

2 Strategic context

Strategic and Project Justification – the EA shall clearly outline the strategic context of the project, having regard to existing and future development of the Sydney–Canberra corridor area and its relationship to the Sydney–Canberra Corridor Regional Strategy. The EA must describe the need for and objectives of the project; alternatives considered (including an assessment of the environmental costs and benefits of the project relative to alternatives) and provide justification for the preferred project taking into consideration the objects of the *Environmental Planning and Assessment Act 1979*.

The Project needs to be considered in the context of the Googong township. The Googong township will contain about 5,500 dwellings, with development to be staged over the next 25 years. The Googong township will be home to 22 per cent of the predicted population growth in the Sydney–Canberra corridor region by 2031 and provide 55 per cent of the new houses required in the Queanbeyan area over that period.

The Project would deliver essential water and wastewater services to the Googong township. Stage 1 of the Project would deliver these services to the first subdivision areas of the Googong township.

This chapter discusses the context of the Googong township and the Project in relation to the Sydney–Canberra corridor – supported by the *Sydney–Canberra Corridor Regional Strategy 2006–31* (DoP, 2008) – and the ACT–Queanbeyan region, particularly in relation to planned urban development and water conservation.

This chapter sets out:

- The importance of the Googong township to regional urban planning goals and the ecologically sustainable development (ESD) outcomes that have shaped the rezoning strategy for the Googong township.
- The need for the Project as an enabler of development of Googong township and to meet water conservation outcomes prescribed as part of the rezoning process.
- The objectives of the Project and Stage 1 of the Project.
- Consideration of how the Project meets the objects of the EP&A Act.

2.1 Urban planning and water conservation context

The development of the Googong township supports all of the relevant urban planning strategies and policies for NSW and the ACT, which are described below.

2.1.1 Sydney–Canberra Corridor Regional Strategy

The *Sydney–Canberra Corridor Regional Strategy 2006–31* (DoP, 2008) recognises the need to provide an additional 10,000 dwellings in the Queanbeyan area over the next 25 years. The Googong township is explicitly nominated as one of the key greenfield developments to deliver these dwellings and accounts for 22 per cent of total dwellings projected.

The strategy applies to the local government areas of Wingecarribee, Goulburn Mulwaree, Upper Lachlan, Yass Valley, Palerang and Queanbeyan. It builds on previous planning work, including the Sydney–Canberra Corridor Strategy (1995), and the ACT and Sub-Region Planning Strategy (1998).

The *Sydney–Canberra Corridor Regional Strategy 2006–31* aims to:

- Provide up to 25,200 new homes for the 46,350 additional people expected to be living in the region by 2031.
- Increase the amount of housing within existing centres and the choice of housing for smaller households and an ageing population.
- Manage the environmental impact of settlement by focusing new urban development in the major regional centres of Bowral, Goulburn and Queanbeyan.
- Ensure an adequate supply of land to support economic growth and provide for the projected 27,800 new jobs that will be needed, particularly in the areas of manufacturing, transport and logistics, business services, health, aged care and tourism.
- Protect important primary industry resources, water resources, environmental diversity, scenery and heritage, which give the region its character and potential.

The Googong township will contribute to achieving each of these aims.

2.1.2 Queanbeyan Residential and Economic Strategy 2031

This residential and employment lands strategy (Queanbeyan City Council, 2006) was prepared to identify the most appropriate land releases in the Queanbeyan area over the period 2006–2031. The document is consistent with the principles in the memoranda of understanding between Commonwealth, NSW and ACT governments on water supply and settlement in areas adjacent to the ACT (refer to Section 2.1.3).

The strategy aims to ensure that development maximises the use of existing infrastructure services and conserves resources. Greenfield development should reduce demand for potable water and have a high degree of containment with regards to services and employment. The Googong township and this Project are strongly aligned with these aims.

