

THE FLOW

BIORETENTION LAYERS: FINDING A BALANCE

**EVENING OUT THE FLOW:
STORMWATER HARVESTING & DETENTION**

**FIGHTING PLASTIC POLLUTION
& RESTORING OUR COASTLINES**

GOING UNDERGROUND:

MEETING FOOTPRINT CONSTRAINTS IN URBAN DEVELOPMENT



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STORMWATER SHEPHERDS PETRIE CREEK CLEAN-UP DAY

We thank Stormwater Shepherds, the amazing volunteers, and the SPEL team that came together to make this event a resounding success.



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A NOTE FROM OUR CEO

ANDY HORNBUCKLE, CEO



Joy in water

Clean water is a right, not a privilege.

LA NIÑA & WET WEATHER CYCLES

In Australia, our climate likes to swing from extremes, whether it is our extended periods of dusty droughts or the rain events we have been experiencing throughout 2022. Recently, the Bureau of Meteorology has declared La Niña for another Spring season.

This marks the third consecutive season of La Niña conditions, which bring increased rains to Australia. As we recover from multiple flood periods in the last 12 months, this is a reminder that we need to continue to future-proof our communities. Resilience is key.

WATER QUANTITY MANAGEMENT & RESILIENCY

Flood mitigation starts with slowing runoff from our impervious surfaces. As urban density increases, we lose precious green space, wetlands and the natural parklands that detain water and allow it to infiltrate.

This issue looks at the way we can facilitate flood mitigation and stormwater harvesting in our urban centres – with the use of detention and retention infrastructure. A mix of these approaches is needed for modern urban development to ensure that we are designing our cities for the future.

SPEL has moved into the production phase for our newest product to meet large detention requirements – the SPEL Megavault. With ongoing projects across Australia, this innovative approach to stormwater detention supports resiliency and flood mitigation goals in local developments. Locally manufactured, the SPEL Megavault is produced at our concrete facilities in Redbank, Brisbane.

We need to move away from water management models that look to move stormwater as quickly as possible from our urban centres. Ensuring that our stormwater solutions scale to meet our future demands is imperative. SPEL helps our communities reach these goals by designing stormwater assets that offer long-term sustainability, resiliency, and innovation.

SPEL

HIGHLIGHTS



SPEL INNOVATORS: INCUBATING BIG IDEAS IN STORMWATER

Do you have a big idea for the future of stormwater?

The SPEL Incubator is the perfect way to pitch your idea and to be backed by one of Australia's leading developers of proprietary stormwater tech.

We are looking to foster innovation in our own backyard – and change the way the world looks at stormwater quality, quantity and conveyance. Let's talk about big picture ideas & innovative, sustainable, state-of-the-art solutions that help create a cleaner water future.



Learn more.

SPEL'S INAUGURAL NEW ZEALAND WEBINAR

In August, we launched our latest webinar series in SPEL New Zealand. Local team leader Matthew Scarlett was at the helm to take a deep dive into the SPELBasin and SPELFilter.

Co-presented by Dr Darren Drapper, Principal Engineer and Director of Drapper Environmental Consultants, they explored the benefits of filtration and basin solutions for local stormwater scenarios.



Webinar available on-demand.



CPD LIBRARY UPDATE: WEBINARS ON-DEMAND

Our online library has been renovated and is open for viewing! SPEL's webinars take on a wide range of topics from the stormwater sector – from design philosophy to case studies and technical overviews.

With all our webinars available on-demand, our portal is a great place to get all the latest updates on these great opportunities to learn more about stormwater. Our latest webinar 'the How-To of Gross Pollutant Traps', presented by Kurt Jensen and Andrew Buggins, is now online!



Browse our CPD Library.
Available on-demand.



MEGAVault PRODUCTION: REDBANK PLAINS CONCRETE FACILITY

We are excited about ongoing production at our new concrete tank manufacturing facility in Redbank Plains, Queensland. These facilities manufacture high-quality on-site stormwater detention for projects across Australia.

Our concrete line has grown this year, which now includes our medium to large detention range - the SPEL Megavault. Our locally manufactured OSD tanks are used for stormwater detention and flood mitigation, and we cover one of the largest Megavault projects to date with our overview of Robina in this issue.

