

Information Brochure



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How will your project look? Let us help you achieve your dream!



About Us

Waterflow NZ is an onsite Wastewater manufacturer, supplier, installer and designer (council consent documentation). We personally manufacture the Naturalflow and Econotreat product lines and facilitate the supply and install of these and our other handpicked systems Nationwide. We offer our customers a complete end to end solution, all while giving the customer options on what would best suit their needs and of course their land.

We believe in a consultative approach to everything we do, taking the customers thoughts and ideas and coming up with the very best solution. Traditionally (and currently) there are many hands involved from the manufacturer to the Engineer to the drainlayer which can become confusing for the customer especially if they have never lived rural before. Our purpose is to make this process as seamless and enjoyable as possible – after all we are dealing with your waste!

Our products and services cater for everything from the 1-bedroom tiny home, to Baches, to Maraes and light commercial and everything in between; we are your Wastewater Specialists waiting for your call!

End-to-End Solutions for you

Design

Following a free site assessment, our design team produces a complete report for the flow and disposal requirements on the site. This is the information you will require for getting building consent from your local council.

Installation

With an experienced install team and a number of accredited installers through the country, we can manage the complete supply and installation of your wastewater treatment plant. Including documentation for final sign off by the Local Council.

Ongoing Support

Our team of professionals is happy to help with any questions you might have.

The service crew will manage ongoing service requirements, giving you peace of mind.



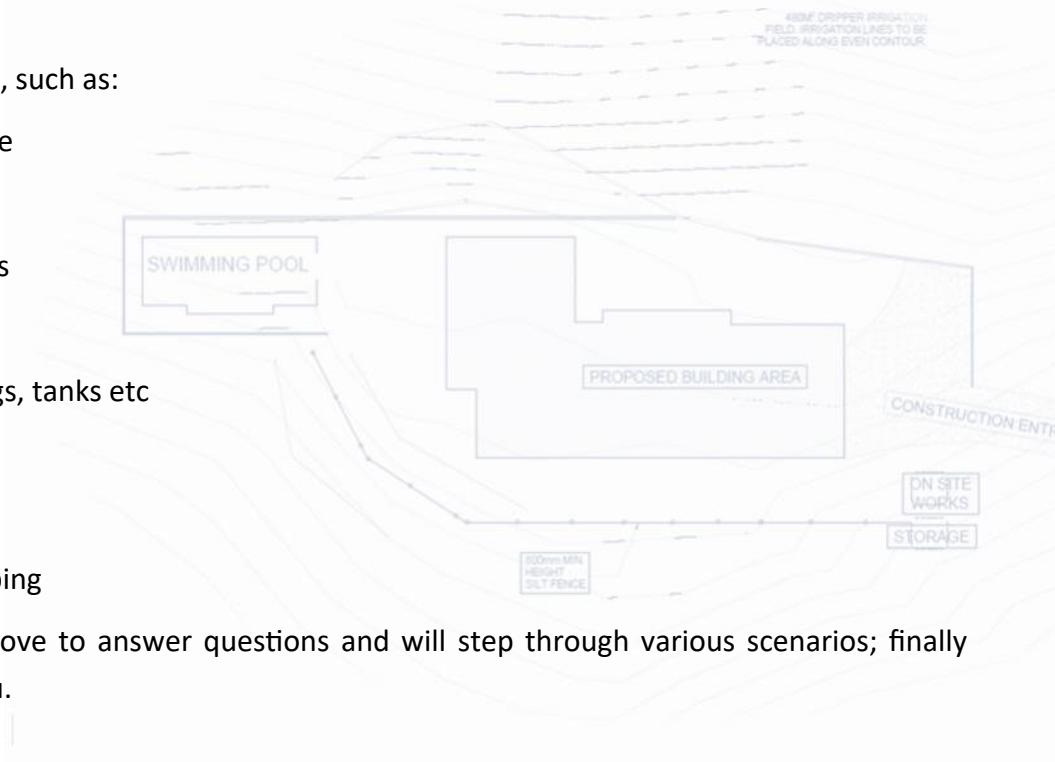
Site Experts

We have trained our site evaluators to be at the top of their game. Eager to help, they will come with a fresh view and new ideas for your site. We like to work in with your ideals, to come up with the best solution for you.

