

14 September 2021

**Draft Frenchs Forest Place Strategy Submission**

Department of Planning, Industry and Environment

Locked Bag 5022, Parramatta NSW 2124

**RE: Draft Frenchs Forest Place Strategy and Green Plan**

Dear Sir/Madam,

Thank you for providing Sydney Water the opportunity to comment on the Draft Frenchs Forest Place Strategy and Green Plan. The draft Strategy envisages a new Frenchs Forest town centre on the current Forest High School site, including 2000 new jobs and 2000 new dwellings, anchored by the new Northern Beaches Hospital. The draft Green Plan provides a framework for the delivery of integrated, high-quality open space and targeted urban tree canopy.

Please find, within the enclosed, **Attachment 1** detailing Sydney Water's submission on the draft Strategy and Green Plan. Our commentary covers a wide range of aspects within the plans and has been tabled to provide legibility on our key comments in relation to specific sections of the plan.

**Growth Planning Requirements**

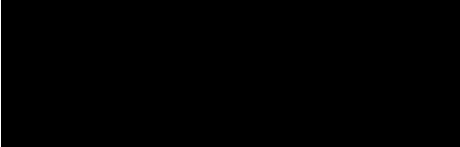
Sydney Water supports government growth initiatives. In order to effectively plan and deliver services at the right time, Sydney Water requires both ultimate and annual growth projections per development area. This assists us in being able to assess what growth can be accommodated through existing services versus what growth requires amplifications of existing or assets of the provision of new assets. We therefore request growth staging data be provided as per the summary (example provided in **Attachment 2**). We acknowledge that this intel may be indicative and subject to change as planning progresses.

Sydney Water respectfully requests that all separate re-zonings/planning proposals/SSDs and DAs are referred to Sydney Water for comment via the NSW Planning Portal where applicable or via [UrbanGrowth@sydneywater.com.au](mailto:UrbanGrowth@sydneywater.com.au). This will ensure that suitable servicing advice is provided to the DPIE and proponents as early as possible, that all growth is accounted for in our [Growth Servicing Plans](#), and that servicing is made available as soon as possible.

Sydney Water will continue to work with the DPIE to support their developments and strategies and to work towards mutually beneficial outcomes.

If you require any further information, please contact the Growth Planning Team via [urbangrowth@sydneywater.com.au](mailto:urbangrowth@sydneywater.com.au).

Yours sincerely,



**Kristine Leitch**

Commercial Growth Manager

City Growth and Development, Business Development Group

Sydney Water, 1 Smith Street, Parramatta NSW 2150

## Attachment 1

### Sydney Water commentary on the Draft Frenchs Forest Strategy and Draft Green Plan

No	Document	Section	Page No	Subtype	Comment type	SW Comment
1	Draft Place Strategy				General	For all proposed growth areas, Sydney Water kindly requests annual and ultimate growth data in the table provided.
2	Draft Place Strategy				General	For all major developments, Sydney Water requests Council/DPIE go through the NSW OCRS Planning Portal under S78 of the Sydney Water Act to ensure no growth is missed and that adequate servicing is available prior to development.
3	Draft Place Strategy		p. 5-7 p. 21		Recommendation	<p><b>Support to plan better open space design:</b></p> <p>Sydney Water would like to contribute knowledge, including existing open space irrigation guidance and emerging research on stormwater retention performance and design.</p> <p>Sydney Water's planning of Urban Typologies<sup>1</sup> for Western Sydney has demonstrated that improved urban design can enhance the number of pervious surfaces in urban areas, reduce harmful levels of runoff to waterways, and significantly improve the quality and quantity of public open space available. When at a larger scale, it might also create a great, stable demand for recycled water, enhancing the viability of such systems.</p>
4	Draft Place Strategy		p. 15		Recommendation	<p><b>Urban Cooling:</b></p> <p>Sydney Water suggests considering targeted implementation of cooling actions such as permeable surfaces, tree planting, vegetation and irrigation which will provide welcome relief to communities.</p> <p>'Adapting the East', a climate study conducted by Sydney Water on the eastern region (comparatively cooler than western suburbs), indicated that only greening might not be adequate to achieve the desired level of cooling for major urban development areas under future possible climate scenarios. Other active cooling measures like irrigated open spaces, water features, misting, etc. might be required for additional cooling for specific urban areas.</p> <p>'Adapting the East' report is available on our web - <a href="#">link for your view.</a></p> <p><b>Urban Cooling – useful tools:</b></p> <p>Adapt water, and XDI Globe was used in Adapting the East could be helpful for the</p>

<sup>1</sup> Urban Typologies and Stormwater Management – achieving a cool, green, liveable Western Parkland City, Available at: [https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/document/zgrf/mjmy/~edisp/dd\\_232132.pdf](https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/document/zgrf/mjmy/~edisp/dd_232132.pdf)