The strategy identifies that an additional 10,000 dwellings and 100 hectares of employment lands need to be accommodated in Queanbeyan. Innovative land management and environmental design solutions must support all development. Thus, the strategy makes recommendations for a balance between new affordable residential development and affordable supporting infrastructure for roads, community facilities and water supply.

The strategy identifies the Googong township as necessary, as it provides 5,500 dwellings, which equates to 55 per cent of total dwellings projected for the Queanbeyan area.

2.1.3 Memoranda of Understanding on water supply and settlement between the Commonwealth, NSW and ACT governments

Future development must observe the provisions of:

- The Memorandum of Understanding on ACT and NSW Cross Border Water Resources (between the Commonwealth, NSW and ACT governments, 2006).
- The Memorandum of Understanding on ACT and NSW Cross Border Region Settlement (between the NSW and ACT governments, 2006).

At the local level, cross border administrative issues are posed by the ACT Government's control of access to the supply of potable water within the ACT and Greater Queanbeyan City local government area. Development of the Googong township needs to adequately address cross-border administrative issues with the ACT Government. These issues primarily relate to the supply of potable water and the provision of any planned road access off Googong Dam Road.

The Memorandum of Understanding on ACT and NSW Cross Border Water Resources

This MoU contains principles stating that parties must share water within resource limits, to enable suitable urban development in the cross-border region. It outlines an agreement between the NSW, ACT and Commonwealth Governments that, congruous with section 12(2) of the *Canberra Water Supply (Googong Dam) Act 1974*, allows for the supply of ACT water to NSW in order to service population growth in this region (Willana Associates, 2007). The supply of water will be directed to development areas that are consistent with a secondary settlement MoU signed by both ACT and NSW governments (refer to below).

The Memorandum of Understanding on ACT and NSW Cross Border Region Settlement

This MoU comprises an agreement that indicates equal weighting of the two governments' interests and the concentration of development in areas that fulfil the long-term benefits for the region. Under this MoU, both governments aim to advance economic and employment growth that considers key regional infrastructure, avoids land use issues and complements the efficient urban system.

In conjunction with the MoU on water resources, this MoU aims to develop the sustainable management of water resources. Provided both parties agree to the principles discussed in the MoUs, water is to be supplied to any settlement (Willana Associates, 2007). The proposed Googong township is aligned with these principles:

- Development should maximise use of existing infrastructure and services and be complementary to and integrated with existing cross border uses.
- Current land use, road connections and service ties must support future development.
- Residential growth should be primarily concentrated in existing urban areas. Greenfield development must show a high degree of urban consolidation or should be consistent with existing urban settlements.
- Rural industry and agricultural landscapes should be preserved by reducing any activities and development (eg rural residential subdivision) that do not support the agricultural use of land.
- Economic development should be supported by the provision of employment lands. Land use should not negate the functions of key infrastructure assets.

2.1.4 Regional water security planning

In Queanbeyan, water services are provided by Queanbeyan City Council, which purchases potable water in bulk from the ACTEW Corporation. This arrangement is secured via a service level agreement between these two parties and agreements between the NSW and ACT governments. 'In principle' discussions with ACTEW have confirmed that similar arrangements would be put in place to supply potable water to Googong township residents. The supply of potable water to the existing and new development in this region, including the Googong township, is recognised in ACTEW's water supply planning (ACTEW, 2007; and ACTEW, 2009).

The ACT Government has outlined its strategy to permanently reduce potable water consumption by 12 per cent per capita by 2013, and 25 per cent per capita by 2023 (ACT Government, 2004). A variety

of means are considered for demand reduction including effluent re-use and water-sensitive urban design. ACTEW also recognises the need to consider water recycling to achieve the ACT Government's target (ACTEW, 2009).

The Project has been designed to achieve a reduction in potable water demand of 60 per cent compared to traditional residential developments (as measured by BASIX benchmarks). This being the case, the Project would not only achieve the 25 per cent minimum target set by the ACT Government, but would also contribute towards achieving water savings for the balance of the population serviced by ACTEW.