LAKE TUGGERANONG: ACT WETLANDS 17-MONTH UPDATE

We were excited to see underwater vision of our Lake Tuggeranong Wetlands 17 months after installation! Plant growth now extends under the floating wetlands, and this amazing green infrastructure is providing a wealth of biological action - with its complex root networks, healthy biofilm, and natural filtration.

A haven for birds, fish and local wildlife, the floating wetlands help improve water quality, remove nutrients, and reduce algal bloom. By improving water quality, this project ensures a healthier future for Lake Tuggeranong and its surrounding environment.



Watch the underwater footage.



PLASTIC FREE JULY RECAP: SUPPORTING THE 5 R'S



Plastic Free July was a fantastic opportunity to think about reducing our contribution to plastic pollution and to support Stormwater Shepherds and the 5 R's - Reduce, Reuse, Refuse, Recycle & REPLACE!



Read the full article.

GOING

UNDERGROUND

MEETING FOOTPRINT CONSTRAINTS IN URBAN DEVELOPMENT

Our cities are growing, and urban density is increasing. As surrounding natural environments shrink, the area of impermeable surfaces is on the rise – from car parks to industrial hardstand and residential rooftops.

These hard surfaces lack the infiltration qualities of the natural environment and leafy urban green spaces. This increases rates of surface runoff and diminishes the surfaces for stormwater to 'soak' or infiltrate.

During wet weather, and prolonged rains, our drainage networks are under strain. This leaves our cities more prone to flooding. So, how can stormwater detention help us alleviate this strain?

We can slow runoff and retain peak flows with the installation of detention infrastructure, such as OSD tanks (On-site Stormwater Detention) and chambers.

The benefits of stormwater detention assets are two-fold – they help to support our overwhelmed drainage network and mitigate local flooding. Putting this infrastructure underground can help us meet footprint constraints and maximise useable land, while preventing flooding of nearby drainage, creeks, roads, and property.



Above-ground assets and below-ground assets are different approaches to detention. Above-ground infrastructure is typically cheaper to build, but it is land-hungry and lacks scalability – for example, retention ponds.

Below-ground detention solutions are compatible with the footprint constraints of modern developments. Often designed for full trafficability, they can be employed underneath a wide range of environments – such as roads, fields, car parks, service stations, and transport depots.

SPEL Stormwater supplies many subsurface solutions to fit these scenarios. The SPELChamber offers high-density polyethylene infiltration chambers for detention with an open chamber design. Alternatively, our locally manufactured concrete assets, the SPELVault and SPEL Megavault, are modular OSD tank designs suited for footprints of all sizes.

At Robina Central, requirements for 316,000 litres of detention volume were met by the SPEL Megavault. Installed in just two days, this detention infrastructure was able to be placed under the forecourt of the site's service station.

End-to-end stormwater treatment included hydrocarbon capture and filtration – using the SPEL Puraceptor and SPELFilter respectively. This ensured water quality and quantity requirements were both met without affecting above-ground real estate.

This ability to meet on-site footprint, and maximise available land, means that underground stormwater assets are an important design philosophy for our changing urban landscapes.



Learn more about the SPEL Megavault.



Q&A WITH PETER HANCOCK

A steady contributor to the development of our concrete OSD tank range, and its implementation in stormwater projects across the country, Peter Hancock is one of SPEL Queensland's Business Development Managers.

Always excited to meet clients and present at our Lunch & Learns, Peter has shown our clients the ways our products can help them. With the SPEL QLD team, he has implemented detention, retention and stormwater treatment solutions across the Queensland region for over three years.



Learn more about Lunch & Learn.



HOW WERE YOU INVOLVED IN THE PRODUCTION OF SPEL'S CONCRETE DETENTION TANKS?

I worked with the SPEL team to look at all the potential sizes of concrete tanks we could manufacture, and the most viable options for getting high-quality, cost-effective concrete detention tanks on-site.

Once we decided on the tank specifications, we arranged the structural engineering and designs for these tanks. The original SPEL Vault has now extended to double-stack solutions and the implementation of the Megavault as well.

HOW IMPORTANT DO YOU THINK DETENTION & RETENTION ARE FOR MODERN URBAN DEVELOPMENT?

