

16 December 2022

Mr Robert Hodgkins  
A/Direction Central (Western) Metro West  
Planning and Land Use Strategy  
Department of Planning and Environment  
Via online submission

## **Greater Penrith to Eastern Creek Investigation Area – Draft Strategic Framework**

Dear Mr Hodgkins

Thank you for seeking Sydney Water's comments on the draft Strategic Framework for the Greater Penrith to Eastern Creek (GPEC) Investigation Area.

We appreciate the framework's intent to provide a clear vision realised by a framework of priorities and actions to guide future precinct planning and land use rezoning, and development aligned with infrastructure. Sydney Water's comments focus on our provision of drinking water, wastewater, and potentially, recycled water services and infrastructure, for the GPEC investigation area, across infill and greenfield areas.

In line with Sydney Water's vision to create a better life with world-class water services, we strongly believe world class and sustainable water services are fundamental to the success of the GPEC area and its valuable contribution to the emerging Western Parkland City.

Our principal comments on the draft GPEC strategic framework are as follows:

1. We support the vision statement for GPEC, and in particular the strong focus on waterway health, connection to Country and urban greening and cooling. We recommend the vision also embody aspirations for communities to enjoy healthy and resilient lifestyles, and where green spaces and sustainable water management help cool local areas and meet future climate challenges.
2. Water is central to each theme of connection to Country, waterway health, and urban greening and cooling. Careful planning and management of water is therefore essential to support the GPEC vision. A robust strategic and statutory planning framework will also be needed to underpin these core principles and deliver on these outcomes.
3. As you may be aware, Sydney Water's Growth Servicing Plan predominantly shows our plans for the next five years. As GPEC is an investigation area, it is not currently included. Growth within GPEC therefore would be deemed to be accelerated and at no cost to government (i.e., Sydney Water) in order to meet our pricing regulation and risk criteria. We recommend that this be made clear (i.e.,

that it would be beneficial to refer to short term time frames as being accelerated, where relevant, to remove dubiety) and support relevant funding routes.

4. We welcome the opportunity to discuss 'enabling works' funding routes via NSW Government and would advocate starting this as soon as possible to meet government acceleration timescales.
5. For the timely delivery of water infrastructure Sydney Water is dependent on the Department providing up-to-date, robust and prompt growth forecasts for GPEC. Detailed forecasts are critical to accurately and cost effectively plan for the timely delivery of water services and infrastructure which in turn enable development to proceed.
  - given lead times to plan and deliver new water-related networks, growth forecasts are especially crucial for the greenfield precincts, including priority precincts like Orchard Hills. The provision of ultimate and annual projections also enables the investigation of suitable temporary or short-term solutions in tandem with the ultimate solution, often allowing enabling earlier urban development.
  - Infill areas may require amplification, duplication or upgrades to assets and therefore both up-to-date ultimate and annual data is critical to assessing when this work is required.
6. To protect existing assets and assess growth demands, Sydney Water reiterates the requirements to refer impactful developments to Sydney Water (under the *Sydney Water Act 1994*, Section 78) via the NSW OCRS Planning portal.

Our detailed and further comments, focused on the framework's priorities, directions, and infrastructure, are attached (attachment 1). We are available to elaborate on our comments further.

Sydney Water considers it a priority to participate in the Department's intra-government groups established for GPEC. Please continue to liaise with Mr Chris Gantt, Head of City Growth & Development on [REDACTED] or email [chris.gantt@sydneywater.com.au](mailto:chris.gantt@sydneywater.com.au) and Ms Kristine Leitch, Commercial Growth Manager on 8849 4900 or email [kristine.leitch@sydneywater.com.au](mailto:kristine.leitch@sydneywater.com.au).

