OUR SUSTAINABLE FUTURE 2024

HYNDS
HYNDS PIPE SYSTEMS
HYGRADE WATER
HYGRADE WATER INFRASTRUCTURE
WATERS & FARR
GILLIES metaltech
HYNDS water

A PROUD KIWI COMPANY WITH A PASSION FOR AOTEAROA

Protecting New Zealand's waterways and environment is at the heart of Hynds' heritage. Our business has been built around finding solutions to support the three waters (drinking water, wastewater and stormwater infrastructure services) and ultimately keeping our country's waterways clean – both for today and future generations.

OUR PLANET

TIAKI I A PAPATŪĀNUKU

HYNDS' COMMITMENT TO BETTER WATER SOLUTIONS

Water is life. Tackling excesses or the lack of water and ensuring water quality are some of the main challenges the world will have to face. Since 1973, as a New Zealand founded and owned company, Hynds has taken its commitment to the environment seriously through the products we create and the talented people we employ. Our people are among the most knowledgeable in the industry about environmental and stormwater management.

Hynds has a 100-year business strategy which includes a commitment to remaining family owned. We plan to be here for the next 100 years and beyond, so we want to make sure that not only the business is in good shape, but that the industry is too. We want to ensure that the products and solutions we supply today, are still fit for purpose and achieving all that they need to in many decades to come.

Hynds operates eight factory sites across New Zealand, strategically located to minimise distance to market, and a distribution network of 36 branches supplying over 40,000 product types for drainage, watermain, environmental, industrial process and rural applications.

OUR ENVIRONMENTAL COMMITMENT

Hynds has adopted a sustainability framework that focuses on three strategic pillars; the planet (our natural environment), people (our people and our wider communities and stakeholders) and products (innovating and building resilience into what we do to meet the needs of future generations).

Addressing the effects of climate change is a huge challenge that we all face and Hynds is committed to New Zealand's transition to a low-emissions economy. We have committed to a 42% reduction in Scope 1 (direct) and Scope 2 (indirect) carbon emissions by 2032. This target is based on the goal to limit warming by 1.5˚C and is aligned with the Science Based Targets Initiative (SBTi).

Hynds' carbon footprint is dominated by Scope 3 emissions. We have therefore also committed to engage with our key supply partners to adopt science-based targets.

World class at Pōkeno

Reducing our environmental footprint is incredibly important to us. This is well demonstrated at our flagship precast facility at Pōkeno which is designed and built incorporating the latest in sustainable design principles to minimise environmental impact.

As a greenfields site, all infrastructure and the manufacturing processes themselves have been selected, developed and implemented to deliver maximum environmental benefits.

Key improvements focused on optimising energy and resource use, while reducing impact include:

- Traditional pipe spinning manufacturing methods that typically produce large amounts of waste have been replaced with automated and semi-automated world leading technology that results in minimal waste (over 90% reduction in waste produced), improves safety and reduces environmental noise.

"Bore water and rain harvesting significantly reduces council-supplied freshwater."

- Concreted road network and onsite water truck minimises dust nuisance and ongoing maintenance.
- Extensive use of LED lighting provides a good working environment and reduces electricity usage.
- The concrete manufacturing plant produces high performing self-compacting concrete onsite, eliminating the requirement for delivery of readymix concrete to the site.
- Centralised North Island location reduces transportation requirements, both for the delivery of aggregate for the site, and the despatch of finished products.
- Use of bore water and rain harvesting significantly reduces council-supplied freshwater usage.

World class at Pōkeno

Above L-R: Artist impressions of Pōkeno Park.

PŌKENO WETLAND

All stormwater from our Pōkeno site is directed to a large stormwater wetland and detention pond with native planting to naturally filter any residual contaminants. As well as significantly reducing any impact on the environment, this contributes to the formation of a large wetland habitat that increasingly attracts local birdlife. We are committed to the long-term development and support of this valuable ecosystem.

PŌKENO PARK

Large-scale native regenerative planting has been undertaken in the surrounding area, as part of a long-term plan to establish the neighbouring land as an open space art sculpture park and ecological reserve, known as Pōkeno Park. Around 35 hectares of property next to the factory is being developed, supported by the Hynds Foundation. The creation of the park creates a natural balance of nature against the urban manufacturing activity in Pōkeno's industrial zone to the north.

The beauty of this rural area will be enhanced through extensive native planting and in time, it is intended that Pōkeno Park will champion local artists with art and sculptures positioned along a dedicated trail through the park grounds. This will offer an educational and creative space for local schools, artists, the wider community and visitors.

"The park creates a natural balance of nature against the urban manufacturing activity."

GECO WATER TREATMENT AND RECYCLING SYSTEM

Our Pōkeno facility is home to a state-of-the-art Geco water treatment and recycling system. Replacing traditional slurry settling ponds, the Geco system takes any process waste and slurry from onsite washing of concrete skips and concrete trucks, screens out the aggregate (crushed stone, gravel and sand) and then puts the remaining cementitious water through a filter press where it comes out as a dry cake. The solids can be recycled or used elsewhere on site, along with the water which is pH neutralised before reuse.

REDUCING THE CARBON FOOTPRINT OF OUR CONCRETE

We are committed to reducing the carbon footprint of our concrete products through the use of cement substitutes such as fly ash, a waste product from coal power plants, and blast furnace slag, a waste product from steel manufacturing.

Concrete – lasting the test of time

"Concrete's durability is a significant sustainable attribute as it will not rust, rot, or burn."

Concrete drainage systems have been the material of choice around the world for over a century and offer the most environmentally friendly and competitive option. The inherent strength and durability of precast concrete drainage can help protect the water system during construction and throughout its long lifetime of operation. Concrete has a 100 year plus service life, removing the need for concrete pipelines to be replaced or reinstalled.

THE SUSTAINABLE CHOICE

Concrete products are a responsible choice for sustainable development. Concrete's durability is a significant sustainable attribute as it will not rust, rot, or burn. Additionally, concrete is easy to use, incurs little waste and can be readily recycled at the end of life. Steel components are recyclable, and the concrete can be used as a replacement for aggregate in new concrete or as an alternative to using virgin material for structures like roads and drainage installations.

Precast concrete, when compared to site poured concrete, has the added sustainability benefits of:

- Reuse of formwork to reduce waste.
- Reduction of waste concrete through precise batching and use of any excess concrete in small products.
- Increased use of cement replacements through controlled curing conditions.
- Reduced admixture use from onsite batching or short delivery distances.
- Higher quality control and ease of defect repair which leads to higher quality, more durable products that will last longer.

MEASURING AND REDUCING THE CARBON FOOTPRINT OF CONCRETE

As part of our goal of reducing the carbon footprint of our concrete products, we have been performing Life Cycle Analyses (LCAs) of our precast concrete products. These LCAs have identified that steel and cement are the two largest contributors to the carbon footprint of our precast concrete products. This information helps us to optimise our product design and procurement.