2.1.5 Water conservation measures mandated for the Googong township

As discussed above, the Queanbeyan Residential and Economic Strategy and the two MoUs on cross-border settlement and water resources all require greenfield development in the region to demonstrate best practice water conservation outcomes in design and service infrastructure. These requirements are in addition to the mandatory water conservation measures required under NSW Building Sustainability Index (BASIX).

2.2 Rezoning process for the Googong township

The initial Googong Urban Investigation Area was approximately 1300 hectares in size. Environmental investigations were conducted in 2004 as part of the Googong Urban Investigation Area Local Environment Study (LES). The LES was intended to assess the appropriateness and sustainability of the area for residential development and associated uses prior to rezoning.

The Johnstone Centre at Charles Sturt University, conducted the report at the request of Willana Associates for Queanbeyan City Council. Part of the investigation conducted for the LES was to further refine the boundary of future urban investigation by identifying localised constraints relating to the natural environment that should be excluded from development.

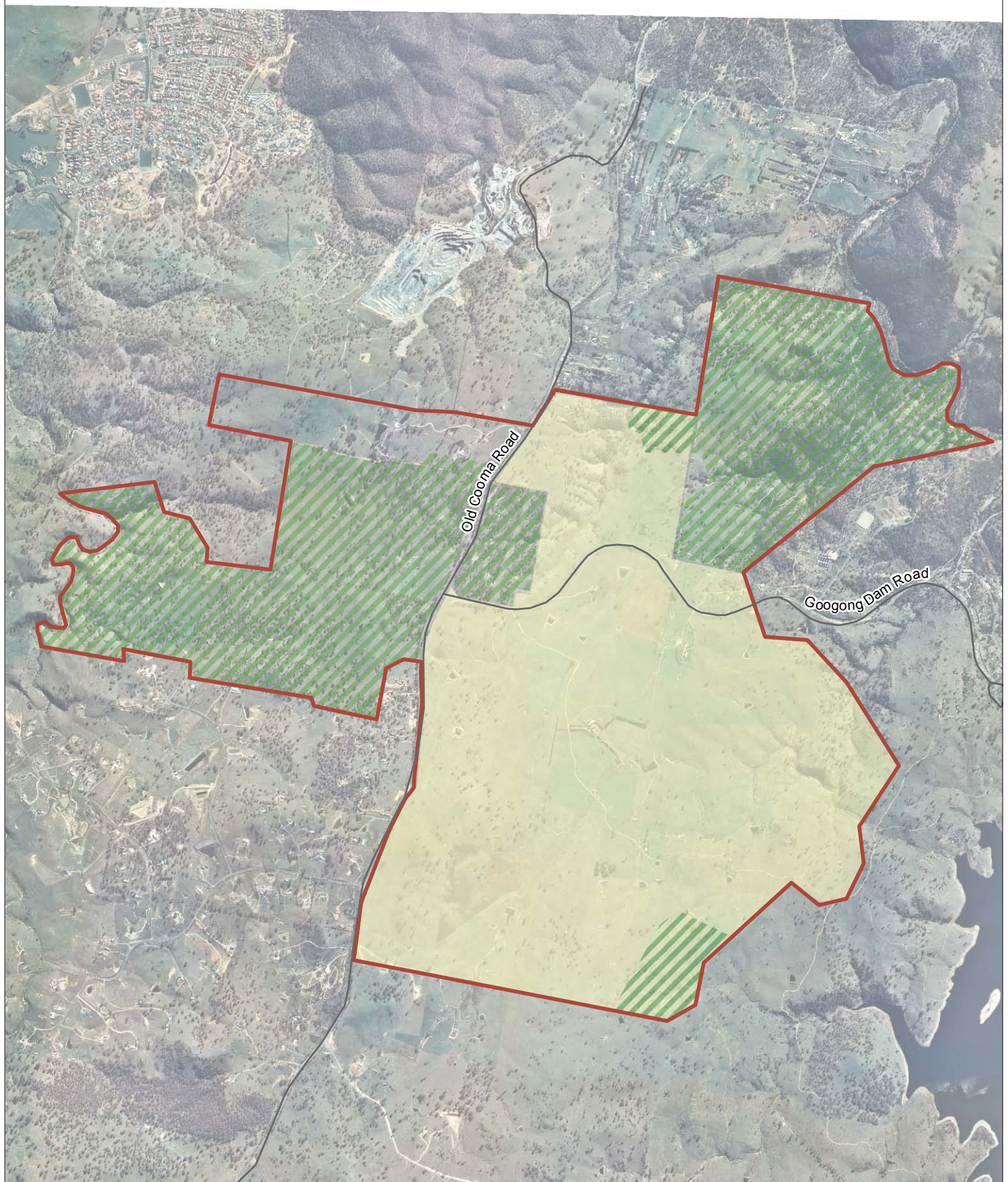
The recommended exclusion areas are represented in Figure 2.1 and are located to the west and north east of the final area rezoned for the development of the Googong township. These areas were found to contain environmental features, such as endangered ecological communities (EECs) and threatened species. It was also recommended in the LES report that a small area in the south east of the study area be excluded from development, as it is within the Googong Dam catchment.

