

JOY IN WATER

ATLANSTORMWATER.COM | ISSUE # 16

FEATURED

**Industry Park,
Pakenham: OSD
Infrastructure for
Major Logistics
Development**

FEATURED

**Maximising Land Yield:
Masterplanning Stormwater
for Land Lease Communities**

AUSTRALIAN WATERWAYS

Coongie Lakes

Atlan
STORMWATER



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Welcome

A WORD FROM OUR CEO

At Atlan Stormwater, our purpose is simple: protecting Joy in Water for future generations.

Servicing local communities, our solutions are purpose-engineered to protect our waterways by capturing pollution at the source in our urban catchments.

Through our comprehensive design assistance services, Atlan Stormwater pioneers the implementation of best-practice stormwater infrastructure. We work alongside engineers, councils, developers and contractors to configure, specify, install and maintain stormwater solutions across a diverse range of water quality and quantity scenarios.

Our latest initiative in this space is the development of the MyAtlan engineering suite and the launch of our inaugural cloud-based Floating Treatment Wetlands design tool. This innovative technology streamlines project planning and specification, and galvanises our ability to support engineers, councils, and project stakeholders.

It's a winning combination putting power at your fingertips – our innovative Floating Wetlands technology bolstered by an intuitive, streamlined design tool. These frameworks enhance the ability of our clients to explore FTW design space, customise solutions, and enhance project performance.

In other product developments, we continue to expand the independent verification of our stormwater treatment devices.

AtlanFilter recently achieved verification through the New Jersey Corporation for Advanced Technology (NJCAT) program, while FlowFilter has received Canadian Environmental Technology Verification (ETV) - adding to our growing portfolio of internationally recognised certifications.

Third party verification is key to building industry trust and confidence. Achieving these internationally recognised certifications will further expand opportunities for our devices to be specified, installed, and ultimately protect lakes, rivers and seas across the globe.

In this issue of Joy in Water, you can gain industry insights into the people, processes, and technology helping shape the future of stormwater management.

As our industry continues to evolve, we look for continual improvement with practical, evidence-based solutions to meet the challenges of stormwater management in our global communities. We believe clean waterways are a right, not a privilege. Therefore, we are Zero Pollution Ambassadors, who are working to ensure a Joy in Water experience for you with your family and friends.

Kind regards,



ANDY HORNBUCKLE
CEO



Atlan has launched our inaugural Floating Treatment Wetland (FTW) design tool and first addition to the MyAtlan design hub. This cloud-based system will support engineers, councils and project stakeholders with a fast, easy-to-use, and intuitive interface for designing FTWs.

Developed to simplify project planning and asset design, the online platform enables users to map water bodies, configure and optimise FTW layouts, assess sizing and performance outcomes, and generate professional reports to support specification and project delivery.

This launch marks the beginning of the MyAtlan engineering suite, with additional digital design tools for Atlan's flagship stormwater management solutions planned for future release.

By bringing engineering insights together in one accessible platform, MyAtlan is helping streamline the design of smarter, more sustainable stormwater infrastructure.

MyAtlan FTW Calculator: The Future of Floating Treatment Wetland Design



SCAN QR



NJCAT & TAPE: Our Latest Device Verifications



AtlanFilter & FlowFilter have received our latest device verifications, with the systems progressing through NJCAT verification and the Canadian Environmental Technology Verification (ETV) program respectively.

These independent evaluation programs provide rigorous assessment of stormwater treatment technologies, giving regulators, engineers, and asset owners confidence in verified performance. Achieving these certifications will further expand opportunities for the deployment of our stormwater solutions across North America.



AtlanFlow HDPE Pipe: Approved by Cairns Regional Council

AtlanFlow HDPE pipe has been approved for use by Cairns Regional Council in stormwater, wastewater and water management scenarios - supporting the adoption of our pipe solutions for projects across Far North Queensland.

Helping to improve project efficiencies, AtlanFlow SN8 Pipe supports enhanced project value, rapid installation, sustainability and compliance. Features include –

- Prefitted seals
- DN100 – 1050 x 6 metre lengths
- Cost-efficient with reduced freight, lifting and installation overheads
- Bundled for safety and efficiency
- ISO9001 approved & AS/NZS 5065 Compliant
- EPD Certified



SCAN QR





AtlanTrap: Pioneering the Next Generation of At-Source Treatment

AtlanTrap has launched! Featuring enhanced modular design, this performance at-source GPT (Gross Pollutant Trap) asset delivers the proven SQIDEP-verified performance and retrofit capability of its StormSack predecessor, while streamlining installation and simplifying asset components.

Featuring the new Atlan TrapCatch mounting system, these injection-moulded brackets provide secure support, rapid installation, and improved structural strength. With surface-level access, AtlanTrap simplifies maintenance while reducing operational costs across your asset lifecycle.



SCAN QR



Atlan DISTRIBUTION PARTNER
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Distributor Highlight: Partnering with Jensen Infrastructure

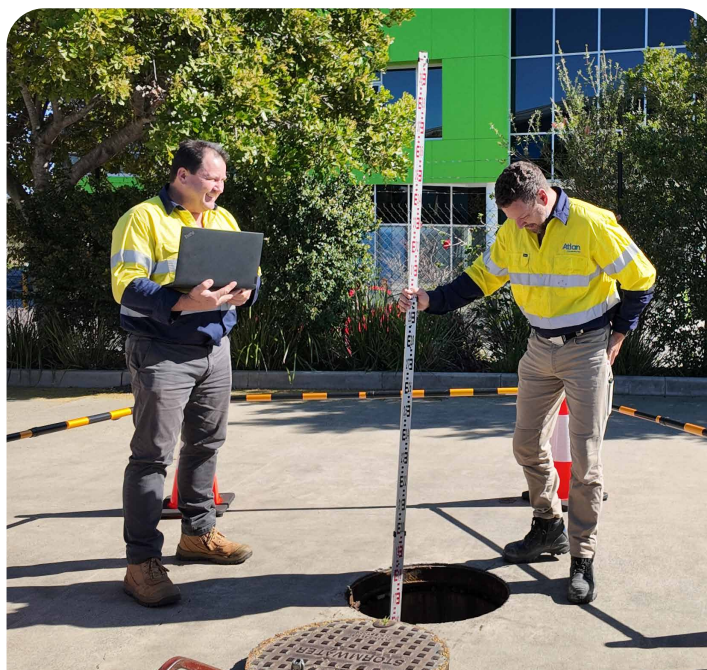
We are delighted to showcase our distribution partnership with Jensen Infrastructure, serving stormwater management projects across Arizona, California, Hawaii, Nevada, Oregon, and Washington. This ongoing partnership includes exclusive distribution of AtlanFilter, FlowFilter, and FlowGuard in these geographies.

