



**WESTERN SYDNEY LEADERSHIP
DIALOGUE SUBMISSION TO THE DRAFT
GREATER SYDNEY WATER STRATEGY**

**Western Sydney
Leadership Dialogue**



ACKNOWLEDGEMENT

The Western Sydney Leadership Dialogue acknowledges and honours the Aboriginal People who have lived on this land and continue to live on this land. We respectfully acknowledge the Traditional Custodians of the land which Western Sydney covers; the Darug people of the Darug Nation. We pay respect to Ancestors and Elders, past, present, and future.

We recognise that there are more than 30 First Nations represented in Greater Western Sydney (GWS), and that GWS has the largest population of Aboriginal people in Australia. Prior to invasion a large, healthy and prosperous community of Aboriginal clans lived and thrived in Greater Western Sydney. We acknowledge that the invasion caused widespread displacement and generations of pain and suffering to all Aboriginal and Torres Strait Islander peoples.

We also recognise the significant role of the Local Aboriginal Land Councils of Greater Western Sydney most specifically the Deerubbin Local Aboriginal Land Council, the largest Aboriginal organisation in Western Sydney.



On the issue of water management in Greater Sydney, the Dialogue regards the evolved understanding of the Aboriginal relationship with the region's 'saltwater country', 'muddy river country' and 'running water country' via the adoption of the Three City model for strategic planning as a critical positive shift in policy. We strongly support the further integration of decision-making around water storage, supply, consumption and custodianship of country wherever possible at all levels of government, including the proposed Greater Sydney Water Strategy.



EXECUTIVE SUMMARY

- The Dialogue strongly supports moving towards rainfall-independent water supply for Greater Sydney, recognising the greenfield project of the Western Parkland City as the ideal location to pilot this new sustainable approach.
- We encourage the NSW Government to ‘go harder’ in the establishment of new water recycling infrastructure, reiterating our call for a 100 gigalitre annual recycled water target for the city.
- We propose that issues of recreational and environmental water equity for Western Sydney be addressed as a condition of the region leading the transition to sustainable water supply and consumption over coming years.
- This must include a range of investments and policies aimed at improving river health and access for recreational use, as well as greening and cooling the Central River City and Western Parkland City.
- We recommend the establishment of a River Watch scheme, to measure progress of the abovementioned initiatives and to better-connect communities and citizen scientists with their local environment.

- On the contentious issue of expanding Dam capacity, the Dialogue notes the variety of views that exist on this issue – both for and against – that exist across the region. We will continue to defer to subject matter experts on the decision-making inputs for this project, however we note the advent and potential acceleration of rainfall-independent water supply enables a disaster mitigation storage buffer that was historically not considered in this debate.
- We reiterate our position that regardless of the eventual decision on Dam expansion, investment in emergency mitigation measures such as the Castlereagh Freeway and a range of roads and infrastructure upgrades must be afforded higher priority in light of increasing climate volatility.



INTRODUCTION

The Western Sydney Leadership Dialogue is pleased to make the following submission on the Greater Sydney Water Strategy (draft). We welcome the strategic ambition and seriousness of intent the draft represents and strongly support many of its elements. As advocates of the people of Greater Western Sydney (GWS), we are particularly gratified by the Strategy's explicit recognition of the planning centrality of the future growth needs and right to amenity equity of those who live in the fastest-growing urban region in the nation, and the increasing urgency of mitigating the impact of climate change upon them.

We regard this Strategy, and core associated project elements of it as currently being evolved by the key utilities stakeholder Sydney Water, as together representing the single most important 'policy pillar' a collective shift towards a more sustainable, prosperous and equitable utilities future. We make the following submission in that light and look forward to playing our role in GWS in helping to deliver that future for all of Sydney.

REGIONAL CONTEXT

URBAN HEAT, AND FUTURE GROWTH AND AMENITY IN GWS

As advocates for GWS's people and its increasingly confident strategic ambitions as reflected in headland projects like the Western Sydney Airport, we have long drawn attention to the need for far-sighted utilities innovation and transition. Our 2019 policy paper on the [Urban Heat crisis in GWS](#) noted the accelerating impact of climate change on Sydney's existing dense urban middle ring and its future-growth areas even further from Sydney's historical CBD centre-of-gravity.

