimise its impact on the environment in keeping with environmentally sustainable development.

ACTIONS

- New development shall incorporate environmentally sustainable development practices in accordance with relevant legislation, councils' policies and best practice. Consultation and negotiations with the DECCW at rezoning stage should determine the vegetation offsets for conservation.
- New development shall also consider the implications of climate change in their designs and function such as rainfall intensity, localised flooding, rising sea levels, bushfire, water tables and changes to mean temperatures.

OUTCOME: Future residential development shall be located and designed taking into consideration existing infrastructure and land uses that have the potential to create odour, noise and vibration issues.

ACTIONS

- Detailed assessments will determine the required attenuation measures for future residential areas adjoining existing noise sources such as the F3 Freeway, main roads, employment industries and other noise sources.
- Future F3 Freeway and other Main Roads upgrades, future rail corridors and new employment industries will need to assess potential noise and vibration impacts. It will be necessary to maintain an acceptable level of amenity to adjoining residential areas.
- State Environmental Planning Policy (Infrastructure) 2007 provides specific noise and vibration requirements for residential developments adjoining classified roads and rail corridors.
- Detailed acoustic and odour assessments will determine the required setback/buffers to the existing Summer Hill Waste Management Facility and nearby mining operations. To expand the Summer Hill Waste Management Facility it will be necessary to assess the potential noise and odour impacts. It will be necessary to maintain an acceptable level of amenity to residential areas.
- The corridor is traversed by high voltage transmission lines and easements which may require buffers in addition to easements.
- There are several of existing open cut and underground mines adjoining the western corridor. Detailed planning investigation will determine whether the land is suitable for residential or employment land uses.

NEIGHBOURHOOD PLANNING PRINCIPLE: Jobs available locally and regionally, reducing the demand for transport services

DEVELOPMENT CRITERIA

OUTCOME: To locate and plan employment land areas that:

- minimise impacts on the environment, infrastructure and adjoining land uses
- are close to where workers live
- allow for a diverse range of land uses
- take advantage of the proximity of the F3 and other major transport and employment corridors.

ACTIONS

- The planning strategy identifies employment lands of around 500 hectares to the north near Black Hill and around 1000 hectares to the south near Killingworth. The provision of an efficient and effective transport network into the employment lands is essential. Specific actions for Black Hill and Killingworth are:

Black Hill—Access arrangements shall be consistent with Map 3—Access infrastructure map and consider the wider development implications of the potential freight hub. Coordinating shared access and transport linkages into the wider employment area will be the responsibility of council in consultation with the RTA and State Rail.

Killingworth—Access arrangements shall be consistent with Map 3—Access infrastructure map and consider the need and funding arrangements for an interchange with the F3 Freeway. Impact on existing residential and commercial areas should be limited where possible through careful route planning and utilisation of existing designated main or private roads.

Approval authorities and proponents shall have due regard to the visibility of employment lands from the F3 Freeway and include appropriate landscaping, retain green corridors/buffers to the F3 Freeway, and introduce appropriate urban design elements.

OUTCOME: New retail centres shall have sufficient capacity to meet the local retail and service demands of the new development areas. Regional scale demands for higher order goods, and services shall continue to be met from major regional centres such as Glendale.

ACTIONS

- Future provision of business/commercial zoned land to be based on demands for local retail/service needs of the projected population, level of existing services and retail hierarchy.
- The role of existing and future centres such as Glendale, Pambulong/Edgeworth, West Wallsend and Wallsend are to be considered when determining capacity – particularly for regional scale demands.



OUTCOME: The renewal corridor (Lower Hunter Regional Strategy) along Main Road Edgeworth is to be developed to accommodate additional employment opportunities and higher density residential development.

ACTIONS

- Councils shall introduce planning controls that encourage the redevelopment/renewal of this area along Main Road Edgeworth to Pambulong consistent with the provisions of the Lower Hunter Regional Strategy. The use of incentives such as floor space ratios and height increases, and financial measures is encouraged.

OUTCOME: To recognise and plan for the possible location of the rail freight bypass.

ACTIONS

- The possible future F3 interchange to access the employment lands around West Wallsend and Killingworth should have due regard to identified rail bypass options in the final Freight Hub Hunter Study. There will need to be consultation with NSW Department of Premier and Cabinet and/or the appropriate rail authority.
- Planning measures such as buffers, reservations and access standards (bridge heights etc) shall be implemented when further certainty of the feasibility of the bypass is received.

