SPEL.COM.AU VSSUE # 5

GENERATIONAL ASSETS:
PRIORITISING STORMWATER
MAINTENANCE

POLLUTION REMOVAL
IN AUSTRALIA'S LARGEST
INTERMODAL LOGISTICS
PRECINCT

TAKE 3 FOR THE SEA

FUTURE-PROOFING STORMWATER NETWORKS



spelstormwater



04

SPEL NEWS HIGHLIGHTS

Taking a look at the latest SPEL News and highlights, and the community response to the 2022 floods.

06

BCC ACCEPTS SQIDEP VERIFICATION

We explore the implementation of the SQIDEP protocol by Brisbane City Council, and the ways it will help secure healthier waterways in Southeast Queensland.

07

FEATURED SPEL PROJECTS

We look at two of our latest projects – the Moorebank Intermodal Terminal & The Victorian Big Battery.

09

TEAM MEMBER HIGHLIGHT

We talk to Queensland Team Leader Leon Attwood about stormwater in the sunshine state.

10

GENERATIONAL ASSETS: PRIORITISING STORMWATER MAINTENANCE

Learn about maintaining stormwater assets and the benefits of looking after this key infrastructure, from environmental benefits to decreases in running costs.

-11

FEATURE SPEL PRODUCTS

Checking out two of our popular products, the SPEL Megavault & SPELBio.

13

TAKING 3 FOR THE SEA

Learn Take 3 for the Sea, and the way downstream and upstream initiatives can work together to help keep our waterways

14

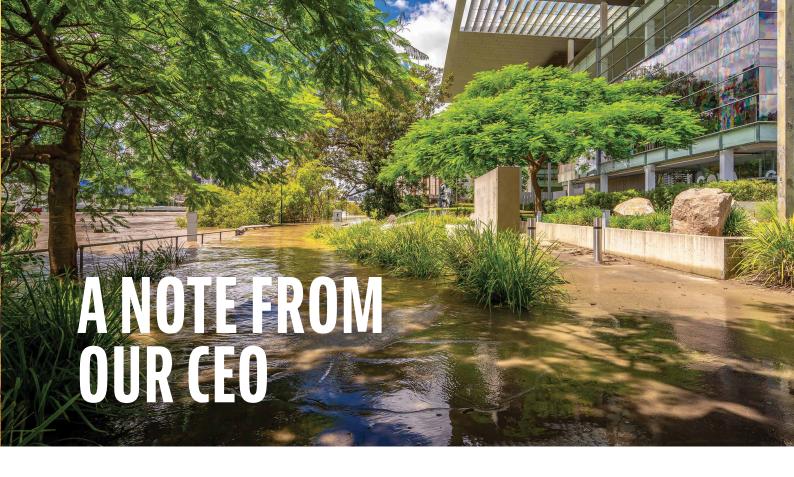
FUTURE-PROOFING STORMWATER NETWORKS

Severe weather and flooding are set to increase in frequency as the climate changes – what adaptive strategies are we implementing in stormwater management to address these challenges?



Clean water is a right, not a privilege.





ANDY HORNBUCKLE, CEO



A WET START TO 2022

A spectacular amount of rainfall soaked our coastline in early 2022. The deluge was one of the worst flood events in recent history, with some places like Northern Rivers NSW even measuring record flood heights. We are amazed by the strength and fortitude of all those impacted by these events, and the ways our communities have banded together to overcome these trying times.

We have provided support across many areas of the eastern coast, with many of our team donating time to charities such as Rapid Relief Team, who have assisted countless people through these events. We applaud these efforts and the response of the wider community. Members of our team were directly impacted, and we have embraced their troubles with open arms and endeavoured to be there for them - with helping hands and warm smiles.

STORMWATER: LOOKING INTO THE FUTURE

SPEL Stormwater has a core ethos to help protect local communities from flooding and preserve the ways we find Joy in Water. As the impacts of climate change increase the frequency of severe weather events, we need to harness appropriate technology that helps us navigate these concerns and live in harmony with the world as it changes around us.

