

4. PLANNING FRAMEWORK AND CONTEXT

The following section provides an overview of key environmental legislation, statutory and strategic plans and policies relevant to the South Jerrabomberra Release Area and proposed infrastructure works.

4.1 NSW Legislation

4.1.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (the 'EP&A Act') and the associated *Environmental Planning Assessment Regulation 2000* provide the framework for the assessment and approval of development proposals in New South Wales. There are 3 approval streams under the EP&A Act – these are regulated by Part 3A, 4 and 5.

Part 3A of the EP&A Act relates to the assessment of major development proposals. Section 75B of the EP&A Act specifies the types of projects to which Part 3A applies. It states:

The carrying out of development that is declared under this section to be a project to which this part applies:

- (a) by a State Environmental Planning Policy, or*
- (b) by order of the Minister published in the Gazette (including by an order that amends such a policy).*

In short, the proposed infrastructure works at South Jerrabomberra are considered to be a major project under Schedule 1 of *State Environmental Planning Policy (Major Projects) 2005* and therefore can be assessed and determined under Part 3A of the Act.

4.2 Environmental Planning Instruments

This section summarises the relevant State, Regional and Local Environmental Planning Instruments and policies deemed relevant to the proposed project, including:

- State Environmental Planning Policy (Major Development) 2005, and
- Queanbeyan and Yarrolumla Local Environmental Plans.

4.2.1 State Environmental Planning Policy (Major Development) 2005

State Environmental Planning Policy or SEPP (Major Projects) 2005 is a policy which aims to identify sites to which the development assessment and approval process under Part 3A of the Environmental Planning and Assessment Act 1979 applies. The SEPP identifies specific sites and classes of development that are subject to Part 3A and determination by the Minister for Planning.

Clause 6 and Schedule 1 of the SEPP identify development to which Part 3A applies. Clause 6 provides:

*'Development that, in the opinion of the Minister, is development of a kind:
(a) that is described in Schedule 1 or 2...*

is declared to be a project to which Part 3A of the Act applies.'

Schedule 1, clause 26 prescribes such development to be:

‘(1) Development for the purpose of sewage and related waste water treatment plants for the treatment, storage or disposal of sewage effluent or other waste water, or for the reticulation of treated water, that:

- (a) handles more than 10,000 EP (equivalent population), or*
- (b) has a capital investment value of more than \$30 million, or*
- (c) is located in an environmentally sensitive area of State significance.*

(2) This clause does not apply to development if the proponent is a public authority.’

The development that is the subject of this application is to include a Sewerage Treatment Plant and related infrastructure works that are anticipated to cater for the treatment of wastewater, delivery of treated (recycled), and also potable water to a population greater than 10,000 EP (equivalent population), and will have a capital investment value of more than \$30 million.

Village Building Company being the proponent for the proposal now seeks concept plan approval for the project, as well as simultaneous approval for the first stage of the project, as described in Section 3 of this preliminary environmental assessment report.

Under Section 75M(1) of the EP&A Act, the Minister for Planning can authorise or require a proponent to submit a concept plan for a Part 3A project. On 10 March, 2010, the Executive Director of the Department of Planning, under delegation from the Minister for Planning also authorised the submission of a concept plan for the abovementioned proposal under Section 75M(1) of the Act.

The Executive Director, under delegation from the Minister for Planning on 10 March, 2010 also formed the opinion under clause 6 of the SEPP that the project is development of a kind that is described in schedule 1, clause 26 of the SEPP. The project is therefore declared to be a Major Project under Part 3A of the EP&A Act and will be subject to determination by the Minister.

4.2.2 Existing Local Environmental Plans

A number of local environmental planning instruments administered by Queanbeyan city Council currently apply to the South Jerrabomberra Release Area.

They are as follows:

- Queanbeyan Local Environmental Plan 1998 (Queanbeyan LEP 1998),
- Queanbeyan Local Environmental Plan 1991 (Queanbeyan LEP 1991), and
- Yarrowlumla Local Environmental Plan 2002 (Yarrowlumla LEP)

