Sydney WATER

Appendix B Western Sydney strategic context



Appendix B – Western Sydney strategic context

Western Sydney Aerotropolis Plan

Table 1 lists relevant objectives and planning principles from the Western Sydney Aerotropolis Plan (Western Sydney Planning Partnership, 2020a) and how the project aligns with and contributes to them. This section provides a brief summary of project alignment and should be read in conjunction with the project description and impact assessment chapters of the EIS.

Table 1 - Project alignment with and contribution to Western Sydney Aerotropolis Plan planning principles

Planning principle	Project alignment and contribution
F	Productivity
Objective 3 – Safeguard airport operations	
PR7 – Appropriately design, construct and locate development to safeguard 24/7 airport operations	The project has been designed to safeguard 24/7 airport operations.
PR8 – Require development up to the 20 ANEC/ANEF contour to adopt appropriate design and construction standards to reduce aircraft noise impacts and prohibit intensification of residential development within the ANEC/ANEF 20 and above contours.	The AWRC site is in the 20-25 and 25-30 ANEC/ANEF corridors. Aircraft noise impacts are therefore a consideration for staff and visitors on the AWRC site and any users of the green space area and have been addressed in the EIS.

Project alignment and contribution
ustainability
Project design to date has avoided impacts on natural features (for example, tunnelling pipelines beneath some waterways), and the EIS describes impacts on those features and measures proposed to manage impacts (for example, rehabilitation of natural features after construction).
The project includes development of a green space area on part of the AWRC site. There is an opportunity to make this publicly accessible and connect it with other parkland along South Creek to encourage active use of the floodplain.
Sydney Water will implement water sensitive urban design on the AWRC site.
The project includes development of a green space area on part of the AWRC site. There is an opportunity to make this publicly accessible and connect it with other parkland along South Creek to encourage active use of the floodplain.



Planning principle

Project alignment and contribution

SU6 – retain and increase the urban tree canopy and green cover across the Aerotropolis consistent with the Region Plan target of 40% and the Premier's Priority for Greening our city.

SU9 – meet the requirements of the biodiversity conservation program in the Cumberland Plain Conservation Plan and approved strategic biodiversity certification and strategic assessment protecting land with biodiversity value, and provide a sensitive urban interface that supports and enhances corridors and reserves.

SU10 – avoid, minimise and mitigate impacts on threatened species and endangered ecological communities, habitat corridors, and riparian and aquatic habitats to prioritise length, connectivity and representativeness to maintain ecological function. Protect the integrity and continuity of wildlife by:

- protecting priority habitat corridors to support migrating species, birds and arboreal mammals
- using public land for biodiversity conservation with an appropriate management regime
- expanding vegetation corridors if impacted by utility installations.

SU11 – retain and protect wetland environments to support plant animal communities and to mitigate wildlife attraction or wildlife strike.

We expect landscaping on the AWRC site to contribute to the increase in urban tree canopy, subject to restrictions associated with its location under the Western Sydney International Airport flight path. We would rehabilitate areas disturbed by construction and provide biodiversity offsets as required by legislation.

The Cumberland Plain Conservation Plan has not been finalised but the project considers alignment with the elements that have been captured in the State Environmental Planning Policy (Western Sydney Aerotropolis) 2020. The project also aligns with the strategic biodiversity certification for the South West Growth Centre.

The project has avoided impacts on biodiversity where possible and the EIS describes impacts on biodiversity and measures proposed to manage them (for example, rehabilitation of natural features after construction).

Wetland areas on the AWRC site would be designed to mitigate wildlife attraction.

Planning principle

SU13 – plan stormwater and wastewater in the Wianamatta-South Creek Catchment to minimise potential hydrologic and hydraulic impacts on ecology, creek structure, infrastructure, water quality and the natural water cycle. Integrate water sensitive urban design and use stormwater or recycled water to irrigate streets and public open space to support public amenity and urban cooling. Co-locate industrial water users, where appropriate.

Objective 5 – a sustainable, low carbon Aerotropolis that embeds the circular economy

SU14 – use low carbon, high efficiency strategies to reduce emissions and energy use in line with NSW net zero emissions target and mitigate urban heat through urban development and building design. Use innovative and integrated approaches to achieve higher standards of resources recover, waste management, water management and renewable energy.