Atlan Stormwater and Jensen Infrastructure share common goals of servicing the project needs of engineers, contractors, agencies, and municipalities with seamless stormwater project management and effective, efficient, and performance-driven stormwater assets.

NSW & QLD: Supporting Tender Projects

Supporting Joy in Water for future generations through the maintenance and installation of Gross Pollutant Trap (GPT) infrastructure, our latest awarded tenders in NSW and QLD are supporting primary treatment outcomes for local councils.

With 169 assets audited and assessed across Brisbane's Moreton Bay region, and a series of GPT installations scheduled across Sydney's Sutherland Shire – we look forward to supporting local councils and their ambitious targets for developing and maintaining stormwater networks fit for our growing communities.



Maximising Land Yield: Stormwater Solutions for Land Lease Communities





Underground & Modular: Scalable Stormwater Solutions

Two key strategies for overcoming these challenges are the deployment of underground stormwater management infrastructure, and the use of modular assets that are easily retrofit or added as project dynamics change and catchment areas increase.

By relocating stormwater quality and quantity infrastructure below ground, LLC developers can increase developable space, while delivering fully trafficable assets that are compatible with a full range of developmental goals.

These assets free functional aboveground space, for site features such as roads, car parks, residential lots, landscaped areas and community space. This effectively minimises land take compared to conventional strategies with surface level assets such as bioretention, sediment basins, stormwater ponds, and extended drainage infrastructure.

Working in collaboration with project stakeholders to ensure Joy in Water outcomes, these stormwater solutions deliver increased dollars yield per square metre of stormwater compliant development footprint.

Modular stormwater solutions enhance project efficiency and offer scalability that extends across full project lifecycles – and provide value for staged developments. As catchments expand across successive project phases, additional assets can be incorporated to increase capacity for managing both water quality and water quantity.

By combining modular solutions and fully trafficable underground alternatives, we can develop adaptable stormwater networks that streamline construction programs, while improving land yield and long-term master planning initiatives.

As modern land lease communities (LLCs) expand to accommodate Australia's urban growth and residential demand, developers are balancing the challenges of large-scale, multiphase projects with increasing housing density, compliance obligations, and developmental constraints.

These present unique challenges as developments seek to find a premium balance of maximising residential area and delivering profitability, while maintaining lifestyle oriented liveability and open community space. With every square metre carrying high value both for developers and residents, maximising land yield is a critical factor in enhancing project feasibility, liveable communities, and stakeholder outcomes.

Supported by detailed master planning and project coordination, LLC developments require extensive networks of specialised drainage, sewer and stormwater systems.

Compliant, high-performance infrastructure is essential for scalability, ensuring that these systems future-proof development and integrate across phased projects.

As urban density increases, traditional stormwater infrastructure, such as sediment basins, can consume valuable surface area. Modern land lease communities contain a wide variety of modern amenities that benefit from reducing the footprint of stormwater infrastructure, including clubhouses, swimming pools, fitness centres, community gardens and green space.

Rather than viewing stormwater infrastructure as a constraint, developers and designers are increasingly integrating these solutions across project planning frameworks. This allows stormwater infrastructure to evolve to match changing catchments and regulatory requirements, while supporting usable community space.

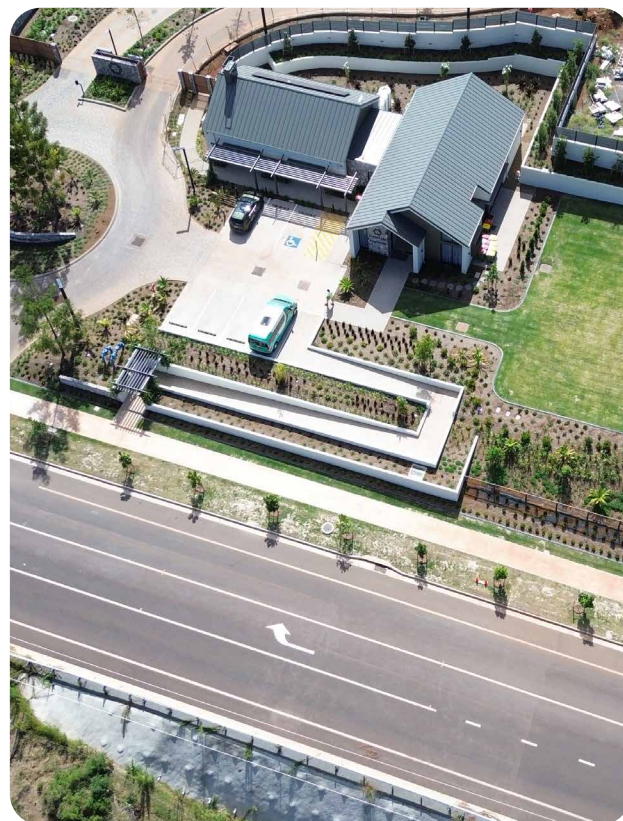
Highfields, Toowoomba

An hour and a half from central Brisbane, Gemlife Highfields is an idyllic over-50s lifestyle development set amongst the Great Dividing Range and the green highlands of Toowoomba. With mountain views, the sweeping 23-hectare community incorporates 350 residential lots with a premium range of single-story and split-level housing.

Fifteen per cent of the site is allocated green space - with the development including bushlands, conservation areas, and local creeks. Residents enjoy Highfield's pristine vistas and premium amenities, including a country club and outdoor recreational precinct.

Generating Value with MegaVault, AtlanFilter & StormSack (now AtlanTrap)

Water quantity and quality outcomes are paramount across the Highfields' development, and the site's MegaVault systems are the centrepieces of its stormwater infrastructure.



These On-site Stormwater Detention tanks slow and detain stormwater flows, preventing flooding and managing surface runoff across the site's residential catchments, ensuring safety, compliance and future-proofed development.

By installing stormwater assets underground, 9,850m² of additional land yield was conserved, when compared to traditional aboveground bioretention and sediment basin assets – which represents an equivalent of 19 additional house lots.

These gains were used to generate viable community space, including tennis court, clubhouse, community gardens, driveways, and admin buildings.

SQIDEP Verified Stormwater Treatment

AtlanFilter will be housed in filter bays across each MegaVault.

The AtlanFilter is a SQIDEP-verified tertiary treatment device featuring a high-performance upflow treatment process, SQIDEP treatment efficiencies for this filter cartridge system include 85% Total Suspended Solids (TSS), 74% Total Phosphorus (TP) and 59% Total Nitrogen (TN).