The vulnerability of our local communities to severe weather has been highlighted. By implementing innovative stormwater systems, and future-proofing our water networks, we can enhance our urban landscape and begin to mitigate the impacts of flooding. With these storms shedding debris and pollution across our entire water network, we see a clear reflection of the increasing need and necessity for stormwater management.

We are very confident that working with Stormwater Shepherds' vision and mission, and local governments, we can help develop systems that protect and future proof our vulnerable environment. Our goal is to provide a robust framework for stormwater infrastructure that stands the test of time – with qualities that match the resilience of the communities that need them the most.

SPEL

HIGHLIGHTS



The large storm cell moved from Southeast Queensland and into NSW, bringing an unprecedented deluge to many areas.

With local communities recovering from the floods, we would like to express our sympathy for those impacted and show our support for the rebuilding efforts that will take place over the coming months.

RAPID RELIEF TEAM: SUPPORTING FLOOD RECOVERY IN SOUTHEAST QUEENSLAND

We were proud to support the Rapid Relief Team (RRT) as they helped the Queensland community throughout the flood events of early 2022. Assisting in sandbagging 1,100 tonnes of sand, and the provision of over 1,000 hot meals to locals displaced by floodwater, their help during this challenging time was invaluable.

SPEL's CEO Andy Hornbuckle and team members Leon Attwood, Toby Attwood, Chad Wright and Jethro Bryan-Brown were all on-hand to help RRT with the provision of sandbags in Brisbane.



SPEL'S EDUCATION OPPORTUNITIES: LUNCH & LEARN

Is your team up to date with the latest approaches in stormwater management?

SPEL can provide lunch & learn sessions in the comfort of your own office to talk you through new developments in the industry and provide troubleshooting for your stormwater issues – with a bite to eat on the side.

Contact us to request a booking.



YOU ASK, WE ANSWER: SHARING OUR KNOWLEDGE

No question is too big or too small when it comes to understanding stormwater. The stormwater sector is evolving at a rapid pace, and through our You Ask, We Answer series, we will be looking to foster important discussions about stormwater management. What questions are on your mind? We would love to hear from you. Email us at questions@spel.com.au.



CPD OPPORTUNITY: PURACEPTOR WEBINAR AVAILABLE NOW

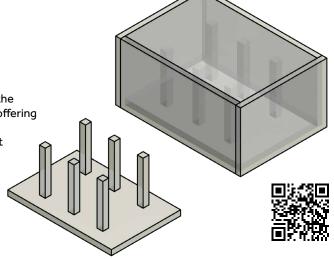
SPEL provides webinars throughout the year, and our February webinar is available on-demand with SPEL New Zealand's Matthew Scarlett. Covering the SPEL Puraceptor, and our approach to oil & water separation, the webinar shows just why these devices are perfectly suited to high-risk applications, such as refuelling stations and service stations.



LATEST SPEL PRODUCTS: THE RELEASE OF THE SPEL MEGAVAULT

We are excited to bring our newest stormwater solution into the marketplace with the SPEL Megavault now available. A great offering for developments that require medium to large stormwater detention solutions with greater depth profiles, these precast concrete systems provide superior structural outcomes, quicker installation and condensed onsite footprints.

You can find out more in our product article in this issue or on our website.





STAGE 1 APPROVAL FOR SPELFILTER & SPEL HYDROSYSTEM ACROSS CHRISTCHURCH

Providing the green light for placement in local developments across the Christchurch region, the SPELFilter & SPEL Hydrosystem have gained Stage 1 approval by Christchurch Council.

As South Island's largest city, complying with Christchurch's environmental standards and specification opens many new avenues for the application of these devices in the region.





BRISBANE CITY COUNCIL **LEADING** THE WAY

Many local councils are looking to make better decisions when it comes to implementing stormwater infrastructure, and they are turning to new ways of assessing best practices in the industry. Standardization is set to become a powerful tool.

Providing a uniform set of criteria for measuring the performance of stormwater treatment devices, the Stormwater Quality Improvement Device Evaluation Protocol (SQIDEP) is an independent process that aims to help set performance standards for devices across the stormwater sector.