On site we look at several factors, such as:

- Topsoil depth and soil soakage
- Angle of the slopes
- Proximity of any watercourses
- House location
- Location of any other buildings, tanks etc
- Boundaries
- Council requirements
- Existing or proposed landscaping

During the site assessment we love to answer questions and will step through various scenarios; finally settling on what will work for you.



Wastewater Reports

We have an in-house designer and technical team. They take all the information gathered from site, to create a site-specific report for council consent. We have worked under most councils throughout New Zealand, so know the rules that will apply to each situation.

We can provide PS1's and a number of council specific checklists, with more being added as we go. These include: TP58, KDC forms, HDC forms, EBOP Schedule 5.

Get in touch to get your project underway!





Welcome to Naturalflow

The NaturalFlow systems have been developed with 'homeowner' in mind. Delivering consistent high levels of treatment with minimal operational demands and is cost effective from day one and into the future.

Nature is one huge recycling mechanism. The NaturalFlow system utilizes these recycling mechanisms of nature by, harnessing its forces that have been quietly working together for thousands of years to break down and decompose waste all around us, and positions them in an enclosed eco-system module that simulates the natural forest floor. It will treat and break down your wastewater – just as nature does – and then reintroduce it into the environment when it is perfectly safe to do so.

Worms are not only capable of digesting human waste (including toilet paper and kitchen scraps) but are also far less sensitive than micro-organisms, to their diet and ambient environmental conditions.

There are no mechanically moving parts in these processes: Nature's power is FREE.

Power Free Treatment Processes!

Waterflow is the proud manufacturer of the Naturalflow wastewater systems. These are the leading vermiculture system in New Zealand. Providing passive breakdown and treatment of waste, the NaturalFlow systems have a completely power-free treatment process. These systems operate quietly and don't require ongoing septic pump outs.

Made from roto-moulded plastic modules, the system is light and easily installed with lighter machinery. Making it great for those sites with challenging terrain.

By utilising aerobic bacteria throughout the treatment process, we have made it possible to have a passive and odourless system.



Key Features of Naturalflow:



Power free Treatment

90% less power than standard systems on a flat site and no power needed on some sloping sites.



Silent Operation

With no mechanical parts in the treatment process, this system won't disturb your serenity.



Environmental Care

Well established and sustainable natural filtration processes. Solid waste is converted to liquid fertilizer.



Robust & Rugged

High resistance to 'shock' and 'intermittent' loading. Bring on the holidays!



NF600TH treatment system

- Advanced Primary Treatment
- Treats up to 640L per day
- Used in:
- 1 - 2 Bedroom homes or minor dwellings
- Sleepouts or cabins
- Rural workshops or sheds



NF8000 treatment system

- Advanced Primary Treatment
- Treats up to 1,600L per day
- Used in:
- 3 - 8 Bedroom homes and Baches
- Rural Commercial facilities of up to 20 people
- Café's and small ablution facilities



NF11000 treatment system

- Secondary Treatment
- Treats up to 1,600L per day
- Used in:
- 3 - 8 Bedroom homes and Baches
- Rural Commercial facilities of up to 20 people
- Café's and small ablution facilities



Great for Difficult Sites

Only light machinery required for installation. the modular design of the Naturalflow system, makes it a perfect fit for steep and difficult to access sites.



Cost Effective

Natures active Bio-System - Sustainable natural processes that work for you for FREE!



High Treatment Levels

Manufactured in Northland, the Econotreat is a leader in it's class. Running off a single blower, the Econotreat delivers consistently high results; while drawing consistently low amounts of power, only 1.3kwh per day.

With proven nitrogen reduction at the National Testing Facility, it is one of the few systems permitted to be installed in restricted discharge areas, such as around the Rotorua lakes.

Key Benefits:

- Single blower - uses less power than most other systems, only 1.3KWH per day.
- Saves water by recycling household water for garden use promoting growth.
- Safe and beneficial for the environment.
- Quiet operation.
- Plastic tank option - difficult sites catered for.
- Meets advanced secondary treatment requirements
- 3 year warranty on Nitto blower.



Key Features of Econotreat:



High treatment levels

Exceeds minimum requirements for secondary wastewater treatment. This makes it more readily accepted by councils and engineers.