Yours sincerely



Paul Higham  
**Head of Strategy and Enterprise Planning**

**Attachment 1**  
**Detailed comments on the Draft Strategic Framework for GPEC**

| Document reference                    | Comment  |
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| <b>Purpose of strategic framework</b> | Consider adding 'cultural heritage' so that the purpose explicitly includes '...places to be retained for open space, cultural heritage, or environmental purposes'  |
| <b>Part 1 Introduction</b>            | Consider adding:<br>'(South Creek)' after the first use of Wianamatta and<br>'(Hawkesbury)' be added after the first use of Dyarubbin to help the reader's understanding and appreciation<br>'(Yellomundee)' after 'Yarramundi'  |
| <b>Part 2 Strategic context</b>       | At figure 7 we recommend: <ul style="list-style-type: none"> <li>the NSW Government's <b>Greater Sydney Water Strategy</b> be included in the box titled 'regional planning' and</li> <li>consideration being given to including <b>INSW's South Creek Sector Review</b> in the 'strategic planning projects' box (as per INSW State Infrastructure Strategy)</li> </ul> <p>The box titled 'what does the strategic framework mean for planning proposals?' at page 22, should also mention other enabling infrastructure that will need to be prioritised and funded, for example, water-related infrastructure</p>   |
| <b>Part 3 GPEC vision</b>             | As mentioned in our cover letter, Sydney Water supports the <b>vision statement</b> for GPEC, and in particular the strong focus on waterway health, connection to Country and urban greening and cooling.<br>We recommend the vision also embody aspirations for communities to enjoy healthy and resilient lifestyles, and where green spaces and sustainable water management help cool local areas and meet future climate challenges.<br>Water is central to each theme of connection to Country, waterway health, and urban greening and cooling and careful planning and management of water is essential to support the GPEC vision.<br>A robust strategic and statutory planning framework will also be needed to underpin these core principles and deliver on these outcomes<br>Please note the legend in <b>figure 10</b> titled Draft GPEC Structure Plan is not readily legible online |

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|   | Also, in regard to <b>Defining growth</b> and <b>Focus precincts</b> at page 25, 26, it is time-critical that the Department provide Sydney Water with up-to-date and robust growth forecasts for the whole of GPEC so we can establish planning and sequencing of water-related infrastructure delivery. This is also requested in our cover letter.  |
| <b>Part 4 Planning priorities</b>                     | Our comments for relevant planning priorities are listed below   |
| <b>Priority 1 – Connect with and care for Country</b> | <p>Sydney Water respectfully acknowledges that the lore, traditions, and customs of the Traditional Custodians nurtured and continue to nurture the land and waters, both saltwater and sweetwater, in which we operate, creating wellbeing for all. We also acknowledge their deep connections to the land and waters (Sydney Water's 'Innovate Reconciliation Action Plan')</p> <p>In general, we strongly support opportunities to connect with, design for and care for Country. It should be noted to achieve the intent of <b>action 1.1.1</b> adoption of best practice water management approaches are vital to ensure development can enhance connections to country and waterways, rather than diminishing its values - especially waterway values. Work occurring in Mamre Rd and the Aerotropolis may be helpful. Best practice water management also essential to achieving the principles outlined in <b>action 2.3.7</b>.</p> <p>Sydney Water supports <b>action 1.1.4</b> and notes the importance of conserving, understanding, interpreting the importance of the Cranebrook Terrace, and recommend this be a strong consideration for Penrith (aka Western Sydney) Lakes master planning. We also recommend adding the word 'culture' so that it reads '...conserve deep time cultural deposits' (as the Formation is an alluvial deposit dating back to the Pleistocene).</p> <p>We have two queries in relation <b>action 1.1.7 (iii) 'undertake detailed Aboriginal Cultural Heritage investigations for development within 300 m of waterways'</b>. These are:</p> <ol style="list-style-type: none"> <li>1. what is meant by 'detailed Aboriginal Cultural Heritage investigations'? Would this be going straight to an Aboriginal Cultural Heritage Assessment Report (ACHAR) for any development within 300m of a waterway or just preparing an Aboriginal Due Diligence Assessment as first step to see whether an ACHAR is warranted.</li> <li>2. please clarify why 300m of a waterway is specified as</li> </ol> |

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|  | <p>this is different to the legally required OEH Due Diligence Code of Practice which requires 5 steps to be followed. This requires consideration of several high-risk landscapes features, including 200m from a waterway, as well as ridgelines, etc? This will ensure alignment with EHG's legal Code of Practice, as per Figure 2: Planning Context; especially given the objective of both the Strategic Framework &amp; HeritageNSW Code of Practice is protection.</p> <p>We also recommend the framework include:</p> <ul style="list-style-type: none"> <li>• reference to the '<b>ochre grid</b>' similar to reference to the green blue grid</li> <li>• cross-reference the <i>NSW Aboriginal Languages Act 2017</i> as it too supports 'opportunities to incorporate First Languages such as Aboriginal place names and wayfinding</li> </ul> <p>In relation to the <b>Acknowledgement of Country</b> (page 2) and its intent, may the words, 'whose voices we seek to empower through this project', be moved to the end of a sentence that mentions the Dharug people? This part potentially reads like the project will result in empowerment of voices from other Aboriginal communities. But given it is Dharug Country, empowerment of Dharug voices (in the first instance) is likely the outcome sought.</p> |
| <p><b>Priority 2 - Focused and responsive growth</b></p> | <p>In relation to <b>direction 2.1 Focus strategic planning efforts on Orchard Hills and St Marys</b> we recommend including the vital importance of:</p> <ul style="list-style-type: none"> <li>• integrated land use and water planning in Orchard Hills (transforming a peri urban land area to mixed use) and St Marys, where there are significant opportunities to improve urban form, water servicing and management of water in the landscape with the uplift to more contemporary, high-density forms.</li> <li>• effective place planning to enhanced pedestrian and active transport connectivity between centres, and across the major transport corridors of western railway, metro and M4) to ensure viability of blue green grid links.</li> <li>• high rates of open space, and active planning for cooling and greening outcomes, especially with development of cooler rural landscapes in Bradfield, Orchard Hills.</li> </ul>   |