The LCAs that we have performed are the first step towards published Environmental Product Declarations (EPDs) for our precast concrete products. EPDs are critical for the construction community to be able to make the most sustainable procurement decisions. The first Hynds Pipe Systems EPD, covering precast concrete pipes manufactured in our Pōkeno manufacturing site, was published in April 2024.

One limitation of EPDs are that they are static documents for a specified range of products. This is problematic for the precast concrete industry for which product customisation is common. To overcome this, we have developed a carbon calculator that can provide 'EPD like' disclosures, with the only difference being the third-party verification of an EPD.

Hynds Pipe Systems, as a member of Concrete NZ's sector groups and the sustainability technical working group, contributed to the development and ongoing updates of 'A Net-Zero Carbon Concrete Industry for Aotearoa New Zealand: Roadmap to 2050'. This roadmap is aligned with the Global Cement and Concrete Association's 2050 roadmap to net-zero concrete. These industry wide initiatives highlight the importance of sustainability within the concrete industry and the multiple ways in which concrete's carbon footprint can be reduced.

Recycling

Our sites across the country take a number of different measures to ensure as much material as possible is recycled. For example, at Waters & Farr, a market leader in manufacturing and supplying plastic pipe systems, no plastic waste leaves the Whanganui or Rangiora sites. All offcuts from the production process are ground in a shredder and then repelletised. The resulting pellets are then incorporated into the manufacture of selected products such as culvert pipes and ducting.

"No plastic waste leaves the Whanganui or Rangiora sites."

sustainable coastlines

We are proud to extend our commitment to the environment by supporting Sustainable Coastlines in their mission to keep New Zealand's waterways and coastlines healthy and beautiful for future generations to enjoy. The partnership includes both financial support and national participation from the Hynds community across Sustainable Coastlines' initiatives.

OUR PEOPLE

TIAKI I TE TANGATA

A PLACE WHERE PEOPLE MATTER

Sustainability is important to us across every facet of our business, and this extends to our people practices and team culture. We prioritise the safety and wellbeing of our workforce and employ more than 850 talented team members across the country. We support individual development, encourage creativity and work together as a team to make big things happen.

Career and professional development

"We support the professional growth of our team members."

Our commitment to growing and nurturing our people right throughout their employment with Hynds starts by helping students considering their future career options and providing work experience for secondary school aged students. Following the early ethos of our founder John Hynds, we are committed to offering a wide array of opportunities for people from different backgrounds and with varying skillsets.

We support our people with extensive on and off the job training opportunities (by both internal and external suppliers) and are committed to advancing our people internally wherever possible.

All Customer Service Officers within Hynds Pipes are part of the Customer Service Development programme. Hynds has several dedicated CSO Development Partners who work, along with the Branch Managers, to support team members to develop their skills and progress their careers while contributing to the team's operational success.

The Hynds Young Professionals network is a programme for invited employees under 32 years of age which supports the professional growth of our younger team members. They attend an annual seminar with their peers and contribute to dedicated projects throughout the year.

We support our people to grow their professional networks and further their professional development through memberships and active participation with national and international bodies such as Engineering New Zealand, Concrete New Zealand, the Concrete Pipe Association of Australasia and more.

Our most valued resource

Hynds recognises that our team members are our most valued resource and this is represented in one of our core values, A place where people matter.

Each year as part of our health and wellbeing strategy, we offer annual health monitoring and an annual wellness calendar to motivate our team to achieve better personal health outcomes, focusing primarily on healthy eating and being active. With great participation rates from across the country, popular examples have included the Hynds Biggest Loser, Hynds 45 Day Heart Challenge and the Hynds Great Try-athlon.

CELEBRATING OUR DIVERSITY

The Hynds Group is ethnically diverse, with strong representation across our organisation of Māori, Pasifika, Filipino and Indian team members. Key documents, including our core values, are translated into multiple languages to support our team members, including Māori, Samoan, Tongan and Hindi. We are proudly committed to equal opportunity across all employment policies and procedures.

"We believe that organisations that embrace Māori beliefs and culture better understand requirements from a delivery point of view."

OUR TE AO MĀORI JOURNEY

In 2021, Aaron Hynds saw the need for Hynds, both as a family and as a company, to be engaged in discussions surrounding water, specifically the three waters discussion, with a focus on understanding what te wai (water) means for Māori. Very broadly, Te Mana o Te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.

Since then, Aaron, along with members of our team (including the Hynds family and Executive) have been introduced to some of the main considerations Māori have when dealing with businesses operating in the environmental space. Hynds believes that organisations that embrace Māori beliefs and culture better understand requirements from a delivery point of view, including the need for engagement, discussions, and collaboration on best outcomes for te wai and to have these jobs clearly communicated to the iwi of each region in the most respectful manner.

Hynds has also been encouraging and supporting team members to educate and upskill themselves on te ao Māori. A new internal webpage 'Te Ao Māori at Hynds' provides links and resources for our people to explore and learn, including guides to learn a waiata, karakia or their own pepeha. The inclusion of te reo in Hynds' official documentation and encouraging the use in email signatures is aimed at supporting the use of te reo Māori in everyday life.

Protecting Aotearoa's waterways and environment is at the heart of Hynds' heritage. There is a strong belief that as our teams engage with the community and partners in delivering quality projects around water, an understanding of what this means to mana whenua and especially tangata whenua is important for providing better outcomes around te wai.

Giving back

We encourage and support our people to give back through their roles at Hynds. Each year, team members across the Hynds Group get the opportunity to spend a day volunteering at a charity or not-for-profit organisation, as well as actively participating in events held in partnership with Sustainable Coastlines. Throughout the year, our team rolls up their sleeves and gets involved in the charity's events which includes beach clean ups, community tree plantings and more.

"Each year, team members get the opportunity to spend a day volunteering."

A LOCAL PARTNER IN BUSINESS

Since the business was established in 1973, Hynds has grown a strong and loyal base of suppliers. Hynds deals with around 3,000 suppliers every month with small to medium sized businesses well represented across our supplier network. These businesses are often locally owned and operated, employing local people and contributing to their local communities. Our sites around the country engage local businesses to undertake the maintenance of our machinery and equipment, and we are committed to utilising local third-party services and purchasing materials locally wherever possible.

Supporting the community

There are many other avenues via which Hynds lends its support around the country. As well as supporting local schools and community groups across New Zealand, we donate to numerous charity organisations throughout the year including Life Education Trust, Heart Kids, and other children-focused organisations, camps and special events.

We are proud to sponsor the Bi-Annual Tour of New Zealand charity bike race which has raised nearly $2 million for New Zealand charities. Additionally, the Hynds Heart Racers team, made up of Hynds team members and customers, is one of the only teams to have competed in all seven tours – raising almost $300,000.

HYNDS FOUNDATION

THE HYNDS FOUNDATION

The Hynds Foundation was established in 2013 as a charitable trust to help make a difference across New Zealand communities, with a focus on education, health and heart research, wellbeing, arts and culture, and the environment.