NEIGHBOURHOOD PLANNING PRINCIPLE: Public transport networks that link frequent buses into the rail system.

DEVELOPMENT CRITERIA

OUTCOME: To increase public transport usage.

ACTIONS

- The establishment of the proposed Glendale/Cardiff bus and rail interchange as part of the emerging Major Regional Centre should improve public transport efficiency.
- The establishment of a more coordinated and integrated bus service with the wider area will improve connectivity and usage on the subregional scale. A further 8000 dwellings will generate the need to expand the existing bus service to link existing and future employment areas, schools and other activity nodes.
- The future road network shall be planned and designed to cater for future bus routes and bus stops. Consultation with the Ministry of Transport will be necessary to plan these connections.

NEIGHBOURHOOD PLANNING PRINCIPLES: Easy access to major town centres with a full range of shops, recreational facilities and services along with smaller village centres and neighbourhood shops. Streets and suburbs planned so that residents can walk to shops for their daily needs

DEVELOPMENT CRITERIA

OUTCOME: To maintain an efficient transport network by managing access to major transport corridors.

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planning principles

ACTIONS

- Direct access off the major transport corridors such as the F3 Freeway, Newcastle Link Road and George Booth Drive will be limited to maintain the efficiency of the transport network. Access arrangements in the Black Hill area shall be consistent with the RTA's proposals for improvements to the network, specifically the proposed new interchange linking the F3 to Raymond Terrace via Hexham.
- A possible new F3 interchange in the south of the western corridor to access the employment lands has been identified.
- Consultation with the RTA for development within the western corridor is essential. Access proposals shall be consistent with Map 3—Access infrastructure map. New release areas should utilise existing intersections and limit new intersection points.
- The establishment of the proposed Glendale/Cardiff bus and rail interchange as part of the emerging Major Regional Centre should improve public transport efficiency.

OUTCOME: Encourage co-location of community infrastructure to strengthen town centres and community hubs.

ACTIONS

- Priority shall be given to the co-location and/or focus of State agency buildings (e.g. schools, emergency services) in central locations to assist in developing community hubs and a strong sense of place for emerging areas.
- High order land uses (proposed community services such as schools, community buildings, emergency services and playing fields) shall be given priority over residential development for the use of the flatter land.

OUTCOME: New retail centres shall have sufficient capacity to meet the local retail and service demands of the new development areas.

ACTIONS

- Future provision of business/commercial zoned land to be based on demands for local retail/service needs of the projected population, level of existing services and retail hierarchy.
- The role of existing and future centres such as Glendale, Pambulong/Edgeworth, West Wallsend and Wallsend are to be considered when determining capacity.

OUTCOME: To provide linkages to major cycle ways and paths to increase non-car transport.

ACTION

- A regional cycle path route has been identified on Map 3—Access infrastructure map and appropriate connections shall be implemented by councils.

NEIGHBOURHOOD PLANNING PRINCIPLE: A wide range of housing choices to provide for different needs and different incomes. Traditional houses on individual blocks will be available along with smaller, lower maintenance homes, units and terraces for older people and young singles or couples.

DEVELOPMENT CRITERIA**OUTCOME: To maximise the density of residential development.****ACTION**

- It is projected that it will be possible to achieve a density between five and nine dwellings per hectare for the estimated yield of around 8000 dwellings due to site constraints such as mine subsidence, slope and vegetation. These estimates take into consideration new release areas, potential infill development and the renewal corridor along Main Road Edgeworth.

OUTCOME: To ensure an appropriate range of housing choices is provided to meet demand.**ACTION**

- New zoning regimes and density controls should allow for a range of housing types. Higher densities closer to transport, employment areas and other activity nodes are encouraged.

OUTCOME: Ensure appropriate development occurs near heritage items, places of heritage significance and conservation.**ACTION**

- Urban development will need to respect the heritage character of Minmi and other localities and be sympathetic to the listed heritage items by complying with relevant heritage design requirements. Items or places/areas of local or State heritage significance will be identified by council's LEP and the State Heritage Register.