The report concluded that residences should not be allowed to occur on the crest of the Googong Dam catchment and no closer than 20m from the catchment boundary to reduce the potential for contamination of Googong Reservoir. The results of these investigations lead to a smaller, refined study area for urban development, which was rezoned in December 2009 to facilitate development of the Googong township, containing the land with low environmental values. The size of the revised area is approximately 780 hectares.

The water and wastewater services to be delivered by the Project would service this reduced area.

To ensure that the Googong township complied with these requirements, the NSW Department of Planning set a precondition on rezoning. The precondition required CIC (as proponent for the rezoning and development of the Googong township) to demonstrate that water conservation design and plans had been developed to ensure that as a minimum, the NSW BASIX requirements would be met and preferably, that targeted potable water savings of 70 per cent would be achieved.

This requirement was fundamental in identifying the available alternatives for water and wastewater services and determining the final Project described in this EA.



Googong Environmental Assessment

Proponent CIC Australia

Date 20 August 2010

Drawing no. 08003g_ea_fig02-1

Source LES (Willana Assoc.)

- 2004 LES assessment boundary
- Area to be excluded from urban development (LES 2004)
- Current project study area

1:32,000

0 250 500 750 1000m



Figure 2.1 Urban investigation area (2004 LES)

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2.3 Queanbeyan Local Environmental Plan (Googong) 2009

The *Queanbeyan Local Environmental Plan (Googong) 2009* (LEP) is the principal local environmental planning instrument governing zoning and development control within the study area. In December 2009, the NSW Government rezoned the land within the study area in accordance with this LEP. The relevant local government authority responsible for this LEP is the Queanbeyan City Council.

The zones in this LEP are R1 General Residential, R5 Large Lot Residential, B2 Local Centre, RE1 Public Recreation and E2 Environmental Conservation (refer to Figure 2.2). All zones cater for utility installations and/or public utility undertakings as being activities that are permitted with consent. Zone SP2 specifically provides for sewage treatment infrastructure with proposed objectives as follows:

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

The proposed water recycling plant complies with the objectives of the SP2 zone.

2.4 Project need

Sections 2.1 and 2.2 have demonstrated the strategic importance of development of Googong township and the ESD drivers that have shaped the rezoning outcome for the site. The need for the Project, as an enabler of essential service provision for the Googong township, can therefore be justified on several grounds.