Our at-source Gross Pollutant Trap, Atlan StormSack (now known as AtlanTrap) will further support water quality outcomes. Providing primary stormwater treatment, these systems were installed across the site's driveways to capture larger rubbish, sediment, and urban pollution.

By housing the StormSack assets in existing drainage and AtlanFilter cartridges within the OSD, these design approaches further contribute to positive outcomes for site surface yield.



Cowes, Phillip Island



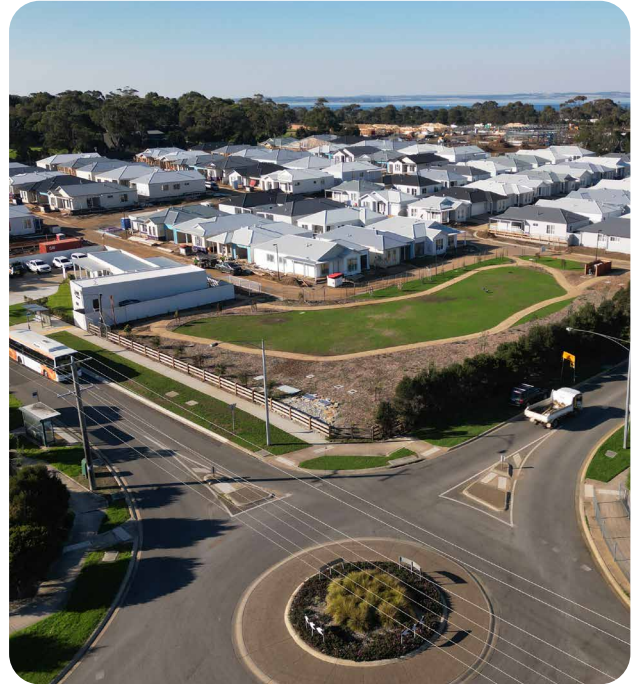
Lifestyle Communities, Cowes, is a modern development just three-hundred and fifty metres from the pristine coastline of Phillip Island. This vibrant seaside development is just a short distance from nearby beaches - including Yellow Sand Beach and Red Rock Beach.

The 263-lot master planned residential estate combines low-maintenance homes and high-value amenities. Sustainable, liveable spaces are essential for the development, with its proximity to nearby coastal environments – and long-term visions for a picturesque seaside community exemplifying the ‘ultimate coastal lifestyle’.

AtlanChamber: 3.1 Megalitres of Mixed OSD & Stormwater Harvesting

Dual AtlanChamber configurations will service the site's stormwater flows, split into two main catchments in the east and west. Respectively, these catchments measure 5.6 and 6.5 hectares.

The underground installations will see over 6,000m² of land conserved as parkland and open green spaces across



the development - providing 15 additional housing lots of usable space to the local community over aboveground bioretention or sediment basin alternatives.

The western chamber system will provide 1.8 megalitres of total storage volume - equally split between OSD and stormwater harvesting (0.9 megalitres each). This dual-purpose asset will detain stormwater, prevent flooding, and capture stormwater for reuse applications to support sustainable outcomes.

The second AtlanChamber installation in the site's eastern catchment will provide OSD capabilities with a 1.3 megalitre detention tank detaining stormwater flows and slowing them in storm events.

Vortceptor & FlowFilter: SQIDEP Verified Water Quality Assets

Treatment trains incorporating Vortceptor and FlowFilter will meet water quality requirements across the site. Manufactured locally, both of these devices are SQIDEP verified pollution removal solutions with 100-year fibreglass design life.

The Vortceptor is our high-performance GPT (Gross Pollutant Trap) for primary treatment – and will act as pretreatment for the AtlanChambers.

Treatment efficiencies for the Vortceptor are SQIDEP verified with removal rates of 93% Total Suspended Solids (TSS), 86% Total Phosphorus (TP), 49% Total Nitrogen (TN), and 100% Gross Pollutants.

Two FlowFilters will provide tertiary stormwater treatment across the dual catchments, and their minimal head drop requirements make them highly suitable for the low gradient site.

Designed to reduce the footprint of WSUD on constrained projects, the FlowFilter's compact, high-performance configuration with internal filters uses an up-flow filtration process. The FlowFilter is SQIDEP verified with removal rates of 95% TSS, 93% TP, 45% TN, 90% Lead, 100% Gross Pollutants, and 53% Zinc.

FlowGuard

Decentralised SQIDEP-Verified Stormwater Treatment

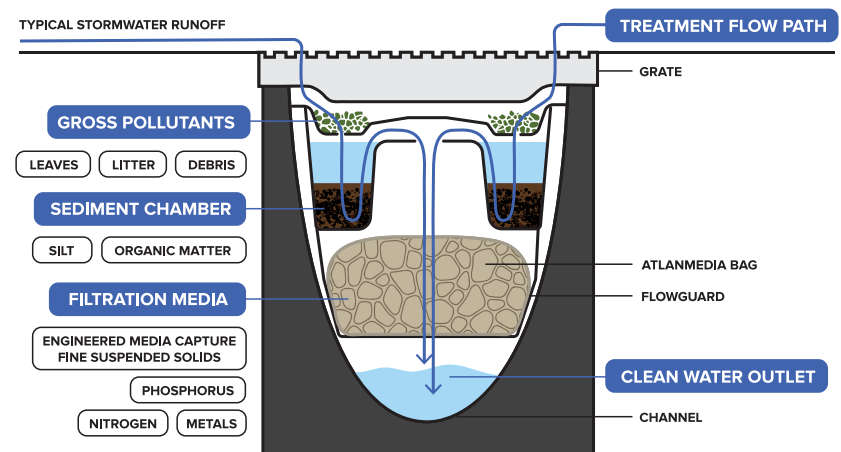
FlowGuard is a SQIDEP-verified tertiary filtration solution designed for installation at surface level in drainage channels and stormwater pits. Directly accessible by maintenance technicians without specialised equipment or confined space entry, this allows quick visual inspections, cleaning, and component replacement.

An example of a decentralised stormwater management device, these types of assets are installed at-source and align with WSUD (Water Sensitive Urban Design) and LID (Low-Impact Development) frameworks. Operating on a smaller local scale to centralised assets, they provide reduced operational and labour requirements.

FlowGuard is a modular system designed to fit in standard linear strip drains with a width of 300mm. Integrating seamlessly into areas such as driveways, car parks and roof outlets, this device treats incoming stormwater flows before allowing stormwater to pass from the outlet into the drainage channel.