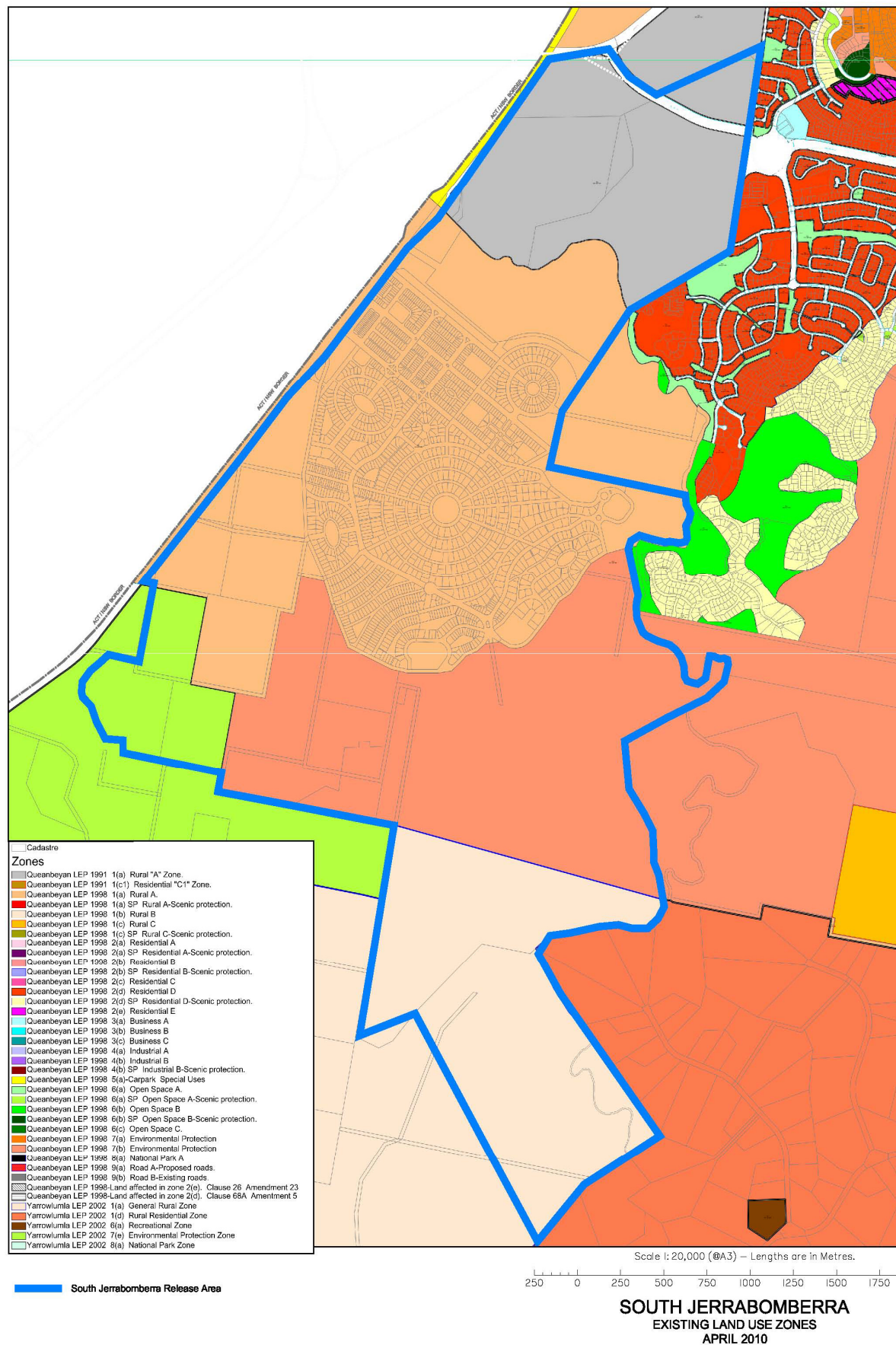
A composite zoning map is provided in Figure 11. The current zonings and relevant land use provisions are discussed below.

The northern part of the release is zoned 1(a) *Rural A* under the Queanbeyan LEP 1991.

Part of the release area is zoned 1(a) Rural A and 7(b) Environmental Protection under the Queanbeyan LEP 1998. The southern part of the release is zoned General Rural Zone (1a) and Environmental Protection Zone (7e) under the Yarrowlumla LEP.

The proposed works can be defined as a ‘public utility undertaking’ and ‘utility installation’ under these plans and would therefore be a permissible use within these zones.

Figure 11: Composite Zoning Map (Source: Queanbeyan City Council)



4.2.3 Rezoning Process (Draft Local Environmental Plans)

Queanbeyan Council is well advanced in rezoning a number of precincts in the release area for urban purposes.

In January 2009, Council resolved to implement the *Queanbeyan City Council Residential and Economic Strategy 2031* which provides the overall framework and recommendations for the urban development of South Jerrabomberra. This plan is discussed in Section 4.3.1 below.

As such, Council has commenced the statutory process for the rezoning of land including the preparation of Environmental Studies for South Tralee, North Tralee and Poplars precincts to inform the Local Environmental Plans for these precincts.

