

CHARTER22



Recommendation 22 of 26 : Fund a feasibility study for a natural swimming pool integrated into the River Torrens as an opportunity to boost city visitation, and a catalyst to improving river water quality to swimming standard.

Charter22 is the culmination of several months of work to understand the current policy priorities for South Australian businesses and the most effective options to improve the State's business environment. In March 2021, Business SA ran a survey of member businesses to gauge their key issues and test policy positions to respond to their needs. To ensure a comprehensive perspective has framed our policy thinking ahead of the 2022 State election, we have also had discussions with a range of businesses through our member reference groups, with members more broadly, and the wider business community.

There is no doubt the Adelaide CBD has suffered an extremely heavy toll through COVID-19, from a lack of international and interstate tourists and business travellers, to international students stopped from returning, and various work-from-home directions keeping employees out of the office. As South Australia's peak employer body, Business SA recognises the need for lateral thinking to reignite economic growth post-COVID 19, particularly in regions like the CBD which need a sustainable boost to visitation numbers. And such proposals need to play to South Australia's strengths.

RECOMMENDATION : 22 OF 26

FUND A FEASIBILITY STUDY FOR A NATURAL SWIMMING POOL INTEGRATED INTO THE RIVER TORRENS AS AN OPPORTUNITY TO BOOST CITY VISITATION, AND A CATALYST TO IMPROVING RIVER WATER QUALITY TO SWIMMING STANDARD

South Australia rightly prides itself on leading the nation in many aspects of sustainability, from renewable energy through to recycling and the circular economy. Businesses are increasingly adopting environmental, social and governance (ESG) policies to remain competitive in a commercial environment where expectations from customers and governments continue to grow. Business SA acknowledges significant progress has been made in improving River Torrens water quality over the past 20 years, although we remain some distance from a point where swimming could typically be accommodated in the River at large (acknowledging the 2018 Australian Barefoot Waterski Championships took place adjoining the CBD riverbank amid daily water quality testing). Reaching this point is not insurmountable for a State that leads in so many other aspects of environmental progress, but we need a transparent debate about the viable options and associated costs and benefits. This is occurring in part through the River Torrens Water Quality Improvement Project, but it is not ambitious to the point of realising a time when swimming could generally be made safe and attractive, even at designated locations.

The River Torrens has been artificially altered several times over the past two hundred years, most notably through the construction of a weir and later a channel to enable an outlet to the sea between West Beach and Henley Beach. Upstream, various water flows into the Torrens have also been dammed to provide drinking water for Adelaide. In recent years the State Government, in conjunction with SA Water, has implemented an ambitious plan to open up several Mt Lofty Ranges reservoirs for recreational use, including but not limited to those on the doorstep of Adelaide such as Myponga, Mount Bold, and Hope Valley. The success of this endeavour demonstrates the public's appetite to engage with water-based activities in previously inaccessible water ways and highlights the achievement of reintroducing native fish species to enable recreational fishing.

While there has been tremendous development along Adelaide's Riverbank precinct over the past decade, including the Convention Centre, Adelaide Oval, Memorial Drive and Festival Centre, Railway Station and Casino upgrades, and potentially a major new multi-purpose sports stadium, there has been no equivalent focus on improving water quality to make the River Torrens the jewel in the crown of this flagship precinct.

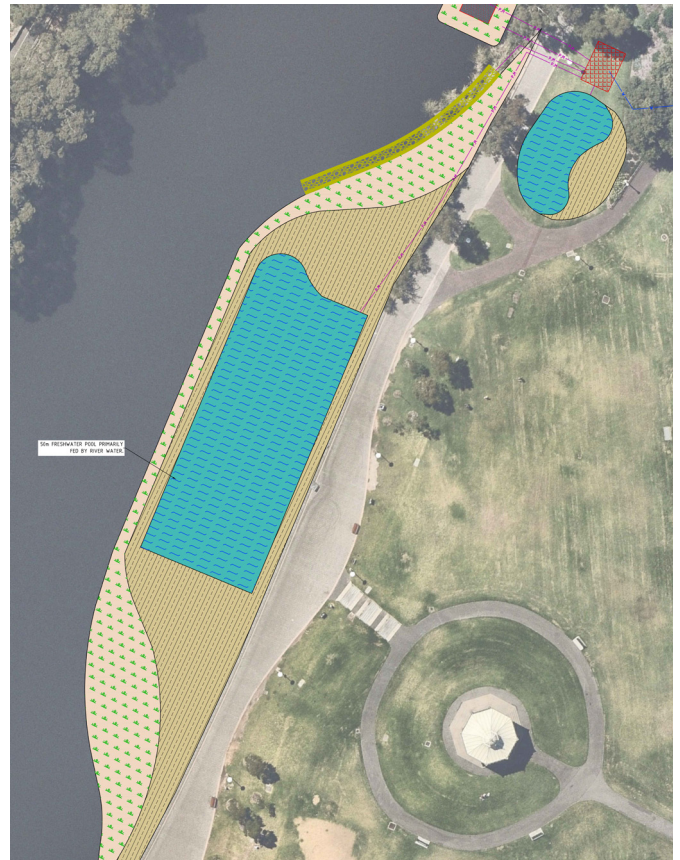


Early 1900s River Torrens Swimming



“THIS SUSTAINABLE POOL PROPOSAL WOULD PROVIDE A MUCH-NEEDED TOURISM BOOST TO OUR CBD, PARTICULARLY IN SUMMER WHEN DAYTIME VISITATION DROPS AS PEOPLE FLOCK TO THE BEACH.”