NEIGHBOURHOOD PLANNING PRINCIPLE: Conservation land in –and –around the development sites, to help protect biodiversity and provide open space for recreation.**DEVELOPMENT CRITERIA****OUTCOME: Identify significant regional, subregional and local conservation lands. Provide green entry statements along F3 Freeway, Newcastle Link Road and George Booth Drive consistent with Map 2.****ACTIONS**

- Regional conservation lands—the Lower Hunter Regional Strategy and the Lower Hunter Regional Conservation Plan identifies the Watagan to Stockton green corridor.
- Subregional/local conservation corridors—subregional corridors linking the Watagans to other significant vegetation may be required in the southern part of the western corridor. The Lower Hunter Regional Conservation Plan identifies the general location of sub-regional linkages sought to implement the Plan. The need to balance the importance of establishing urban areas identified in the Lower Hunter Regional Strategy with establishing subregional conservation corridors will need to be managed carefully. Environmental studies undertaken as part of the rezoning process will identify other subregional and local conservation areas and corridors.
- Green entry statements—the role of 'green entry' visual statements into areas or along certain transport routes is recognised. The need to provide a green entry statement along the F3 from the south (Killingworth) to Black Hill for the proposed employment zones and the importance of retaining the visual landscape corridor from the F3 toward Hexham Swamp is also recognised. The Newcastle Link Road and George Booth Drive provide important green entry statements into the city of Newcastle. The character of these statements should be retained as much as possible.

Note. The width of the vegetation corridors will be determined by environmental and visual impact studies taking into consideration biodiversity and the role/s of those corridors.

Source: Neighbourhood Planning Principles identified in the Lower Hunter regional strategy: 2006–2031 (NSW Department of Planning 2006), page 26.

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planning principles

6.3 Planning Principles Guidelines / Resource Material

There are various publications and guidelines available that can be of assistance when implementing the neighbourhood planning principles.

Building Liveable Communities in the Lower Hunter Region 2007

Building Liveable Communities in the Lower Hunter Region (Hunter New England Area Health 2007) provides planning design guidelines to create liveable communities. The document is the result of extensive consultation with developers, planners, health and social welfare agencies and the community. It highlights the importance of the relationship between the built environment, planning and health to achieve liveable communities.

Designing Places for Active Living (PCAL)

New South Wales Premier's Council for Active Living (PCAL) has developed a web-based resource: Designing Places for Active Living. Specific considerations to help create environments for active living are summarised within six key design focus areas: cities, towns and neighbourhoods; walking and cycling routes; public transport; streets; open space and retail areas.

Within each focus area there is a design objective, important design considerations, links to key references and additional resources for detailed design guidelines and specifications.

DIPNR Planning Guidelines for Walking and Cycling 2004

The NSW Government recognises the importance of walking and cycling in the creation of sustainable neighbourhoods and cities. Planning has an important role to play,

particularly as it influences urban form and accessibility. These guidelines aim to improve walking and cycling accessibility to urban services and public transport. This will help reduce car use and create healthier neighbourhoods and cities.

Local Councils

Newcastle City Council and Lake Macquarie City Council have their own policies and guidelines to assist in planning for local communities. These policies deal with issues such as: urban design, environmental conservation, infrastructure, recreational open space, community facilities, cycleways and heritage conservation.



Preferred land use

This planning strategy identifies three types of preferred land use within the western corridor to accommodate around 8000 new housing sites, 1500 hectares of employment lands and conservation lands.

Chapter 3 outlines constraints that apply to much of the western corridor area. Detailed investigations into the suitability of the land and consideration of the planning principles will determine with more certainty the location and boundaries of the indicative preferred land uses.

Rezoning proposals involving the clearing of native vegetation, will need to provide an appropriate vegetation offsets which achieves the 'improve or maintain principle' under the *Native Vegetation Conservation Act 2003*.