Council has also commenced the plan preparation process for the South Tralee precinct. At the time of finalising this report, Council had consulted with a number of relevant agencies in accordance with the former S.62 provisions of the Act. It is expected that a draft LEP for this precinct will soon be exhibited following certification by the Department of Planning.

The timing of the rezoning process is expected to generally occur as follows:

STAGE	PRECINCT
Stage 1	A. South Tralee
	B. Poplars
	C. North Tralee
Stage 2	A. Environa and Robin
	B. Forrest, Morrison and Walsh

The urban development of land within South Jerrabomberra will therefore occur in stages. The likely order in which land will be rezoned is not necessarily the same land on which the necessary infrastructure is to be provided. For example, it will be necessary to construct water mains extending from existing connections in the north-east of the release in order to service the first stage release, such as South Tralee, which is located within the middle and southern parts of the release.

4.2.4 Queanbeyan Residential and Economic Strategy, 2031

The Queanbeyan Residential and Economic Strategy was prepared in order to provide a framework for the future urban release of land in the Queanbeyan area.

The 2008 Addendum report and accompanying strategy map identify a spatial allocation of 10,000 new release area dwellings to be provided in at least two simultaneous releases at Googong and South Jerrabomberra. South Jerrabomberra localities/properties identified for development potential include Poplars, Tralee North, Environa, Robin, Tralee South, Morrison, Forrest and small area in Tralee Station. A copy of the strategy map is shown in Figure 12.

The South Jerrabomberra release is expected to provide approximately 4,685 dwellings of the total 10,000 envisaged by the Strategy.

The specific outcomes for South Jerrabomberra as noted by the strategy document include:

- Approximately 417.4 Ha of Residential land.
- Approximately 136.5 Ha of employment land.
- Approximately 46 HA of community land for facilities such as a site for a regional sporting complex,

- Commercial centres to be located at South Tralee and Poplars, in addition a school site for the Anglican Secondary College and primary schools to accommodate the projected population.

The Endorsed Strategy (April, 2007) and Addendum Report (December, 2008) also include a number of recommendations to ensure that a range of planning outcomes are achieved. A number of these are relevant to the proposed infrastructure works, as follows:

Satisfactory Water and Other Services Arrangements

6. Prior to any rezoning being concluded the Council must demonstrate how the approved residential development will meet the minimum water targets in BASIX and investigate and confirm commitment of higher water savings of up to 70%

7. Prior to any rezoning being concluded the Council must demonstrate that there are satisfactory arrangements in place for potable water and other services and utilities.

This application is seeking conceptual approval for a water cycle infrastructure network for the majority of the release, and project approval to service the 'Stage 1' area. Accordingly, it specifically addresses Recommendation No.7 of the Endorsed Strategy by establishing 'satisfactory arrangements for potable water supply and other services and utilities', including wastewater collection and treatment.

The conceptual proposal for the water cycle infrastructure network will facilitate the urban release of not only Stage 1, but the remaining precincts within the South Jerrabomberra release thereby ensuring consistency with the overall land use planning aims and recommendations of the Strategy.

4.2.5 Sydney to Canberra Corridor Regional Strategy (2008)

The Sydney-Canberra regional corridor extends from the southern highlands and tablelands of NSW to the ACT border, an area of approximately 25,000 square kilometres. As with other regions in NSW, the Department of Planning has prepared a strategy to guide local planning decisions and development within the area. The strategy is largely based on previous planning investigations, including the ACT and subregion planning strategy and the 1995 Sydney-Canberra corridor strategy.