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|                                     | <p>A range of land-use types have been considered in Sydney Water's water sensitive typologies for the Western Parkland City, and we strongly recommend adoption of this best practice for GPEC.</p>  |
| <p><b>Priority 2 continued.</b></p> | <p>Sydney Water strongly supports <b>action 2.3.7 Protect the landscape and create a cooler, greener, low carbon future:</b></p> <ol style="list-style-type: none"> <li>1. We particularly support i, iii, iv, v, and vii. We believe GPEC's waterways (particularly Wianamatta South Creek) are essential assets in their own right and are key tributaries of the Hawkesbury Nepean River. The Dyarubbin-Hawkesbury Nepean River is identified in the GPEC vision, and the framework should include specific actions to enhance it. Therefore, planning proposals and precinct planning should achieve the principles outlined in action 2.3.7. Planning proposals should also demonstrate how proposals will contribute to the enhanced health on the Hawkesbury Nepean River, through the adoption of best practice approaches for retaining water in the landscape, minimising water pollution, and adopting water efficiency measures.</li> <li>2. In addition, we recommend that action 2.3.7 vii be accompanied by clear performance metrics to ensure that water retention is effective enough to deliver the required outcomes for waterway health, cooling and greening. Refer to the stormwater retention and flow targets established for Wianamatta in Mamre Rd / Aerotropolis development. We recommend similar methodology and targets are established for GPEC.</li> <li>3. The strategic framework references the risk-based framework in direction 5.1 and direction 6.1, and this is supported. We also strongly recommend that this policy be referenced in, and applied to, delivering outcomes in direction 2.3 so that it clearly applies across the whole subject area.</li> <li>4. We strongly recommend that direction 2.3 includes references to the protection and enhancement of natural soil landscapes, to improve soil biodiversity, enhance water retention in the landscape and enable effective soil carbon sequestration. This will provide a practical pathway for land-use planning to achieve the intent of the direction. It also provides clear benefits</li> </ol> |

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|  | <p>and incentives to drive delivery of action 6.2.4 - ensure planning proposals and precinct planning [will] (v) facilitate a network of interconnected undisturbed soil across the development that connects to the broader soil network so vegetation and tree canopy can thrive"</p> <p>5. We note direction 2.3 includes the term "<b>low carbon future</b>". However, the actions exclude any reference to the consideration of renewable energy, or energy, water and material efficiency in development proposals. Consideration should be given to these key aspects of a low carbon future.</p> <p>6. Sydney Water considers it worthwhile that <b>direction 2.4 growth considers cultural, social and economic needs</b> includes the importance of planning for industrial Circular Economy precincts with land use allowances for mixed industry, transport connectivity, and buffering from sensitive receivers.</p>  |
| <p><b>Priority 4 - Infrastructure delivery</b></p> | <p>In relation to <b>direction 4.2 Provide upgraded and new utility infrastructure</b>, Sydney Water notes action 4.2.2 identifies Sydney Water as the lead for the timely provision of water-related services throughout GPEC in the medium term.</p> <p>As previously mentioned, the timely delivery of enabling water infrastructure is dependent on DPE providing up-to-date and robust growth forecasts.</p> <p>And please note, generally all short-term and medium-term deliverables are reliant upon timing of rezoning and demonstrated development demand.</p> <p>Funding mechanisms for recycled water needs ongoing analysis and discussion.</p> <p>In relation to <b>action 4.2.7 for integrated stormwater management planning for the St Marys Town Centre</b>, it should be noted that this is currently not a declared stormwater catchment and Sydney Water therefore has no formal role in stormwater planning or management. However, it is critical that Sydney Water does work closely with Penrith City Council in planning for stormwater as part of a broader integrated water cycle management approach for Western Sydney. To optimise outcomes and unlock full value across the entire water network, best practice IWCM must be embedded at the earliest stages of planning. Sydney Water would welcome the opportunity to work collaboratively with Penrith Council and other partners to deliver on this plan</p> |

