Preliminary environmental assessment

Googong water cycle
October 2008

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Quality control

Our reference	08003
Version number	3.0
Date	14 November 2008

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Executive summary

Canberra Investment Corporation Limited (CIC) is proposing a new residential community at Googong, south of Queanbeyan in NSW and west of the Googong Reservoir for 15,000 to 18,000 residents.

The new development supports the strategic aims of the wider region in that it supports:

- Queanbeyan Residential and Economic Strategy 2031 (DoP, 2007).
- Sydney to Canberra corridor regional strategy 2007–31 (DoP, 2008).
- ACT–NSW cross border settlement strategy.

It is proposed that the Googong new town is developed in specific stages in respect to both the subdivision of the land and the associated infrastructure. This report only examines the water cycle management strategy for the Googong development. The development (including subdivision) of the land at Googong is the subject of a separate planning and approvals pathway.

The project, referred to as the Googong water cycle project, is anticipated to service greater than 10,000 equivalent population (EP) and cost more than $30,000,000. The project is therefore considered a major project in accordance with clause 6 and schedule 1 of the *State Environmental Planning Policy (Major Projects) 2005* and section 75(B)(1)(a) of the Act. Part 3A of the EP&A Act therefore applies.

This preliminary environmental assessment supports a major project application made by CIC in accordance with section 75M of the EP&A Act. The water cycle infrastructure for the whole Googong development forms the subject of an application for approval of a concept plan for the project. In addition, the first stage of the Googong water cycle project – neighbourhood 1A (NH1A) water cycle infrastructure – is the subject of an application for approval to carry out a part of the project.

The preliminary environmental assessment of the project has been undertaken based on the results of early studies. This assessment has allowed for the identification of the environmental risk posed by the project, a range of broad environmental management measures for the project, and proposed further studies to ensure that key environmental issues are addressed.

For the concept plan, it is proposed that the ensuing environmental studies will focus on overall water cycle management, resulting in the development of a water cycle management plan that addresses potential construction and operational environmental impacts of the proposal on water quality, hydrology, aquatic ecology and human health. This plan will guide the activities related to the design and development of water cycle infrastructure for the first stage of the project.

The results of the environmental risk analysis for the development of the water cycle infrastructure for NH1A, indicate the need for the following further environmental investigations:

- Water quality and hydrology.
- Aquatic ecology.
- Human health.

These investigations are expected to form the basis of measures to mitigate and manage any environmental impacts of the project, which would be included in the statement of commitments for the project.

A number of general environmental issues have been identified. Some of these issues will also be the subject of more detailed investigations with most proposed to be managed using industry best practice management techniques. Section 6 (Table 6) outlines the proposed scope of environmental assessment for general issues relating to both the concept and project plans. The proposed scope for the project environmental assessment, addressing the key issues, is outlined in Table 7.

1 Introduction

1.1 Project background

CIC is proposing to develop a new essentially self-contained residential community at Googong, which will be located south of Queanbeyan in NSW and west of the Googong Reservoir. The proposed new town will have approximately 5,500 dwellings and be home to an estimated 16,000 people, and will be established in stages over a 20–25 year period. Further details about the development can be found at www.googong.net. The broad geographical context of the development is shown in Figure 1.

The Googong development is well positioned to fulfil a significant role in accommodating some of the expected 65,000 additional people that will live in the Canberra/Queanbeyan region by 2021 in a way that is more sustainable than existing alternatives.

The proposed new town will utilise contemporary environmental and social sustainability processes, incorporating a host of major initiatives ranging from walkable neighbourhoods and energy efficiency to water reuse and savings that will target reductions in potable water use of 60–70 per cent compared to traditional developments.

It has been recognised throughout Australia that substantial improvements in the management of the water cycle will be required for urban development to proceed on a more sustainable footing. Water is a particularly important element in the planning of this project because of the relatively low regional rainfall, increasingly constrained water resources, and the identified need to move toward more sustainable communities. The Googong project vision aims to achieve high levels of water sensitive urban planning and design. The development of an integrated water cycle management strategy for Googong is intended to ensure more sustainable urban use of the region's water resources. This will be achieved through reducing potable water demand, maximising water reuse and minimising environmental impacts of the new development.

The water cycle management strategy will focus on smarter ways of managing water resources, looking at water in an integrated sense and not just as separate issues of water supply, wastewater disposal and stormwater release. The Googong integrated water cycle management strategy has been developed to this end. This strategy incorporates stormwater (roof water and overland stormwater) capture and reuse, wastewater reuse, potable water supply and water sensitive urban design.

Several broad-scale environmental assessments have already been undertaken in relation to this development proposal. These address general site issues such as the bio-physical environment, including fauna and flora, and specific issues, such as cultural heritage, soils, geology, drainage, groundwater, slope and erosion. The overall planning for the development is currently well advanced with rezoning via a new Googong local environmental plan expected in 2009. The project is currently at the stage where approval for activities will be sought from Queanbeyan Council under section 68 of the *Local Government Act 1993*.

CIC intend to develop the new town in specific stages with respect to subdivision of the land and provision of associated infrastructure. The preferred planning approval pathway for the first stage of the development comprises development application for:

- Assessment of the first stage of subdivision under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) through Queanbeyan City Council.

The development of water cycle management infrastructure is proposed to be subject to two levels of planning approval at this time:

- Water cycle management (water, wastewater and stormwater headworks) for the entire development, application for assessment of a concept plan for the project under Part 3A of the EP&A Act.
- Water cycle management required for stage 1 of the development (NH1A), application for assessment of part of the project, under Part 3A of the EP&A Act.

This report deals with the Part 3A assessments required for major water cycle headworks.

The study area for the project (referred to as the Googong water cycle project) with respect to the concept plan application is shown in Figure 2. This figure also illustrates the boundary of NH1A, for which it is proposed that water cycle infrastructure be developed as a first stage.

Figure 1 Broad geographical context of the Googong development

Figure 2: Study area for concept plan application (Googong water cycle project, containing Neighbourhood 1A)