Ideal for retrofit applications, the FlowGuard uses a multiphase treatment process to improve water quality. A SQIDEP-verified stormwater treatment device, its verified treatment efficiencies demonstrate pollution removal rates of 88% Total Suspended Solids (TSS), 69% Total Phosphorus (TP), and 67% Total Nitrogen (TN).

High-Performance FlowPath: How does FlowGuard work?



FlowGuard's treatment process occurs in a multistage process.

1. Firstly, stormwater enters through the top cover, where larger gross pollutants are physically screened. This area of the device captures solids such as stones, leaves, and debris – and is fitted with a rubber seal to ensure flows are directed through the device.
2. After initial treatment, stormwater flows are passed through a sedimentation box, where organic matter, sediment and other particulates are captured using an underflow principle to enhance pollution capture.
3. The last phase of treatment occurs in a performance-engineered filter media contained in a specially designed internal bag. This media provides tertiary filtration and polishing, removing fine suspended solids (TSS), nutrients (TN and TP), and dissolved metals.

By providing multiphase stormwater treatment in a condensed footprint, FlowGuard can effectively improve the quality of incoming flows at the source – reducing pollutant transport, protecting waterways, and supporting Water Sensitive Urban Design (WSUD) outcomes.





TEAM MEMBER PROFILE

Going the Distance to Support Better Mental Health

I've experienced that this company cares about its employees and what they do outside of work as well.

Creating Joy in Water memories on the waterfront during the 2026 Gold Coast Marathon, Queensland Business Development Manager **Brenton Turner** embraced the challenge of endurance running while rallying support for Beyond Blue.

Brenton raised more than \$2,500 for the charity, helping to generate awareness for mental health while building strong bonds of camaraderie and mateship with his training group. The loss of a friend following significant mental health challenges became the catalyst for Brenton and his friends to take on the milestone event, crossing the finish line in early July while honouring their friend's memory and supporting a worthy cause.

What is your role at Atlan?

I am a Business Development Manager on Atlan's Queensland team. I like meeting new people. I've always been a people person – and I like working in a team that finds solutions for our clients and helps people solve their problems.

How was your first marathon experience?

Eye opening. I was training for a good six months beforehand and even with all that training - nothing truly prepares you for what you are

going to experience. You get to the 20K mark, and you realize you've got another 22 kilometres to go. Then soon it's 12 kilometres, then it's all up to you, you need to push, you're nearly there and you've got to finish it.

You supported Beyond Blue on your run. What do you think is the importance of mental health?

I think it's important to speak about it – not just to bottle up inside. Someone cares and someone will listen, whether that's a best mate, your parents or even seeing a health professional.

It's the small, simple things that can help you out in those moments. I've got some awesome mates, and we sort of always talk about and be open about what is going on in our lives – it's great to have a support network.

What was the support like on your journey?

The support was outstanding.

My family all chipped in, which helped – and I had mates that were there with me helping out during the run.

My Atlan colleagues would support me the days I would leave the office to go on a run before picking up my kids from school.

Did you reach your donations target?

I went to (Atlan CEO) Andy Hornbuckle one morning, knocked on his door and said 'this is what I'm doing' and he was a bit gobsmacked on (my desire) to run 42 kilometres. He said Atlan would kick off with a donation.

People in the office, people from Sydney, people from Victoria, people from the concrete yard here, all messaging or donating was huge. I've experienced that this company cares about its employees and what they do outside of work as well.

Why is Joy in Water important to you?

Joy in Water means to me that there's always going to be that environmental future for the kids. I've been running around lakes and parks and up and down the coast, and to see that may be taken away one day because of the pollution – and that my kids potentially can't experience that... it really sort of angers me.

So, I'm happy that at Atlan, we are making positive impacts with upstream treatment, Gross Pollutant Traps and stormwater infrastructure - knowing that what we're doing each day is stopping and preventing that is awesome.



PROJECT SPOTLIGHT

Huntley Hills Park: Floating Wetlands for Biodiversity, Water Quality & Habitat Creation

We express our appreciation for the Chattahoochee Riverkeeper for their assistance on this project, and for the imagery showcasing this Floating Treatment Wetlands installation at Huntley Hills Park. The Chattahoochee Riverkeeper was established in 1994, and is a non-profit organization dedicated to protecting, preserving and monitoring the Chattahoochee River and its upstream environments.

Huntley Hills Park is a popular community green space in the City of Chamblee, Georgia, featuring a vibrant butterfly garden, children's playground, and a local stream serving as a tributary to Nancy Creek.

Originating in Peachtree Corners, Nancy Creek stretches through several residential neighbourhoods in the state of Georgia. Ultimately reaching the Chattahoochee River, the creek spans a 37.8 square-mile (97.9 square-kilometre) watershed. This area includes seven cities – Atlanta, Brookhaven, Chamblee, Doraville, Dunwoody and Peachtree.

Sections of Nancy Creek have been identified on Georgia's impaired waters list for failing to meet state water quality standards for primary contact and recreational uses. This represents a growing challenge in our metropolitan communities - and protecting urban waterways like Nancy Creek from stormwater pollution is critical to sustainable development.

Community waterways face numerous impacts from stormwater contaminants. Nutrient inputs from lawn fertilisers, grass clippings, and organic debris elevate nitrogen and phosphorus levels, promoting algal growth and reducing water quality.

Stormwater also carries gross pollutants, such as litter and plastics. Generally non-biodegradable, these bulkier items accumulate in local waterways before they are conveyed to downstream riverine and marine environments.

In the City of Chamblee, the development of Floating Treatment Wetlands aims to address these issues by providing practical, environmentally beneficial approaches to urban creek restoration and water quality.



Harnessing FTWs: Combining Nature-Based Principles with Traditional Trash Booms

At Huntley Hills Park, Atlan Stormwater partnered with Chattahoochee Riverkeeper and Cox Enterprises to install a 54-module Floating Treatment Wetland (FTW). Designed to intercept stormwater pollution while supporting ecological restoration, the system will provide long-term benefits through improved water quality, community beautification, and enhanced biodiversity.

Installed in a V-shaped configuration, this nature-based stormwater treatment solution will guide gross pollutants and debris into central collection areas. This will allow them to be removed efficiently during routine maintenance, preventing them from being washed downstream.

This multipurpose asset provides the functional benefits of a traditional trash boom system, while integrating additional biodiversity gains – with the ability to plant each module with local plant species for site aesthetics and habitat creation.



The Georgia Native Plant Society played a leading role in plant selection and establishment, helping source a diverse range of native wetland species – including False Indigo Bush (*Amorpha fruticosa*), Eastern Bluestar (*Amsonia tabernaemontana*), Swamp Milkweed (*Asclepias incarnata*), and Fringed Sedge (*Carex crinita*).