Stormwater Australia, and its panel of seasoned stormwater professionals, are the custodians of the SQIDEP evaluation process. The process involves rigorous field-testing requirements and verification procedures. Adoption of the protocol by the Brisbane City Council is set to be a game-changer, and they look to secure water quality outcomes across an ever-increasing variety of devices for treating stormwater.

VERIFIED DEVICES: MAKING BETTER STORMWATER INFRASTRUCTURE DECISIONS

SQIDEP verification was adopted by Brisbane City Council in late 2021 as part of their infrastructure design planning framework. Verification ensures that devices fulfil their product guarantees and performance specifications, such as pollutant removal and support of local water quality objectives.

A strong body of evidence is required to support SQIDEP verification, including data on a minimum of fifteen stormwater events over two years. This verification is set to streamline device assessment, making it quicker and easier to choose new stormwater infrastructure.

Brisbane City Council currently has two out of fourteen current devices approved for use. A transition period of two years has been set for new and existing developments, which will conclude in December 2023. These standards will ensure that devices in the Brisbane area are thoroughly tested and meet the city's long-term vision for cleaner water and improved urban stormwater management.

In other areas, various councils and water groups across Australia have cited a need for better stormwater device standards, including Sydney's Blacktown City Council and Water Sensitive SA (South Australia).

The SPELBasin and SPEL Hydrochannel are already SQIDEP verified, and we welcome these independent processes. In the future, we look forward to putting more of our stormwater devices through the necessary testing to prove their effectiveness in local conditions and their ability to help safeguard our local environment. For more information about SQIDEP's application process please visit Stormwater Australia.



Supporting Victoria's transmission network, the Victorian Big Battery is one of the world's biggest battery facilities. The modern 300MW facility is situated approximately 13 kilometres northwest of Geelong and is a key contributor to hitting the state's target of 50% renewable energy by 2030.

Providing energy storage when the sun is shining and the wind is blowing, the battery's efficient storage of renewable energy is a game-changer. Allowing the release of stored energy during peak load, it is expected to unlock an additional 250MW of peak capacity across Victoria's power grid.

Situated next to AusNet's existing Moorabool Terminal Station, the battery holds enough energy to power one million Victorian homes for half an hour. This fail-safe system will also insulate the state's power network from the impacts of network outages, grid instability and blackouts.

SPEL was delighted to join the project and provide stormwater solutions for this innovative part of Victoria's energy network.

HYDROCARBON RETENTION: PROTECTING THE BIG BATTERY TRANSFORMER YARD

The <u>SPEL Puraceptor</u> is a full retention, oil and water separator, which is perfectly suited to containing hydrocarbon spills in the Big Battery's transformer yard. In high-risk applications, its emergency retention capabilities ensure that oil spills are contained safely on-site. Mitigating fire events, the oil from onsite transformers can be completely retained within the unit.

The SPEL Puraceptor meets all Australian standards with its 60,000 litre spill capacity, and provides key protection from hydrocarbon contamination across the site and surrounding areas. Our unit's fire stopping flame trap, and superior performance in high-flow rate conditions, help to minimize risk during catastrophic events.

Single-piece fibreglass construction resulted in quick installation, with no on-site concrete pours, and less exposed excavation throughout placement.

At the unmanned site, the Big Battery Puraceptor can relay key issues to site operators with its automatic warning system. Remote alerts will be flagged directly in their systems in the event of a spill or necessary clean.

Comprehensive maintenance will be performed to ensure optimal operation, asset safety and structural integrity. With a 25-year guaranteed design life, the SPEL Puraceptor fit the bill for the site's environmental vision for sustainability.

The Big Battery is a great achievement for local power infrastructure, and SPEL was there to help every step of the way with this crucial stormwater asset.

Learn more about the Big Battery Project - victorianbigbattery.com.au.

MOOREBANK, SYDNEY



POLLUTION REMOVAL IN AUSTRALIA'S LARGEST INTERMODAL LOGISTICS PRECINCT

Located 32km from inner Sydney, and occupying a stunning 243 hectares, the Moorebank Logistics Park is poised to be Australia's largest intermodal logistics precinct, and SPEL is honoured to be part of this ambitious piece of key infrastructure.