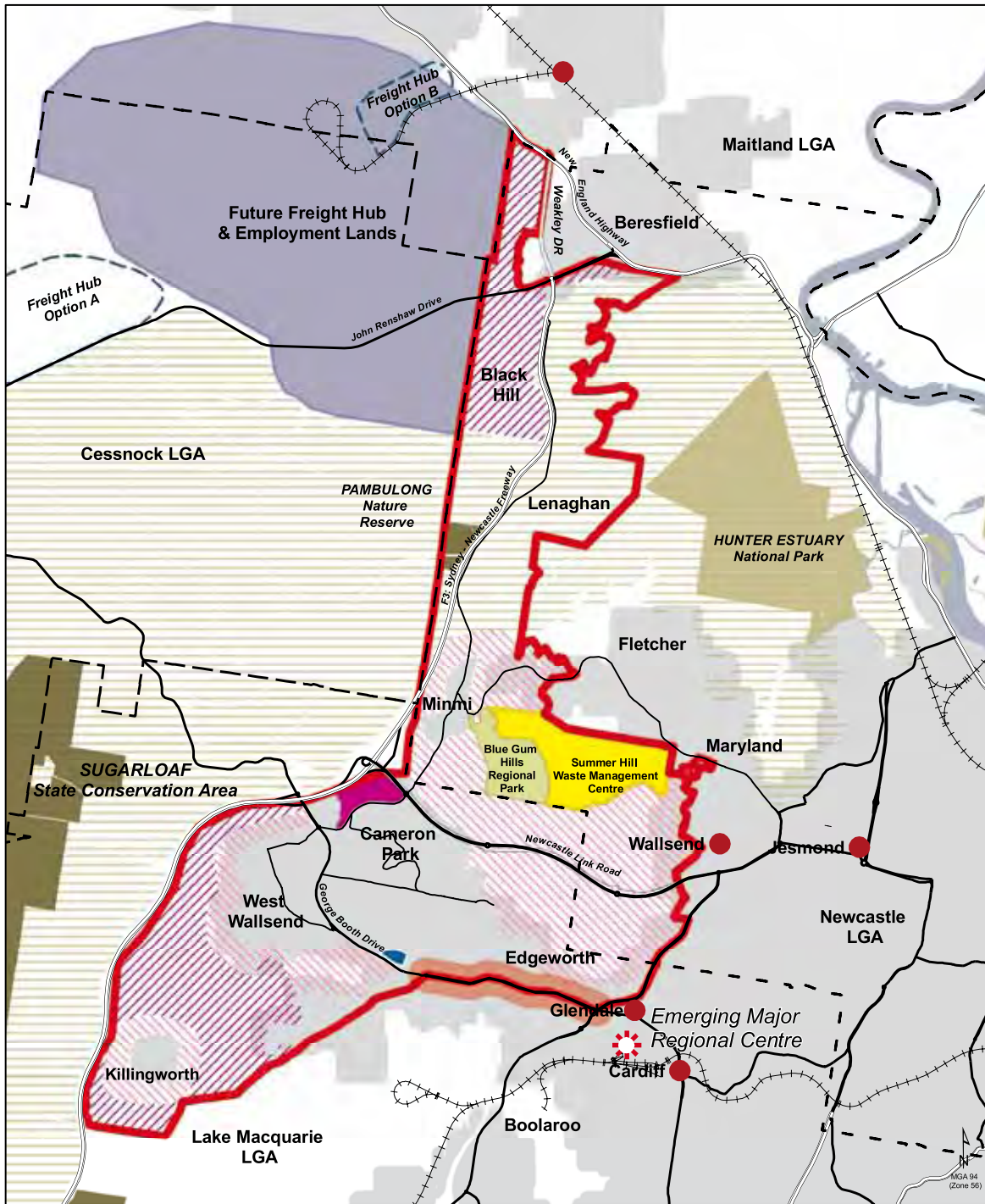
Vegetation offsets need to be negotiated with the Department of Environment, Climate Change and Water and should preferably link or adjoin existing conservation lands to provide greater biodiversity conservation outcomes.

In areas such as West Wallsend and Killingworth where both residential and employment areas are the preferred land uses, more detailed planning will be required to manage the transition between these zones and potential land use conflicts.

There are a number of existing open cut and underground mines adjoining the western corridor such as Donaldson Open Cut at Black Hill, ABEL and Tasman Underground on the western side of the F3 Freeway and West Wallsend Colliery and West Side Open Cut operating to the south of Killingworth. Detailed planning

investigation will determine whether the land is suitable for residential or employment land uses taking into consideration the existing mining operation.

map 4- western corridor planning strategy



Legend

	Western Corridor Strategy Area		Existing Urban		Employment Lands
	Emerging Major Regional Centre		Rivers/ Streams		Employment Lands Investigation
	Locality		Rural Lands		Future Freight Hub & Employment Lands
	Renewal Corridor		Summer Hill Waste Management Centre		Pambulong Commercial Retail Area
	Local Government Area Boundary		Watagan Stockton Green Corridor		Residential Investigation
	Freeway & Highways		National Park		Freight Hub Intermodal Options
	Main Road		State Conservation Area & Reserves		
	Railway Line		Regional Open Space		

WESTERN CORRIDOR PLANNING STRATEGY
MAP 4 - INDICATIVE PREFERRED LAND USES

0 1 2 4
 Kilometres



Conclusion

This planning strategy provides a broad framework to guide urban expansion and conservation in the Newcastle and Lake Macquarie western corridor. It is projected that a residential density of approximately eight dwellings per hectare (8000 dwellings), and up to 1500 hectares of employment lands will be achieved in the identified areas.