2.4.1 A need to provide essential water and wastewater services

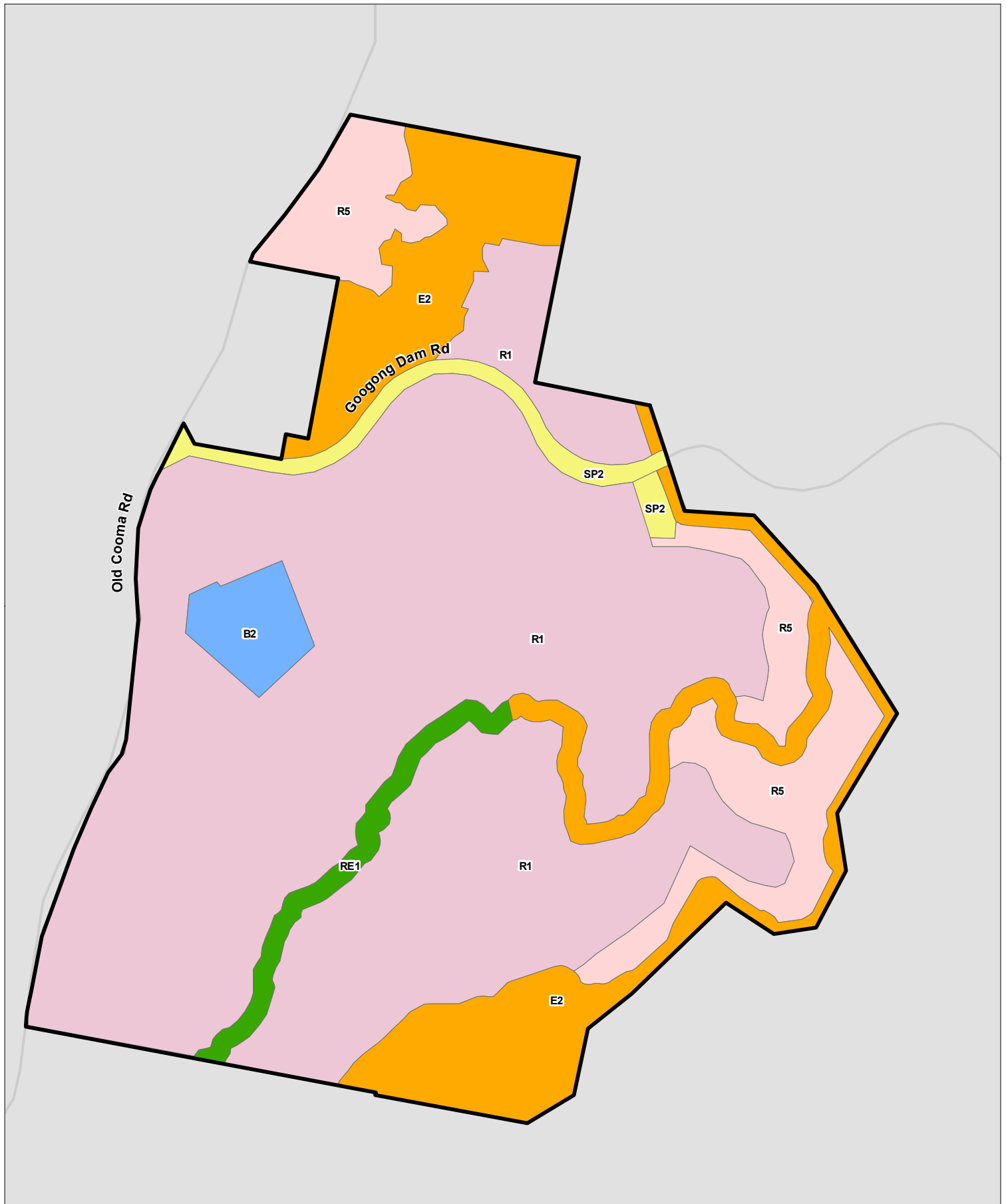
The scale and urban framework of the Googong township, permissible under the Googong Local Environmental Plan 2009, requires a modern water and wastewater servicing strategy for incoming residents. These services are essential to urban development and the Googong township achieves relevant environmental and human health standards.