MARTIN HAESE, CEO - BUSINESS SA



Suggested placement and concept drawing provided by Aquatic Biosecurity and Herriot Consulting

There are various elements to achieving this, including the removal of pest fish species including carp and goldfish, already being done safely and effectively on a small scale through electrofishing methods. There would also need to be some substantive investments in UV filtration treatment facilities at appropriate locations to generally facilitate swimming. As a preliminary step, Business SA recommends consideration of a separate designated swimming area with an adjoining channel to treat water. While this introduces a material capital expenditure spend, a focus on a targeted area for swimming first could be a more practical catalyst to restoring the river more broadly to a swimming standard, also providing the city with an iconic tourist attraction.

Business SA proposes a natural 50m swimming pool adjacent to the existing River Torrens on the edge of Elder Park, in a similar location to that occupied by the festival season pontoon. A concrete pool would be fed by a treated channel direct from the river, including multiple layers of treatment, both natural and mechanical. Our modelling of the cost of the pool itself is based on the ocean pool proposal at Hallett Cove, expected to cost circa \$5.5m, including an allowance for circa \$100,000 per annum in maintenance and pumping costs. We have also allowed an additional \$250,000 per annum to provide for lifeguards. Similar to the Hallett Cove project recently put to the State Government, Business SA's proposal is for a walled pool fed by pumped water. In total, Business SA estimates the project would cost circa \$10-12m, including the natural treatment channel works, acknowledging this would need to be subject to a formal feasibility study.

Importantly, key stakeholders of the River Torrens would need to be consulted to ensure the project best meets their interests, including the local Kaurna people for whom the 'Karrawirra Parri - River Red Gum Forest' holds significant cultural importance.

Technology for natural swimming pools is already well-established and could easily be replicated for a River Torrens swimming pool. Natural swimming pools work on the basis of having chemical free pools that use the principles of nature to filter out harmful microorganisms. Essentially, a natural swimming pool has two distinct parts; a swimming area and a separate regeneration area which features a range of plants that feed hydroponically on the water. Additionally, there are aerobic and anaerobic bacteria which act as a biological filter in the regeneration area to further purify the water. Once water has been treated in the regeneration zone, it flows back into the swimming area. In Business SA's proposal, having an additional layer of mechanical treatment and a separate connection to mains water would ensure the River Torrens natural swimming pool is completely safe and attractive to locals and tourists alike.

The running costs of this flow through pool should, once constructed, also be well below conventional swimming centre running costs which use mains water as their source and are chemically expensive. Regardless of the water quality in the Torrens, an SA Water feed would enable the system to be 100% manipulatable and usable 24 hrs/365 days per year. Evaporation loss of this pool is technically zero whenever it uses Torrens River water, a feature overcoming one of the largest costs in other public pools in Adelaide. A solar array to power the pumps, treatment and filtration plant, and primary debris collection system will also bolster the river pool's sustainable credentials.

While the swimming pools adjacent to the Brisbane River are quite popular, they are separate from the river and do not reinforce any concept of the river and pool being intertwined. If South Australia wants to ultimately restore the River Torrens to a swimmable river, Business SA's river pool proposal provides a significant bridge towards that goal. It would also be quite attractive for locals on the eastern side of the city who often have a long commute to the beach and otherwise seek to go somewhere to cool off with a similar atmosphere.

The closest comparable facility is the Cataract Gorge on the edge of Launceston which is very popular with locals and tourists, featuring a conventional swimming pool adjoining the nearby gorge where swimming is also possible. However, there is no other comparable naturally fed pool right on the doorstep of an Australian CBD and South Australia should take the opportunity to be a first mover. Munich in Germany has river surfing and South Australia should be ambitious with what is possible to make the River Torrens more desirable for leisure activities, and to leverage off the extremely successful work recently done to open up SA Water reservoirs to visitors.

South Australia is already home to the world class Australian Water Quality Centre, established in 1933, and as a State we should aim to ultimately have our flagship city river swimmable. In 2021 with South Australia seen as a world leader in many areas of sustainability, let's aim to be world class in every respect and completely restore the River Torrens to its former glory.



THE RIVER TORRENS WAS ADELAIDE'S PREMIER SWIMMING VENUE AT THE TURN OF THE 20TH CENTURY THE SCIENCE BEHIND WATER QUALITY MANAGEMENT, MONITORING AND TREATMENT HAS IMPROVED REMARKABLY SINCE THEN. THE UN-REALISED POTENTIAL FOR OPEN AIR SWIMMING IN A POOL FED BY NATURALLY FLOWING WATER, WILL PROVE TO BE ONE OF OUR GREAT ICONS AND IT FITS NEATLY WITH OUR STATE'S GREEN CREDENTIALS.

**DR MICHAEL SIERP,
AQUATIC BIOSECURITY**



*Artist Impression
Gerald Matthews - Matthews Architects*