The Foundation continues the lifelong passion of John and Léonie Hynds, joined by second generation Hynds family members as trustees, to give back to the community and to support the next generation of creative, enterprising and entrepreneurial talent.

Since its launch, the Hynds Foundation has been focused on working collaboratively, contributing significant funding to various causes while also linking existing business networks and contacts within local communities, with the aim of assisting initiatives that create positive change. The success of the Hynds business, the support of our customers and the contribution of our people allows the Hynds Foundation to make this meaningful contribution.

Here are just some examples of where we have lent our support across the five key focus areas.

Health

- Since its inception, the Hynds Foundation has supported the Heart Foundation through a number of avenues. Most recently this included a grant of $1 million for a five-year partnership to support heart health research and provide better health outcomes for New Zealanders.
- A donation of $200,000 to Auckland Bioengineering Institute (ABI) at the University of Auckland, a world leading research institute that aims to improve medical diagnosis and treatment of injury and disease, is supporting research into heart health.

"You are helping us to restore dignity and wellbeing to those whom life has presented significant challenges."

MANDY MEE, HOMEGROUND CAMPAIGN MANAGER, AUCKLAND CITY MISSION

Social wellbeing

- The Hynds Foundation has made a significant contribution to Auckland City Mission's new 'Homeground' facility that will provide much needed accommodation, medical and community facilities for Auckland's homeless community.
- Since 2020 the Hynds Foundation has supported Kootuitui ki Papakura. The Kootuitui approach, 'by whaanau, for whaanau, with whaanau' is focused on improving outcomes for children and families in education, health and homes.
- Early in 2023, the Hynds Foundation made a $200,000 donation to the Red Cross New Zealand Disaster Fund, on behalf of the wider Hynds Group.

Education

- More than $1 million of financial support has been provided in education grants at Manurewa High School. John Hynds is one of the founders and has been the Chairman of the Manurewa High School Business Academy which incorporates programmes such as a pathway to employment scheme.
- At a tertiary level, the Hynds Foundation is a founding partner of Unleash Space at the University of Auckland's Centre for Innovation and Entrepreneurship, a vibrant innovation and entrepreneurship hub with a state-of-the-art Create and Maker Space that helps grow ideas into ventures.

Arts and culture

- The Hynds Foundation has provided a range of support for the arts and emerging artists through different avenues, including establishment of Pōkeno Park which will showcase the art and sculptures of established and emerging local artists.
- Annual support has been provided for a number of art galleries including Auckland Art Gallery to enable annual exhibitions and acquisitions; Artspace Aotearoa, to support emerging artists to exhibit their work; Objectspace to support the gallery to showcase object art and architecture and Te Tuhi Contemporary Art Trust, to support artist initiatives and learning experiences.
- The Hynds Foundation has been proud to support SCAPE Public Art in Christchurch, the largest producer of new contemporary public artwork in New Zealand.
- The Hynds Foundation has supported the development of a New Zealand war museum at Le Quesnoy in Northern France, named Te Arawhata, The New Zealand Liberation Museum.

Environment

- A partnership with the charitable organisation, Sustainable Coastlines, helps contribute to keeping the country's waterways and coastlines healthy for future generations.
- The Hynds Foundation has supported the development of Pōkeno Park, with the long term plan to establish the area (more than 35 hectares) as an open art and nature ecological reserve park.

CASE STUDY: Manurewa High School

Manurewa High School is the largest multicultural school in New Zealand with 2,000 students representing 50 nationalities.

John and Léonie Hynds met at Manurewa High School, and went on to raise a family while building the Hynds Group. In the years since, John and Léonie have been long and loyal supporters of Manurewa High School, and the founding project of the Hynds Foundation was assisting the establishment of the Manurewa High School Business Academy. The concept for the Academy was to create real pathways for students into the business world, with a particular focus on entrepreneurial and innovation initiatives. The Business Academy, now reaching throughout the school and evolved to include pathways into all areas, has had a positive impact on many South Auckland students and their families since its inception.

Through the Manurewa High School Business Academy, students have been exposed to multiple channels of business learning including Hynds office, branch and factory visits for Business Studies students completing NCEA Level 2, as well as Hynds site visits for students interested in engineering futures. Connections and opportunities have also been generated for work experience and partnerships with leading New Zealand businesses.

Mentoring and financial support for higher education is also a key part of the Hynds Foundation programme. A number of Manurewa students have now benefited from a Hynds scholarship to study at the University of Auckland, with a number following both engineering and business pathways and careers.

"The Business Academy has had a positive impact on many South Auckland students and their families."

OUR PRODUCTS

HE RAWA MO TE ANAMATA, Ā, HAERE AKE NEI

PROTECTING NEW ZEALAND'S WATERWAYS

From its early inception five decades ago, Hynds has been focused on delivering positive change with industry-leading and sustainable solutions. The manufacture of products to support stormwater and wastewater treatment, and ultimately to protect the environment, remains at the heart of our product innovation today.

While founded in the production of concrete pipes, Hynds today delivers much more than just pipes, working across a number of other areas – all focused on improving the resilience of communities across New Zealand to weather and water-based events.

Through its various business divisions, Hynds provides fit-for-purpose water, stormwater and wastewater quality management solutions for residential and commercial markets. Our products lead the New Zealand market with second-to-none design, strength and proven reliability in some of the country's most demanding environments.

HyndsLC – Our lower carbon future

Hynds is committed to lowering the carbon footprint of all product ranges, to meet both our internal sustainability goals and our customers' project requirements.

While pursuing this goal, opportunities for further carbon reductions in Hynds' precast concrete products were identified which could not be included in the standard ranges due to supply limitations and increased manufacturing time. These components were brought together to create a new product range, HyndsLC®, which combines all the benefits of our industry-leading precast concrete product ranges with a lower carbon footprint.

The HyndsLC range can be customised to meet specific project requirements, for both performance and sustainability. The carbon reductions are achieved through increased use of supplementary cementitious materials (SCMs) in our concrete, increasing the use of raw materials with lower carbon footprints, and optimised product design.

The HyndsLC range is available in a set of standard reductions:

LC25: Our lower carbon concrete and raw materials option to provide an average manufactured product carbon reduction of 25%.

LC25+: Our lower carbon concrete and raw materials option, combined with optimised design based on the specifics of the project.

All percentage reductions are the difference in GWP-total compared to Hynds' standard range of products. This represents a comparison to a real product, not a database or industry average value.

