

Interflow®

Creating the
Future of Water



Water

—
SECURING LIFE'S ESSENTIAL

Who we are





Water

SECURING LIFE'S ESSENTIAL

A name synonymous with 'challenging the status quo', our 85+ year journey demonstrates a rich heritage of innovation born from a vision that prioritises solving our customers' problems. This vision, combined with our specialist expertise, continues to position us as a market leader across Australia and New Zealand, providing water solutions that ensure long-term security for our customers and communities.

We understand that every drop of water is a precious resource and will work to make sure your communities have reliable access to clean water and sanitation services.

While people expect on-demand access to clean drinking water, they are less concerned about 'how' the system operates and is maintained. Working collaboratively with our customers, we ensure that together we deliver on this fundamental expectation whilst improving your assets' operability, reliability and longevity.

Our approach to innovation enables us to support our customers' comprehensive water management plans and set up our communities for generations to come.

We apply this approach to the way we do business, keeping our people, our customers, the environment, and our communities at the forefront of everything we do.

Together, we're working towards securing life's essential, now and into the future.

Interflow

Understanding your water needs

From our years of working closely with our customers and serving our communities, we truly believe that the key to any project's success is the strong relationships we create.

When we listen to your needs, we're learning about what drives you, what pains you and what motivates you. This paves the way for creating a bond of trust, where we work collaboratively to solve your problems.

Our services are designed to integrate seamlessly with your community's water infrastructure needs. To achieve this, we plan our works from a social, environmental, safety, quality and economic perspective.

We aim to create a network of water services that keeps your communities thriving in the most sustainable and financially viable manner.

When you work with us, our specialist teams will consult with you throughout every stage of your project – from strategic planning and project scheduling, to daily operations, construction and maintenance – we have you covered throughout the entire life cycle of your water asset.



Delivering what you need, when you need it

The water sector is facing unprecedented challenges as our population continues to grow in this ever-changing climate. As such, there is increased pressure to preserve this precious resource. At Interflow, we adopt a multi-pronged approach to address these risks. Whether it be upgrading existing water assets or developing new infrastructure, all components are vital to our delivery strategy.

We consider a combination of factors when planning and undertaking your project, including the nature of potential risks and overall objectives. This will enable you to select a customised model that meets your service delivery goals for your community.

Your water Delivery Partner

With a key focus on relationship management, our 'Delivery Partner' model encompasses project planning, programming, design, construction and renewal to ensure your water system operates efficiently and is well maintained.

Our specialist teams will consult with you to determine the best methods and technologies to construct, maintain and renew your water networks. This includes using trenchless technology, with an emphasis on managing the local conditions.

Whether it be improving your water quality, reducing leaks, or staying on budget, we help you plan ahead and prioritise our work to meet your program objectives.



What you need, when you need it

Our proven capability means you can be certain that we will deliver the results you expect, ensuring that safety, quality, budget, community relations and program scheduling are maintained to the highest standard.

From planning and designing your water solutions through to construction and maintenance, when you work with us, you know that we will own and manage your projects every step of the way.