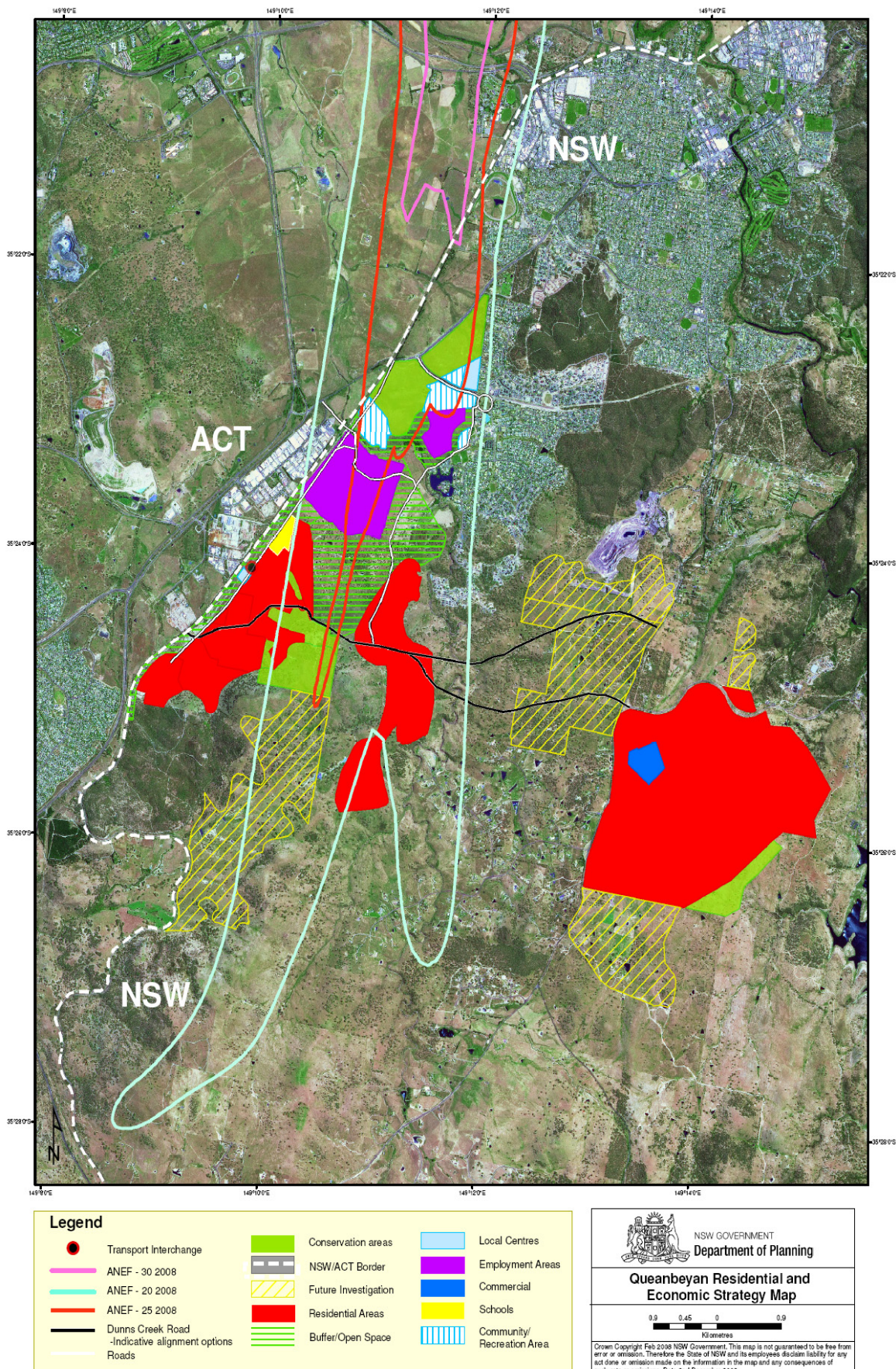
According to the Department, the strategy will guide local planning in the six local government areas of Wingecarribee, Goulburn Mulwaree, Upper Lachlan, Yass Valley, Palerang and Queanbeyan. The regional strategy also recognises the importance of working cooperatively with the ACT and represents the NSW Government's position on settlement within the cross-border region.

The strategy 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.

Of relevance to the subject proposal is that the strategy recognises the need to provide an added 10,000 dwellings in the Queanbeyan area over the next 25 years. Further, the Strategy states that '*capacity to meet this demand will be provided through a number of greenfield development sites at Googong and South Jerrabomberra*'.

Figure 12: Endorsed Queanbeyan Residential and Economic Strategy 2031



4.2.6 ACT–NSW Cross Border Settlement and Water Resources (Memorandums of Understanding)

Urban development within the Queanbeyan area should respect the principles of the Memorandum of Understandings (MoU) between the ACT and NSW governments on cross border settlement and water resources. It is noted that the settlement and water resource strategies are to be largely implemented by Government through planning and urban development process.

Memorandum of Understanding on Cross Border Settlement:

The Cross Border Settlement MoU was signed by the NSW and ACT Governments in March 2006.

The MoU establishes a set of principles to guide the sustainable growth of residential and employment lands in the NSW/ACT cross border region. The Cross Border Settlement MoU states that future settlement in NSW should be in accordance with the Sydney-Canberra Corridor Regional Strategy.

The stated outcomes of the MoU are:

- 1. To sustainably manage growth in the residential and employment lands sector in the Cross Border Region in accordance with the principles outlined in this MoU; and*
- 2. To support the sustainable management of water resources, through operation of this MoU in tandem with the MoU on Cross Border Water Resources*

Memorandum of Understanding on Cross Border Water Resources:

The Water Resources MoU sets out principles and obligations for the supply and management of water in the Cross Border region. The Water Resources MoU was signed by the NSW and ACT Governments in March 2006.