Objective 6 – a resilient and adaptable Aerotropolis

SU15 – plan for compatible land uses within the floodplain, provide safe evacuation and egress from flood events and consider climate change, culvert blockage and floodplain revegetation.

SU16 – prohibit cut and fill to alter the 1% AEP flood extent.

Project alignment and contribution

The project has been designed to avoid wastewater flows to South Creek during dry weather and transfer them to Nepean River which has capacity to benefit from larger flows. The AWRC also produces a high-quality treated water that can be used for a range of recycled water uses. Sydney Water will implement water sensitive urban design on the AWRC site.

The project includes energy efficiency and renewable energy measures to reduce emissions. The project is adaptable to future circular economy opportunities and innovations and the AWRC provides a foundational element for a future circular economy hub in the Western Parkland City.

The project will have negligible impacts on flood behaviour and the AWRC site is compatible with its location.

The project is not expected to alter the 1% AEP flood extent.



Planning principle	Project alignment and contribution	
SU17 – design, build and manage flood mitigation assets to provide where feasible native habitat, aesthetics, public recreation and amenity, whilst not impacting on flood behaviour	The EIS considers the approach to flood mitigation on the AWRC site.	
SU18 – protect, maintain and improve the water quality and flow to meet the NSW Government waterway health targets.	The project has been designed to align with NSW Government waterway health targets for the South Creek catchment.	
SU19 – protect high value terrestrial and aquatic ecosystems to enhance biodiversity and protect environmental values	The design to date has avoided impacts on biodiversity and the EIS describes impacts on biodiversity and measures proposed to manage impacts (for example, rehabilitation of natural features after construction).	
Infrastructure and collaboration		
Objective 7 – infrastructure that connects and services the Western Parkland City as it grows		
IC7 – adopt an integrated water management approach that considers urban form and streetscape, trunk drainage land and assets, waterway health, stormwater, wastewater and recycled water.	While focused on wastewater management and production of recycled water, the project is part of a suite of water-related projects Sydney Water is progressing to adopt an integrated water management approach for the WSAGA.	
Objective 8 – a collaborative approach to planning and delivery		
IC8 - Adopt a collaborative approach to precinct planning and master planning with all three levels of government, the community, industry, utilities and landowners	Sydney Water has worked closely across government in developing the project and this EIS, as outlined in the stakeholder and engagement sections of the EIS.	

Planning principle	Project alignment and contribution
	Liveability
Objective 11 – great places that celebrate local character and bring people together	
LV9 – create a strong sense of place through a well-designed built environment, a fine grain urban form, a diverse and flexible land use mix, high levels of amenity and legibility of movement through the place	The project's main opportunity to contribute to this planning principle is at the AWRC site and the project has identified a range of urban design principles so the site takes a landscape-led approach to develop a well-designed facility.
LV10 – integrate development with precinct-wide place and public domain outcomes.	Appendix B describes how the project aligns with the Aerotropolis precinct plan.
LV12 – create valued public and private places that demonstrate a high degree of design excellence and activate open spaces in line with Better Placed, Greener Places and the Premier's Priority for Greener Public Spaces	The project's main opportunity to contribute to this planning principle is at the AWRC site and the project has identified a range of urban design principles so the site takes a landscape-led approach to develop a well-designed facility.
LV13 – celebrate open space areas as places of shared importance to Aboriginal and non-Aboriginal people and maintain important landscapes and views. Provide opportunities for connection to Country. LV14 – acknowledge and celebrate Aboriginal culture, history and heritage, alongside non-Aboriginal heritage.	The EIS describes the project's current approach to consulting with the Aboriginal community and celebrate connection to Aboriginal and non-Aboriginal heritage.

Western Sydney Aerotropolis Precinct Plan

The draft Aerotropolis Precinct Plan (Western Sydney Planning Partnership, 2020b) sets out planning and design guidelines for the initial precincts of the WSAGA (Aerotropolis Core, Wianamatta-South Creek corridor, Badgerys Creek, Northern Gateway and Agribusiness). It was on public exhibition from November 2020 to March 2021. The precinct plan was not finalised at the time of writing the EIS, so this section considers alignment of the project with the draft plan. Table 2 addresses precinct-specific objectives that the project could impact or influence.