Detention is set in stone as part of a DA (Development Approval) requirement, so it is 100% important and detailed to be important by industry and governmental bodies across Australia.

It is a void that needs to be ready to receive water in the next storm or flood, whether that's in a month, a week or two-years' time.

With regard to retention, I think there will be a growing demand. The last year has seen lots of wet weather, and another wet one looks scheduled. As the weather cycle changes back

to the other extreme of dry weather, retention and re-use will be back on the agenda.

HOW CAN DETENTION BE USED TO SLOW WATER DOWN AND MITIGATE FLOODS?

There will always be a need for detention as stand-alone infrastructure because it is key to flood mitigation. Failure to mitigate flooding means our rivers and creeks reach peak volumes far quicker, which floods our communities and, ultimately, people's houses.

If we have deluge after deluge – the runoff slowly gets larger – and we have massive amounts of water that our rivers and drainage cannot cope with. We need to imitate what happens in nature, by slowing down water, detaining it, and allowing it to infiltrate.

WHAT ARE YOUR INTERESTS OUTSIDE OF WORK?

I love kayaking and that's one of the reasons that it is rewarding working with SPEL. I get to realise the importance Water Sensitive Urban Design (WSUD) has for our water activity enjoyment and kid's enjoyment – which is great.

It's one thing picking things out of the water, it's another when things degrade and produce chemicals that may be sitting there for extended periods of time. Stormwater treatment is a step in the right direction along with the triangle of refuse, reuse and recycle.

To discuss your next stormwater project please contact Peter Hancock at peter.hancock@spel.com.au



SPELCHAMBER

HDPE INGROUND STORMWATER HARVESTING & DETENTION

SPELChamber is a high-density polyethylene (HDPE) infiltration chamber system for retention, storage and detention.

A cost-effective approach to water quantity requirements, it requires less maintenance than other types of underground stormwater management systems.

HDPE formulation ensures SPELChamber is lightweight and conveys installation efficiency to your projects. The SPELChamber is available in large capacity units and is designed to fit various onsite footprints – with 4 different arch heights allowing freedom of design and suitability for different detention volumes.

These chambers range from a minimum installed depth of just 1,000mm for the SC400 through to 1,980mm for the SC1200 Chamber.

SPELChamber can be implemented in landscaped areas or under urban development, such as transport depots and car parks. The structural design of the HDPE arches allows for superior load ratings, which comply with AS5100 and W80 wheel loads.

FEATURES

- High density polypropylene
- Injection moulded open chamber design
- Large capacity to fit tight footprints
- Robust continuous true elliptical arch design
- Integrated handles
- Infiltration & pollutant removal solution



Learn more.



SPEL MEGAVULT

MEDIUM TO LARGE DETENTION SCENARIOS

The SPELMegavault is the latest in our range of on-site stormwater detention tanks (OSD). The modular design of the Megavault, and its innovative pillar system, ensure scalability for medium to large detention scenarios.

Locally manufactured in Brisbane, the SPEL Megavault is an industry-leading answer for medium to large detention scenarios. Its design is based on ancient architectural principles and cost-effective and efficient stormwater management.

FEATURES

- Cost efficient construction
- Faster fabrication and installation
- Superior structural outcomes
- Improved site efficiencies & safety
- Condensed site footprint
- Greater depth capability



SPELVault

With no internal walls and precast fabrication, the design of the SPEL Megavault provides cost efficiency and easy on-site handling compared to block and slab solutions. Optimised to suit available volume and footprint, these OSD tanks are a versatile approach to flood mitigation and detention that can be tailored to fit your on-site stormwater detention requirements.

Fully trafficable, the SPEL Megavault is designed to meet W80 loading criteria. This system maximises available land and allows detention to be situated underground, supplying detention infrastructure for modern developments such as residential areas, car parks, industrial hardstand and roads.

MODULAR PRECAST ON-SITE STORMWATER DETENTION TANKS

Our range of pre-cast concrete on-site stormwater detention tanks (OSD Tanks), the SPELVault is engineered with innovative modular design principles, and manufactured locally in Brisbane.

Achieving high freight and installation efficiencies, the SPELVault is a versatile approach to stormwater detention with variable configurations. These OSD tanks can be tailored for your site's unique footprint,

with customisable heights, filter cartridge installations, and lengths – and includes double-stacked tank configurations.