2.4.2 A need to deliver necessary water conservation outcomes

As discussed in Section 2.2, the Googong township is required to meet best practice water conservation outcomes as part of the rezoning outcome for the site and consistent with regional planning strategies and agreements between the Commonwealth, NSW and ACT governments.

The design of the Project as a self contained integrated water cycle management system, including production and re-use of recycled water from wastewater, is necessary to meet the stated objectives of these conditions and agreements.

Chapter 4 discusses the alternatives available to target the necessary water conservation outcomes and the selection of the Project as the preferred option.



Googong Environmental Assessment

Proponent CIC Australia

Date 20 August 2010

Drawing no. 08003g_ea_fig02-2

Source Queanbeyan City Council

- R1, General Residential
- R5, Large Lot Residential
- B2, Local Centre
- SP2, Infrastructure
- RE1, Public Recreation
- E2, Environmental Conservation
- Googong township

1:20,000

0 150 300 450 600m



Figure 2.2 Queanbeyan City Council Local Environment Plan (2009)

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2.5 Project objectives

2.5.1 Delivery of essential water and wastewater services to the Googong township community

The key objective of the Project is to deliver essential water and wastewater headworks to the Googong township. Each subsequent land subdivision would be able to connect to these headworks. In delivering essential human services, the Project's objectives are to:

- Ensure that the supply of water, recycled water and wastewater services meets the demand profile of the Googong township community.
- Ensure that all potential human health impacts from provision of water and wastewater services are mitigated.

2.5.2 Water conservation

An objective of the project is to achieve best practice water conservation outcomes relative to other regional urban developments.

The DoP stipulated in its review of the *Queanbeyan Residential and Economic Strategy 2031* that the Googong township development is required to meet certain goals in regard to provision of water services at Googong (DoP, 2007). One key goal is that the approved residential development must meet the minimum water targets in BASIX and demonstrate methods to achieve higher water savings targeting 70 per cent. This requirement has been met by CIC and authorised by Queanbeyan City Council (September 2008).

2.5.3 Ecologically sustainable development

Ecologically sustainable development (ESD) is a core objective of the Project. ESD opportunities and constraints have shaped the location and scale of the Googong township and therefore the scope of the Project. Key ESD objectives are to:

- Minimise impacts on the environment from wastewater discharge.
- Minimise impacts on the environment from construction activities.
- Minimise impacts on the environment from location and operation of plant and machinery.

2.5.4 Specific objectives of the Project

The key objectives of the Project (the concept plan) are to:

- Provide an integrated water cycle system for the Googong township that reduces potable water consumption by at least 60 per cent, when compared with traditional developments.
- Treat all wastewater from the Googong township and produce high quality recycled water suitable for irrigation, household use and discharge to the environment.
- Ensure that construction and operation environmental and human health risks are adequately managed during construction and operation of the Project.
- Protect the Googong Dam and Foreshores area.
- Gain endorsement from relevant stakeholders.
- Construct and operate an economically feasible water cycle system.

2.5.5 Specific objectives of Stage 1 of the Project

The key objectives of Stage 1 of the Project are to:

- Provide an integrated water cycle system for Neighbourhood 1A (NH1A) of the Googong township that reduces potable water consumption by at least 60 per cent.
- Treat all wastewater from NH1A and produce high quality recycled water suitable for irrigation, household use and discharge to the environment.
- Provide specific avoidance, management and mitigation measures to reduce the potential environmental and human health impacts associated with Stage 1 of the Project.
- Implement monitoring to inform an adaptive management process to ensure that construction and operation environmental and human health risks are best managed as future stages of the Project are developed.
- Protect the Googong Dam and Foreshores area.
- Gain endorsement from relevant stakeholders.
- Construct and operate the first stage of the water cycle infrastructure in an economically feasible way.