Table 2 Project alignment with Western Sydney Aerotropolis precinct plan precinct objectives

Objective	Project alignment with objectives
Badgerys Creek and Wianamatta-South Creek precinct	
Objective 9 – protect the operations of the Airport, including 24-hour operations, and protect future communities for aircraft noise.	The pipeline that runs through these precincts does not influence airport operations. Infrastructure at the AWRC site will be designed to protect airport operations.
 Objective 11 – integrate with the blue-green corridor for the Western Parkland City. Objective 14 – prioritise the restoration and protection of the Wianamatta-South Creek Corridor (including its tributaries) and adjacent high quality green space by integrating land use and water management. Objective 16 – increase the urban tree canopy to mitigate heat island effect and manage stormwater flows. 	The project integrates with the blue-green corridor, protects the Wianamatta-South Creek corridor and contributes to urban tree canopy by appropriate landscaping of the green space area on the AWRC site and by appropriate rehabilitation after construction of creek crossings for the treated water and brine pipelines.
Objective 15 – promote the role of water within the Wianamatta-South Creek Corridor to support healthy, liveable and sustainable communities. Objective 17 – enhance water retention in the landscape and achieve healthy waterways to facilitate urban cooling.	By producing high-quality treated water, the project provides an opportunity to contribute water to the landscape to benefit the Wianamatta-South Creek corridor and retain water in the landscape.



Objective	Project alignment with objectives
Objective 18 – support flood management, mitigation and best practice natural drainage solutions.	The project has been designed to avoid impacts on flooding.
Other objectives	The project does not preclude any other objectives being achieved and helps enable them by providing a wastewater service and potentially some recycled water that facilitates development of the precincts.
Northern Gateway	
 Objective 9 – preserve and protect the water assets and the landscape ecology. Objective 10 – protect Wianamatta-South Creek Corridor, its tributaries and adjacent high quality green space. Objective 11 – prioritise the restoration and protection of the Wianamatta-South Creek Corridor and Cosgroves Creek catchments by integrating land use and water management. 	The project protects water assets, landscape ecology and the Wianamatta-South Creek and Cosgroves Creek corridors by managing impacts of building the treated water pipeline on waterways and biodiversity.
Objective 13 – retain existing soil profiles to the maximum extent possible in streets, parks, floodways and on private land.	Building the treated water pipeline through this precinct is expected to have minimal impacts on existing soil profiles.
Objective 15 – enhance water retention in the landscape and achieve healthy waterways to facilitate urban cooling.	By producing high-quality treated water, the project provides an opportunity to contribute to retaining water in the landscape.
Other objectives	The project does not preclude any other objectives being achieved and helps enable them by providing a wastewater service and potentially some recycled water that facilitates development of the precinct.



Objective	Project alignment with objectives
Agribusiness	
Objective 14 – identify and protect remnant vegetation, tree canopy and other areas of significant vegetation to develop within the Agribusiness Precinct to be built around landscape elements.	The project has been designed to minimise impacts on native vegetation where possible.
Other objectives	The project does not preclude any other objectives being achieved and helps enable them by providing a wastewater service and potentially some recycled water that facilitates development of the precinct.
Infrastructure delivery and staging	
General	The plan lists the AWRC as sewer infrastructure that is required to service the Aerotropolis and notes the likelihood of recycled water availability as a result.
Objective 2 – ensure appropriate utilities and services are planned early and provided to meet demand.	The AWRC is being staged to align with population growth and service demand.
Objective 3 – protect existing utility infrastructure, including the Warragamba pipeline corridor and TransGrid transmission lines.	The EIS assesses the project's impacts on existing utilities, including measures to minimise impacts on the Warragamba pipeline corridor.