The Water Resources MoU formalises water supply arrangements from the ACT to existing NSW recipients and articulates the conditions of further supply of ACT water to new urban areas in the ACT/NSW Cross Border region. It is intended through the MoU, that NSW and the ACT “share water on a sustainable basis, within resources limits, in order to enable appropriate settlement in both the ACT and ACT/NSW Cross Border Region.”

4.3 Commonwealth Legislation

4.3.1 Environmental Protection and Biodiversity Conservation Act 1999

Commonwealth legislation of possible relevance is the *Environmental Protection and Biodiversity Act 1999* (EPBC Act). Under the EPBC Act, approval is required from the Commonwealth for any activity likely to have a significant impact on a matter of national environmental significance. Matters of national environmental significance include:

- Internationally important wetlands
- World Heritage sites
- National Heritage items
- Listed threatened species and ecological communities
- Migratory species protected under international agreements

Based on initial investigations, the proposal is unlikely to impact on threatened species and ecological communities. Other matters of national environmental significance or commonwealth land are unlikely

to be impacted. However if the Commonwealth deem that the proposed activities are a 'controlled action', it will therefore require assessment and approval under the EPBC Act.

4.4 Other Environmental Legislation

It is noted that Section 75V of the EP&A Act identifies particular environmental legislation and necessary approvals that must be applied consistently to the approval of a project, whilst Section 75U(1) & (2) of the Act identifies legislation and approvals that do not apply to the approval of Part 3A project.

The following legislation will be reviewed in preparing the Environmental Assessment and, will be addressed where necessary:

- Contaminated Land Management Act 1997.
- Heritage Act 1977.
- Native Vegetation Act 2003.
- National Parks and Wildlife Act 1974.
- Native Title (New South Wales) Act 1994.
- Pipelines Act 1967.
- Protection of the Environment Operations Act 1997.
- Roads Act 1993.
- Threatened Species Conservation Act 1995.
- Water Management Act 2000.
- Water Act 1912.
- Water Industry Competition Act 2006.

4.5 Other Relevant Policies

4.5.1 Draft NSW Best Practice Odour Guidelines (Dept of Planning, 2010)

The Department of Planning recently released draft guidelines for sewerage system infrastructure in urban areas including sewage treatment plants (STP), water recycling facilities, sewage reticulation systems and sewer mining.

The primary purpose of the guidelines is to minimise adverse odour impacts on existing and planned communities through the strategic planning process, site selection and on-going management of STP's.

This best practice *Guideline* replaces the Department of Planning Circular No. 148 (E3) entitled "*Guidelines for buffer areas around sewage treatment (water pollution control) plants*". Although the *Guideline* is not legally enforceable, and is not the minimum requirements, it is expected that many public authorities will seek to follow the best practice guidance provided.

5. PRELIMINARY ENVIRONMENTAL ASSESSMENT

5.1 Preliminary risk analysis

A preliminary environmental risk analysis was undertaken for the Project to identify key environmental issues. The methodology for the risk analysis was consistent with the Australian Standard AS/NZS 4360:1999 Risk Management and Environmental Risk Management – Principles and Process (Standards Australia, 2000). Consideration was given to both the construction and operation phases of the Project. The risk analysis process followed a number of steps:

- Identification of components of the surrounding environment that may be impacted by the Project.
- Identification of activities during construction and operation that may affect the environment component.
- Identification of potential environmental impacts as a result of the proposed activities.

A qualitative ranking of consequence and likelihood was undertaken, and the risk considered in light of proposed control measures. Where residual risk was considered of concern these issues were categorised as key environmental issues, as indicated below:

- Water quality and hydrology.
- Soils and groundwater.
- Waste generation and management.
- Visual amenity.
- Hazards and risks.
- Human health.

For the specific aspects of the Project associated with the South Tralee precinct, the following issues have been identified as being of key importance to the environmental assessment:

- Indigenous and non-indigenous cultural heritage.
- Biodiversity.
- Air quality
- Traffic and access
- Visual amenity
- Utilities and services
- Noise and vibration.

The various issues identified above are discussed further in the following Sections 5.2 (Concept Plan Application – Environmental Issues) and 5.3 (Project Plan Application – Environmental Issues).