With over 850,000 square metres of warehousing, the project aims to remove 3,000 truck movements per day from New South Wales motorways. Reducing greenhouse gas emissions by over 110,000 tonnes per year, the site will play an integral role in supplying a renewable future for state-wide logistics networks. Fitting the bill for sustainable design, SPEL's Vortceptor was chosen as an integral part of their stormwater treatment.

SUSTAINABLE DESIGN: 100-YEAR DESIGN LIFE

With a specified design life of 100-years needed for all on-site assets, five Vortceptors were placed across the site in key catchment areas.

The single piece, fibreglass construction of these units fit the park's key design criteria and were installed in two days with no in-situ concrete pours – supplying reductions to project cost, OH&S and labour requirements when compared to traditional concrete installations.

The <u>SPEL Vortceptor</u> has a unique no-blocking screen and treatment action, which separates and captures gross pollutants. With the capacity to treat 800 litres of storm runoff per second, each Vortceptor unit provides excellent pollution removal capabilities and high water-quality outcomes.

The captured debris can have many catastrophic downstream impacts on water quality, such as leaching of pollutants, degradation of aquatic habitats and threats to local wildlife. Offering a low-maintenance solution, the Vortceptor will continue to function even during high rainfall events.

A benchmark project for environmentally sustainable design, the Moorebank site has a large 100-hectare area dedicated to biodiversity conservation. With a priority to meet Five Star Green Star design standards, our Vortceptor units support key waterway protection policies across the site's entire catchment.

Each Vortceptor also helps to manage the levels of sediments, silt and total suspended solids (TSS) hitting the site's waterways, and their ability to screen 99.9% of gross pollutants places them in a league of their own when it comes to locally manufactured GPTs (Gross Pollutant Traps).

More information about this project can be found at $\underline{www.micl.com.au}.$



Q&A \ \ EON ATTWOOD

Queensland Team Leader Leon Attwood joined SPEL in 2013, bringing a new set of eyes to the stormwater industry.

Eight years later, his growth in the industry has led to extensive time designing, developing and supporting stormwater assets across the state. committee roles at Stormwater Queensland and embracing SPEL's mission of ensuring joy in water.

WHAT IS YOUR STORMWATER BACKGROUND?

I started at SPEL straight out of school with little stormwater background apart from knowing it starts in the sky and ends up in the ocean. In the 8 or so years I have been at SPEL, it has taught me the positive impact that I as an individual, and as part of the company, can have on ensuring joy in water experiences for the current and future generations.

Outside of SPEL, I am also part of the board of Stormwater Queensland, which involves advocacy and conferences around stormwater initiatives and issues that have been raised in the Queensland area.

WHAT ARE SOME OF THE **BIGGEST PROJECTS YOU HAVE WORKED ON AT SPEL?**

At SPEL, we are very team orientated. Largely, we all have some input and involvement in most projects that SPEL is engaged with. Many large projects come to mind, and these

The large floating wetland installations at Bribie Island and Parklakes (2013-2015), the multiple Hydrocarbon management devices for RAAF Amberley (2017), the major upgrades to QLD's substation hydrocarbon management units (2018-ongoing) and more recently several large filtration and detention systems on warehouse developments throughout SEQ.

WHAT DO YOU LIKE ABOUT **WORKING AT SPEL?**

There's a saying - you don't choose a job; you choose a boss. From the topdown, the company has exceptionally good leadership. They believe in you, and they honestly care about the staff and the employee well-being and life in general outside work, who they are and where they are going.

HOW QUICKLY HAS SPEL STORMWATER GROWN IN YOUR TIME AT THE COMPANY?

SPEL is a very team orientated business and doesn't have a lot of space for ego, we are doing it for the team. I see this as one of the main reasons why SPEL is growing so quickly - with a team you are harnessing, it provides scalability, which allows (for) growth far beyond any one individual's capabilities or growth rates. If you're not growing, you are going backwards, and at SPEL we are never standing still.