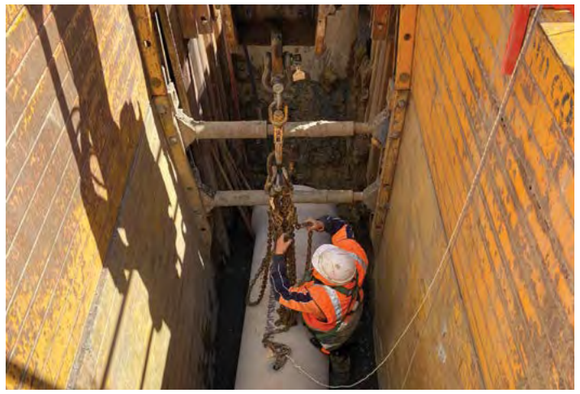
The calculation of all product carbon footprints follows the standard EN 15804+A2, as required for Environmental Product Declarations, and have been developed in collaboration with thinkstep-ANZ. The values cover cradle-to-gate only (EPD modules A1-A3) and do not include transport beyond Hynds' sites or end-of-life scenarios.

For more information on the calculations or for specific product carbon footprints, please contact sustainability@hynds.co.nz

"HyndsLC combines all the benefits of our precast concrete product ranges with a lower carbon footprint."

CASE STUDY: Auckland Council installs first low carbon pipes

"Service life of over 100 years and a 22% lower carbon footprint than Hynds' standard range."



When Auckland Council contractors were excavating a partially collapsed stormwater pipe on College Hill, they uncovered a 19th century double brick lined drainage tunnel. The tunnel was constructed before the city's foreshore began at what is now Victoria Park and was damaged during the January 2023 flooding.

In choosing a replacement pipe material, the council wanted an option that would balance long-term reliability and the council's current focus of reducing their carbon footprint. Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan commits Auckland Council to reducing carbon emissions in line with national and international commitments and has set itself a target of a 50% reduction in greenhouse gas emissions by 2030 with a goal of reaching net zero emissions by 2050.

Hynds proposed the use of a 600mm diameter HyndsLC concrete pipe which has a designed service life of over 100 years and a 22% lower carbon footprint than Hynds' standard range. This option was supported by the contractor, Kerry Drainage, as there was no change in installation technique required with the lower carbon option.

In choosing the HyndsLC range, Auckland Council was able to avoid over 4.4 tons of CO_2eq emissions.

The successful installation of the pipes, which were manufactured at Hynds' Pōkeno manufacturing site, highlight the positive outcomes that can be achieved through collaboration between council, contractor and supplier.

Precast products

Hynds' wide range of precast products includes box culverts, bridges, channels, chambers, electrical pits, retaining wall systems and bespoke solutions.

Leaders in their field, our Hynds Precast engineering team specialise in concrete structures for the civil and rural infrastructure markets, providing all precast needs within one team.

Situated strategically throughout New Zealand for local access, our expert engineers can tailor a bespoke precast solution to match most scenarios, and all Hynds precast products are available in the HyndsLC range of lower carbon concrete.

Designed in-house, precast solutions are manufactured and delivered from one of our seven precast factories around the country.

North Piha's unique lifeguard tower pictured below, features bespoke precast concrete elements designed and manufactured by Hynds.

Photo courtesy of Sam Hartnett.

"Our expert engineers can tailor a bespoke precast solution to match most scenarios."

CASE STUDY: Te Tupua Horo Nuku seawall

"The new seawalls will not only provide protection from surge and waves, but also enable the corridor to respond to the challenge of climate changes."

The Tupua Horo Nuku project involves the construction of a 4.4 kilometre walking and cycling path along Marine Drive between Ngau Matau (Point Howard) and Eastbourne in the Wellington region. The path will provide a safer route for those walking and cycling in the area, encouraging these active modes of transport which will in turn help reduce congestion and improve health and wellbeing, as well as better connect local communities between the bays.

A new seawall is also being built along the corridor which will be the platform for the path and improve the resilience of Marine Drive by providing protection against storms and waves, along with coastal erosion. Hynds has manufactured the unique seawall units, with each unit measuring three metres long and including high strength 50MPa concrete and galvanised reinforcing.

Manufactured at our Palmerston North site, the new seawalls will not only provide protection from surge and waves, but also enable the Marine Drive corridor to respond to the challenge of climate changes and sea level rise, ultimately helping to protect the road and essential services for local communities.

The seawall units have also been designed to allow sea life to thrive with a Reckli liner. The curved surface on the front of the units has an architectural pattern cast into the unit. The design not only looks impressive, but creates a 29mm deep roughened pattern that will help provide a natural habitat for sea life.

Wastewater treatment

Hynds provides a range of treatment technologies for onsite wastewater management systems to ensure wastewater is treated and disposed of in the best and most reliable way, where there is no connection with the local council wastewater network.

Hynds supplies the highest quality treatment systems designed to ensure optimal long-term performance. For over 20 years, the Hynds Lifestyle® Wastewater Aerated Treatment System continues to be a trusted brand, and is New Zealand tested specifically for the domestic market.

Hynds holds the exclusive agency for world-renowned Eloy Water products in both New Zealand and the South West Pacific Islands.

"For over 20 years the Hynds System continues to be a trusted brand."

CASE STUDY: New wastewater plant makes for happy campers

As small coastal town, Wai Inu, struggled to cope with an aging water treatment plant, the South Taranaki District Council were dealing with a growing number of odour complaints from residents.

The popular holiday spot, 50 minutes' drive south of Hawera, sees its population swell over summer. As well as affecting residents, the odour problem was not making for happy campers at the adjacent camp ground and Hynds was asked to find a solution to the odorous situation.

We recommended the installation of a new treatment plant which would meet the town's growing requirements. Being a coastal location, there were very strict resource consent compliance conditions on the proposed new plant which would require a high level of performance including phosphorus removal and UV treatment. The existing plant needed to be decommissioned during the installation of the new plant, without affecting the 30 occupied homes, meaning that the situation had to be navigated with much caution.

"The result is the largest Eloy treatment plant installed in Australasia."

The order for the 30m³ Eloy Oxyfix Wastewater tanks saw the 220-tonne delivery of 26 tanks shipped from Eloy Water in Belgium. Working with Hynds' contractors, the tanks were installed over a three-month period. The result is the largest Eloy treatment plant installed in Australasia.

Not only does the new system allow for seasonal population fluctuations but a huge bonus is that it can be operated remotely. A high level of design and remote monitoring via radio frequency provides real time data to the Council's system in Hawera meaning that the entire plant can be operated from a distance instead of making the two-hour return trip. The Council is delighted with the new efficiencies of the plant and the time saving factor to operate it.