The planning strategy implements a number of the Lower Hunter Regional Strategy housing and employment actions, such as ensuring future rezoning proposals are consistent with the identified urban footprint, and the design of new release areas incorporate sound neighbourhood planning principles.

Planning principles and development criteria have been established through: consideration of the Lower Hunter Regional Strategy, broad constraints analysis, existing settlement parameters and consultation with key stakeholders.

The development criteria provides guidance for the planning and development of urban land in the corridor to enable more

sustainable and effective land uses. Due to the slope constraint on much of the identified residential investigation lands, priority has been given to the use of flatter sites for community land uses such as schools, playing fields and neighbourhood shopping.

Development criteria to implement the neighbourhood planning principles identified in the Lower Hunter Regional Strategy addresses:

- site constraints
- residential density
- access and transport
- local centres and community spaces
- conservation and vegetation corridors
- employment lands
- heritage

The dedication of the regional and subregional conservation corridors will ensure significant environmental assets will be conserved for future generations.

Future development within the corridor will have implications on

infrastructure needs. Consultation with government departments and agencies that provide infrastructure was undertaken to identify needs specific to the western corridor. The planning strategy outlines the key state infrastructure needs for roads, public transport, power, water/sewer, education, emergency services, health and local government.

Whether the land is rezoned via Part 3 or Part 3A of the EP&A Act, the Minister or delegate will determine the specific assessment requirements. The environmental planning studies that accompany the request for rezoning must address regional environmental plans, state environmental planning policies, the Lower Hunter Regional Strategy, this planning strategy, the Minister's section 117 directions, council strategies/studies and other relevant legislation. This planning strategy will also assist councils, landowners and developers in coordinating the urban structure elements and the provision of infrastructure within the western corridor.

Bibliography

Publications and plans

Department of Environment and Climate Change 2009, Lower Hunter regional conservation plan.

Department of Infrastructure, Planning and Natural Resources 2003, Draft Thornton Killingworth sub-regional conservation and development strategy, a report prepared for the Department by Parsons Brinckerhoff.

Department of Infrastructure, Planning and Natural Resources, Planning Guidelines for Walking and Cycling 2004.

Department of Planning 2009, Circular PS 09-015 Environmental Planning and Assessment Amendment Act 2008 and the Environmental Planning and Assessment Amendment (Plan Making) Regulation 2009.

Department of Planning 2007, Circular PS 07-018 Infrastructure contributions.

Department of Planning 2007, Circular PS 08-017 Review of infrastructure contributions.

Department of Planning 2007, Guideline for State significant sites under the Major Projects SEPP.

Department of Planning 2006, Circular PS 06-013 Local environmental studies.

Department of Planning 2006, Lower Hunter regional strategy: 2006-2031.

Department of Premier and

Cabinet 2008, Freight hub Hunter, report prepared for the Department of Premier and Cabinet, Hunter Economic Development Corporation, Department of Planning, Department of State and Regional Development and Newcastle Port Corporation by Strategic Design + Development Pty Ltd.

Department of Urban Affairs and Planning, Newcastle City Council & Maitland City Council 1997, Draft Blue Gum Hills-Killingworth corridor strategy.

Department of Urban Affairs and Planning, Newcastle City Council & Maitland City Council 1997, Draft Thornton-Beresfield planning strategy.

Draft Lower Hunter Integrated Transport Plan, unpublished report commissioned by the then Department of Infrastructure, Planning and Natural Resources, 2005.

Hunter New England Area Health, Building Liveable Communities in the Lower Hunter Region 2007

Kellogg Brown & Root Pty Ltd 2003, Draft Newcastle port environs concept proposal.

Lake Macquarie City Council 1999, Lifestyle 2020: strategy for our future.

Lake Macquarie Local Environmental Plan 2004

Maryland Minmi Corridor Integrated Local Area Plan 1995.

Newcastle City Council 1994,

Maryland-Minmi Structure Plan.

Newcastle Local Environmental Plan 2003

NSW Premier's Council for Active Living (PCAL), Designing Places for Active Living

NSW Rural Fire Service 2006, Planning for Bushfire Protection: a guide for councils, planners, fire authorities and developers.

Further Information

Newcastle-Lake Macquarie Western Corridor Planning Strategy:

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