WHAT ARE YOUR INTERESTS **OUTSIDE WORK?**

I love an active lifestyle and the outdoors. We have the odd game of rugby in the community, and I also like to CrossFit train when I can during the week. Outside of that, anything to do with adventure - bike riding, hiking, and anything adventurous on the water.

For any WSUD design assistance please contact Leon Attwood on leon.attwood@spel.com.au



Modern stormwater treatment assets are a form of water sensitive urban design (WSUD) that aims to reduce the volumes of <u>sediment</u>, <u>nutrients and gross</u> <u>pollutants</u> discharged into receiving waterways. Well-maintained, they can last for generations.

Regular maintenance and checkups play a critical part in managing stormwater assets. Not only will an appropriate maintenance schedule provide peace of mind, but it also ensures the long-term function of your system and ongoing compliance with municipal stormwater regulations and safety protocols.

Neglected or undermaintained systems threaten to fall into disrepair, are costly to replace, and further burden downstream systems leaving our environment vulnerable. Maintenance is vital. Maximizing the lifespan of generational stormwater assets underpins modern environmental planning, prevents premature decommission and preserves the health of waterways in our urban landscapes.

BENEFITS OF A GOOD MAINTENANCE PROGRAM

Maintenance programs ensure ideal performance across the lifecycle of your stormwater assets with many associated benefits -

Reduced risk of premature device replacements – Heavy weathering may occur during unforeseen stormwater volumes, spills, or heavy pollutant loads. Maintenance helps early detection of damage and prevents breakdown of stormwater infrastructure.

Prevention of environmental impacts – With well-maintained devices, asset managers have greater peace of mind knowing that their stormwater management is preventing local water quality issues and environmental impacts.

Meeting municipal stormwater requirements – Regular maintenance helps asset managers prepare for council inspections and prevent costly fines, breaches and compliance issues.

Other benefits of efficient maintenance practices include improving safety and functionality of stormwater systems, reducing flood risks during rainfall events, and the improvement of water quality.

CONSISTENT, QUALITY MAINTENANCE PROVIDES LONG TERM EQUITY

Modular wear and tear can occur for many reasons, from frequent rain to flooding and heavy spills. These events can compromise the structural integrity of your stormwater assets. Early identification and vigilance are key elements of mitigating ongoing damage.

Maintenance services are part of our core offering to meet our customers' stormwater needs. Our National Maintenance team play an integral role in fulfilling SPEL's mission to drive best practices in stormwater management and build a clean 'Joy in Water' future for all.

The maintenance of stormwater assets involves highly specialised work. Technicians often require certification to work in confined spaces, detect hazardous gases, and handle contaminated sediments and pollutants. Industry-specific knowledge is a requirement of effective maintenance practices.

Our maintenance solutions for SPEL products include clean-outs, part replacements and repairs of all our products and related proprietary devices. We provide full diagnostic reporting for any maintenance conducted by our team and our systems can be tailored to provide you with automatic warnings before larger, costlier problems arise.

SPELBIO

HIGH-QUALITY STORMWATER FILTRATION MEDIA



SPELBio is our range of quality stormwater filtration and growing media with specific properties and media composition for use in catch basin structures, rain gardens, bioretention cells and prefabricated concrete stormwater assets.



More information about SPEL Bio please contact our National Product Manager Kristy Pratch -Kristy.Pratsch@spel.com.au. Bioretention is used in catchment areas to drip-feed stormwater. This percolation of runoff helps to slow down water movement and creates permeable surfaces in the local urban landscape. As water seeps into these areas, the result is slower water movements before drainage systems and waterways. Downstream, this helps mitigate high flow rates across nearby stormwater systems, and localized pooling and flooding during storm events.

Quality bioretention media plays a key role in the filtration of pollutants and the removal of excess nutrients from stormwater. The porous nature of its media also acts as a natural filter for vegetation. These mechanisms take place as the water flows through the bioretention system and is one of the reasons that graded media is necessary – its uniformity and consistency underpin its dual purpose of plant growth and filtration.