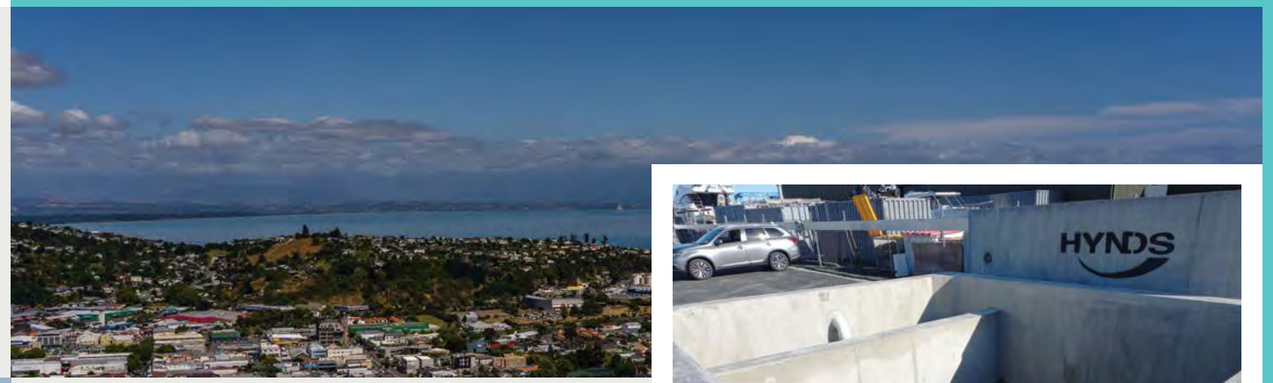
Stormwater treatment

Hynds is New Zealand's leading stormwater technology provider, specialising in treatment, conveyance, management and storage of stormwater. For close to 50 years, Hynds has been partnering with the civil construction industry providing critical and resilient infrastructure to sustainably protect our environment from the impacts of stormwater runoff.

Our dedicated stormwater engineers are strategically placed throughout New Zealand for immediate access, and are able to design from standard to complex tailored solutions inhouse for all stormwater treatment requirements. The focus is on improving stormwater quality, by removing any harmful content, and positively impacting the quality of stormwater by either holding the water and letting it infiltrate into the ground, retaining it for storage or slowly releasing it into the receiving environment.

"Our dedicated stormwater engineers are able to design from standard to complex tailored solutions."

CASE STUDY: Crystal clear water for Nelson



Hynds Stormwater supplied a comprehensive filtration system to Nelson marina. The project was delivered to owners Nelson City Council (NCC) under a fast-tracked procurement initiative as a result of the economic impacts of Covid-19.

The main driver for the project was to install surface drainage to separate stormwater runoff and trade waste flows to an upgraded treatment system to meet resource consent conditions. The entire 3000 m^2 gravel area was to then be overlayed and asphalted.

Stormwater runoff is a challenge for hardstand areas used for boat hull maintenance. The materials and compounds used to control fouling, repair boats and corrosion; and the wastes generated by sanding, scraping, painting, varnishing, and fibre glassing contains high concentrations of metals, solvents and hydrocarbons. When it rains, this all washes to the ocean.

Preparing a vessel for painting can generate paint chips, dust and particles that may contain metals such as copper, zinc and lead. In addition to impeding marine life, any spills washed into the water from hull maintenance areas can also contaminate sediments in the marina basin, posing problems for dredging and the disposal of dredged material. Without correct management, pollutants can seep into the ground to eventually contaminate the site itself, posing problems if the marina was ever sold. Being experienced in this field the Hynds Stormwater team and Beca designed a comprehensive system capable of treating to a high degree.

There were structural elements to consider given the location and impact of high tidal ingress on concrete structures. This included foundation design; seismic restraints of the above ground structures; code compliance with NZS3106 (Water Retaining Structures); NZ3101 2006 (NZ Concrete Structures Standard) and C Exposure Classification Environment protection. Under normal conditions this process of assuming commercial risk could take several months. NCC were outstanding to deal with and promptly supplied answers to our technical queries.

All products were manufactured in Christchurch with our Hydura concrete and delivered to site in advance of the installation date. Subcontractors, Asphalt & Construction, were provided with comprehensive installation guidelines and supported by several site visits and commissioning assistance. The automated system is operating very well with crystal clear water leaving the site.

Smarterwater® products

We believe that building smart technology into the infrastructure system of cities is the way of the future. Hynds Smarterwater® devices are designed and built for the asset management of stormwater, wastewater, infiltration, surge and capacity. The underlying philosophy of Smarterwater® products is 'Measure to manage, measure to act', ultimately putting the power to make positive changes in the hands of asset owners through the provision of real time information.

The traditional way of managing a city's water system is often based around customer feedback from events such as flooding and sewer overflow. The resulting poor customer and environmental outcomes can also lead to degradation of water quality and significant health risks to the end user as well as long term environmental damage.

Smart technology delivers near real time data to asset owners through a virtual network of sensors showing the location and performance of each relevant asset on their infrastructure grid. Instead of being reactive, asset owners (city, district or regional councils) can become predictive, anticipating potential failures before they occur and taking corrective action. This significantly reduces the chance of flooding, overflow and other failures. The whole community benefits from the introduction of smart real time technology.

SMARTER MANHOLE SENSOR

As the first of its kind, the Smarter Manhole Sensor is an in-manhole, real time level measurement sensor designed to transmit data directly back to the asset owner. The sensor discreetly fits into the manhole cover itself, automatically measuring water levels and any tampering events. It also removes any health and safety issues associated with confined space entry, for both deployment and maintenance.

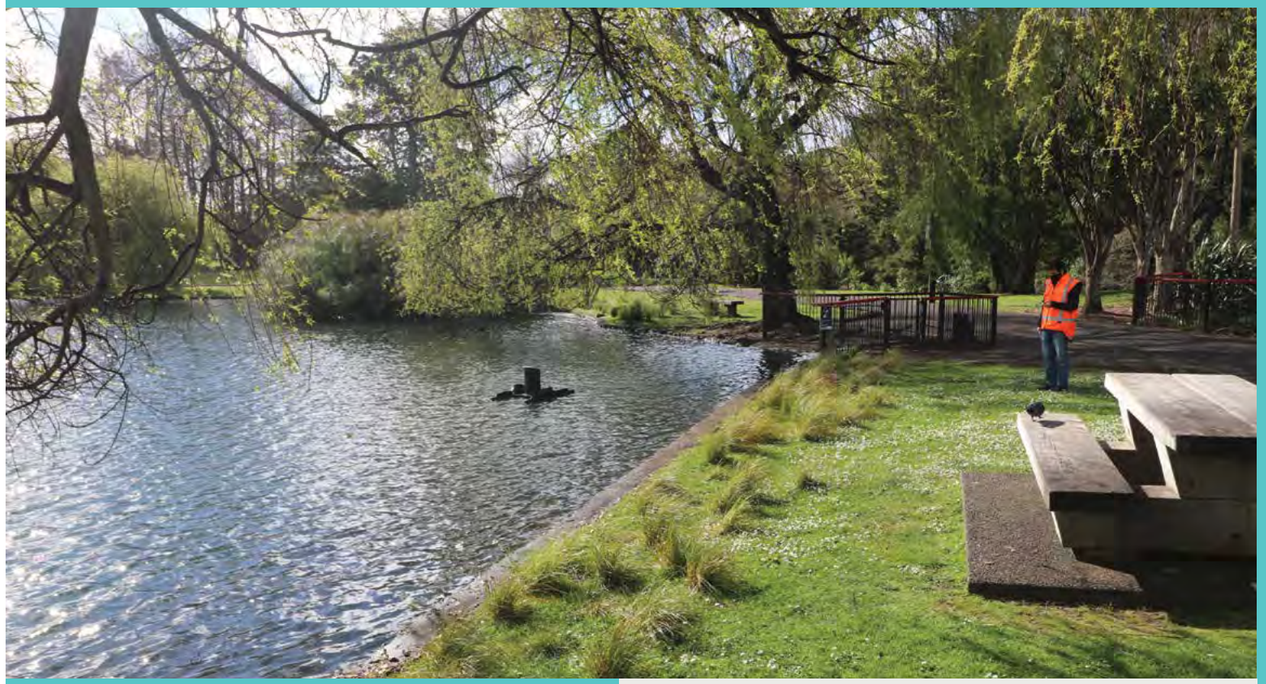
In most gravity systems, the manhole acts as a detention device and provides added capacity to the network. When a pipe suddenly becomes blocked, the surge levels in the manhole increase beyond what is normal. When this blockage goes unnoticed, the first sign of trouble is usually a flood of either stormwater or wastewater occurring in the street, on properties or anywhere manhole access has been provided. This not only poses a risk to public health, the environment and property, but also means the work teams need to operate in more hazardous environments or cannot resolve the problem until after it subsides, leaving communities in distress.