Objective	Project alignment with objectives
Objective 4 – undertake utilities and services in a manner that is safe, efficient and cost effective without negatively impacting on peoples' lives or the environment.	The project will minimise community impacts, achieve positive amenity outcomes, factor in water sensitive design and allow for future staging.
Objective 5 – use the development of utilities infrastructure to achieve positive urban design and amenity outcomes.	
Objective 6 – ensure design and location of utilities infrastructure allows space for planting water sensitive urban design and footpaths.	
Objective 7 – ensure utilities designs and locations consider space for alternative future services and allow for multiutility corridors in the future.	
Objective 8 – use technology and data driven solutions to maximise quality of life across the Western Sydney Aerotropolis, in line with the NSW Smart Places Strategy and Smart Western City Program.	Chapter 2 describes how the project will use smart infrastructure.

Western Sydney Aerotropolis Development Control Plan

The Western Sydney Aerotropolis Development Control Plan (DCP), currently in development, will provide detailed planning and design guidelines to support the WSAP and its precinct plans.

The Phase 1 Western Sydney Aerotropolis Development Control Plan (DCP) was on public exhibition from November 2020 to March 2021. The Phase 2 DCP was not finalised at the time of writing the EIS, so this section considers alignment of the project with the Phase 1 plan. The DCP applies to development applications under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and therefore does not apply to the project, which is assessed under Part 5 of the EP&A Act. However, this section demonstrates how the project aligns with relevant content. Table 3 addresses project alignment with relevant DCP objectives.





Table 3 Project alignment with relevant Western Sydney Aerotropolis DCP objectives

Objective	Project alignment with performance
	outcome

Biodiversity

- a) Avoid, minimise and mitigate impacts to biodiversity from future development
- Enhance landscape connectivity through conservation and restoration of native vegetation, wildlife b) habitat and migration corridors to enable plant and animal communities to survive in the long-term, whilst not conflicting with aviation safety.
- c) Improve the biodiversity and ecological values of the area by addressing indirect and prescribed impacts across the Aerotropolis.
- Ensure ecological function of the landscape is maintained to provide benefits to the natural and d) human environment.
- e) Manage weeds and pests in strategic locations to reduce threats to biodiversity.
- f) Ensure construction and operational works comply with best practice standards.

Native Vegetation

- a) Conserve, manage and enhance the remaining native vegetation, including along ridgelines, to increase habitat and tree canopy cover within the Aerotropolis.
- Retain and protect native vegetation areas and provide for the improved management of remnant b) native vegetation communities with a size and configuration which are able to survive and develop in the long term.
- Ensure that native vegetation contributes to the character and amenity of Aerotropolis. c)

Sydney Water has made substantial efforts to minimise the project's impacts on biodiversity. We have completed comprehensive terrestrial and aquatic biodiversity impact assessments that include management measures to mitigate residual impacts, including rehabilitation of disturbed areas.

On the AWRC site, we propose a green space area that enhances remaining biodiversity values on the site, particularly along South Creek.



Project alignment with performance outcome

Waterway Health

- a) Protect, maintain and restore the ecological condition of aquatic systems (including but not limited to wetlands and riparian lands) over time.
- b) Retain and restore native vegetation to promote aquatic ecosystems functioning.
- c) Ensure that waterways are protected in the design and management of the stormwater and wastewater management systems.
- d) Effectively manage indirect and ongoing impacts of development waterways to ensure established water quality and waterway health values are achieved and maintained.

Stormwater and Water Sensitive Urban Design

- a) Avoid or minimise the adverse impacts of urban stormwater on the land on which development is to be carried out, adjoining properties, riparian land, native vegetation, waterways, groundwater dependent ecosystems and groundwater systems.
- b) Protect and enhance water quality, by improving the quality of stormwater runoff from urban catchments to help achieve local water quality and health objectives.
- c) Integrate stormwater management systems into the landscape in a manner that provides multiple benefits, including water quality protection, stormwater retention and detention, public open space, habitat improvement and recreational and visual amenity.

Sydney Water has assessed the project against waterway objectives developed in accordance with the risk-based framework referenced in the DCP.

The project has potential impacts on several waterways that are key fish habitat and has considered current policies and measures to manage impacts.

