

### E News October 2022

### From the Committee

Welcome to our September newsletter.

We've been a little quiet this year as we all juggle busy workloads and adjustments to the 'new normal' following two years of Covid restrictions. Rest assured that the committee is committed to bringing a calendar of events to our membership base in the remainder of 2022 and into next year.

Our September event brought you an online presentation on Blacktown City Council's WSUD Compliance Program. A first of its kind in Australia, the program aims to increase compliance with legal requirements for the management of privately-owned water sensitive urban design assets in the Council area. This was a great opportunity to hear what our interstate counterparts are up to in a convenient lunch time, online seminar.

We are currently planning our 2022 Annual General Meeting and associated event, coming up in November of this year. Details will be provided as soon as we've finalised our plans, but we hope to be able to coordinate the AGM with a site visit to a current South Australian project site.

Also in the planning phase is our Stormwater SA Stormwater Excellence Awards. We will be opening nominations later this year, with the awards ceremony to be held in early 2023. This'll be the first time since 2018 that we've had an in-person awards ceremony, so we are looking forward to reconnecting with our members and celebrating the achievements of the South Australian Stormwater industry. Now is the time to start thinking about nominating a project you've been involved with over the past couple of years. Further details on the awards categories, criteria and key dates will be provided soon.

As always, the success of our newsletter is reliant on contributions from you, our members. If you have any projects you'd like profiled, please contact <a href="mailto:info@stormwatersa.asn.au">info@stormwatersa.asn.au</a> and we can provide more details of what we are looking for. Essentially all we'll need are a few words on the project and some good quality photos.

We hope you enjoy our newsletter and look forward to seeing you all at our AGM.

Sarah Murphy, on behalf of the Stormwater SA Committee

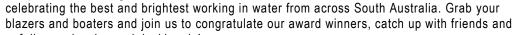
### What's on



# SA Australian Water Association – Gala Dinner and Awards Night

18 November 2022

Jump aboard for a night on the River Torrens



enjoy an evening of dinner, dancing and deckhands!

Water Awards SA are now open for entries! Entries close Friday 9 September.

Please follow the link below to find out more about the Award Categories and conditions of entry.

https://www.awa.asn.au/upcoming-events/wa-awards-dinner-2022-0







# Profile of the Month - Breakout Creek Stage 3 Redevelopment

If you've ventured near western end of the River Torrens/Karrawirra Pari recently you will have noticed extensive earthworks underway as the Breakout Creek Redevelopment Stage 3 takes shape.

A wet winter in 2022 has made construction challenging, but the project is on track for completion in mid-2023.

Breakout Creek is being steadily transformed from an artificial channel into a more natural and healthy river system. The Stage 3 redevelopment area stretches from Tapleys Hill Road to the sea, a total of 1.5 kilometres of river and banks.

The Stage 3 redevelopment marks the end of a 30-year makeover for this section of River Torrens.

The river once flowed through sprawling reed beds towards Port River in the north and Patawalonga Creek in the south. When the western suburbs of Adelaide were developed in the 1930s, Breakout Creek was excavated with confining levee banks constructed to manage flooding in the area.

The Stage 1 "demonstration" project saw a 500 m section of Breakout Creek, upstream of Henley Beach Road in the suburbs of Fulham and Lockleys, developed from an artificial channel to a more natural one in 1999.

Stage 2 of the project saw about 700 m between Henley Beach and Tapleys Hill roads redeveloped and opened up for community use with access to spaces with high biodiversity value in the urban landscape. It was completed in 2010 and included widening and deepening the channel, removing weeds and planting more than 200,000 native plants.

Stage 3 will create wetlands to capture and clean stormwater from adjacent residential catchments prior to discharge to the river, remove weeds, plant more than 215,000 new native plants and create habitat for a range of aquatic and terrestrial fauna. The redevelopment will also open areas that are currently fenced off, with new opportunities for people to enjoy trails, picnic areas, viewing decks and art.

Importantly, collaboration is underway with traditional owners of the land, the Kaurna people, to acknowledge the significance of the area, its culture and history.

The redevelopment will include substantial upgrades to the River Torrens Linear Path both sides of the river including path widening and lighting upgrades, creation of two new low-level pedestrian river crossings and connecting path networks, constructed wetlands on the banks of the river channel, significant revegetation and habitat areas, development of a new Kaurna Reflection Space at the end of Military Road, and relocation of horse agistment areas to the south-western quadrant of the site.

The project is a \$14 million partnership between Green Adelaide, the City of Charles Sturt, the City of West Torrens, the South Australian Department for Trade and Investment through the Planning and Development Fund, the Australian Government through the Environment Restoration Fund, and SA Water. The project is committed to working with the Traditional Owners of the Adelaide plains, the Kaurna people.