5.2 Concept Plan Application – Environmental Issues

Issue	Possible Impacts	Assessment Approach
Hydrology – Water Quality	<p>Due to the nature of the treatment processes and requirements for reuse of water for high contact scenarios, the resultant water will typically have nutrient and salinity concentrations higher than mains (potable) water.</p> <p>As an outcome, there may be consequential impacts on both the land irrigated and downstream receiving waters. Impacts may include build up of soil salinity and nutrient levels; and discharge of nutrient and salinity load to downstream receiving waters.</p> <p>Nutrients of concern are total nitrogen and total phosphorus and additional loads may be generated by direct input (from inappropriate watering, pavement washdown, pipe leaks, fire fighting etc.) and/or by elevated nutrient levels in soils.</p> <p>There may also be site specific variations due to the capacity of different soil types (including compacted fill) in assimilating irrigation water of elevated nutrient concentrations.</p> <p>Furthermore, elevated salinity concentrations in recycled water may pose a threat to waterways or downstream water quality works such as wetlands.</p>	<p>In order to assess the potential water quality impacts associated with the construction and operation of the recycled water system, the following analysis will be undertaken:</p> <ul style="list-style-type: none"> - Establishment of the existing environment as a baseline, including the analysis of soil types and receiving waters, specifically focussed on Jerrabomberra Creek. This will involve, as necessary, the collection of samples of the existing water quality. - Based on the operational characteristics of the recycled water to be produced, investigation of the potential impacts on receiving surface water. - Once the potential impacts are known, development of management measures to address the identified impacts, both during construction and operation of the system. <p>At this stage, the details of the ultimate urban development are unknown; therefore it is proposed to develop concise operational and design guidelines which can inform the design of public open spaces and private garden spaces. This could include recommendations on:</p> <ul style="list-style-type: none"> - Proposed irrigation strategies. - Buffer requirements. - Interaction with proposed stormwater quality treatment elements.
Soils and groundwater	<p>Recycled water contains dissolved salts which means there is potential for its application to:</p> <ul style="list-style-type: none"> - Increase soil salinity. - Raise the water table, enabling salt to rise into surface soil. - Change catchment hydrology and subsequently introduce 	<p>To analysis the impacts on the soils and ground water, it will be necessary to:</p> <ul style="list-style-type: none"> - Establish the key characteristics of the existing soil and groundwater environment, where possible utilising existing data to develop a picture of:

	<p>more salt and nutrients into the landscape. Further assessment will be required to identify any soil or groundwater constraints to the application of recycled water. It is noted that there is a relationship between the quality of the recycled water to be applied, and the way in which it is applied, that will influence the potential impacts.</p> <p>Construction activities would result in the exposure of soils leading to potential for erosion and sedimentation during rainfall events.</p>	<ul style="list-style-type: none"> - Soil characteristics, including soil landscape types, salinity and contamination. - Sub-surface hydrology, including water table depth and groundwater quality. - Investigate areas where the construction activities may adversely impact on groundwater and subsurface flows. - Identify areas where specific construction techniques may need to be followed, or otherwise propose relevant mitigation and management measures as necessary - Conduct a land capability study on a regional scale to identify issues associated with recycled water application.
Waste generation and management	<p>The potential sources of waste generated during construction include spoil, drilling mud, treated water resulting from dewatering of excavated areas such as bore pits, and other general waste.</p> <p>During the operation of the sewerage treatment facility, the likely waste generated includes:</p> <ul style="list-style-type: none"> - Sewage screenings. - Grit. - Biosolids. 	<p>The assessment will consider all construction waste material in accordance with the Environment Protection Authority's (1999) <i>Environmental Guidelines: Assessment Classification & Management of Liquid and Non-liquid Waste</i>, and accordingly recommend appropriate mitigation management and disposal measures consistent with these guidelines.</p> <p>The assessment will include an estimation of quantities of waste generated during the operation of the sewerage treatment plant and details of proposed disposal arrangements.</p> <p>Management strategies will be proposed to implement safeguards to manage any possible issues associated with incorrect handling of materials or other inadvertent practices, which may result in releases of these material to the environment or otherwise mishandling or disposal of the materials.</p> <p>The extent of this change will need to be assessed and appropriate mitigation strategies will be proposed.</p> <p>It is likely that the sewerage treatment plant impacts will be minimal since it will be located away from the existing and proposed residential development. The existing Jerrabomberra residential area is separated from the proposed location by a hill.</p> <p>Once a clearer indication of the size and height of the water reservoirs is known, the impacts will be able to be</p>
Visual Amenity	<p>The construction of the sewerage treatment plant may result in a change to the visual appearance of the south west corner of "The Poplars" area, as this will result in the introduction of an industrial type premises into the existing rural environment.</p> <p>The construction of the water cycle infrastructure may also have impacts, particularly in relation to the location of water storage reservoirs.</p> <p>The majority of the infrastructure proposed as part of this Concept</p>	