The focus of the project's stormwater management and water sensitive urban design approach is on operation of the AWRC site and how it meets the South Creek targets outlined in the precinct plan.



Project alignment with performance outcome

Airport Safeguarding

- a) Safeguard the future operations of the Airport, including 24-hour operations and provide appropriate protections for the surrounding community.
- b) Ensure compatible development that exhibits design excellence occurs on surrounding land.
- c) Development does not introduce or intensify noise sensitive uses.

Flooding

- a) Minimise the flood risk to life and property.
- b) Ensure development does not adversely impact flood functions.
- c) Provide protection of the natural environment.
- d) Floodplains are to be used for amenity and recreation opportunities as well as flood function, where appropriate.
- e) Ensure post-development flows do not exceed pre-development flows in to and through the Pipelines Corridor.

This is most relevant to the AWRC site. The EIS assesses airport safeguarding considerations to demonstrate we can appropriately manage project impacts, including building heights, noise, operational airspace, lighting, emissions and wildlife hazards.

Although the treated water pipeline crosses one of the public safety areas, it will be below ground so is unlikely to increase the risk to life or property.

This is most relevant to the AWRC site. The operational components of the AWRC are located above the 1% annual exceedance probability (AEP) flood level and the green space area is below the 1% AEP flood level. The EIS includes a flood impact assessment for the project, demonstrating appropriate management of flooding on the AWRC site.



Project alignment with performance outcome

This is most relevant to the AWRC site. The site would be developed and operated to appropriately manage bushfire risk.

This is most relevant to the AWRC site. The EIS includes an air quality impact assessment, including odour modelling of AWRC operation to demonstrate the project can appropriately manage odour impacts.

Upper South Creek Advanced Water Recycling Centre | Appendix B Western Sydney Strategic Context

Bushfire Hazard Management

- a) Protect life, property and community assets from bushfires.
- b) Minimise the impacts of development in relation to bushfires.
- c) Assist government agencies, land management authorities and landholders in developing fire management practices.

Odour

a) Manage and mitigate the impacts of development in relation to odour.

Air Quality

- a) Manage and mitigate the impacts of development in relation to air quality.
- b) To protect air quality for sensitive uses, including adjoining busy roads and rail corridors.
- c) For development located in or adjacent to road corridors and intersections, to incorporate site layout and building design features that address higher level of air emissions generally found in transport corridors.

Noise and Vibration

a) Manage and mitigate the impacts of development in relation to noise and vibration.

The EIS includes a construction and operational noise and vibration impact assessment for the project, identifying potential noise impacts and management measures to minimise them.



Project alignment with performance outcome

The EIS includes a soil and contamination impact assessment that addresses the

salinity, contamination and land stability and

project's impacts on acid sulfate soils,

our approach to managing impacts.

Acid Sulphate Soils and Salinity

a) Manage and mitigate the impacts of development in relation to acid sulphate soils and salinity.

Contaminated Land

a) Manage and mitigate the impacts of development in relation to contaminated land.

b) Ensure all land is suitable for its intended use.

Land Stability

a) Manage and mitigate landslide risk to maintain the safety of people, property and infrastructure.

b) Retain scenic qualities, landscape character and natural topography.

c) Ensure that development responds to the site conditions, excavation is minimised, and the site is properly retained.

Character and Place – Urban Design

- a) Ensure development responds to the existing topography, connects to Country and implements the Western Parkland City Landscape Led Approach.
- b) Development is designed for effective waste and resource recovery by allowing for waste services to occur in a safe, seamless and timely manner.
- c) Provide a high-quality connected public domain which is attractive, safe, functional, activated, accessible, sustainable, and culturally diverse.
- d) Provide for a range of integrated, functional, attractive and accessible open space and recreation areas.

Street design, role and hierarchy of centres, night-time economy, digital technology, waste or resource management facilities are not considered relevant to the project.

The project incorporates a range of resource recovery and sustainable water management approaches, including reuse of biosolids and the production of very high-quality treated water suitable for reuse.

The EIS documents an urban design approach for the AWRC site, including our



Project alignment with performance outcome

g) Systems are designed to be innovative and maximise waste separation and resource recovery. Best practice waste management collective systems and technologies are supported, where appropriate.