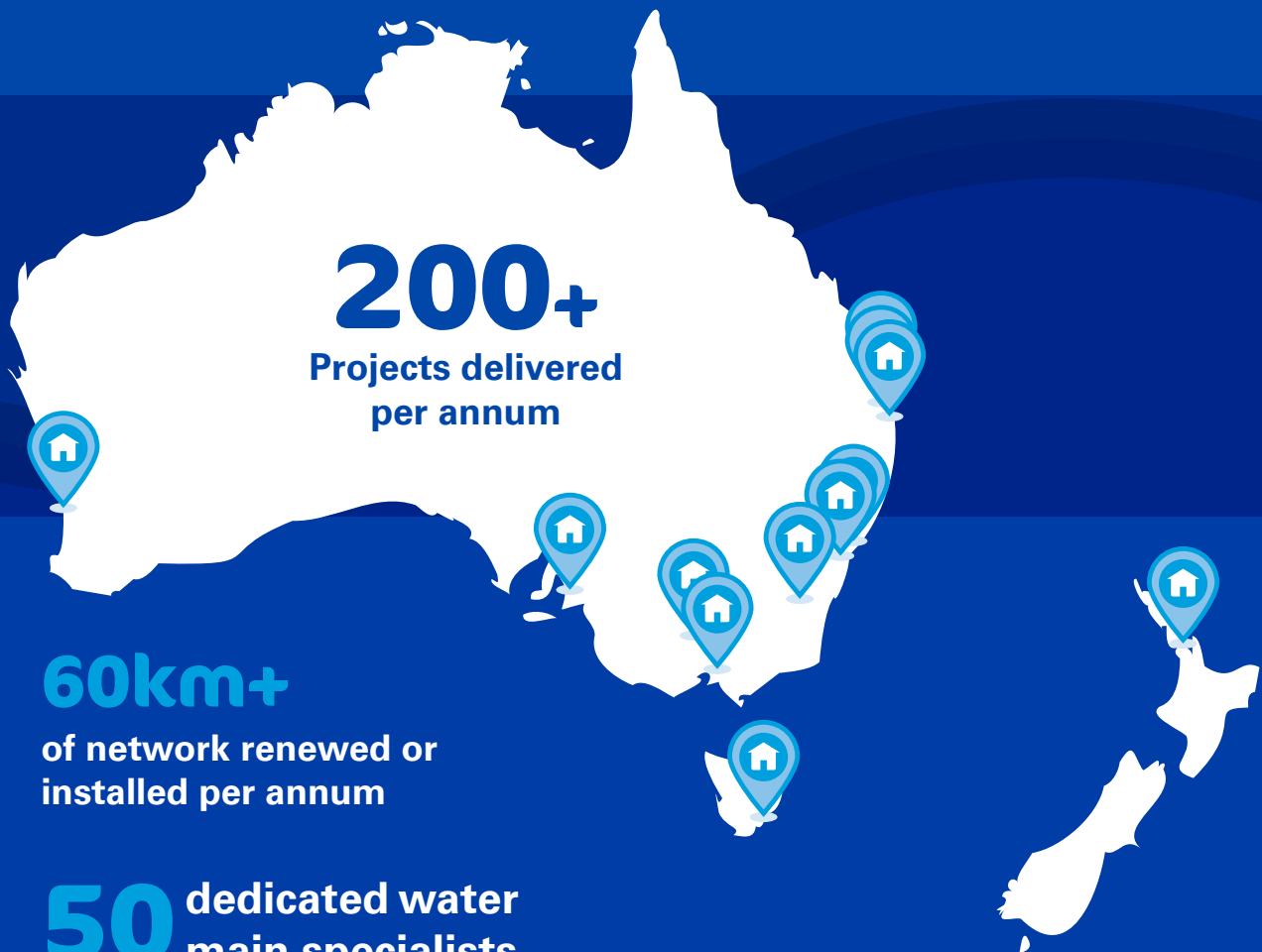
We invest in innovation and development to continually improve and drive efficient solutions. Our diverse talent pool means we can offer you the best end-to-end solution for your water infrastructure needs by drawing on the diverse skillsets of our people.

Our commitment to self-perform will minimise schedule delays and maximise the certainty you're seeking for a time and cost-efficient project outcome.



Water

SECURING LIFE'S ESSENTIAL



Ensuring a sustainable
outcome for every project

H2O — Harm 2 Zero



Best practice
safety and environmental
stewardship



10,000+ customers
connected to new
or renewed services



20,000+ services
proved



8,000+ INFRASTOPs
installed

Our services, capabilities and solutions

Securing Life's Essential

Bringing more than 85 years of experience in helping our customers oversee their water assets, we adopt best practice in our customers' Water Management Plans. Through a combination of strategic planning, open communication with key stakeholders and efficient project execution, we have helped our customers deliver their short and long-term asset management goals.

Our services, capabilities and products build on this framework and help us integrate sustainable solutions that enable your water assets to service your communities now and into the future.

We work with you to Secure Life's Essential and provide our communities with safe, accessible and healthy water services.

Our key services in the water space include:



Pre-design site proving



Construction and renewal – DN100-DN900



Emergency response



Design



No severe disruptions to residents

Our services



Planning and design

- Early contractor involvement
- Constructability advice
- Condition assessment/analysis
- Concept and optioneering
- Functional design
- Detail design



Maintenance

- Burst and leak repairs
- Valve and hydrant maintenance
- Line stopping/ isolation (Infrastop)
- Hot tapping (tee and service connections)
- Water main shutdowns
- Temporary services
- Service locating and non-destructive digging
- Water tank cleaning and sludge removal
- Asbestos management





Construction

Pipeline installations (new and renewal)

- Open trenching
- Lift and relay incl. AC removal
- Slip lining (PE and Primus Line)
- Pipe busting
- Horizontal directional drilling
- Micro tunnelling
- Die reduction lining (Titeflow)
- CIPP (pressure)
- Property services (main to meter)

Civil construction

- Pits and structures
- Flow meters installations
- Pressure reducing valves installations
- Tanks (concrete, bolted)
- Pumping stations
- Mechanical and electrical
- Corrosion protection incl. protective coatings

As a full service Delivery Partner, we have the ability to solve any water infrastructure problem.