Bioretention media provides a healthy environment that promotes plant growth. These plants are specifically chosen for their pollution removal capabilities – they include but are not limited to, Carex Apressa, Imperata Cylindrica and Melaleuca species.

Organic matter in our bioretention media is sourced from mature compost. This is a unique feature of SPELBio, and its formulation goes beyond industry standards, such as MRTS Form G Standards and Water Sensitive Cities guidelines. This ensures that SPELBio is free of deleterious materials such as asbestos and harmful pathogens, making it safer for people and the environment. Mature composts ensure conformity and reduce nitrogen drawdown – helping the establishment of plants.

SPELBio is available for use throughout the urban landscape and provides natural properties that make it suitable for sustainable application across commercial, industrial, and residential infrastructure. Maintenance of these areas is imperative, and we offer services to help support and sustain your bioretention systems – and to ensure your growth media is in top condition.



TACKLING LARGE ONSITE DETENTION SCENARIOS

The **SPEL Megavault** is our latest offering in stormwater infrastructure and our industry-leading answer to medium to large stormwater detention scenarios. These impressive tank systems are based on fundamental principles of cost-effective and efficient stormwater management and are inspired by ancient architecture.

Locally designed and manufactured, the Megavault is engineered for optimal manufacture, installation and life-cycle maintenance. Its condensed footprint and versatile depth specifications present great on-site

alternatives for stormwater detention. It is the perfect choice for sites that require large detention volumes and structurally superior systems.

The high load tolerance of the SPEL Megavault allows installation underneath development sites, and its robust build ensures superior structural outcomes. These systems provide an essential stormwater asset for a wide range of industrial developments and urban infrastructure. Its applications include car parks, roads, parklands and commercial sites.

The SPEL Megavault's superior quality ensures it satisfies Australian standards. It is engineered to meet W80 load-case requirements, and our team can collaborate with you to adjust these load limits to suit your onsite specifications. This team-based approach ensures efficient installation and freight.

A sound alternative to traditional block and slab construction, the precast design of the SPEL Megavault means that open excavation times are minimized, and on-site safety concerns are reduced. These upsides flow into improved site efficiencies and safe work practices, while the condensed footprint means fewer impacts to other onsite work.

Offsite manufacture allows greater levels of quality assurance and ensures delivered tanks are rigorously tested on the factory floor before shipping and installation. Similar to the SPELVault, the Megavault works in unison with SPEL filtration devices to meet onsite water quality needs. municipal standards and council requirements.

The unparalleled versatility of the SPEL Megavault in overcoming footprint, stormwater train configuration and depth requirements allow the provision of essential stormwater solutions for civil, hydraulic and consulting engineers alike.

Compare precast concrete solutions with conventional slab tanks - spel.com.au/wp-content/ uploads/2022/02/SPEL-Stormwater-<u>Detention-Tanks-Comparisons1.pdf</u>

TAKE 3 FOR THE SEA 3 PIECES OF RUBBISH AT A TIME

The recent east coast flood events were devastating to local infrastructure and people's well-being. Our beaches and rivers along the eastern seaboard have been inundated with debris and have become an effective dumping ground for tonnes of rubbish and plastic. Reports indicate the removal of over 1,000 tonnes of rubbish and debris from Brisbane River and the flow of millions of tonnes of sediment into Moreton Bay.

Take 3 for the Sea is an Australian downstream initiative that believes in taking simple actions to address the complex problem of stopping plastic pollution. Their motto is 'take 3 pieces of rubbish with you when you leave the beach, waterway or.... anywhere, and you have made a difference.'

We support the direct nature of the Take 3 for the Sea initiative. Together, we are all able to take individual action to help protect our waterways and beaches.

Upstream and downstream stormwater initiatives work best in tandem. The management of our water resources is a team sport, and many hands make light work.