Character and Place – Building Design

- a) Provide an attractive, innovative, sustainable and functional built form that achieves the parkland vision through high-quality design and connection to Country.
- c) Deliver high-quality architectural, urban and landscape outcomes as well as a structured process to support high-quality design.
- d) Reduce the opportunity for crime and illegal dumping to be committed through environmental design.
- e) Encourage high-quality public art in the public and private domain.
- f) Ensure buildings are designed to be accessible, maximise solar access, protect privacy, enhance view sharing and provide functional private open space.
- g) Ensure buildings are designed with innovative IWM facilities to enable and encourage people to participate in circular economy initiatives and water recycling and re-use opportunities.

Character and Place – Urban Ecology and Sustainability

- a) Support sustainable management of water in urban areas through intelligent and integrated management of water resources for local greening and cooling.
- b) Support integrated management within urban environments to capture, treat and re-use stormwater and wastewater before it has the chance to pollute and/or degrade our creeks, rivers and riparian vegetation.

approach to landscaping the green space area in line with green infrastructure principles and connection to Country.

The EIS also includes a biodiversity assessment that describes our impacts on biodiversity and measures to manage impacts.



Project alignment with performance outcome

c) Support and implement the vision of the Greater Sydney green grid, through strategically planned, designed and managed green infrastructure that supports healthy, green and sustainable communities and connects communities to the natural environment.

Objective

- d) Green infrastructure is to be comprised of a network of green and blue spaces, which include waterways, bushland, parks, open spaces and tree canopy that are strategically planned, designed and managed to support a good quality of life in an urban environment.
- e) Minimise the amount of waste generated and waste going to landfill, by designing waste out of developments and implementing circular economy principles within all developments.
- f) Protect, conserve and enhance the biodiversity values of trees and other vegetation in the Aerotropolis and conserve threatened species and ecological communities in natures.
- g) Protect and enhance trees that contribute to the landscape character and scenic qualities.



Services and utilities

- b) Ensure appropriate utilities and services are planned and delivered to meet future demand.
- c) Protect existing utilities infrastructure, including the Warragamba pipeline corridor.
- d) Contribute to and supports a circular economy.
- e) Ensure utilities and services are undertaken in a manner that is safe, efficient, cost effective and does not negatively impact on liveability and the environment.

The main objective of the project is to service population growth in the Upper South Creek servicing area and to remain adaptable to changing growth projections. It contributes to the circular economy through resource recovery and production of treated water suitable for reuse. The project also provides a future opportunity for a circular economy hub in WSAGA.

outcome

The project has been designed to minimise impacts on other utilities.

Content throughout this EIS describes how we are minimising the project's environmental and amenity impacts.

The EIS includes a traffic and transport impact assessment for the project. The project includes carparking facilities as outlined in Chapter 4. Sydney Water is building an access road to the AWRC site, which is outside scope of this planning approval.

Access and Carparking

a) Ensure development makes appropriate provision for transport, access, servicing and end of trip facilities to meet the needs of development, reduce the demand for private car parking over time and facilitate, an environmentally sustainable transport network.

Project alignment with performance outcome

Heritage Items

a) Ensure that development in the vicinity of heritage items is designed and sited to protect the heritage significance of the item and its setting.

b) Ensure that the development of land or a building in the vicinity of a heritage item is undertaken in a manner that complements the heritage significance of the site or area.

Historic Archaeology

a) Ensure adequate protection and appropriate management of archaeological resources.

b) Ensure that as much archaeology of Local, State and potential National heritage significance is retained *in situ* as possible and interpreted within the new developments.

Aboriginal Culture and Heritage

a) Preserve items and sites of Aboriginal cultural and archaeological significance located within the Aerotropolis.

b) Ensure development is designed to care for and connect to Country.

Western Sydney Parklands

This section considers project alignment with key strategic planning documents for the Western Sydney Parklands - the Western Sydney Parklands Plan of Management (Western Sydney Parklands Trust, 2018a), the Southern Parklands Framework (Western Sydney Parklands Trust, 2018b) and Design Manual (Western Sydney Parklands Trust, 2018c).