The design was led by Taylor Cullity Lethlean, suported by Tonkin, DesignFlow and its other partner consultants. The construction is being led by Bardavcol.

Stay tuned for a future SSA site visit to the redevelopment site in the near future.

Visit the project website for more details: <a href="https://www.greenadelaide.sa.gov.au/projects/breakout-creek-stage-3">https://www.greenadelaide.sa.gov.au/projects/breakout-creek-stage-3</a>









Artist's Impression – New path network and pedesrian river crossing
For other artist's impressions visit <a href="https://cdn.environment.sa.gov.au/greenadelaide/images/Breakout-Creek-Redevelopment-Stage-3-Artists-Impressions.pdf">https://cdn.environment.sa.gov.au/greenadelaide/images/Breakout-Creek-Redevelopment-Stage-3-Artists-Impressions.pdf</a>

# Case Study: TREENET inlets and infiltration systems trial

Kerbside inlets and leaky well structures provide many environmental, economic, and social benefits including capturing the 'first flush' of stormwater at the point source and providing passive irrigation to surrounding vegetation. To explore the benefits of these structures, an ongoing collaborative research trial has been initiated by Space Down Under, Hydrorock Australia, the University of South Australia, and the City of Port Adelaide Enfield.

A total of six infiltration systems with TREENET inlets have been installed at Rafferty Street, Wingfield. The trial is focussing on investigating the emptying time of wells, and the water quality infiltrating from the leaky wells. There are two types of infiltration system at the site – all consist of a kerbside TREENET inlet and these are coupled with either (a) Hydrorock infiltration systems or (b) Space Down Under infiltration trenches. The City of Port Adelaide Enfield has installed ten young Eucalyptus trees ('Euky Dwarf') at the site, including seven trees with adjacent kerbside inlets and leaky wells which will receive passive irrigation, and three trees with no nearby well (as a control).



(a) Space Down Under infiltration trench with TREENET inlet



(b) Hydrorock infiltration trench with TREENET inlet





(c) Equipment used to extract water samples from underneath the leaky wells



(d) Eucalyptus tree with the recycled plastic stakes planted at Rafferty Street, Wingfield, City of Port Adelaide Enfield

# **Stormwater Management Planning Priorities 2022**

The Stormwater Management Authority (SMA) offers funding support to projects which are in accordance with an approved stormwater management plan. The SMA has a legislated responsibility to prepare a list of priority catchments for which stormwater management plans should be prepared. Over the last eighteen months, the SMA has been working to apply a new prioritisation framework and is pleased to release its <a href="Stormwater Management Planning Priorities for South Australia 2022">Stormwater Management Planning Priorities for South Australia 2022</a>

The new list of priorities has considered stormwater catchments across metropolitan Adelaide as well as sixty regional cities and towns, with regard for flooding and drainage risks; water quality risks; water security risks and stormwater reuse potential; climate change adaptation; development pressure; and the recency and adequacy of existing strategies and plans. A wide range of stakeholders contributed to the work including the Department for Environment and Water, Department for Trade and Investment (Planning and Land Use Services), Environment Protection Authority, State Emergency Service, Green Adelaide, landscape boards and local councils.

The new priorities reflect the relative needs for new or updated investigations and planning. Stormwater management plans that are already approved, and the works and measures which they describe, are in various stages of ongoing implementation (for approved plans see <a href="https://www.sma.sa.gov.au/resources/stormwater-management-plans/">https://www.sma.sa.gov.au/resources/stormwater-management-plans/</a> or contact the relevant local council). The SMA acknowledges that priorities can change in response to underlying factors. The SMA will review the priorities from time-to-time and encourages stakeholders to share any more recent data or information.

For further information on the 2022 priorities, please contact Belinda Skilton, SMA Technical Advisor (belinda.skilton@sa.gov.au) or David Trebilcock (david.trebilcock2@sa.gov.au)

#### Conferences and events



Australian Water Association Ozwater '23 – United by Water Naragaying Badu

10-12 May 2023 SYDNEY, Australia



<u>Call for Ozwater Papers</u>: <u>Submissions close 19 September 2022</u>

Ozwater is the premier event for presenting new research, innovation and technologies to address current and emerging water challenges.

Submit an abstract to share your experience.

For more information on the Conference Themes, visit the Ozwater '23 Website



### Conferences and events



#### SA Australian Water Association:

SA State Conference 2022 – Water matters: Envisaging our future

30 September 2022

Adelaide Convention Centre, ADELAIDE SA



The Conference will be an engaging one-day event held on Friday, 30 September at the Adelaide Convention Centre. The theme for the Conference is **Water Matters: Envisaging our Future**.