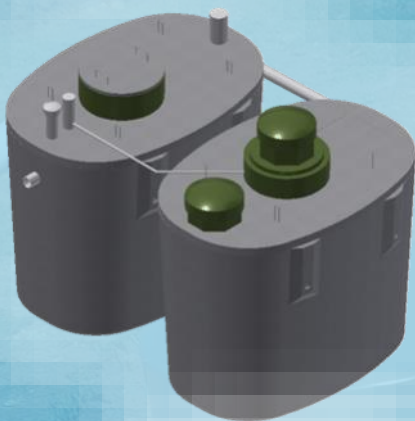
National Certification

Proven performance at the National Testing Facility. Enjoy the peace of mind that your system will perform effectively for years to come.



VBB-P-2000 treatment system

- Advanced Secondary Treatment
 - Treats up to 2000L per day
 - Plastic Tanks - great for difficult or remote sites
- Used in:
- 3 - 8 Bedroom homes and Baches
 - Rural Commercial facilities of up to 20 people
 - Café's and small ablution facilities



VBB-C-2200 treatment system

- Advanced Secondary Treatment
 - Treats up to 2200L per day
 - Concrete tanks - best durability
- Used in:
- 3 - 8 Bedroom homes and Baches
 - Rural Commercial facilities of up to 20 people
 - Café's and small ablution facilities



VBB-C-3000 treatment system

- Advanced Secondary Treatment
 - Treats up to 3000L per day
 - Concrete tanks - best durability
- Used in:
- Small Commercial Facilities
 - Rural Commercial facilities of up to 30 people
 - Café's and large ablution facilities

Ask us about commercial sized systems for larger projects!



Modular System

Broken down into two smaller components rather than a large single one. This allows greater flexibility around installation the use of smaller machinery.



Better for irrigation

Consistently effective treatment reduces the amount of contaminants entering your irrigation system; increasing its lifespan significantly, and saving you from future replacement costs.



Commercial Wastewater Treatment

Commercial wastewater treatment is a bit more complex and requires specific design, which our team at Waterflow can provide for you.

We have done several commercial and large-scale systems; including several Maraes, fruit picking accommodation, School's , Papakainga's, small subdivisions with a communal system or simply very large family homes. With daily volumes ranging from 5,000 to 50,000L or more; and both primary to secondary treatment level requirements. We have the capability to build a configuration to your needs; and long term requirements.

End-to-End Solutions for your Commercial Project

Design

We develop and design the system to meet your requirements.

We also provide a complete report for the flow and disposal requirements on the site. This is the information you will require for getting resource consent.

Installation

With and experienced install team and a number of accredited installers through the country, we can manage the complete supply and installation of your wastewater treatment plant.

Ongoing Support

Our team of professionals is happy to help with any questions you have.

The service crew will manage ongoing monitoring and service requirements, giving you peace of mind.

Some Key Considerations:



Sources of Waste

This is the first thing that must be accurately covered. It is purely human waste from ablution blocks or accommodation? Is there a by-product from processing? Are there process chemicals or contaminants?

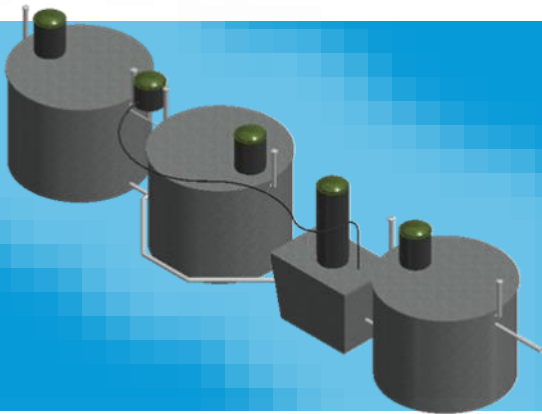


Volume of Waste

This must also be calculated as accurately as possible, as the volume will determine the size of the treatment plant you require.