Our 2019 recommendations represented practical policy steps to help mitigate the worst of these impacts, which include rapidly rising temperatures, increasingly vulnerable water provisioning, and the accelerating onset of extreme environmental events (drought, heat shock, peri-urban bushfires, extreme storm and flood events). Principal in our recommendations was a more focused and ambitious approach to water systemic efficiency, resilience and sourcing - including challenging all stakeholders to set a **bold 'hard target' of 100GL/20% of recycled water** in Sydney's annual 'water budget' by 2030.



We also argued that the flow-on impact of making this target a Premier's Priority could and should extend beyond the obvious (drought-proofing) aspects of diversifying our water sources, into other no less vital elements of sustainable living for all, but especially in GWS:

- The cooling impact of increasing localized 'green and blue' infrastructure;
- The infrastructure cost-savings arising from reduced pressure on wastewater and ocean outfall loads (especially from regions far from the coast);
- The reduced vulnerability to extreme weather events of localised utility 'circular economies' that are less reliant than linear ones on centralised and/or inter-regional infrastructure;
- Improvements in natural waterway flow, and the commensurate physical and mental health outcomes of enhanced recreation and amenity;
- The economic-multiplier impact of new sustainable utility technologies and expertise; and,
- The positive impact that better local water management and urban cooling would bring to bear on Australia's overall emissions footprint.

We are pleased to note, and lend our strong support to, the many aspects of the Draft Greater Sydney Water Strategy that clearly acknowledge similar concerns and share similar ambitions, and submit the following observations on and in some cases suggestions for enhancing the various elements of the Strategy as it is propose

THE DIALOGUE'S WATER STRATEGY PRINCIPLES

FOR GWS

- The Western Parkland City project represents a unique opportunity to 'get water transition right' - and it must not be squandered.
- We should 'start from scratch', re-inventing water policy orthodoxy if and where valid.
- The people of GWS will 'lift above their civic weight' in any water supply transition – but expect water equity in return, including in recreation and amenity elements.
- Water recycling and re-use must be championed boldly and confidently as a primary transitional lever – it is not a policy shift or moment for leadership timidity.
- Maximum optionality and flexibility should be built into Sydney's water sourcing to cope with climate volatility.
- The Greater Water Strategy must be delivered as a *whole-of-community compact*, whereby community buy-in and support for the transition towards sustainable water supply is conditional upon meaningful action to address water quality and access for recreation, especially in Greater Western Sydney.



KEY SUBMISSION ELEMENTS

The Dialogue makes the following key points about the Draft Strategy.

ON PRIORITY 2

SUSTAINABLE AND RESILIENT WATER SYSTEMS

We strongly support maximising ‘rainfall-independent’ water supply.

We suggest consideration be given to an even bolder, faster expansion and diversification of water sourcing and systemic balance/resilience measures. We support:

- an increase in (energy sustainable) Sydney Desalination Plant capacity (including advantageous recalibration of contractual arrangements if/as viable);
- further exploration/evolution of an Illawarra Desalination Plant option, as noted;
- similar ongoing exploration of eight possible purified water schemes, as noted;
- an increase in systemic transference, balancing and extreme event resilience, including the Prospect-Macarthur transfer pipeline and other enhancements of transfer flexibility if/as identified at regional and local scales;
- further investigation regarding transfers from the Shoalhaven system, and Upper Nepean and Tallowa dam environmental flow releases, as noted;
- Sydney Water’s proposed Advanced Water Recycling Centre at Upper South Creek (to which we have made a separate submission), enthusiastically urging that this ground-breaking project become the centrepiece of a substantial whole-of-community conversation about water recycling specifically and circular economy utilities generally;
- ultimately extending such a conversation cautiously but confidently into potential purified recycled water options, including building a purified recycled water demonstration plant to help sensitively advance community water attitudes and habits in a sustainable direction.

#2

We strongly support systemic risk mitigation.

We agree that any sustainable water Strategy must incorporate systemic future cost and risk mitigation, and acknowledge the profoundly complex issues in identified elements of the draft Strategy, such as aging and capacity-stressed ocean outfall infrastructure, and the 'wicked problem' of Warragamba Dam capacity and Hawkesbury-Nepean flood-plain risks.

- We support: the boldest approach to expanding and diversifying a sustainable water supply (as outlined above), in order to provide the on-going complex debate over Dam capacity and flood risk mitigation with a range of alternative solution-options. We support the argument that a water system which has invested with foresight, to maximise its future adaptability is a water system best placed to make the optimum policy choices where there are legitimate and highly nuanced 'for' and 'against' cost, risk and impact factors.
- We acknowledge the complexities regarding the contested proposal to increase Dam capacity, and applaud the draft Strategy's clarity and flexibility regarding the 'live' planning options, alternatives and implications.
- We accept and agree strongly with the primary justification behind the Dam wall raising option, being the urgent need to protect the communities of Hawkesbury-Nepean flood plain areas in an era of increasing extreme weather events. We also however note the severe potential impacts of this option, in particular on sensitive native flora and fauna in the Warragamba catchment areas, on World Heritage areas, and on Indigenous sites of great significance.