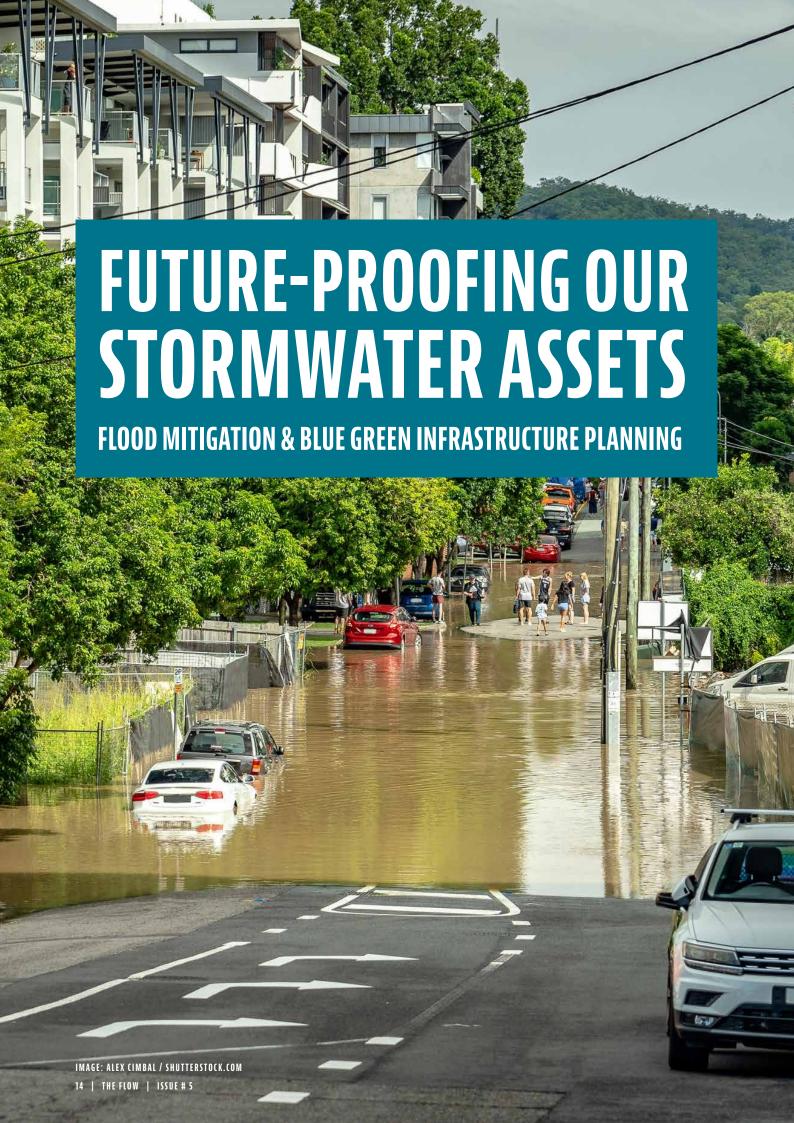
Further upstream, SPEL has invested in these ideas throughout its history. We believe in providing cutting-edge stormwater solutions to preserve joy in water. Stormwater Quality Improvement Devices (SQIDs) are primarily located at the main conduits for this pollution - our urban catchments and stormwater systems. They stop plastic pollution, chemical contaminants and substances like soil, oil and sediment from entering our waterways in the first place.

As a major contributor to the efforts of Stormwater Shepherds, SPEL supports raising awareness of stormwater issues throughout the community. Using social capital to improve the health of our waterways is vital. Awareness and education are key.

Stormwater Shepherds is an international notfor-profit that is committed to restoring the health of our waterways. Together, we help communities develop an understanding of their stormwater issues. We hope to promote positive change and the adoption of strategies to restore health to our waterways and to keep them that way for future generations.

The goal of upstream stormwater strategies is to nip the sources of waterway pollution in the bud. By helping communities implement, maintain and develop these systems, we can stay a step ahead of the sources of pollution and protect our local environment.

www.take3.org.



We were struck by the severity of flooding across Australia's eastern coast recently, and the vulnerability of our communities to severe weather. Extreme weather events are projected to increase in frequency due to climate change, which threatens public safety and burdens our stormwater infrastructure.

In a dire race to protect our community's waterways, stormwater infrastructure is undergoing a revolution of new green technology.