We work with local councils and water authorities across Australia and New Zealand to deliver world-class pressure pipeline renewal and construction works.

This includes employing trenchless technologies where possible, with the goal of minimising community disruption, reducing the excavation and raw materials needed, and positively impacting our carbon footprint.

Highlighted solutions

Primus Line®

Interflow is Australia and New Zealand's exclusive provider of Primus Line, a flexible slip lining solution for the rehabilitation of pressure pipelines.

The Kevlar® reinforced PE liner is capable of traversing bends. Primus Line is suitable for pipe diameters from 150mm to 500mm, with the option to install multiple liners in larger diameter lines.

The benefits of Primus Line include:

- Minimal cross-sectional loss
- Fast installation and no curing
- A low carbon and site footprint
- The ability to install in long continuous lengths (3.6km to date)
- A minimum 50-year design life

We have local stock available to respond to your emergency needs.

Primus Line®



Primus Line®

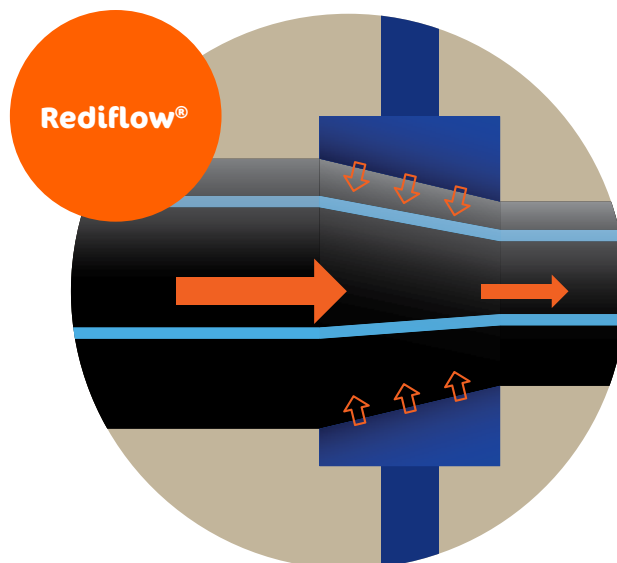


RediFlow®

RediFlow is our innovative pressure main renewal technology bundle, designed to suit the full structural renewal of deteriorated water mains. The system comprises the use of Titeflow H112 plus INFRASTOP.

Together, this cutting-edge renewal system is uniquely designed to be:

- Reliable, ensuring long-term performance with enhanced slow crack growth resistance and high abrasion resistance
- Environmentally friendly, minimising water loss as well as stakeholder impact
- Durable, increasing overall resilience and security
- Innovative, utilising high strength H112 resin for increased flow capacity compared with PE100



Titeflow® H112

Titeflow is our HDPE die-reduction tight-fit technology for renewing pressure pipelines with diameters from 90mm to 900mm.

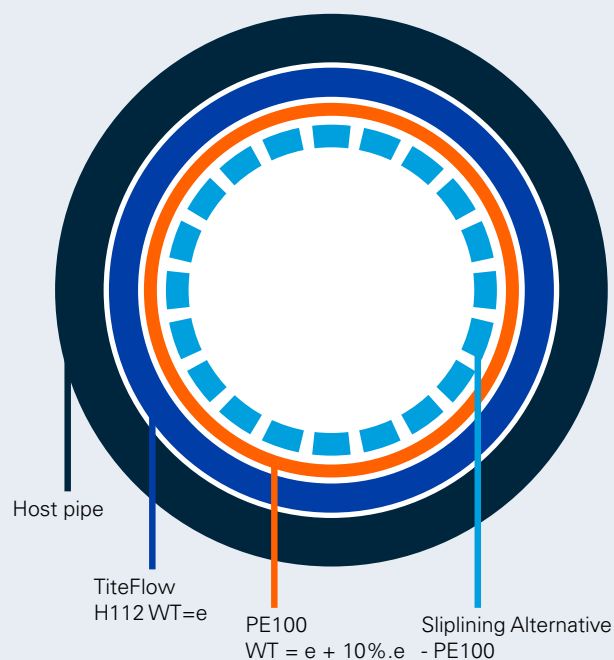
Comprised of H112, an internationally recognised resin specifically designed for pipe applications, Titeflow's benefits, include:

- Minimal impact during installation
- Superior hydraulic performance
- Enhanced slow crack growth performance
- 50% better abrasion resistance compared to conventional PE100

INFRASTOP®

INFRASTOP is our line stopping technology which ensures a targeted shutdown of water mains from DN80 to DN300, eliminating or minimising:

- The need for use of section valves
- Trial shuts
- Customer complaints
- Water loss



Your program Delivery Partner

Our customers are moving progressively towards multi-year programs of works that promote long-term cost efficiencies, intelligent programming and reliability of service.