- Finally, we acknowledge the bipartisan findings to date of the Interim Report from the Select Committee on the Proposal to raise the Warragamba Dam wall. We are particularly encouraged by the prospect that an alternative solution in the form of a reduction in systemic ‘maximum capacity’ could effectively secure a similar risk-mitigating ‘airspace buffer’ as would a wall raising, without the damaging impacts. We will continue to defer to specialist expertise in exploring this difficult policy question, while also advocating for the Strategy’s enhancements of rainfall-independent water sourcing (as above), in order to render such an alternative Dam/flood risk solution viable on its own merits.
- Regardless of the Dam Wall solution decided upon, the Dialogue is resolute in our strong support of those whose priority has always been the safe, prosperous and *fair* risk mitigation of communities in the Hawkesbury-Nepean Valley who have long inhabited flood-prone homes with the implicit approval of state and local authorities. We commend and support both the Interim Report and the draft Strategy for placing the highest priority on addressing extreme weather event contingencies in these areas, in particular regarding the formulation of more comprehensive emergency resource and response plans, and the identified ‘emergency infrastructure’ priorities regarding the Castlereagh Freeway, the M9 orbital and various bridge, culvert, exit-feeder route and public transport assets.

We strongly support pre-emptive cost mitigation/savings.

We agree that any truly efficient Water Strategy cost-benefit methodology must incorporate potential cost savings that arise from choices to invest in innovative sustainable and circular utilities models, as opposed to more traditional (and wasteful) linear ones.

We support:

- the elements of the Strategy that explicitly embrace water conservation and efficiency programs, a greater use of stormwater and recycled water circularity, leak management and localised transfers, connections and upgrades to address connectivity and ageing asset risks;
- the Strategy's expressed ambition that a projected (short-term) 40 to 70 GL/year of expected extra demand could be substantially met by the 'circular economy' approaches of boosted desalination (20 GL) and better efficiency/conservation (49 GL/year) at low cost, noting especially the potential this adds for a commensurate relative reduction in ocean outfall 'wastage', in turn offering potential infrastructure cost-savings;
- an even bolder, more ambitious exploration of such potential for cost-savings, in the form of unnecessary future oceanic outfall infrastructure investment. We would for example support the setting of specific targets for commensurate, phased-in reductions in annual 'wastage' (out to sea), as the Strategy's conservation, recycling and re-use elements expand;
- an eventual (long-term) 'zero ocean outfall' systemic aspiration, in which no investment at all is required in infrastructure whose only operational purpose is to facilitate the expensive flushing out to sea of re-usable water far better kept circulating locally, to green and cool our cities; and
- commend, notwithstanding this idealised ambition, the general first moves toward circularity/cost savings as expressed in this draft Strategy.

ON PRIORITY 3

GREEN AND LIVEABLE CITIES

We strongly support green and cool cities, via WSUD, IWCM and integrated land use planning.

We applaud the Strategy's explicit embrace as a Priority of the need to facilitate green, cool, liveable cities, via more Water Sensitive Urban Design (WSUD), Integrated Water Cycle Management (IWCM) and planned 'water place-making' in the built environment. Consistent with our Recommendations in GWS's Hot Issue paper, we support the Strategy's:

- ambition to integrate water cycle and land use planning, providing the full range of water services (drinking, wastewater and stormwater management) in an integrated, interconnected way that combines a whole-of-system, multi-disciplinary approach with place-based planning;
- focus on Greater Sydney's design principles, in particular those advancing blue and green places and infrastructure, through WSUD, IWCM, more joined-up open green spaces, pathways, surfaces and treescapes, more recycling and stormwater harvesting and more water/built environment interfacing;
- commitment to implementing the Wianamatta/South Creek catchment area delivery strategy: the consistent long-term coordination of integrated and use and water cycle management, Stage 1 of which includes the Upper South Creek Advanced Water Recycling Centre project;
- intention to develop a Net Zero Carbon Plan for GWS water services;
- continued commitment to supporting the extant Premier's Priorities in urban greening ('Greener Public Spaces', and 'Greening Our City');