These precast concrete tanks can often be installed within one day and can handle vehicle loads promptly following installation and backfill. SPELVault is compatible with end-to-end stormwater treatment and tertiary filtration requirements and can be configured to incorporate our filter cartridge system - SPELFilter.

Designed to fit constrained footprints, and with the ability to be installed underneath developments, the SPELVault ensures maximised land use – for sites such as commercial premises, driveways, and multi-unit developments.



Learn more.

FEATURES

- Flexibility in footprint design for optimum layouts
- Variable heights to suit site levels
- Truck trafficable & delivered to site cured to 50MPa
- Quick installation and backfill
- Immediately trafficable for site accessibility
- SPEL Filter cartridge configurations



Learn more.



GLOUCESTER RESERVE: POLLUTION REMOVAL ON THE BAY

Gloucester Reserve is situated on the Foreshore Trail in Melbourne's Williamstown. Backing onto Porth Phillip Bay, the reserve is a popular dog-off leash area and cycling spot with wide seaside views.

Bordered by high traffic areas and large flat catchments along the nearby Esplanade, new stormwater infrastructure was implemented to ensure effective pollution removal from water discharging into the bay.

SPEL provided design assistance throughout the installation of an Ecoceptor system - a versatile, vertically configured gross pollutant trap (GPT) for low-risk applications.

Pollution removal capabilities of these devices include the removal of larger pieces of rubbish and debris, extending to light liquids, sediment, silt, oil, and suspended solids. They also reduce levels of phosphorous and nitrogen in run-off, which can help reduce algal bloom and improve water quality.

Retrofitting the existing catchment infrastructure, the unit was designed to withstand tidal backwater and shallow depth to invert. With easy maintenance and installation, this represented a cost-effective solution for the site's stormwater needs.



Check out our project video & blog. Available here.

BENEFITS & FEATURES

- Ability to retrofit existing catchments
- Designed and configured to suit tidal backwater and tailwater
- Small on-site footprint & easy installation
- Excellent pollution removal capabilities

RESIDENTIAL STORMWATER SOLUTIONS: GPTS IN MARSDEN PARK

Newpark Precinct 7 is a new housing development situated in leafy Marsden Park. With 1864 housing lots releasing in 18 stages, the expansive site occupies 2 million square metres. Key stormwater outcomes for the site include the removal of residential-based pollutants across its large catchment areas.

Four SPEL Vortceptors will help manage pollution removal across the development. Designed to suit a variety of catchment sizes, these Gross Pollutant Traps (GPTs) treat flow rates up to 1600 litres per second.

The Vortceptor meets all relevant Water Sensitive Urban Design (WSUD) criteria. Its innovative and sustainable design makes it an excellent choice for residential zoning. With 100-year design life, these generational assets will improve water quality outcomes and help future-proof the development.

The lightweight nature of these systems ensure they are easily freighted and installed. Subsequently, there is a reduction in carbon footprint. Three days on-site were needed for installation and backfill. This quick process delivered less open excavation, lifting requirements, and freight costs.



Check out our project video & blog. Available here.

BENEFITS & FEATURES

- 100-year design life
- 40% reduction on carbon footprint – FRP vs. concrete GPT alternatives
- Two-piece construction and easy installation
- Installed and backfilled within three days

ROBINA CENTRAL

END-TO-END STORMWATER SOLUTIONS & THE SPEL MEGAVAULT



Located on the Gold Coast, Robina Central is a new mixed-use development on Laver Drive – just a stone’s throw from the nearby M1 motorway. A high-traffic area that will see use as a local hub, new amenities for the area include retail premises and a service station.

SPEL designed an end-to-end stormwater treatment solution to meet the site’s diverse requirements, including gross pollutant and hydrocarbon capture, stormwater detention, and tertiary filtration. These assets were sustainably designed to match the sizeable 316,000-litre volume requirements for on-site detention – without sacrificing treatment capability.

Our goal was to offer a stormwater treatment train that protects the local environment, ensures pollution capture, and helps to mitigate flooding across the site. With a condensed footprint available on-site, these stormwater assets met these size constraints while supplying high-performance pollution removal.