These species were primarily chosen to support biodiversity and their suitability for native pollinators and macroinvertebrates, including butterflies, moths, dragonflies, and bees.

This project complements Atlan Stormwater and the Chattahoochee Riverkeeper's ongoing efforts in establishing Floating Treatment Wetlands in the



region – creating a broader network of infrastructure to collectively manage and improve the health of the larger Chattahoochee River system.

In addition to capturing floating debris, the Huntley Hills Park FTW will also drive better water quality outcomes across the Nancy Creek watershed.

Floating Wetlands submerge plant root structures directly in the water column, exposing large surface areas for biofilm growth. These plant roots and biofilm provide a network of physical, biochemical and microbial pathways for treating stormwater pollution. This optimises FTW's stormwater treatment capability, providing high-performance sedimentation, nitrification, and phosphorus uptake.

By combining trash interception, native habitat creation, and community engagement, this project demonstrates how FTWs can integrate with urban watershed renewal and broader community sustainability objectives.

Together, we can work in our urban catchments to stop pollution at the source. With growing demand for biomimetic stormwater solutions to improve the water quality of our urban streams, creeks, and rivers, projects such as Huntley Hills Park showcase the benefits of Floating Treatment Wetlands in ensuring Joy in Water for future generations.



PROJECT SPOTLIGHT

Floating Treatment Wetlands: Supporting the Rehabilitation of Lake Alford

Named by locals as the 'Duck Ponds' Lake Alford Recreational Park is one of Gympie's most recognisable family spaces. A popular destination for birdwatchers, residents, and visitors, the park offers a peaceful backdrop for picnics, leisure activities, and an off-leash dog area.

Providing habitat for a wide range of native species, birdlife inhabiting the park includes White Faced Herons, Black Swans, Little Pied Cormorants, Forest Kingfishers, and Royal Spoonbills.

Maintaining healthy aquatic habitat is a key objective of Lake Alford's ongoing rehabilitation, with restoration efforts focused on improving both ecosystem function and long-term water quality after floods damaged the park in 2022. Restoration efforts include the stabilisation of the lake's banks, establishment of sandstone terraces,



As plant root systems develop beneath the floating structure, they create a large, interconnected surface area for biofilm colonisation. These microbial communities are fundamental to stormwater treatment and improved water quality.

These submerged root networks contribute to stormwater treatment through multiple processes. Nutrients such as nitrogen and phosphorus are assimilated by the plants, while the extensive microbial communities in the biofilm accommodate organic matter breakdown.

As stormwater passes through the dense root network, suspended sediments are intercepted by the biofilm and root mass. The sediment accumulates, then falls and settles, providing better removal of TSS (Total Suspended Solids) than a constructed wetland relying on gravity and attenuation times alone.

A benefit of these systems is that they minimise land take for treatment infrastructure, the Floating Treatment Wetlands floats on top of the waterbody, which conserves the foreshore for use by the community or for further council rehabilitation efforts.

Projects such as Lake Alford demonstrate the expanding role of Floating Treatment Wetlands in Water Sensitive Urban Design (WSUD) projects. These assets offer an adaptable combination of sustainable engineering benefits, habitat creation and opportunities to plant native flora.

For councils and asset owners seeking to maximise the environmental performance of existing lakes, ponds and stormwater basins, Floating Treatment Wetlands provide a practical retrofit solution that integrates seamlessly into established watercourses. This makes Floating Treatment Wetlands particularly attractive for councils seeking to improve the performance of existing stormwater assets without the cost or disruption associated with major civil works.

The Lake Alford project demonstrates how nature-based engineering can support broader catchment rehabilitation initiatives, delivering Joy in Water outcomes and protecting our waterways.

and the planting of 25,000 native trees, grasses, and aquatic plants to reinvigorate the park's ecosystems. Supporting these site works, Atlan Stormwater's Floating Treatment Wetland (FTW) installation complements the broader objectives of Lake Alford's restoration. These initiatives demonstrate how nature-based stormwater infrastructure can complement long-term site works to improve water quality, biodiversity and community amenity.

Creating Habitat & Improving Water Quality

Surrounding the park's central island, the Floating Treatment Wetlands comprise several series of interconnected floating wetland modules installed in a large open ring configuration. The Floating Wetlands has been installed in a two-module width – and has an overall perimeter of approximately 100 metres by 30 metres.

This system delivers multiple benefits to local environments, including nutrient reduction, habitat creation, biodiversity enhancement and beautification. The ability for these units to rise and fall with the water level of the lake provides resilience to fluctuating lake levels and storm flows.

The scale of the installation creates extensive vegetated habitat that supports local birdlife while also establishing aquatic ecosystems beneath the water surface. Plant foliage and submerged root systems provide refuge and breeding habitat for a range of invertebrate species, including dragonflies, worms, beetles and snails, which contribute to the development of local food webs that support fish populations and the many waterbirds that inhabit Lake Alford.

PROJECT SPOTLIGHT

Industry Park, Pakenham: OSD Infrastructure for Major Logistics Development



Driven by demand for critical supply chain upgrades and the development of major warehouse precincts, Melbourne's southeast is continuing to experience significant expansion across the industrial sector.

Located in one of Victoria's fastest-growing transport and logistics corridors, an upcoming development at Enterprise Industry Park, Pakenham, is set to contribute to the region's logistics growth. This 12.1-hectare site is part of an expansive 27-hectare estate that accommodates large-scale industrial facilities for premium-grade warehousing, distribution, and transport operations.

Premier industrial projects benefit from the integration of scalable stormwater management infrastructure. Meeting requirements for developmental approval and

compliance, assets such as On-site Stormwater Detention (OSD) tanks are essential components of sustainable development.

Stormwater detention systems aim to match pre-development hydrology by slowing, storing and gradually releasing incoming stormwater flows. These critical assets protect surrounding businesses, roadways, and drainage networks, ensuring that the impact of high-volume stormwater flows is mitigated and flood risk is reduced.

The development of OSD infrastructure is imperative for Australia's growth corridors to effectively manage peak flows and protect downstream assets. These assets enable sustainable development, regulatory compliance, and environmental resilience.

MegaVault: High-Capacity Stormwater Detention for Melbourne's Growing Industrial Corridor

Atlan Stormwater's 3.4-million litre MegaVault will rise to meet the OSD challenges of this sprawling development. Large industrial spaces contain extensive impervious areas with high volumes of stormwater moving quickly during heavy rainfall from surfaces such as roofs, hardstand, driveways and car parks.

A high-capacity, modular, precast concrete detention solution, MegaVault, is ideally suited to these site conditions. Customisable and adaptable, its versatile design configurations ensured that access points, filter bays, weir walls and inspection channels could all be engineered to meet the available footprint.