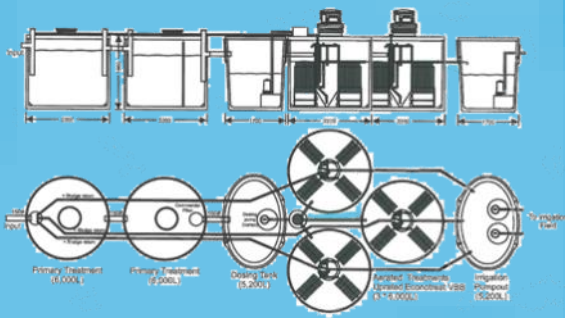
To get this right we will assess the type and volume of users; whether over-night, day only, visitors, staff etc

A snippet of the Systems we provide to the commercial market:



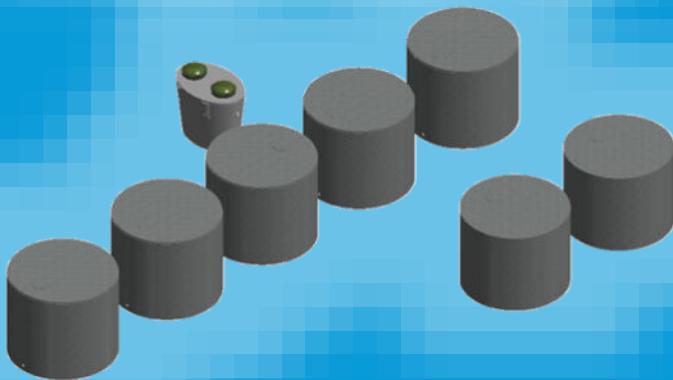
CSX120

- Secondary Treatment
- Air assisted options
- Treats up to 12,000L per day
- Used in:
 - Larger commercial 100+ people
 - Accommodation facilities
 - Maraes and other event centres



Triple VBB-C-3000

- Secondary Treatment
- Treats up to 9,000L per day
- Used in:
 - Large domestic situations/multiple dwellings
 - Small commercial 50-100 people
 - Small event centres
 - Schools



CSX370

- Secondary Treatment
- Air assisted options
- Treats up to 54,000L per day
- Used in:
 - Large commercial
 - Accommodation facilities
 - Maraes and other event centres



Fluctuations Over Time

If you experience short term peak flows, we may be able to save you money. Rather than installing a system to match the peak flow, a smaller system that takes batch flows may be enough; this would continue to operate outside of the peak period, using the low times to process the remaining peak flow. Smart design and operation are our specialty.



Future

Think about your future requirements. It is typically cheaper to go slightly larger capacity now, than trying to add to the system later on.

Irrigation

Irrigation systems are the most common method of discharging wastewater to the ground; this is due to the relatively low cost and ease of installation. There are two irrigation options you can use, depending on your site: Pressure compensating drip irrigation (PCDI) or Low Pressure Effluent Distribution (LPED).

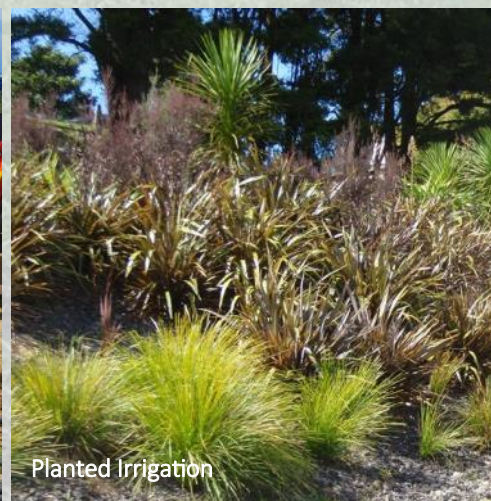
LPED - Low Pressure Effluent Distribution

This is a favourite of ours, as it is the most robust irrigation system available. Using larger 25mm distribution laterals with drilled holes, it is much less prone to blockage and crushing. The larger holes are covered with an innovative squirt guard, developed by Waterflow. These systems do require a rectangle area and must run across contour, which limits the options around where and how it can be positioned onsite. There are also more council regulations around topsoil and slope for this method.



PCDI - Pressure Compensating Drip Irrigation

This is a very common irrigation system, used with the majority of secondary treatment systems. While it has finer emitters and requires more care, it can be laid across contour in any shape you desire; this makes it much more favourable when trying fit a specific area of planting or lawn.



Soakage Systems

Soakage systems rely primarily on the earth's ability to soak up the discharged water; therefore they are better in ground with a lower clay content. Evapotranspiration can also be utilized, using plants to assist the take up of moisture. They use higher loading rates and can reduce your discharge area by up to 50%. These are the most robust distribution systems, as they aren't subject to damage from stock or foot traffic. They also use large holes rather than small orifices, meaning there is much less chance of blockage. Of course, along with the benefits, soakage systems do come at a higher price.