With the theme focused on looking to the future, the conference provides an opportunity for you to hear about the latest information, technology, innovations, research or case studies that South Australian water professionals are talking about, delivering or considering.

For further information and to register, follow the link below

https://www.awa.asn.au/upcoming-events/sa-state-conference



#### **IPWEA** (Victoria)

How to deliver better stormwater outcomes

9 November 2022 - 30 November 2022 (four online sessions)

Online

Presented by specialist trainers via Clearwater, this online course covers stormwater management basics and best practice stormwater management solutions.

Designed for engineers, technical officer and works supervisors

Head to IPWEA's website for more details and to register.



# **Training**

Links to the current schedule of training opportunities from providers who are hosting courses in South Australia and further afield are provided below.

Water Sensitive SA (WSSA) Training

http://www.watersensitivesa.com/training-events/

International Centre of Excellence in Water resources management (ICEWARM) Short Courses

http://www.icewarm.com.au/australian-water-school/short-courses/

eWater MUSIC and WSUD Modelling Courses

http://www.ewater.com.au/products/music-training/

eWater Source Training Courses:

https://ewater.org.au/products/ewater-source/source-training/



# Bits and pieces

#### New Logo for Stormwater Australia

If you receive newsletters from Stormwater Australia, you may have noticed that their logo has changed. Our National body is also in the process of rebuilding its website, so stay tuned for the new look in the coming months.



#### Stormwater Victoria Conferece 2022

Our Stormwater SA Treasurer, Michael Di Matteo attended the Stormwater Victoria Conference, held in Geelong in June.

#### He reported that

"The conference was an excellent opportunity to present some forward-thinking and innovative South Australian approaches to stormwater management and was well-received by the audience. It was also great to meet colleagues from Victoria for the first time including in Melbourne Water who I am working with on the Fishermans Bend drainage strategy.

It was great to see a number of presentations on Integrated Water Management (IWM) for growth areas and the importance of considering stormwater management's role in IWM. Melbourne Water also presented interesting techniques for wetland monitoring by processing aerial imagery to track plant establishment and health.

The Victorian stormwater industry is moving towards value adding to clients undertaking flood studies by considering stakeholder and community engagement and whole of catchment objectives including water sensitive urban design, water quality, amenity and water reuse. This wholistic approach helps to integrate community wants and flood intelligence into planning, and identify multi-benefit infrastructure that can attract multiple funding sources and deliver a stack of benefits that improves cost-benefit ratio. It's interesting that SA is somewhat advanced in this practice and there is also lots to learn from stormwater management approaches in Victoria.

Also, a key takeaway is that consultants play a key role to help water management organisations to break down their internal 'silos' by including internal stakeholder engagement in integrated water planning and design projects. This helps the organisations develop a shared vision for a project and gain internal buy-in and identify key internal roadblocks early on in the planning and design phases."



#### Gardening Australia showcasing stormwater

Reproduced from Stormwater Australia Newsletter
Keep an eye on Gardening Australia in the coming
months! Alan Hoban recently just spent a day with the
Gardening Australia crew showcasing the Hanlon Park
(Bur'uda) Creek Rehabilitation project at Stones Corner
in Brisbane. This project has had a lot of publicity
because the park is in the heart of Brisbane and has
converted a concrete drain into a 'natural' creek and new
urban parkland.

The Brisbane City Council Project was 10 years in the making and came on the back of many years of community advocacy and engagement. The project was designed by Bligh Tanner, Tract and others, and built by Epoca Constructions. It was a complex project to design and construct, being constrained by major bridges at the



top and bottom end, contaminated soils, tidal influences, major underground utilities and a series of floods during construction. Since its opening, it is much loved by the local community and there's an abundance of native fish and wildlife.

In typical style, Alan turned the event into a stormwater education opportunity. While you can never be sure what happens when a day's footage is reduced to a few minutes, we are hoping that this will be a good plug for the industry!

#### **Nominations for Emerging Leaders**

Storwmater Australia is seeking to support and profile some of the industry's Emerging Leaders in the national newsletter and on the national website over the next 12 months. If there is an Emerging Leader who is making a difference with their work and in their community, who you would like to nominate for their passion, hard work, innovation and achievements in the industry, please contact <a href="mailto:nationaladmin@stormwater.asn.au">nationaladmin@stormwater.asn.au</a>

Please send us any information on events, news items or items of interest for the next newsletter. If you have any interesting stormwater news, we're keen to submit articles to the national newsletter so get in touch if you have any ideas.

Stormwater SA Stay in touch with us: or Follow us:

Developing a sustainable stormwater industry for South Australia

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