					<p>Greening Sydney Strategy and associated future analysis to understand site-specific risks, effective adaptation and required level of temperature reduction. To learn about the Adapt Water climate change adaptation tool, please follow the link <a href="#">Climate Change Adaptation Tool (Adapt Water) for the Australian Urban Water Sector (327 KB)</a></p> <p>Another relevant tool is <a href="#">Urban Heat Island (UHI) Mitigation Performance Tool</a>. It has a broad range of urban heat island mitigation options tailored to specific microclimates and urban contexts, incorporated into the 'Adapting the East' study. UNSW Sydney and Swinburne University developed the tool as part of the CRC for Low Carbon Living, of which Sydney Water was a member.</p>
5	Draft Place Strategy		p. 19	Recommendation	<p><b>Water Conservation within Hospital Precinct:</b></p> <p>Sydney Water is open to collaborating to develop the health and education precinct. Hospitals in urban settings are one of the highest Water and energy users. The redevelopment of the hospital precinct presents an opportunity to improve water efficiency and establish low carbon use practices within the precinct. Opportunities to improve efficiency include, for example:</p> <ul style="list-style-type: none"> <li>• Maximising water efficiency,</li> <li>• Capturing rainwater and, where economically feasible, recycling Water for irrigation of green spaces, cooling, and toilets,</li> <li>• Improving water leakage, and</li> <li>• Developing a water management plan.</li> </ul>
6	Draft Place Strategy		p. 21, p. 25	In support of	<p><b>Tree Species:</b></p> <p>Sydney Water supports the precinct's local plans, fostering opportunities to increase urban tree canopy cover and potentially setting targets. Sydney Water would also encourage consideration being given to appropriate tree species for planting and methods to ensure trees receive enough water to grow, including via passive irrigation via stormwater.</p> <p><b>Water for greening:</b></p> <p>Sydney Water would encourage considering sustainable and efficient water management methods to support the greening of recreational spaces and tree canopy plantings.</p>
7	Draft Place Strategy	p. 37, p. 38, p. 45		In support of	<p><b>Sustainable use of water:</b></p> <p>Sydney Water strongly supports the mention of sustainable use of water resources in place strategy. Sydney Water would like to emphasise considering the use of recycled water, especially where economically viable. Water recycling can provide a source of water that is independent of rainfall. We suggest recycled water services are not just limited to large scale new developments and irrigation, but also to consider any commercial spaces around the precinct and</p>

						<p>at an appropriate level (i.e. use of greywater at the building level, precinct-level stormwater harvesting etc.)</p> <p><b>Water efficiency and conservation:</b></p> <p>Sydney Water recommends that the place strategy emphasise demand reduction and efficient use of water at the precinct level, where possible, as part of broader water conservation measures to promote water-wise community behaviour. It will help mitigate the impacts of increased demand from growth, greening and cooling, etc., and defer costly augmentation.</p>
8	Draft Place Strategy	p. 29			Recommendation	<p><b>WSUD and IWCM:</b></p> <p>Sydney Water suggests adopting appropriate WSUD (Water Sensitive Urban Design) features an Integrated Water Cycle Management approach to develop the Frenches Forest Precinct. In Sydney Water's experience, WSUD approaches help retain water in the landscape, improve environmental and waterway health, contribute to urban cooling, and create liveability features.</p> <p>This can include rain gardens, green landscape buffers, street trees (and tree pits), green roofs and walls, deep soil percolation, swales, porous and permeable pavements and rainwater tanks. These green infrastructure design approaches increase the volume of water held in the soil, increasing water availability for trees and vegetation, improving urban greening and cooling, and contributing to healthy waterways.</p> <p><b>Better stormwater management approach:</b></p> <p>Sydney Water suggests stormwater management practices for the precinct, which will retain rainwater within the area. Sydney Water has proposed development compliance metrics for annual runoff and flood runoff (Mean Annual Runoff Volume – or MARV, and Flood Event Runoff Volume – or FERV). These are outlined in our study<sup>1</sup></p> <p><b>Stormwater Retention and Detention for WSUD<sup>2</sup></b> Achieving these metrics would enable effective reductions in the volume and frequency of runoff. Sydney Water also provides a rigorous calculation methodology. Retention can also help towards flood mitigation benefits sought through on-site detention, potentially with greater effectiveness and cost-efficiency.</p>
9	Draft Green Plan				In support of	<p>Sydney Water supports the development of a Green Plan for the Frenches Forest Precinct.</p>

<sup>2</sup> 2 E2DesignLab 'Stormwater Retention and Detention for Water Sensitive Urban Design '(2019)

10	Draft Green Plan				Recommendation	Sydney Water recommends NSW Government Urban Greening and Open Space objectives be utilised in the Green Plan (i.e. greening to support cooling outcomes – potential missed opportunity and may influence some decisions about canopy types and maintenance needs).
11	Draft Green Plan	3.4	p.26	3.4.1	Recommendation	There is potential for water utilities to support the implementation of the greening plan (potentially through 'underutilised government owned land' if in the area.
12	Draft Green Plan		p.30	3.4.3	In support of	Sydney Water agrees that DCP's are an opportunity to support urban tree canopy cover targets and supports this.
13	Draft Green Plan				Recommendation	Sydney Water recommends mentioning the role green space can play in adapting to climate change and mitigating urban heat island effects.
14	Draft Green Plan				Recommendation	Sydney Water notes there may be an opportunity to consider the application of water sensitive typologies for development, as proposed for Western Sydney.
15	Draft Green Plan				Recommendation	Sydney Water recommends the consideration of irrigation or water needs to support Green Plan.

## Attachment 2

### Growth Data Information

This data collected will inform Sydney Water's planning investigations for servicing the proposed development and wider area. Ideally updates should be provided every quarter for each development. Development intel helps to ascertain demonstrated demand and development confidence which supports business cases, planning studies, and commercial opportunities. The data collected will be treated as commercial in confidence. It is understood that the data may be indicative only at this stage.

	Ultimate Growth	Ultimate EP (if known)	Number of Stages
Single dwellings			
Multi dwellings			
Jobs			

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Single dwellings										
Multi dwellings										
Jobs Numbers										
OR: Jobs in GFA										

Where there are clear staging areas or separate geographical locations, please provide separate summaries for each.

#### High water users

Insert details on any proposed high demand water users (data centres, food production centres or specialised proposed high water users etc)