Capturing, diverting, and absorbing stormwater runoff is the basis of contemporary city-planning solutions. This approach is now the driving philosophy behind new developments in historically flood-prone cities like Copenhagen, New Orleans, and New York.

SHIFTING OUR MINDSETS AROUND STORMWATER

The movement of water is a natural process. However, our urban centres are full of impermeable surfaces, such as concrete and bitumen. With nowhere for stormwater to seep into the ground, stormwater often has no recourse – pooling or rushing to find our drains and waterways.

Before development, natural habitats like wetlands, swamps and vegetation acted as flood control with their inherent capabilities to absorb and slow stormwater. Unfortunately, much of these natural habitats have been lost to urban sprawl.

We are facing an increasing need for wider and deeper drainage networks. This approach is unsustainable – how are our overburdened stormwater systems meant to keep up?

Countering conventional thinking, which drains stormwater from urban centres as quickly as possible, many modern technologies look to slow down moving stormwater and allow it to permeate the ground slowly.



BLUE-GREEN INFRASTRUCTURE: DESIGNING CITIES THAT HANDLE WATER

To future-proof our urban environments, we need to conserve and create spaces that allow us to co-exist with localized water events. Bluegreen infrastructure is recognised as a multifunctional stormwater and flood mitigation design concept and is being adopted across certain municipalities in Australia.

Besides parks, gardens and green space, we can incorporate innovative and specialised vegetated areas such as swales. bio-retention basins, and floating wetlands. For example, SPEL's **SQIDEP** approved SPELBasin shows the ways we can blend natural and urban infrastructure to naturalize urban water flows. We also design special bioretention media, SPELBio, that is specifically designed to help slow down water flow and act as a growth medium for pollutant capturing plants.

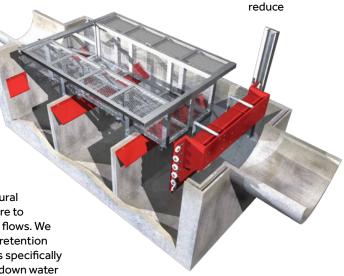
Adding value to surrounding areas, these places not only absorb water but often share functions as public amenities, habitat for wildlife and urban green space. Stormwater infrastructure is fast becoming a standard feature in community-wide development plans.

At SPEL Stormwater, we have had the privilege of working on many open space projects that incorporate stormwater storage beneath sports fields, parking lots, and transport depots. One of our most recent projects includes the inner-Canberra bus interchange facility in Turner. For the facility, we installed a 2-million litre detention system that would reduce flooding impacts on the surrounding area.

Baffle box installations are another great solution to help handle the impacts of surging floodwater, as the torrents pick up sediment, debris, and trash in urban areas. SPEL's Baffle Boxes have been installed throughout Australia - from Geelong to Rockhampton - to help support clean waterways. Ultimately, they reduce the amounts of pollutants and particulates entering key water bodies during flood events - for example, Queensland's Great Barrier Reef and Moreton Bay.

When planned and designed well, green-blue infrastructure can help to solve urban and climatic challenges through the provision of ecosystem services that enhance the well-being and prosperity of local communities.

Together, we can get on top of stormwater solutions that mitigate floods and



the impacts of climate change on our communities. SPEL hopes to raise awareness of the ways stormwater assets can help us prepare for the future and lead the way with innovation and sustainability.

SPELIS A PROUD SUPPORTER OF





STORMWATER SHEPHERDS

Stormwater Shepherds are an environmental not-for-profit committed to restoring health to our waterways by stopping plastic and urban pollution at the source & for all lifeforms to enjoy clean water for future generations.

PLEASE SUPPORT STORMWATER SHEPHERDS

Stormwater Shepherds's Zero Pollution Ambassador Shop proudly works with Australian owned companies selling Australian-made products when available.

Your kind purchase will contribute to supporting:

Positive Action – purchasing equipment for community clean-ups

Sharing Knowledge – informing and researching the latest pollution facts and its effects on all lifeforms

Advocacy – working with councils and governments nationwide on the importance of well-managed stormwater

stormwatershepherds.org/shop