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|   | <p>We also recommend <b>including green infrastructure, blue green grid and active transport corridors</b> in the infrastructure structure plans. As we note earlier, networks of green infrastructure are essential to realising the vision and objectives of the vision statement and enabling value-added development.</p> <p>In relation to <b>action 4.2.9 about the potential for a regional stormwater approach to be rolled out in GPEC</b> reference should be made to the extensive work undertaken to establish the regional stormwater scheme in the Mamre Road and Aerotropolis Initial Precincts. Key learnings from this process could offer insight and benefit to any potential future scheme in GPEC.</p> <p>If a regional scheme is to be pursued, it is critical that stormwater master planning be undertaken as a key component of precinct planning to identify land required for this infrastructure prior to rezoning. Early reservation of this land through appropriate planning mechanisms is critical to the viability of a regional stormwater scheme.</p> <p>Sydney Water would be happy to work with DPE and local councils on a review of options for stormwater management in the GPEC area. Importantly, Sydney Water is not the declared stormwater authority for the GPEC area.</p> |
| <p><b>Priority 5 - Public open space, biodiversity, and landscape</b></p> | <p>Sydney Water supports <b>action 5.1.1 for the use of DPE's Risk Based Framework and the application of appropriate waterway health objectives</b> to protect waterways as urbanisation occurs. DPE's Environment and Heritage Group (EHG) would need to advise on the right waterway health objectives to use in the GPEC Investigation Area. It is noted that not all of the area lies within the Wianamatta-South Creek catchment and the existing objectives and stormwater targets may need to be revised in these areas.</p> <p>We support <b>direction 5.2 to make public open space accessible and usable for all GPEC residents</b>. Sydney Water considers the identification of waterway corridors and connections as an essential element in making public open space accessible and usable for all residents, workers and visitors. We agree that there are great opportunities to enhance the health and improve accessibility of Wianamatta South Creek and Ropes Creek. A medium to longer term aspiration should be to enable more forms of waterway contact depending on water quality and waterway management improvements.</p>   |

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|                         | <p>Given the future significance of Penrith (aka Western Sydney) Lakes, actions to make this area "accessible and usable to all GPEC residents" are limited. We recommend identification of green blue links between Penrith Lakes and other parts of the Hawkesbury Nepean River, including the Great River walk and riverside recreation areas, and improving links between the Penrith city Centre and the HN river and Penrith Lakes.</p> <p>In line with <b>action 5.2.3 to secure funding and explore opportunities to consolidate land holdings along the Wianamatta-South Creek corridor</b>, Sydney Water supports the consolidation of land holdings along the Wianamatta-South Creek corridor to allow for more consistent management outcomes and to facilitate improved access to the waterway for the community, in particular First Nations people.</p> <p>A <b>further action under 5.2</b> may be to highlight the opportunity for recycled water from a range of sources, including stormwater harvesting and recycled wastewater, to support blue-green infrastructure and their associated benefits.</p> <p>There is opportunity to encourage use of recycled water by government agencies in the precinct like Metro. Sydney Water would welcome early engagement with stakeholders to better assess the demand for recycled water.</p> <p>Within the qualitative aspects of <b>table 2 Open space criteria</b> consider adding <b>‘bushfood’ plantings</b> and interpretation (signs or robust/resilient QR codes) to reliable websites containing information on location-specific Aboriginal stories, customs or practices that have been collated by relevant local Aboriginal communities and/or DLALC). This will help to enhance inter-relationships with priority 1 of the framework, and the wider community’s understanding and appreciation for Aboriginal people’s culture.</p> |
| Priority 6 – Resilience | <p>Sydney Water strongly supports <b>direction 6.1 promoting the importance of waterways and prioritising their health</b>.</p> <p>We recommend <b>action 6.1.1</b> be further strengthened to an action for collaboration to result in the <b>establishment of effective governance of waterways</b> (including Wianamatta South Creek, the Hawkesbury Nepean River and Penrith (aka Western Sydney) Lakes. This will facilitate effective planning to enable action 6.1.4 ii to be achieved effectively and efficiently.</p> <p>As noted earlier, we strongly support <b>action 6.1.2</b>. We also strongly recommend the framework identify the preparation of</p>  |