These contract models play to our strengths, allowing us to approach your asset management needs holistically, looking for long-term efficiencies and opportunities to innovate. You will also benefit from proactive asset management that results in fewer emergencies and outages.

We offer an unrivalled level of service that encompasses our complete range of products and solutions, our dedicated delivery teams, and an unrelenting commitment to continuous improvement.

We are delivering works under panel arrangements for water authorities across Australia, including South East Water, Greater Western Water, Yarra Valley Water, ICON Water and Hunter Water.

**We deliver over
50km of pipeline
construction and
renewal works for
our panel partners
annually.**





Partnering for success in Victoria

Location: Greater Melbourne, VIC

Customer: South East Water & Greater Western Water

Services: Water main renewals program

With hundreds of kilometres of ageing water pipes, Victoria is home to some of our largest and longest-standing water main renewal programs. Two of the most significant are the contracts we hold with Greater Western Water and South East Water – the latter having been in place for over 15 years.

The works take us into neighbourhoods of all kinds, from peaceful residential streets to bustling business strips. To minimise our footprint and disruption to the community we're operating in, we adopt a trenchless approach wherever possible. Our range of proven solutions include horizontal directional drilling, pipe bursting, Primus Line and our very own die-reduction lining method, Titeflow.

At times, the vast scope of works across varied ground conditions requires us to draw upon our complete suite of services. Our trenchless offering is complemented by our extensive civil capabilities that includes lift and relay and asbestos cement (AC) pipe removal.

We understand the importance of working collectively with the community to achieve exceptional outcomes for everyone. Each program has its own dedicated community liaison who works hard to keep residents and business owners connected and informed.

Key program features:

- Long-term contracts
- 80+ renewals per year
- 25km+ of water main renewed per year
- A team of over 60 people
- In-house design
- 15 dedicated civil crews





Our case studies

We work with local councils and water authorities across Australia and New Zealand to construct, maintain and renew water networks.

With a proven history of successfully constructing and renewing deteriorated water assets, we provide solutions that are smart, effective and environmentally friendly, which set communities up for the future – we've shared some examples of this in action.

**We work with you
to secure life's
essential for
generations to come**

Renewal while maintaining flow

Location: Adelaide, SA

Customer: SA Water

Services: Distribution main renewals, Titeflow

A 5.5 kilometre length of one of Adelaide's most important water trunk mains had reached the end of its useful life. Our client, SA Water, required a solution that didn't decrease the flow carrying capacity of the water main. The project was complicated by the pipeline route being under major Adelaide roads and by the need to maintain water supply services during the works.

We renewed the pipeline by lining with a close-fit PN16 PE100 polyethylene pipeline. It was the first installation of our Titeflow technology, which provided maximum internal diameter while causing minimal community disruption during construction.

The Titeflow process involves winching a polyethylene pipe through a circular die, which temporarily reduces the pipe's diameter. The reduced diameter is maintained provided the winching tension is sustained. The reduced diameter pipe is winched through the deteriorated pipe, from the launch pit to the pit containing the winch.

The tension is then released, causing the polyethylene pipe to attempt to revert to its original diameter. This process allows a new polyethylene pipe to be installed to closely fit the inside of the deteriorated pipe. The polyethylene pipe has full pressure carrying capacity, meaning the pipeline has been effectively renewed. The smoothness of the polyethylene inner surface means flow carrying capacity is not reduced.

On this project, we demonstrated the ability of Titeflow to renew the pipeline using a full-strength liner with maximum internal diameter, by adopting an installation process that minimised the need for disruptive excavation.





Challenging the scope of lining technology

Location: Mount Dandenong, VIC

Customer: South East Water

Services: Reticulation main renewal, Titeflow/RediFlow

Through ongoing performance monitoring, South East Water identified underperforming water pipelines around The Basin area of Mount Dandenong that were no longer providing their customers with a reliable water supply. The DN100 AC water mains had been laid predominantly in the 1950s and '60s and were reaching the end of their service life.

In Australia, the degradation of AC water pipes is a growing challenge for water authorities. Suitable relining solutions for water mains are hard to come by, and renewal projects often involve digging up and replacing ageing conduits. Like Interflow, South East Water is driven by finding innovative and sustainable solutions that provide service and cost benefits to their customers. Knowing that dig-and-relay is costly and risked a greater community and environmental impact, South East Water put out the call for innovative alternatives.