SPEL MEGAVAULT: AN EFFICIENT DESIGN APPROACH TO LARGE DETENTION SCENARIOS

With no internal walls and off-site precast fabrication, the design of the SPEL Megavault provides cost efficiency and easy on-site handling compared to block and slab solutions.

Despite wet conditions on-site, installation of the Megavault was completed within 2 days. Quick assembly ensured less open excavation time and allowed prompt backfilling. Importantly, the Megavault will retain full trafficability over its placement under the forecourt – an essential benefit for installation in a busy service station.

The service station will also require hydrocarbon capture and tertiary filtration to meet its water quality requirements.

A full retention separator, the SPEL Purceptor, was installed to handle oil and water separation. These units guarantee hydrocarbon capture in all flow conditions, including storm events – and are designed to contain oil and petrol in stormwater runoff and spill conditions.

The end-to-end stormwater treatment also incorporated SPEL Filters to ensure water quality outcomes were met. As the final stage of stormwater treatment, these cartridge filters can be added to detention systems to remove pollutants, such as total suspended solids (TSS), total phosphorous (TP), and total nitrogen (TN).

The result is a comprehensive stormwater treatment system that incorporates the diverse environmental requirements of the development – helping to future-proof the site’s environmental impacts and mitigate local flooding.



Check out our project video.



EVENING OUT THE FLOW

STORMWATER HARVESTING & DETENTION

Our climate is changing, and with it is an expected increase in extreme weather events. Australia is no stranger to the perennial nature of El Niño and La Niña. Our communities face a natural cycle of two extremes – from dusty droughts through to big soaks and catastrophic floodwater.

Influenced by a changing climate, reported data shows “extreme El Niño and La Niña events may increase in frequency from about one every 20 years to one every 10 years”. Exceeding this benchmark, Australia has just declared our third consecutive La Niña season.

With our wet seasons extending another year - detention, retention, and stormwater harvesting help to support the safety and resiliency of our communities.

THE DUAL PURPOSE: RESILIENCY IN THE BIG WET & BIG DRY

A multi-pronged approach to water storage ensures that we can take on both extremes of our local environment. Managing complex water quantity scenarios can be achieved with a combination of retention and detention.

Flood mitigation is supported by detention systems, which slow peak flows during our wet seasons. Comparatively, retention systems provide capacity for stormwater harvesting and storage which supplies water during our drier periods.

Combinations of these systems alleviate pressures on our water and drainage networks during our weather extremes. Implementing these stormwater systems is an essential strategy to sustainably manage our water resources.

SPEL Stormwater designs and implements a full range of water quantity solutions, from detention to retention & re-use. Our stormwater devices in this range include the SPELVault, SPEL Megavault and SPELChamber.

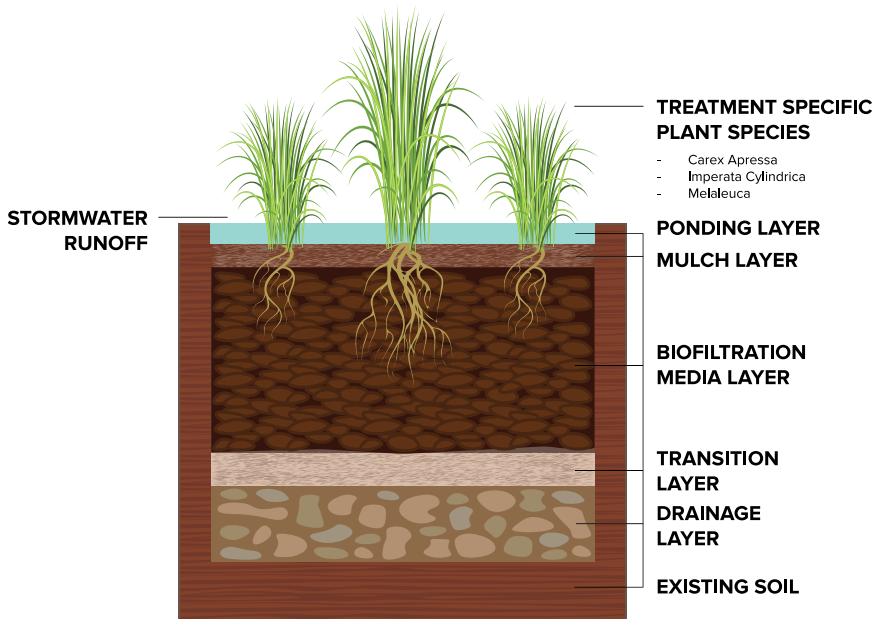
PREPARING FOR LA NIÑA 3.0

With the declaration of our third consecutive La Niña season, another wet summer is expected. For many developments, planning projects around the wet season must start early.