Designed to learn typical or normal water levels over time, the Smarter Manhole Sensor can set a point and provide a high-level warning when levels exceed normal. Use of the sensor provides precise information for work teams about where and when to look for issues. With more information about the parts of the system that need attention, the work teams become more effective, flooding events may be reduced, and the risks to people, the environment and property can be improved. With information learned from the network over time, system expansion cost can also be better managed by providing more accurate real situation data to assist future planning.

SMARTERWATER® RAFT

The Smarter Raft allows for intelligent water quality monitoring of receiving environments such as wetlands, sediment retention and effluent ponds. It acts as a floating monitoring station providing near real-time data for water quality management. Once installed, the device requires minimum maintenance and monitoring and offers sensing devices to measure parameters such as turbidity, temperature, pH, dissolved oxygen, oxidation reduction potential, and conductivity.

CASE STUDY: Takapuna's Quarry Lake



"It helps maintain the correct conditions for a healthy, thriving aquaculture environment."

Takapuna's Quarry Lake on Auckland's North Shore provides an important water source for secondary use and is one of three non-potable water tanker filling stations across Auckland.

Non-potable water is available to Auckland businesses for construction and other non-drinking purposes, and gives businesses the opportunity to assist Auckland's water saving efforts by not relying on water from the metropolitan supply network.

The pumping of water from the Quarry Lake requires continual measurement of water quality to maintain appropriate oxygen levels, correct pH and nutrient balance, to sustain plant and aquatic life. Installation of a Smarterwater® Raft provides near real time measurement of these elements, allowing better and more sustainable long-term outcomes for this important Auckland water source. It helps maintain the correct conditions for a healthy, thriving aquaculture environment for the fauna and flora that live there, and also for the people of the city who use the location for recreation. As caretaker of these resources, local councils have a duty of care to safeguard the health of these natural resources and effective measurement of that environment is paramount.

Product innovation

Our commitment to ongoing research and product development allows us to regularly introduce new products to address industry needs, increase efficiency and quality, and simplify product installation – all contributing to more sustainable outcomes.

The establishment of our state-of-the-art factory at Pōkeno has allowed us the opportunity to redesign and innovate new solutions to the very highest and latest worldwide standards. For example, innovations like the Perfect Pipe and Perfect Manholes are delivering a more sustainable product that is better for contractors and the environment alike, saving on material, labour, minimising health and safety issues on site and providing the best long term environment outcome.

THE PERFECT SOLUTION

The Hynds PERFECT® Manhole Base is a watertight pre-benched flanged based manhole that can be customised to suit a variety of diameters, depths and inlet/outlet configurations. This watertight plug and play system is the perfect manhole for any job.

The Hynds Perfect Manhole System range is a revolution in manhole technology. It is a brand-new and improved range of concrete manholes from our world leading concrete manufacturing site in Pōkeno, Auckland. The

"Our state-of-the-art factory at Pōkeno has allowed us the opportunity to redesign and innovate new solutions."

Hynds Perfect Manhole is a pre-benched manhole base with already cast-in pipeline inlet and outlets.

The use of the Perfect Manhole provides safer and quicker construction with less work and time within the excavation zone and no requirement to bench the manhole in a confined space or haunch a pipe connection outside the manhole base.

The Hynds Perfect Manhole is specifically designed to prevent external water infiltration. The combination of rubber gasket riser and pipe connector seals, and the Pinnacle® Step System (which does not require bolting through the wall) ensure a watertight structure for many years to come. This provides Councils with the confidence that infiltration of groundwater into manholes is not occurring which greatly benefits the operation of wastewater networks.

World-leading partnerships and products

"The WaStop provides critical protection for people, properties and livelihoods from the devastating impact of flooding."

Hynds is proud of its partnerships and exclusive distributorships with many high-quality European agencies and brands. These include brands such as Eloy Water, Wapro, Hawle, Hauraton, EJ, GRAF and Georg Fischer.

Working in partnership with these elite brands, Hynds delivers world-class solutions for New Zealand, Australia and in the case of some brand distribution arrangements, across the Pacific Islands.