Soakage Beds



ETS Beds



Raised Mound

Soakage Beds

Constructed in the ground using drainage metal and a central distribution pipe. These beds can vary in width from 1.5 - 3.0m

ETS Beds - Evapotranspiration

Constructed in much the same way as conventional beds, this system is mounded and utilizes plantings to help take up water.

Raised Mounds

Similar in principle to ETS Beds, these are built up above ground. Normally used in high water tables or flood prone areas.



Soakage Trenches



Soakage Beds during installation



Bore Holes

Soakage Trenches

Less common than soakage beds, they are constructed in the same way; the only variation being they are narrower and sometimes deeper. Deep trenches use the deeper soakage to disperse water and are not so commonly used.

Bore Holes

Like their name suggests, they are a series of deep holes, being 0.6m diameter and up to 6m deep. These discharge much deeper in the ground and are only used in very limited situations. They are not a permitted activity in NZ and will require a resource consent.

Water Pumps

Wastewater

Needing to replace an old pump in your wastewater system? Give us a call today. Simply explain the system and disposal method and the capacity the pump needs to work to.

We cover a range from large macerating grinder pumps to smaller submersible discharge pumps, including controllers and alarms if necessary.

We can also provide complete pump stations for various situations.



Drinking Water

There is a huge range on the market, but we do have a couple of favourites:

The **ESYBOX** surface mounted pump is a high end, soft start, multi-stage pump, that gives you the water you want when you need it. Easy to install and manage, this pump can also be doubled up for better flow.

The **DAB-1200X** is a submersible pump installed inside your water tank. This pump is great value for money and won't let you down.

Any preference of your own? Just ask us and we can give you a comparison or get a price.



Water Filtration

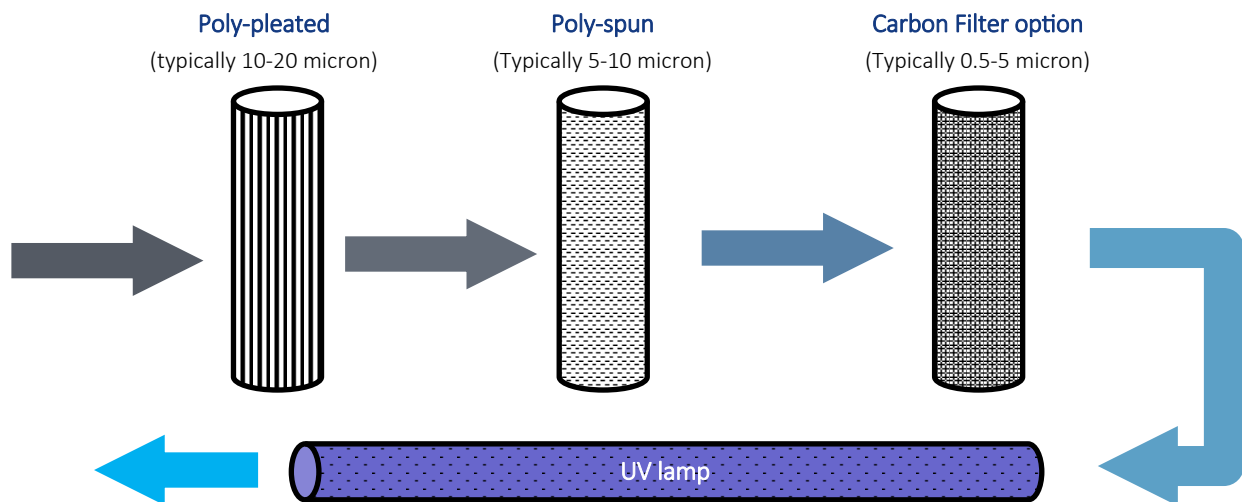
Have the peace of mind, knowing that your cup is free from foreign contaminants. Installed between you and the tank, a filter system will ensure sparkling clean water every time. We can offer supply and installation of a range of water filters; ranging from two or three stage cartridge filters to full UV solutions.

Sediment Filters

The first stage of water filtration involves removing any small particles. This can be anything from dust to biological matter that has grown in the water. There can be multiple stages to this filtration process; typical water filters have two or three cartridges. The first stage being a pleated paper filter, which is followed by a finer 'block' filters.