Modular designs with quick installation times help insulate developments from the economic impacts of the wet season. The SPELVault and Megavault are notable examples of concrete on-site stormwater detention tanks (OSD) that can be installed quickly, compared to the traditional approach of in-situ pouring.

In the face of a changing climate, modern stormwater design can help our communities build resiliency and address extreme weather with scalable infrastructure. From flooding to drought, it is paramount that we future-proof our communities – and think about these systems before extreme weather events happen.

BIORETENTION LAYERS: FINDING A BALANCE



Naturalised systems bridge the gap between our urban spaces and nature - and bioretention is a fundamental part of modern stormwater designs, green infrastructure, and sustainable assets.

Bioretention media mimics the infiltration properties of our natural green space and supports plant growth, stormwater treatment, and water retention. It slows flows of stormwater runoff that travel through our urban areas and mitigates flooding in surrounding areas.

Our engineered bioretention media is formulated from high-quality sandy loam, MRTS Form G compost, and gravel, and sown with plants selected for their pollution removal qualities. Appropriately graded and standardized, the components of quality bioretention mediums are engineered to meet requirements for hydraulic conductivity, plant growth, filtration, and fast drainage.

SPELBio is engineered to tick these boxes and ensure that your green infrastructure is underpinned by high-performance bioretention.

BIORETENTION: DESIGNING THE LAYERS BELOW

PONDING LAYER

Bioretention basins are often designed to hold water in a ponding layer, which allows it to slowly infiltrate. Overflow outlets allow excess water to drain directly in case of a large storm or flood, and ponding layers can be exchanged for extended detention.

Maintenance: Occasional overflow maintenance after rain events, particularly if the basin is not draining.

MULCH LAYER

Mulch forms a protective layer that supplies very coarse filtration, stops the germination of weed species, and protects the biofiltration media beneath. It helps soils to retain water and captures sediment and debris. As

mulch breaks down, it creates organic matter that helps support plants and bioorganisms.

Maintenance: Mulch replacement. Remove germinating weed species.

PLANTS

Healthy plants are essential to water quality and infiltration! The biological processes of plants sequester pollution and uptake nutrients. Their root systems create voids in the underlying media, which allow water to 'soak' through.

Maintenance: Watering & general plant care. Weeding and removal of pest species.

BIOFILTRATION MEDIA LAYER

This porous media is a mixture of sand, MRTS Form G compost and fines (clay or silt), and acts as a growing media for plants and a filtration media

for stormwater. Engineered to meet hydraulic specifications, it is designed to retain water and allow it to slowly percolate and drip through.

Maintenance: Replacement of media after prolonged ponding.

TRANSITION LAYER

The transition layer is a layer of sand that stops the filter media from being transported into the drainage layer.

DRAINAGE LAYER

The drainage layer, typically aggregate, ensures that water can move from the bioretention into surrounding soils and nearby drainage pipes. This helps to prevent the water from saturating the bottom layers for extended periods – and the layer is sized appropriately for flow rates and catchment volume.

Maintenance: Assessment of water conveyance and ponding.



FIGHTING PLASTIC POLLUTION & RESTORING OUR COASTLINES

The world's plastic production is increasing – and plastics persist and accumulate in our biosphere with disastrous outcomes for our environment.

Globally, over 8 million tonnes of plastic pollution reach the world's waterways and oceans each year, and Australia contributes 130,000 tonnes to this global figure. With long lifecycles and low biodegradability, plastic tends to accumulate, and the ecological impacts of our growing plastic economy are enormous.