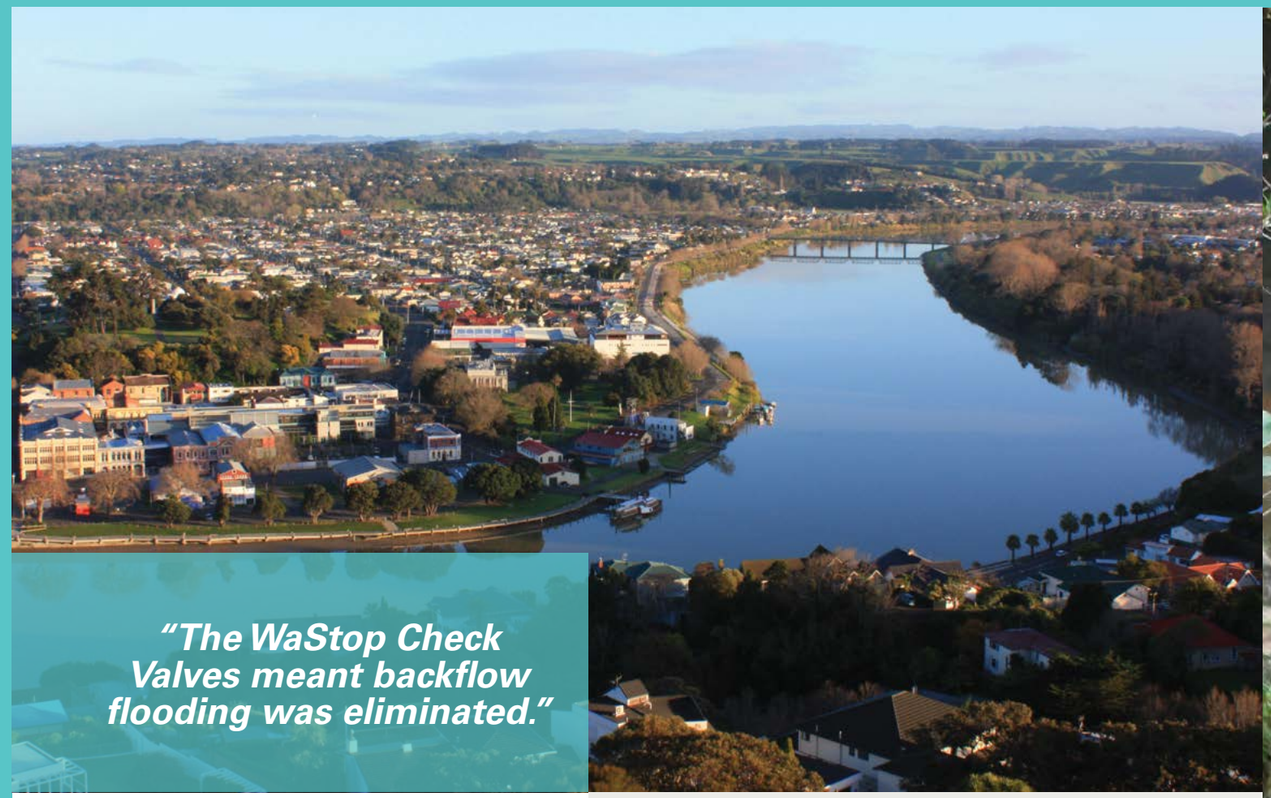
WASTOP®

Hynds is the exclusive distributor of the highly regarded WaStop® Check Valve from Wapro, a unique product delivering crucial flood and odour management for countless communities across New Zealand, Australia and the Pacific.

The WaStop is a unique patented non-return valve with a clever membrane that allows the flow of water one way while preventing backflow, odour and flooding. By restricting the backflow of water from the ocean, lakes and other bodies of water, the WaStop provides critical protection for people, properties and livelihoods from the devastating impact of flooding.

Working on differential water pressure, the WaStop functions autonomously, without human interaction, electricity or constant maintenance.

CASE STUDY:
Protecting people and property in Whanganui



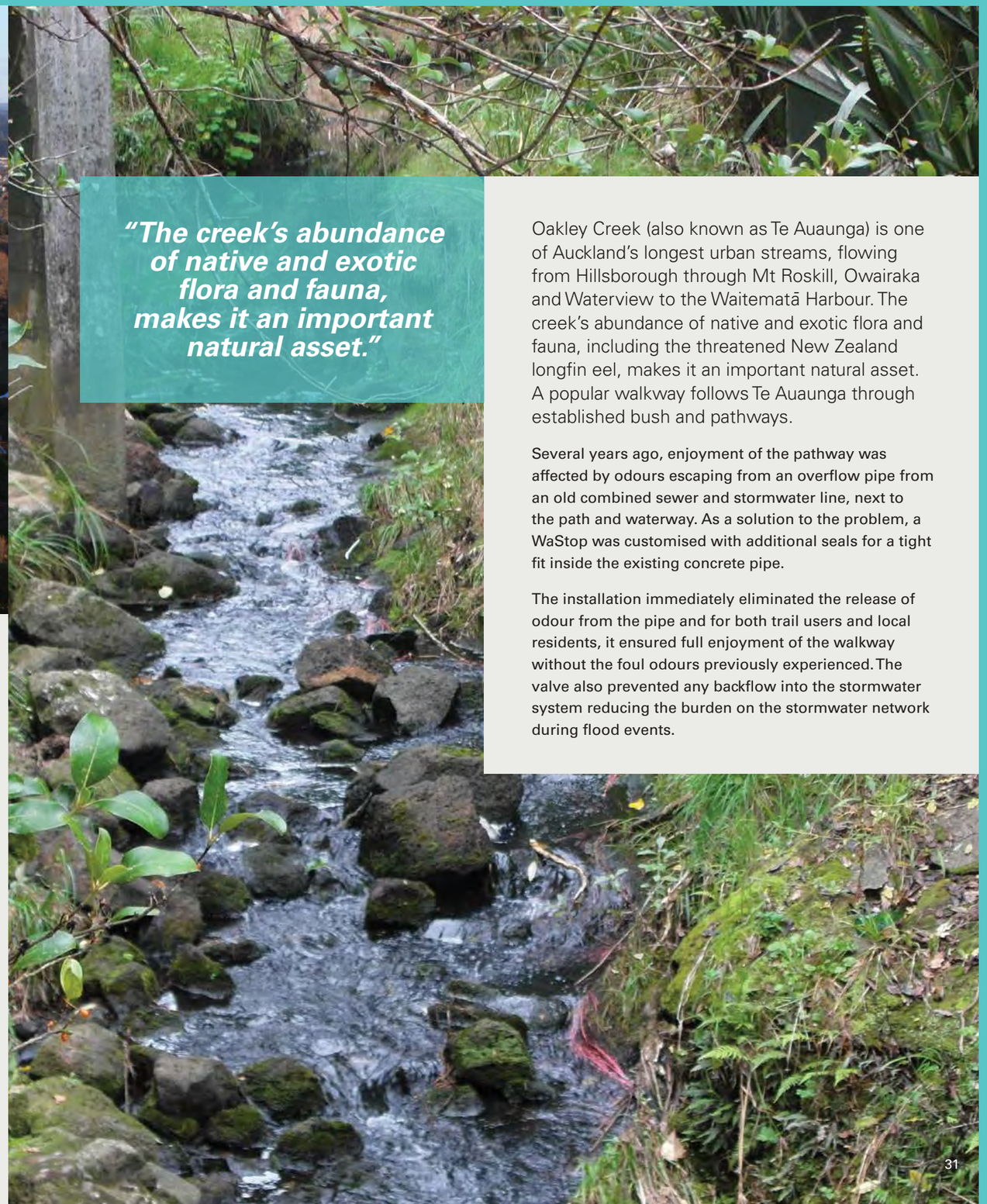
"The WaStop Check Valves meant backflow flooding was eliminated."

Whanganui has a history of repeated flooding in low-lying areas, particularly those adjacent to the Whanganui River. The inlet of the river is subject to significant tidal fluctuations with high silt content that has historically caused flooding and damage to nearby properties and roads. Residents had to be continually prepared to evacuate themselves, pets and important belongings at short notice at times of high rainfall.