A registered Australian design (Design no. 202315550), MegaVault is locally manufactured to meet ISO9001 standards. Each tank module is fabricated off-site in Atlan Stormwater's precast production facilities, assuring quality and performance.

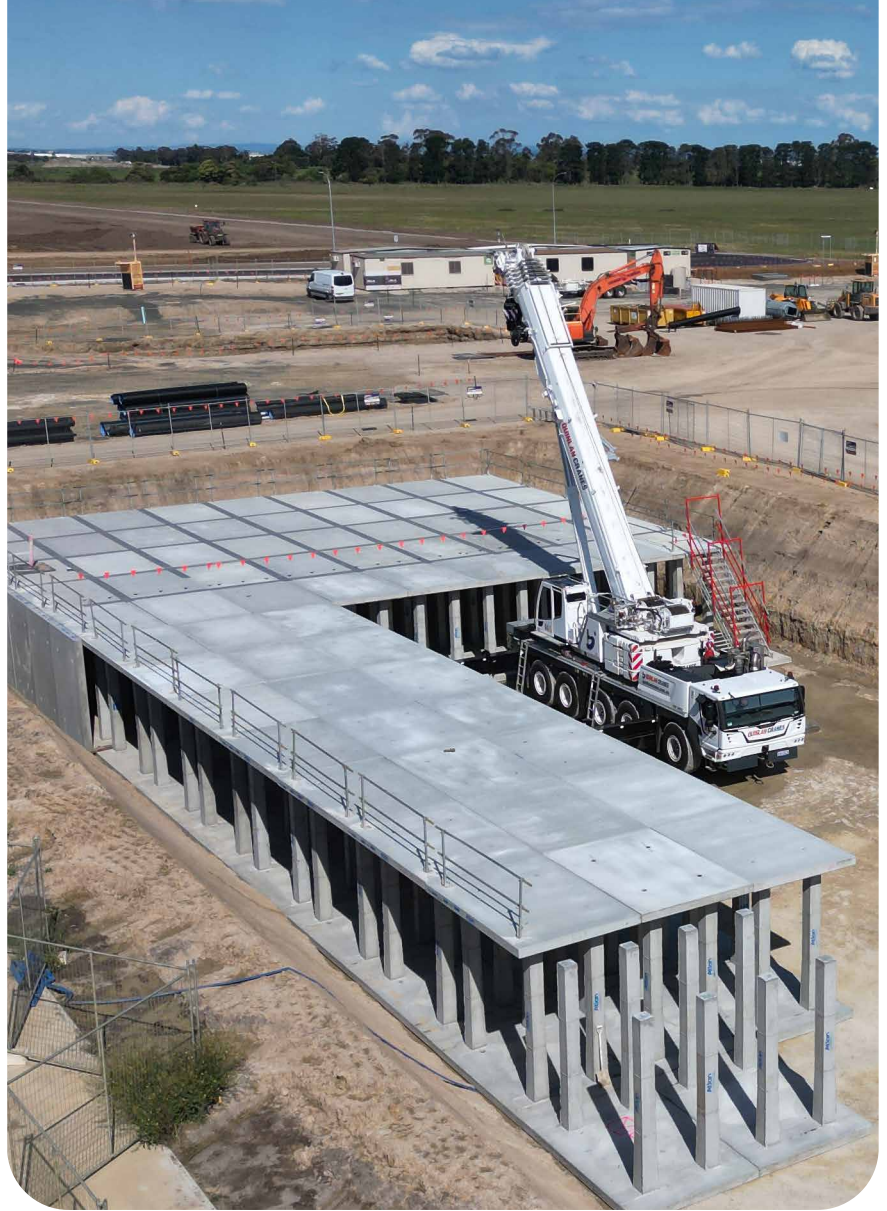
Independently engineered to exceed Australian traffic loading requirements, MegaVault delivers exceptional structural performance, which supports the operational requirements of industrial projects.

MegaVault's robust structural strength enables underground installation, which maximises land yield and development opportunities for overhead civil and structural works, including site features such as driveways, warehousing and car parks.

A modular solution that is delivered ready to install, MegaVault ensured ongoing project benefits over conventional alternatives such as cast-in-situ tanks - with decreased exposure to wet weather delays, limited open excavation, and reduced site works and personnel risk.

MegaVault contributed significantly to project efficiency gains and the management of tight timelines. Rapidly deployed to meet strict construction schedules, the system's quick installation enabled site works to continue with minimal disruption.

Comparatively, a cast-in-situ solution would have required on-site formwork, pouring and curing, with multiple trades necessary throughout fabrication.



This system future-proofs the site and integrates seamlessly with aboveground development, ensuring available space for driveways, forecourts, and car park areas.

The MegaVault will be accessible from site-level access points and will reduce ongoing operational expenses. This allows for easy maintenance and enhances the cost-benefit of the system across routine maintenance, inspections, and clean-outs.

This installation demonstrates the integration of high-performance OSD tank infrastructure in high-growth industrial and logistics hubs.

Combined with Atlan Stormwater's full-service project management, logistics, and coordination, this project marks the successful delivery of critical stormwater OSD infrastructure - built to perform for decades and ensure Joy in Water for future generations.





PROJECT SPOTLIGHT

FlowFilter: Water Quality Solutions for Landmark Logistics Development

Located within the Greater Flagstone Priority Development Area (PDA), Flagstone Logistics Estate is one of South East Queensland's premier logistics developments. Situated in North Maclean, adjacent to the Mount Lindesay Highway, the estate is emerging as a major industrial precinct servicing Brisbane's growing transport, freight and logistics networks.

Forty-five kilometres southwest of Brisbane CBD, this PDA has been declared by the state government to fast-track development, boost economic growth, and address housing shortages. The estate has been designed to accommodate next-generation warehousing and distribution facilities - developed to deliver essential industrial infrastructure and state-of-the-art facilities.

As new facilities continue to be delivered across the estate, stormwater management is playing an important role in protecting local waterways and ensuring project sustainability, compliance and water quality requirements are met.

Meeting these requirements across an extended warehouse allotment, Atlan Stormwater has supplied three

FlowFilter systems as part of the project's stormwater management strategy.

Unique Stormwater Challenges on Logistics & Industrial Precincts

Logistics estates and industrial hubs generate significant stormwater runoff with expansive impervious surfaces such as warehouse roofs, internal roadways and hardstand. During rainfall events, these surfaces rapidly convey pollutants through the drainage network, making effective stormwater treatment essential to protect receiving waterways.