#3

- many and diverse components at varying scales for achieving the above, including retaining and integrating waterways and waterbodies, increasing stormwater retention, diverting roadway run-off into rain-gardens and vegetation, enhancing urban canopy and riparian vegetation, improving stormwater discharge quality, and prioritising rainwater and stormwater harvesting to offset subsequent increased irrigation needs;
- four specific technical solutions for retaining stormwater in the GWS greenfield developments (bioretention sponges, water smart street trees, permeable pavements and rainwater harvesting), and its 50% and 40% permeability outcomes for residential and employment lands respectively;
- general commitment to enabling IWCM innovation, especially in the greenfield developments of GWS, to better facilitate smart water solutions into buildings, streetscapes, precincts and open spaces;
- renewed commitment to better encouraging and facilitating innovation and competition in Sydney's water provisioning, by undertaking to streamline the licensing and administration demands on private sector companies operating under the Water Industry Competition Act, a bold and creative reform which the Dialogue warmly welcomes.

ON PRIORITY 4

HEALTHY WATERWAYS & LANDSCAPES

We strongly support the nurturing and safeguarding of our urban waterways and landscapes.

As a long-term and highly vocal and visible advocate of water equity for the people of GWS with those who inhabit our beachside and harbour communities, the Dialogue is gratified by the Strategy's recognition of the importance of maintaining healthy, vibrant and amenable natural waterways and landscapes in our dense urban regions. In particular, we support the Strategy's:

- commitment to maintaining and improving ecosystem health, enhancing water quality, and mitigating pollution and industrial legacy impacts. The Dialogue especially welcomes the Strategy's sharper focus on high priority causes of diffuse source urban water pollution in Greater Sydney, and urges priority be given here to the worst-impacted industrial legacy areas of GWS, such as those associated with the Parramatta, Cooks, Georges and Duck Rivers, and smaller tributaries such as Salt Pan and Prospect Creeks;
- current review of the NSW Water Quality Objectives and the development of local government partnership pilot programs for the management of stormwater flows at a precinct and sub-catchment level (for example, in the Northern Beaches Lagoons). We urge the soonest possible development and extension of this inter-governmental partnership approach into the dense LGAs of GWS, where heavily industrialised stormwater/rainwater run-offs have typically wreaked havoc on natural waterway quality, especially during extreme weather events;

#4

- general enhancement of wastewater and stormwater management and waterway quality control, as a manifest by-product of the previously noted shift towards recycling, re-use and a water ‘circular economy’. The Dialogue particularly applauds the added boost to Nepean and Warragamba River environmental flow capacity that the Upper South Creek AWRC will provide, and encourages future projects that will similarly help improve waterway health;
- variety of approaches to improving wastewater management at the precinct operational, local community and residential level, including better understanding and regulation of new pollutants (microplastics, pharmaceuticals), household efficiency gains (rain-gardens, greywater systems, natural cleaning products), and promoting higher environmental standards through targeted programs and regulatory reform;
- conscientious approach to groundwater and mining issues, both in its general strategic intent and its specific mitigating measures, given the weighted significance of both to GWS.

We strongly urge ‘Water Quality Monitoring’ equity for GWS

We welcome the Strategy’s acknowledgement that while comprehensive water quality and wastewater monitoring programs are in place for Sydney’s urban waterways, much of it is highly technical and directed at government and regulatory audiences. However, we note (as we have noted often in the past) that, in fact, non-specialist audiences in Sydney’s beachside and harbour locales are (uniquely) kept well advised of the daily ‘swimmability’ and amenity of their (abundant) recreational water assets, through the popular Beach Watch service. In this context we draw respectful but firm attention to:

- the gross ‘amenity inequality’ of the recent COVID lock-down experiences between communities in Sydney’s eastern, northern and southern beachside and its central harbourside suburbs, where green and blue natural infrastructure and water recreational opportunities are abundant, and those in GWS, where they are not;
- the harsher GWS amenity and health impacts inherent in this disparity and especially the more urgent urban heat impacts of climate change;
- the Dialogue’s sustained pleas, to successive governments over many years, for a genuine commitment to ensuring fair and reasonable equity at last between Sydney’s recreational water ‘haves’ and its ‘have nots’;
- our specific urging of then-Premier Berejiklian, in a letter of November last year, to establish a River Watch scheme for GWS’s swimmable urban waterways, as long advocated by water quality experts, as a regional equivalent of the accessible beach/harbour monitoring service long enjoyed by Sydney’s recreational water ‘haves’.