One of the main causes of flooding was backflow from the river through the stormwater outfall system. To help prevent any backflow, WaStop valves were installed on some stormwater outlets. With the WaStop in place, backflow was prevented and the stormwater system had more capacity to cope better during periods of high rainfall and high river levels.

Installation of the WaStop Check Valves meant backflow flooding was eliminated, delivering welcome peace of mind for residents and property owners.

CASE STUDY:
Eliminating odours around Oakley Creek



"The creek's abundance of native and exotic flora and fauna, makes it an important natural asset."

Oakley Creek (also known as Te Auaunga) is one of Auckland's longest urban streams, flowing from Hillsborough through Mt Roskill, Owairaka and Waterview to the Waitematā Harbour. The creek's abundance of native and exotic flora and fauna, including the threatened New Zealand longfin eel, makes it an important natural asset. A popular walkway follows Te Auaunga through established bush and pathways.

Several years ago, enjoyment of the pathway was affected by odours escaping from an overflow pipe from an old combined sewer and stormwater line, next to the path and waterway. As a solution to the problem, a WaStop was customised with additional seals for a tight fit inside the existing concrete pipe.

The installation immediately eliminated the release of odour from the pipe and for both trail users and local residents, it ensured full enjoyment of the walkway without the foul odours previously experienced. The valve also prevented any backflow into the stormwater system reducing the burden on the stormwater network during flood events.

Recycled products - from rubbish to rural

Post-consumer plastic is getting a second life at Hynds PKS in Christchurch. The site is the sole manufacturer of Supaduct™ Rural, a lightweight and durable culvert pipe system produced from reprocessed raw HDPE (high density polyethylene) material and post-consumer recycled plastic.

The percentage of post-consumer recycled plastic in the product ranges anywhere between 50-80%, depending on the type of material used. The balance of the resin used to make the pipes is reprocessed HDPE waste product from our manufacturing process, meaning the Supaduct Rural range is manufactured entirely from recycled and repurposed resin.

Supaduct Rural also offers a number of time and money saving features. Along with being cost effective, easy to install and long life, it is chemically resistant, physically tough and offers increased flow rates due to the smooth inner.

Its weldable nature and structural design also mean there are many ways the pipe can be fabricated to help achieve the desired end result. The capability of the product, particularly in handling significant direct traffic loadings, makes it ideal for rural and forestry applications.

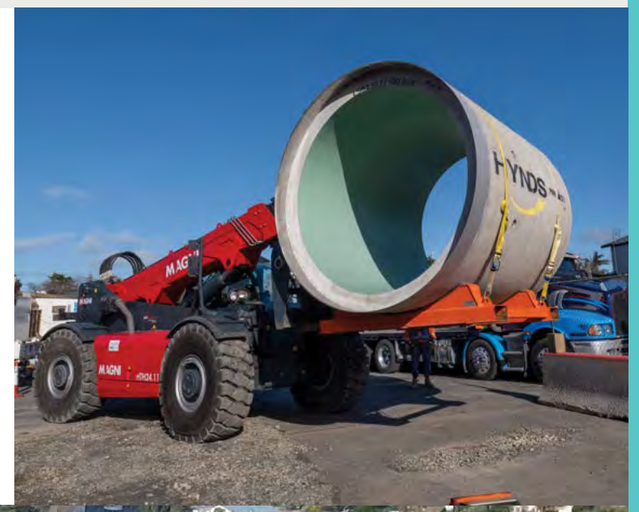
"The percentage of post-consumer recycled plastic in the product ranges anywhere between 50-80%."

Products for good

For many years we have been committed to increasing the handprint that our products have and the benefits they have on the environment and wider community. Just as Hynds pipes and products deliver water solutions around and under New Zealand, they are also delivering social, environmental and recreational outcomes in non-traditional settings. Here is just a snapshot of our products doing good.

TRENCHLESS PIPELINES

New Zealand's three water infrastructure will require major upgrades over the next few years and this will come at a significant cost and carbon footprint. We believe that trenchless pipe installations will help reduce this cost and carbon footprint compared to traditional pipeline installations and have the benefit of minimising noise and disruption to the public. We are committed to trenchless pipeline solutions and being New Zealand's trenchless supply partner of choice. We are currently manufacturing and supplying numerous trenchless projects (such as the Central Interceptor project for Watercare) with customised solutions and a variety of pipe materials.



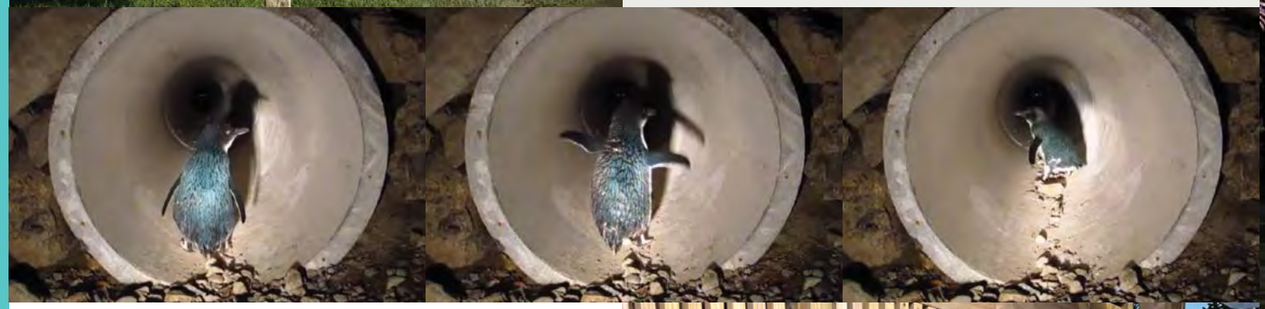
Products for good

PENGUIN CROSSING

We were proud to supply the concrete pipe for the country's first wildlife underpass in Oamaru.

The 25-metre tunnel provided an important lifeline for little blue penguins in Oamaru, acting as a unique underpass to remove the need for a treacherous road crossing for the small birds. The tunnel creates a safe passageway for the local blue penguins who head out to sea before first light, returning ashore at dusk along the same route. Their night time movements had become increasingly challenging with the birds negotiating the busy road beside the blue penguin colony.

With the penguins refusing to change their course, the focus for local penguin enthusiasts and the Council was on getting them to their nests while avoiding the busy road. Power, water and other services were relocated, so the tunnel could be sited along the penguins' usual route. Hynds was thrilled to donate product and labour to support this project.



CHILD'S PLAY

Hynds pipes are also delivering unique play structures for children around New Zealand. When Summerland School in the Auckland suburb of Henderson was looking for something a little different for their playground, Hynds answered the call with the repurposing of box culvert piping. We've also been proud to supply pipes for play structures at rural schools, like Pukekawa School, where the pipes are being used to support students' imaginative play.

"Children love the opportunity to make up their own games and these pipes have provided another avenue for this."

JOSIE REDMOND, PRINCIPAL, PUKEKAWA SCHOOL

HYNDS

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