Typical contaminants generated across industrial sites include fine sediments, nutrients, hydrocarbons, tyre wear particles, gross pollutants and dissolved heavy metals.

Locally manufactured at Atlan Stormwater's Australian fibreglass production facility and engineered with a 100-year design life, the project incorporated three FlowFilter systems. Two of these units were designed to treat flow rates of 156 litres per second each, and one smaller unit designed for a flow rate of 44 litres per second.

An effective stormwater solution for the relatively flat development, FlowFilter's minimal head drop requirements, and upflow filtration process make it an ideal solution for low-gradient developments. Fully trafficable to Australian standards, the device's underground installation enhanced project outcomes by reducing on-site footprint and integrating into aboveground works.

These innovative systems house high-performance filter cartridges for tertiary stormwater treatment. The device's SQIDEP-verified treatment efficiencies include 95% Total Suspended Solids (TSS), 93% Total Phosphorus (TP), 45% Total Nitrogen (TN), 90% Lead (Pb), 53% Zinc (Zn), and 100% Gross Pollutants (GP).

We believe clean waterways are a right, not a privilege. By incorporating high-performance stormwater filtration into the development, the project delivers a practical, long-term solution that protects downstream environments.

As industrial infrastructure continues to evolve, integrated stormwater management will remain fundamental to delivering sustainable developments and ensuring Joy in Water for future generations.



SCAN TO
PLAN



PRODUCT SPOTLIGHT

Floating Treatment Wetlands: Design, Plan & Report

Introducing the future of Floating Treatment Wetland design! Join us for the launch of our inaugural signature stormwater engineering tool - available now as the first addition to the MyAtlan design hub.

Streamline time-consuming planning and calculations and access engineering insights at your fingertips - easy to use, fast and powerful. Our new FTW calculator provides rapid project planning, asset configuration, visual modelling, and report management.

Enhancing the ability of engineers, councils and project stakeholders to select and model stormwater management systems, we look forward to expanding the MyAtlan design hub to accommodate our flagship range of stormwater assets.

Launching MyAtlan: Our Design Hub & Engineering Tools

Specify with confidence. Size with precision.

Access the MyAtlan engineering hub to streamline the design of your stormwater quality & quantity assets. Explore sizing, configurations, and stormwater performance outcomes with our upcoming suite of intelligent online design tools and calculators.

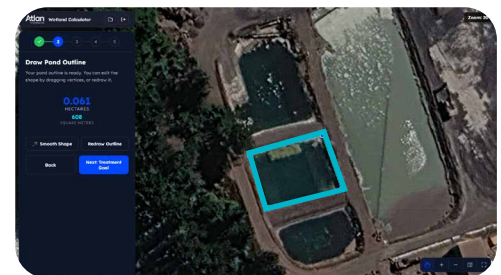
Whether you're exploring options for treatment infrastructure or On-site Stormwater Detention (OSD) systems, the development of our calculators will ensure fast, practical recommendations – engineered for performance to help move your project from concept to specification.

Create your own secure MyAtlan account to store your designs, return to previous calculations, make design changes, generate updated reports and share project documentation with colleagues, consultants or clients.

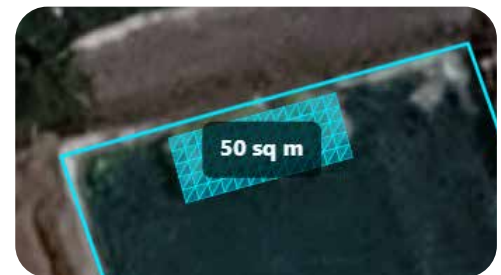
The launch of our FTW design tool is part of our ongoing mission to provide engineers, councils, and project stakeholders with a modern toolkit to enhance stormwater design and engineering. Together, we can serve our communities and develop stormwater networks that protect Joy in Water for future generations.



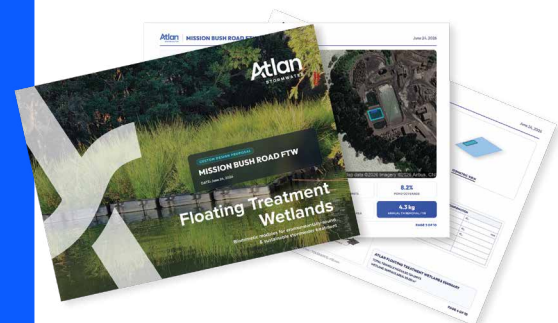
Select your site using global mapping tools.



Map your waterbody & optimise site selection



Explore sizing, layouts, and performance outcomes with ease.



Generate professional reports to support design, approvals and project delivery.



PRODUCT SPOTLIGHT

AtlanFilter: Joining NJCAT's Verified Stormwater Technologies

Our latest verification announcement has landed with AtlanFilter gaining successful verification through the New Jersey Corporation for Advanced Technology (NJCAT) Verification Program. This verification reinforces the validation of AtlanFilter's stormwater treatment performance claims and supports its deployment across North America.

NJCAT is one of America's premier protocols for verifying stormwater device performance. It provides technology innovators with technical and regulatory support to bring innovative and emerging environmental technologies to market.

AtlanFilter has gained verification under the category of Stormwater Technologies: Laboratory Verified. Through this framework, MTD (Manufactured Treatment Device) stormwater technologies have been tested to NJDEP (New Jersey Department of Environmental Protection) published testing protocols and their performance verified by NJCAT and certified by NJDEP.

Full-height AtlanFilter – The cumulative sediment removal efficiency of 82.9% exceeded the NJDEP protocol requirement of $\geq 80\%$.

Half-height AtlanFilter – The cumulative sediment removal efficiency of 82.1% exceeds the NJDEP protocol requirement of $\geq 80\%$.

NJCAT verification follows AtlanFilter's TAPE designation and SQIDEP-verification, and demonstrates Atlan Stormwater's ongoing research, engineering and product development. Servicing our urban catchments and watersheds, we develop high-performance stormwater solutions to protect Joy in Water for future generations.



Verification programs are unique to the locality and Approving Authority, and whilst they may be accepted across different geographic regions, programs often specify unique particle size distributions, pollutant concentration ranges and testing methodologies. For this reason, exercise caution when comparing performance between different programs, and ensure it is relevant to your location.



AtlanFilter

FlowFilter



PRODUCT SPOTLIGHT

FlowFilter's Canadian Environmental Technology Verification

We are pleased to announce the Atlon FlowFilter's Canadian Environmental Technology Verification (ETV), providing independent verification of the performance of the device and its pollution removal capabilities – further supporting the deployment of Atlon's stormwater treatment assets in North America.