	Plan Application will be located underground, therefore only minor and short term impacts are likely.	assessed and mitigation measures such as landscaping works will be able to be proposed.
Human Health	<p>It has been known for some time that treated waste water effluent, or recycled water, contains pathogens that can potentially result in a human health risk.</p> <p>While these waters can be an important resource for a community, it is important to ensure that they are fit for the intended purpose. Residual contaminants can pose potential environmental and health risks. One of the highest risks associated with using recycled water is the presence of enteric microbial pathogens. While there are a range of chemical and biological contaminants in recycled water, it is the enteric microbial pathogens that pose the greatest risk.</p> <p>Due to the risk from these micro-organisms much of the public focus and guidelines for recycled water is on the presence and removal of pathogens from the water prior to use.</p>	<p>The assessment of the potential risks will be in accordance with the following:</p> <ul style="list-style-type: none"> - Identification and discussion of the key potential issues associated with use of recycled water and human health, including a consideration of potential cumulative impacts associated with the adjacent Googong project. - Define the pathogen log reduction criteria as defined in the <i>National Guidelines for water recycling: Managing Health and Environmental Risk</i>. - Qualitative assessment of predicted or monitored log reduction through the treatment plant processes. - Prima Facie risk assessment for the recycled water scheme. - Statement of potential significance of impact. - Recommendation for further risk reduction strategies and safeguards as appropriate.

5.3 Project Plan Application – Environmental Issues

Issue	Possible Impacts	Assessment Approach
Heritage	<p>Possible impacts as a result of this Project Plan application include:</p> <ul style="list-style-type: none"> - Disturbance of areas of possible archaeological deposit, particularly in the location of the Jerrabomberra Creek banks; - Disturbance of Aboriginal artefact scatters that may occur along the infrastructure corridor routes; and - Disturbance of European heritage items, such as old shedding. <p>Where disturbance cannot be avoided, appropriate safeguards, mitigations and approvals from the relevant government agencies will be sought, prior to commencement of construction activity.</p>	<p>The area subject to the Project Plan Application will be investigated by an experienced heritage consultant, involving:</p> <ul style="list-style-type: none"> - A review of heritage listings - An Aboriginal heritage literature review - A historical heritage literature review - Aboriginal consultation in accordance with the <i>DECCW Interim Guidelines for Aboriginal Community Consultation</i> - Inspection of the study area, with comprehensive surveys of areas with high predicted historic sensitivity.
Biodiversity	<p>The construction of the proposed infrastructure may have impacts on any flora or fauna that are located within the study area. This impacts could potentially include:</p> <ul style="list-style-type: none"> - The removal of threatened species; - The removal of native grasslands; or - The removal of habitat areas of threatened species <p>Where possible, the infrastructure will be designed to avoid impact on any identified flora and fauna. However, it may not be possible to avoid impacts in the western infrastructure corridor due to the alignment of the road and number of services.</p> <p>Where the impacts cannot be avoided, impacts will be minimised and managed in accordance with DECCW guidelines and recommendations.</p>	<p>The following key flora and fauna issues will be investigated:</p> <ul style="list-style-type: none"> - Natural Temperate Grassland; - Pink-tailed Worm Lizard; - Earless Dragon; - Golden Sun Moth; - The plants <i>Swainsona recta</i> and <i>Swainsona sericea</i>. <p>Natural temperate grassland is present in the area; this needs to be assessed in terms of extent and quality. The presence of lizards, dragons and moths will be surveyed through field work.</p> <p>The assessment will be undertaken in accordance with the requirements of the <i>NSW Threatened Species Conservation Act 1995</i> and the Commonwealth's <i>Environmental Protection and Biodiversity Conservation Act 1999</i>.</p> <p>Regular liaison with the DECCW (Queanbeyan) will occur during the project.</p>
Air Quality	The sewerage treatment plant operations can produce odour from	The potential impacts of the operation of the sewerage