The main impact of the project on heritage items listed under the Western Sydney Aerotropolis SEPP is that the AWRC site is located on the listed Fleurs Radio Telescope site, which will impact its heritage significance. The EIS includes a non-Aboriginal heritage impact assessment for the project, including archaeology assessments, impacts on the Fleurs Radio Telescope site and approach to heritage interpretation.

The EIS also addresses how the project has avoided or minimised impacts on Aboriginal cultural heritage and describe the project's impacts.

Plan of Management

The Plan of Management guides operation and management of the Western Sydney Parklands towards 2030 and includes 11 defining principles and four strategic directions. The principles most relevant to the project are to protect natural environmental values and respect cultural heritage. The strategic direction relevant to the project is Strategic Direction 1 – Environmental protection and land stewardship. This includes an action to 'work with partners to minimise disruption from infrastructure works and maintenance in existing biodiversity areas' (p.33). The EIS addresses project impacts on heritage and the natural environment and management measures to mitigate these impacts.

Population growth is a common driver for the project and the ongoing management of Western Sydney Parklands – for the project it drives provision of wastewater infrastructure and for Western Sydney Parklands it drives management and development of green open space and community facilities.

The Plan of Management divides Western Sydney Parklands into 16 precincts. The brine pipeline crosses two of these:

- **Precinct 12 (Cowpasture).** The objective for this precinct is that it retains its scenic natural landscape, supports local unstructured recreation and maintains its existing semi-rural and bushland character. The project would disturb a small section of this precinct while the brine pipeline is built. However, once Sydney Water rehabilitates the area impacted by construction, the brine pipeline would be below ground and would not impact achieving objectives for this precinct in the long-term.
- Precinct 14 (Cecil Park). The objective for this precinct is that it becomes a major recreation, sport, entertainment and tourism destination while conserving the natural landscape and ecological corridors and protecting the heritage listed Upper Canal system. The plan also acknowledges the range of existing utilities in the precinct and the need to minimise the impact of future infrastructure such as the M12 motorway corridor. As in precinct 12, the project would disturb a small section of this precinct while the brine pipeline is built. Once Sydney Water rehabilitates the area impacted by construction, the brine pipeline would be below ground and would not impact achieving objectives for this precinct in the long-term. Ongoing consultation between Sydney Water and Greater Sydney Parklands (formerly Western Sydney Parklands Trust) will be important in coordinating any overlaps with project infrastructure and future recreation or other facilities proposed in the precinct.

Southern Parklands Framework

The brine pipeline crosses the northern section of the Southern Parklands. The Southern Parklands Framework outlines Greater Sydney Parkland's vision for this area and some key initiatives that could be implemented over the next 30 years. Proposed initiatives in the vicinity of the brine pipeline include Upper Canal linear park, Cecil Park unstructured recreation, Western Ridges Walk and the Blue Seam walkway. Once the brine pipeline is built, it will be underground and would not preclude these initiatives. Sydney Water's ongoing consultation with Greater Sydney Parkland will include consideration of any project interactions with these initiatives (for example, overlapping construction timeframes or ongoing access requirements).

Design Manual

The design manual is focused on design of above ground infrastructure and assets to support community access and recreation, rather than below ground pipelines. This means most of the content is not relevant to the project. However, Table 4 lists relevant sections of the design manual and their application to the project.

Table 4 Sections of Western Sydney Parklands Design Manual relevant to the project

Design manual section	Application to project
2. Vision for the parklands	In terms of design excellence, Sydney Water maximises asset life by designing pipelines to last at least 50 years, to be low maintenance and in accordance with water industry standards.
4. Parkland roads and parking 7. Tracks	Existing roads and access tracks in Western Sydney Parklands will be used during construction and for ongoing maintenance access. No new roads, access tracks or parking in Western Sydney Parklands will be required for the project.
5. Barriers	These design measures relate to permanent fencing and gates which will not be required for the project. Temporary construction fencing will be required to delineate construction areas.

Design manual section	Application to project
14. Planting and landscape	This will be relevant in further consultation with Western Sydney Parklands as the rehabilitation approach is developed.