The Atlon FlowFilter® is a proprietary cartridge-based stormwater treatment system ideal for improving water quality. This device features a condensed footprint, modular design, and flexible filter cartridge configurations.

Incorporating a sedimentation sump and multiple replaceable filter cartridges configured within its treatment chamber, FlowFilter is a scalable solution that is designed to meet a wide range of flow rates and stormwater treatment requirements.

Joining FlowFilter's existing SQIDEP-verification and TAPE designation, the ETV was conducted by Globe Performance Solutions in alignment with the principles and framework of ISO 14034:2016 – Environmental Management – Environmental Technology Verification (ETV).

The verification of this system involved an independent assessment of the available evidence supporting the performance of the FlowFilter for the treatment of urban stormwater runoff. The assessment focused on the system's ability to reduce suspended solids, nutrients, metals, and gross pollutants under defined operating conditions.

ATLON FLOWFILTER® DEMONSTRATED POLLUTION REMOVAL RANGES

90-98%	70-90%	40-50%	80-90%	40-60%
Total Suspended Solids (TSS)	Total Phosphorus (TP)	Total Nitrogen (TN)	Lead (Pb)	Zinc (Zn)



Verification programs are unique to the locality and Approving Authority, and whilst they may be accepted across different geographic regions, programs often specify unique particle size distributions, pollutant concentration ranges and testing methodologies. For this reason, exercise caution when comparing performance between different programs, and ensure it is relevant to your location.





Exploring Water Quality in NSW's Most Contaminated Waterways

The top 10 most contaminated sites were ranked accordingly, with the highest contamination found in urban waterways in the Hawkesbury–Sydney region.

1. Cooks River
2. Dee Why Lagoon
3. Muddy Creek
4. Toongabbie Creek (Upper Parramatta River)
5. Throsby Creek
6. Coffs Creek
7. South West Rocks Creek
8. Manly Lagoon
9. Parramatta River
10. Middle Harbour Creek

Microplastic assessments by the NSW Environment Protection Authority (EPA) have named Cooks River, Dee Why Lagoon, Muddy Creek and upper Parramatta River as New South Wales' most contaminated coastal waterways.

Conducted over a three-year period, the Broadscale Microplastic Assessment (BMA) is Australia's first large-scale study of microplastic contamination. The report ranks 120 coastal waterways in NSW for microplastic concentrations in the top 15 centimetres of surface water.

Microplastics: An Emerging Pollutant

Emerging pollutants, such as microplastics, often fall outside the scope of traditional monitoring, treatment, and water quality regulations. These pollutants are present in low concentrations that persist and accumulate in the environment, presenting hazards to the health of our ecosystems.

A type of emerging pollutant, microplastics are small plastic particles under 5mm in diameter, which are produced through multiple pathways. These include the breakdown of manufactured goods, plastic packaging, synthetic turf, artificial grass, industrial plastic pellets, Styrofoam, and car tyres.

Over time, plastic waste in our aquatic environments accumulates and degrades into microplastics. Depending on the composition of plastic, this process takes anywhere from five to five hundred years.

Threatening the health of our environment, monitoring microplastic contaminants is becoming a necessity for the development of targeted management and infrastructure.

Removing Microplastics with Atlan's Stormwater Treatment Systems

As the removal of emerging pollutants becomes a priority in our communities, Atlan Stormwater is manufacturing, designing, installing and maintaining solutions to meet these environmental challenges. Our research and development of these systems reflect our belief that clean waterways are a right, not a privilege.

Products across the Atlan range have been developed and tested for their capability to remove microplastics from incoming stormwater flows. Atlan Stormwater's microplastic treatment solutions include Floating Treatment Wetlands, AtlanTrap, and Atlan BaffleBox.

The treatment capabilities of Atlan BaffleBox have been verified through Stormwater Australia's SQIDEP (Stormwater Quality Improvement Device Evaluation Protocol). Verified treatment efficiencies include 73% Total Suspended Solids (TSS), 59% Total Phosphorus (TP), 39% Total Nitrogen (TN), 99% Gross Pollutants, and 66% microplastics.

AtlanTrap's filtration capabilities have also been confirmed through studies, which show the removal of 35% to 88% of microplastic concentration, which varies according to catchment characteristics such as traffic patterns and road surfaces. Reductions in microplastics were also shown in stormwater treated in nearby Floating Treatment Wetlands.

As water quality requirements in our communities evolve, the development of stormwater infrastructure is critical to effectively managing emerging pollutants. Bridging the gap between economics and environment, we provide generational assets to enhance water quality outcomes and protect our waterways.

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Recognised as one of Australia's Ramsar Wetlands of International Importance, the Coongie Lakes are among South Australia's most spectacular freshwater landscapes. This vast 2.1 million hectare network of lakes, channels, billabongs, floodplains, deltas and swamps comes to life with the seasonal floodwaters of Cooper Creek, creating one of the nation's most ecologically significant inland wetland systems.¹

Located in the Malkumba-Coongie Lakes National Park in South Australia's far north-east, the wetland system is one of Australia's most pristine and remote - approximately 100 kilometres from the outback township of Innamincka, and 1,050 kilometres north of Adelaide.²

The park offers true outback wilderness experiences for visitors seeking solitude in nature, requiring full self-sufficiency with zero-facility bush camping. Visitors willing to adventure are rewarded with camping, canoeing, bushwalks and one of the most untouched waterways in the country.

Coongie Lake receives inflows no less than eight times in any ten-year period, with no dry period lasting longer than twelve consecutive months. Receiving cyclical flood pulses, the influx of water results in rapid plant growth and the migration of huge numbers of waterbirds to feed and breed, with more than fifty-five species recorded using the site as a breeding ground.³

This spectacle has recorded migrations of up to 100,000 Australian pelicans, along with a large variety of Australian native wildlife, including Freckled Ducks, Black-winged Stilts, Yellow-billed Spoonbills, and Great Cormorants.³

The Coongie Lakes wetlands also play an essential role within the broader Lake Eyre Basin. Floodwaters recharge groundwater systems, transport nutrients throughout the landscape and sustain habitats that support fish, amphibians and countless other aquatic organisms.⁴

Coongie Lakes is fed primarily by the unregulated, free-flowing waters of Cooper Creek. As monsoonal downpours in central and western Queensland fill catchments, they send billions of litres of water to slowly wind through Cooper Creek – eventually spilling out over South Australia's vast, flat floodplains.⁵

This natural connectivity demonstrates the importance of protecting our pristine riverine catchments and riparian environments, ensuring they can receive flows that sustain healthy ecosystems. We believe clean waterways are a right, not a privilege.

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Australian
Waterways

Coongie Lakes



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