	<p>numerous components, such as:</p> <ul style="list-style-type: none"> - The inlet works; - The aerobic zone; - UV disinfection process; - Chlorine tank equipment; and - Sludge lagoons. <p>During the construction phase of the proposed scheme, local air quality may be impacted as a result of dust generation and exhaust emissions from construction machinery and associated earthworks, including bulldozers, scrapers, excavators and wind erosion from the exposed surfaces.</p> <p>As the type of STP proposed is mostly enclosed there are no significant health risks likely from bioaerosols.</p> <p>The presence of these odours can affect residents or employees in the vicinity of the STP in different ways from being an "offensive" annoyance through to having health impacts.</p>	<p>treatment plant will be assessed by undertaking a Level 3 odour impact assessment in accordance with the DECCW 2006 Technical Framework: Assessment and Management of Odour from Stationary Sources in New South Wales.</p> <p>This assessment will determine the 2 odour unit per cubic metre (2OU/m³) boundary around the proposed Stage 1 infrastructure, which is proposed to be constructed as part of this Project Plan application.</p> <p>The 2OU/m³ boundary around the ultimate capacity STP will also be estimated to provide an appreciation of the overall odour impact possible from the STP. However, when approval is sought for the future stages of the STP, more detailed studies will need to be undertaken, using information of the then existing infrastructure and the proposed modifications.</p> <p>Dust control measures required during construction to prevent wind blown dust such as water sprays and water tankers. Dust, soil or mud deposited on public roads by sub contractors construction activities and vehicle movements will be removed immediately and disposed of appropriately. Truck wheel washes to be installed.</p>
<p>Traffic & Access</p>	<p>The provision of the road in the infrastructure corridor will provide an access point from South Tralee, North Tralee and the sewerage treatment plant onto Lanyon Drive. This road will need to be assessed to ensure that the following potential impacts do not occur or are managed appropriately:</p> <ul style="list-style-type: none"> - Traffic flows along Lanyon Drive; - Separation between the existing Tomsitt Drive/Lanyon Drive intersection and the proposed new link/Lanyon Drive intersection; - The impact on the broader existing road network in the vicinity of the urban release area, including the impact on congestion experienced by the existing Jerrabomberra community; and - The provision of sufficient capacity on the new link road for the proposed development traffic volumes. 	<p>The assessment of the potential impacts will build on the work previous undertaken by the Queanbeyan City Council in the Googong and Tralee Traffic Study (2009).</p> <p>This Traffic Study was prepared by Gabites Porter as a macro level gravity model of the traffic impacts of all the development proposed in the Endorsed Strategy.</p> <p>The assessment will consider this work at a fine level of detail and model the impacts of various scenarios to identify the optimal road network arrangements.</p>

Visual Amenity Impacts	<p>The construction of the sewerage treatment plant may result in a change to the visual appearance of the south west corner of "The Poplars" area, as this will result in the introduction of an industrial type premises into the existing rural environment.</p> <p>The construction of the water cycle infrastructure may also have impacts, particularly in relation to the location of water storage reservoirs.</p> <p>The majority of the infrastructure proposed as part of this Project Plan application will be located underground or provided in the vicinity of the STP, therefore only minimal and short term impact is likely.</p>	<p>The extent of this change will need to be assessed and appropriate mitigation strategies will be proposed.</p> <p>It is likely that the sewerage treatment plant impacts will be minimal since it will be located away from the existing and proposed residential development. The existing Jerrabomberra residential area is separated from the proposed location by a hill.</p> <p>Once a clearer indication of the size and height of the water reservoirs is known, the impacts will be able to be assessed and mitigation measures such as landscaping works will be able to be proposed.</p>
Noise and Vibration	<p>There are possible impacts as a result of the construction and operation of the sewerage treatment plant in the context of the existing and planned urban development in the South Jerrabomberra urban development area.</p> <p>Additionally, there is a possibility of short term impacts as a result of the construction of the infrastructure associated water supply cycle to service the South Jerrabomberra urban development area.</p>	<p>To assess these potential impacts, it is proposed that the approaches will be adopted:</p> <ul style="list-style-type: none"> - The assessment is to be in accordance with the following guidelines, as appropriate: <ul style="list-style-type: none"> - <i>Environmental Noise Control Manual</i> (EPA 1994) - <i>Environmental Criteria for Road Traffic Noise</i> (EPA 1999) - <i>Industrial Noise Policy</i> (EPA 2000) - <i>Assessing Vibration: A Technical Guideline</i> (DECC 2006) - Address construction traffic noise; and - Liaison with NSW and ACT Government agencies as required, for inputs in the report.

6. PROPOSED SCOPE OF ENVIRONMENTAL ASSESSMENT

As identified in Chapter 5 a number of issues are identified as being of crucial importance to the project, and will need to be assessed in more detail in the Environmental Assessment. It is proposed that the Environmental Assessment only assess the following key issues, to the extent required given the scope of the concept and project stage elements being proposed. All other issues will be managed through the development of detailed design and through the application of industry standard and best practice mitigation and management approaches.

As such the key issues for the Environmental Assessment for the Concept Plan application are as follows:

- Water quality and hydrology.
- Soils and groundwater.
- Waste generation and management.
- Hazards and risks.
- Visual amenity.
- Human health.

The Environmental Assessment for the Project Plan application will address the following issues of key importance:

- Indigenous and non-indigenous cultural heritage.
- Biodiversity.
- Air quality.
- Traffic and access.
- Visual amenity.
- Utilities and services.
- Noise and vibration.

7. REFERENCES

- ACT & NSW Governments, (2006), *ACT-NSW Cross-Border Region Settlement and Water Resources Memorandum of Understandings*.
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