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|                    | <p>integrated water cycle management (IWCM) plans, that achieve Government and communities' waterway health objectives and targets by applying the risk-based framework throughout all precincts. We recommend clear metrics for stormwater management to achieve waterway health outcomes (in the same way that clear metrics for street tree canopy to help achieve urban cooling outcomes are identified in action 6.2.1).</p> <p>Sydney Water supports <b>action 6.1.3</b>. We recommend this action be strengthened to say "ensure planning proposals and precinct planning prioritise the health and natural state of waterways and <b>help enable the achievement of the NSW Government's water quality objectives</b>. Also, many Caring for Country and associated well-being opportunities exist when Aboriginal people contribute to the design, construct and/or maintain areas/landscapes in this action.</p> <p>We support the naturalisation of waterways. Sydney Water has extensive experience in the naturalisation of our own stormwater channel assets and are happy to provide advice on the planning and prioritisation of naturalisations.</p> <p>In regard to <b>action 6.2.1</b>, Sydney Water supports <b>best practice integrated water cycle management (IWCM)</b> being embedded in the Orchard Hills Precinct Plan to support waterway health as well as liveability objectives. The Greater Sydney Water Strategy (GSWS) advocates for IWCM across Western Sydney and we support this policy position through our servicing approach. In this regard, it is important that Sydney Water has a role in the development of the integrated water cycle management strategy for Orchard Hills and continues to be actively involved throughout the precinct planning process.</p> <p>We recommend the GPEC strategic framework consider innovative ways to incentivise or mandate urban cooling measures to help ensure the vision for the GPEC area realised, and in line with the broader vision for the Western Parkland City.</p> <p>As the Department knows urban heat is one of the most significant challenges to liveability in Western Sydney. Crucially, water is a central part of any solution. Precinct-scale solutions to urban heat are achievable through innovative IWCM approaches that combine climate-independent water supply with the right combination of infrastructure. However, widespread buy-in is required to achieve precinct-, district- and, ultimately, city scale outcomes.</p> |

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|                              | <p>Sydney Water welcomes <b>action 6.2.3</b> to collaborate on opportunities to further explore the use of recycled water (including recycled wastewater and harvested stormwater) in the urban environment to improve resilience and liveability outcomes for local communities within GPEC.</p> <p>Sydney Water supports the ambitious <b>urban tree canopy targets</b> outlined in table 3. We recommend design and planting of the tree canopy consider irrigation to optimise tree and canopy growth to better ensure the cooling benefits of green infrastructure are realised.</p> <p>Sydney Water recommends the strategic framework mention <b>climate change</b> and the NSW Climate Change Adaptation Strategy, especially as an increase in temperature is visually represented. Priority 6 - Resilience should include a consideration of climate change in planning. We recommend inclusion of the following elements:</p> <ul style="list-style-type: none"> <li>• <b>action 6.2.4 vi.</b> demonstrate climate resilient design considers climate change for whole ultimate precinct plan timescale</li> <li>• <b>action 6.3.6 iii. &amp; iv.</b> flood levels and bushfire extents are defined incorporating likely climate change impacts</li> <li>• <b>action 6.3.6 vii.</b> ensure creation of data (e.g., flood extents) are available for use by other authorities beyond initial application for precinct</li> </ul> <p>This will ensure the management of place-based risks are resilient not just to today's climate but also the climate we expect in the future.</p> |
| <b>Part 5 Infrastructure</b> | <p>Sydney Water notes that <b>draft water-related infrastructure shown Figure 24 and listed in Table 5</b> under Infrastructure – Utilities and services appear to be based on Sydney Water's relevant contributions to the GPEC PIC in 2019-2020. Please note that this infrastructure was based on the PIC growth forecasts and were based on high-level planning.</p> <p>Water-related infrastructure shown and listed therefore may have been superseded by Sydney Water's more detailed planning for GPEC. Importantly, there is no commitment to deliver all the assets attributed to Sydney Water, which are mostly categorised as short-term (within 5 years). As raised earlier, our ongoing planning and delivery is contingent upon receiving up-to-date and robust growth forecasts from the DPE.</p>  |

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|                    | <p>Sydney Water requires anticipated ultimate and annual growth forecasts for the GPEC precincts in order to sufficiently review and provide robust servicing advice for the area. Our catchments commonly do not align with growth precinct boundaries and Sydney Water needs to take account of growth across larger areas when planning for new or augmented water services.</p> <p>To this end Sydney Water requests that the project looks to provide anticipated ultimate and annual projections as part of the project or embedded within the DPE housing supply dashboard/greenfield project as early as possible. We acknowledge that these numbers will vary as the project progresses over time.</p> <p>We concur with the statement on page 56 that the items listed and shown, are not yet funded. Our strong preference is that each page in this section include a footnote noting that the infrastructure listed and shown are based on strategic-level investigations and are subject to change in location and sequencing, to avoid readers misinterpreting key information.</p> |

end of submission