INTERNATIONAL PLASTIC POLLUTION & THE GPGP

Located in the North Pacific, the Great Pacific Garbage Patch is estimated to be 1.6 million square kilometres in size – an area equivalent to Queensland. Supplied by converging ocean currents and gyres, it is the destination for vast amounts of plastic pollution and is estimated to weigh a jaw-dropping 3 million tonnes.

Discarded fishing gear, household items, and food & drink packaging are mainstays of plastic pollution in the GPGP. High volumes of this marine pollution originate from countries bordering the Pacific - with reports showing Japan, China, South Korea, the United States and Taiwan as key contributors.

LOCAL IMPACTS: AUSTRALIAN ECOSYSTEMS UNDER THREAT

The Australian coastline regularly feels the impacts of overseas plastic production. Recent reports show the inundation of the Northern Territory coastline by plastic debris of international origin.

Each year, 'lighters, thongs, scooter helmets, medical syringes, and toothbrushes' (ABC News) are part of the hundreds of cubic metres cleared

from our coasts by indigenous rangers in the top end. Much of it originates from international neighbours, namely China, Indonesia & Thailand.

Our environment simultaneously faces the impacts of our local plastic use. Australian adventurer Beau Miles' recent video 'Kayaking the Sickest Urban River in Australia' shows this first-hand.

On his journey, Miles navigates Sydney's Cooks River and its corridors of wastewater, sewerage and rubbish. The result is a twenty-three kilometre voyage that winds through the treacherous waterway, offering direct insight into the riverine impacts of our urban pollution.

To combat these outcomes, pollution removal and stormwater management are changing. Gross Pollutant Traps (GPTs) are increasingly installed in urban catchments, which capture plastic pollution at the source.

SPEL provides high-performance GPTs, and these generational assets screen stormwater conveyed from our catchments before it reaches our river systems. They remove a wide array of pollutants – including plastic debris, bottles and packaging.

Reducing plastic pollution takes many policies and tiers of engagement, from international awareness to better utility funding and sustainable infrastructure.

Grassroots involvement and direct action are key elements of restoring our environment, and the combined efforts of volunteers, not-for-profits and community groups. SPEL is proud to support Stormwater Shepherds' local clean-ups and advocacy for stormwater treatment – and events like the recent Petrie Creek Clean-Up & Plastic Free July.



Support Stormwater Shepherds: Reducing Plastic Pollution.

STORMWATER SHEPHERDS PETRIE CREEK CLEAN-UP DAY



1,500 PIECES OF
RUBBISH COLLECTED



SPEL was proud to sponsor Stormwater Shepherds' Petrie Creek Clean-Up Day on September 10th, in Nambour, Queensland. Following the success of 2021's Clean-Ups in the area, we appreciate the ongoing support of the local community and the work of all the volunteers in helping create cleaner water outcomes for the tributary.

With over 25 attendees, the day was a success that saw close to 1,500 pieces of litter removed from the Sunshine Coast waterway. SPEL Stormwater's maintenance team were on the ground supporting the event, and we welcomed the participation of Sunshine Coast Council and Petrie Creek Catchment Care Group.

Petrie Creek winds through Nambour, before reaching the Maroochy River and the pristine waters of the Sunshine Coast. The pollution removed across the three-hour event presents dangers to wildlife – particularly local Platypus populations.

Local initiatives play an important role in protecting our vulnerable waterways, estuaries and oceans. Direct action is essential to stopping urban pollution from being transported further downstream, and we applaud all the participants who came and helped the clean-up efforts.

POLLUTION REMOVAL & LOCAL WATERWAYS

Failure to capture plastic pollution has catastrophic consequences - and the state of our local rivers and creeks outlines the growing demand for stormwater treatment and pollution removal infrastructure.

SPEL & Stormwater Shepherds hope to revisit Petrie Creek in 2023 and continue our work restoring the local riverine environment and raising awareness of stormwater pollution. These continued efforts, and those of local volunteer groups, and community organisations, help to ensure that Petrie Creek thrives.



SPEL IS A PROUD SUPPORTER OF



STORMWATER SHEPHERDS

How many impervious surfaces are around your home?



NEW RESOURCES AVAILABLE AT 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 and for all lifeforms to enjoy clean water for future generations.

Discover a collection of pollution and stormwater resources available on our website.

www.stormwatershepherds.org.au