Designed for high pressure and large diameter water mains, Interflow's Titeflow technology was identified as a potential lining solution for the ageing water mains. The challenge for both teams was that Titeflow had never been used to line a pipe of this diameter in Australia; while the solution existed, the equipment needed to do the job did not.

Working together, Interflow and South East Water embarked on a program of research and development to engineer the lining installation solution. With the new technology in hand, Interflow lined 1.4km of AC water main, returning the assets to full service. The successful adaptation of the Titeflow solution is a game-changer in the renewal of small diameter AC water mains across the nation.



New trunk mains to supply drinking water

Location: Rouse Hill, NSW

Customer: Sydney Water

Services: Distribution main construction

We were engaged by Sydney Water to construct new trunk mains to supply drinking water to existing and future homes in Rouse Hill. Comprised of a combination of Ductile Iron Cement Lined and Steel Cement Lined pipes, the new mains run for 2.3km along Windsor Road and Rouse Road, connecting into existing water assets in the region.

The new lines passed through live construction sites and roadways, requiring crews to interface with other contractors and workers. This called for an added layer of care and planning to ensure that our works did not impact on other projects, and conversely, assured crews they had reliable access to the resources and services they needed to perform the job.

We needed to take an innovative approach to project management and planning in order to drive success on this project.

By keeping the community and stakeholders at the head of project planning and scheduling, we were able to minimise the potential for delays on this new infrastructure project.

We made the community our top priority when planning and constructing these critical assets for Sydney Water. By approaching the scope with a community-first mindset, we were able to identify and mitigate potential impacts the works may have on residents, critical services, and adjacent construction sites.

It was critical that we engaged with stakeholders early to understand their needs. This early engagement allowed crews to address risks and concerns from the beginning through careful design, scheduling and project management processes.

Our approach ensured that essential water services could be delivered to a growing community with minimal disruption.

Pressure main rehabilitation

Location: Coffs Harbour, NSW

Customer: Coffs Harbour City Council

Services: Distribution main renewals, Primus Line

We were engaged by Coffs Harbour City Council to renew and replace 604m of water main which was approaching 40 years of age. Bursts along the line had caused obvious disruption to the community.

The work presented significant challenges, with the main containing several horizontal and vertical bends up to 45°.

Despite this, we were able to restore the full operating capacity of this main by installing a high strength Primus Liner.

The Kevlar-reinforced, polyethylene Primus Line, with its rated working pressure of 25 bar (250m), offered a large factor of safety against the design internal pressures.

The first part of the project was to isolate the defective section of main and ensure continuity of water supply. Small pits 440m and 165m apart were excavated to access the main and short sections of pipe were removed.

Cleaning was completed prior to CCTV inspection confirming the main was in a suitable condition for liner installation.

The Primus Liner was then installed by winching it into the deteriorated pipeline. Only small installation pits were needed, which could be placed long distances apart.

The liner has a higher bursting pressure than the pipeline it has renewed, is thin walled to maximise flow capacity, and was installed in a fraction of the time that would have been necessary for excavation and replacement of 604m of DN200 water main.





How can we help you?

As you can see from our projects, we are all about delivering the 'how' for our customers – ensuring the system operates efficiently, is well maintained, and secures life's essential by providing our communities with safe and healthy water.

You have learnt about who we are and why we exist – to solve our customers' problems. To continually challenge the status quo. No job is too large and complex, or too small and simple. We work around you.

**Contact us today
and find out how
we can help**

Phone: **1800 251 240** (Free Call Australia)

Email: **mail@interflow.com.au**

Fax: **+61 2 9636 5475**

Corporate Office

Sydney (NSW)
254 Toongabbie Road, Girraween,
NSW 2145, Australia

Phone: +61 2 9631 2444

Fax: +61 2 9636 5475

New Zealand Office

Auckland (New Zealand)
18 Anvil Rd, Silverdale 0932
PO Box 221, Silverdale 0944

Phone: +64 9 443 7209

interflow.com.au



Interflow®

For more information about
the services we provide

Phone: 1800 251 240 (Free Call Australia)
Email: mail@interflow.com.au
Fax: +61 2 9636 5475

interflow.com.au

Corporate office

Sydney (NSW)
254 Toongabbie Road, Girraween,
NSW 2145, Australia

Phone: +61 2 9631 2444
Fax: +61 2 9636 5475

New Zealand office

Auckland (New Zealand)
18 Anvil Rd, Silverdale 0932
PO Box 221, Silverdale 0944

Phone: +64 9 443 7209