We thus take this opportunity to respectfully ask that the Greater Sydney Water Strategy consider formally incorporating a commitment to establish such a River Watch scheme at last, as a concrete expression of its welcome abstract intention to rectify an acknowledged absence of water quality ‘reporting that reflects community values or that uses terms and metrics the general public can understand’ in GWS. As ever the Dialogue stands ready, willing and able to assist in the detailed development and implementation of River Watch, for the people of GWS.

We urge the Strategy to privilege enhancements of recreational water in GWS

We welcome the Strategy's recognition that Sydney's recreational water assets include our urban rivers, creeks and swimming pools as well as the traditionally showcased and favoured beach and harbour amenities. We applaud the great success over the years in improving the water quality on Sydney's beaches, and more recently in Sydney Harbour, and now urge an even more concerted effort to expand swimmable water options in GWS. As does the Strategy, the Dialogue strongly supports the initiatives of the Parramatta River Catchment Group, and other 'river amenity' groups like Georges River Keeper and individual Councils, and we urge a final Draft that embraces, enhances and where possible helps resource the many efforts now underway to reclaim as much of the region's natural waterways for swimming as is possible.

GWS COMMUNITIES, WATER RECYCLING AND THE STRATEGY'S TRANSITIONAL SHIFT

Following on from this plea for recreational water equity for GWS, the Dialogue makes the observation that, as the Draft stands, it will be these same regions and populations that are likely to form the 'consumer vanguard' of the significant water provisioning changes the Strategy heralds. In particular it is clear that the shift towards greater water re-use and recycling will find traction first in the new growth areas of GWS. Significant construction disruptions and impositions will arise directly from transitional projects like the Advanced Water Recycling Centre (and other systemic improvements, like the Macarthur-Prospect transfer pipeline), but ultimately the biggest disruption of all will lie in the permanent changes of habit that the circular re-use of water will demand.

Since the arrival of the Europeans, Australians living on the water-abundant coastal fringes have never had great need to husband our water carefully, much less use and re-use it for multiple different purposes. Recent experience in changing Australians' perceptions of water recycling has been mixed. Some major projects have self-sabotaged entirely by their failure to properly re-negotiate the 'water social license' between governments, utilities providers and user communities.



The Dialogue urges that the Strategy take the most serious care in advancing the debate on water recycling, and in particular avoid taking for granted the people of GWS, who will be justified in feeling somewhat like proverbial guinea pigs when presented with an exciting, but dauntingly new, project like the Upper South Creek AWRC. We are confident that with deft and sensitive forethought, planning and engagement, communities will not only quickly embrace the benefits of recycling, but will become powerful advocates and assets in the process of convincing all Sydneysiders of the way ahead with our water.

The Dialogue very much looks forward to playing a role in managing this conversation, and once again, stresses that ensuring equity in matters such as recreational water accessibility and daily water quality monitoring will go a long way towards underwriting a fruitful and mutually beneficial 'social license' transition.

INDIGENOUS STEWARDSHIP OF SYDNEY'S WATER FUTURE

Finally, the Dialogue notes and welcomes the explicit focus the Strategy accords throughout to the rights, interests and access issues of the traditional custodians of this land, including its waterways and water resources. We regard it as wholly appropriate – urgently necessary – for any truly sustainable water management plan to recognise the eternal centrality of water to life in Australia, and thus to both respect profoundly and draw upon the deeply entwined spiritual and practical importance of this precious resource to Aboriginal culture, health and well-being. In responding to this Strategy, we seek to give expression to our optimistic hope that it will forge a fertile reconciliation of the best both the traditional and the modern Australian perspective can bring to sustainable water management for us all.



TOWARDS A NEW WAY OF DOING WATER IN SYDNEY

The Dialogue congratulates the conceivers and authors of the draft Greater Sydney Water Strategy for its far-sighted expression of a clear and timely desire to ‘do water differently’. There is much to applaud, and our urged improvements notwithstanding, the Dialogue looks forward to helping advocate for it in GWS as may be needed, both in individual constituent part and in over-arching holistic ambition. We strongly believe that the moment is right to accelerate the transition towards the water management framework and infrastructure we need, with future provisioning of our people’s water needs becoming a whole-of-community exercise in mutually supporting this vital transition to a more sustainable, resilient and equitable system.

The Greater Sydney Water Strategy seems well disposed to be the policy vehicle for just such a compact between government and community, and we wish its journey well.



**FOR FURTHER INFORMATION
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