Carbon Filter

Carbon filters are optional and depend on the water you are wanting. They can be added to remove odour, chlorine and bad taste from the water.



UV Filtration

UV treatment is a process following initial particle filtration. The initial filtration is necessary to ensure the UV is effective, as any murkiness reduces UV transmission. UV light sterilizes the water by neutralizing bacterial contamination such as E.coli.



Ask us to add it to your project!

Water Tanks

Ask us to add water tanks to your project! With all the complexities of a house project It makes sense to use less subcontractors. We can supply and install your complete wastewater and drinking water systems.

Plastic or Concrete?

Plastic water tanks are far more common, due to cost and ease of installation, and they do a great job of holding water. Lightweight means it is easy to position them onsite; and while they can only be partially buried, they do have a range of colour options to help them blend in to their surroundings.

The major benefits of concrete are: the insulation properties during hot weather, and the ability to fully bury them. However they do require Hiab access to get them into position onsite, which can be especially challenging during the winter months.

In reality every site will have different requirements, ask us what would be best for your site: **0800 629 356**



Common plastic water tank colour options:



Please Note:
Tank Colours are displayed as close as printing methods will allow.

Drainage

Complete the package with drainage connections for your wastewater and stormwater systems.

All our installers are qualified drainlayers, who can complete all your drainage work outside of the house.

The plumber is responsible for everything within the walls, from the under slab drains to the final fit-off.

We can save you time and cost, by having one contractor onsite doing the whole job.

Drainage connections include:

- Wastewater from the house to the sewage system
- Stormwater from the downpipes– to the water tank
- Overflow connections from the water tanks to a dispersal area
- Can also include general stormwater management such as cut-off drains and minor site contouring.

We will arrange the drainage inspections and provide as-built drainage plans to cover all council regulations, ensuring your build is compliant.





Thelma — Ruawai

Thank you for your services, you have an excellent working crew and you all in the offices there made the whole paperwork and organizing of the job processes so easy for me it was so good to leave it in your hands and not be doing it myself, as I had to with the rest of the stuff I've had to do during this time.

Give my regards to all and a big thumbs up👍!

Thelma 24/06/20

Mark – Te Kauwhata

Thanks again, were really impressed by your Company. I would have absolutely no hesitation in recommending anyone in both the product and your after care support. We really appreciate it!

Thanks

Mark & family 6/06/19

Steven – Rakino Island

Thank you Hamish, we are pleased with the way that you finished the installation and particularly Jimmy's work with cleaning up the site. Please thank him for us.

We enjoyed your company.

Regards Steven 7/02/19

Waitoki School – Waitoki

To Whom it may concern.

Waitoki School's decision to go with Water Flow NZ Ltd, was one of the wisest we have made.

The quality of both product and service is exceptional.

Their care of 'post installed product' is timely and professional.

One of the trickier elements when installing in a school environment, is the installers ability to run a safe secure installation – and Water Flow stood out with their professional approach to working around children.

Chris Neison – Principal 20/02/20



Emily – Hatuma

Just wanted to add that you guy's have been amazing throughout this process, Gerry has been so great to deal with, himself and the other two guys were super efficient and very tidy completing the job on site and it was done on time even with my dates getting pushed out and not 100% confirmed until about a week out from the house arriving on site it felt like it was no issue to Gerry and he was very accommodating.

Emily 13/11/19

Andrew – Ruawai

Water Flow has been an absolute pleasure to work with from start to finish. Everyone has been knowledgeable, friendly and professional.

Your contractors are excellent, highly skilled and very professional. Communication has been exceptional.

I have no hesitation in using your services for our new house system and would highly recommend your services in the future.

Regards Andrew 7/09/21

Pouto Papakainga – Pouto

To Whom it May Concern

Our Papakainga in Pouto (currently 8 homes on site) had major septic issues and due to Health & Safety reasons the Council was justified in demanding an upgrade.

Natural flow provided an environmentally sustainable system that uses a natural process to treat our wastewater to a very high standard. This was extremely important to us as the Papakainga lies adjacent to the Kaipara Harbour.

To date we have experienced great service and maintenance of the system and the Council is happy too.

Henry – Chairperson 05/03/20



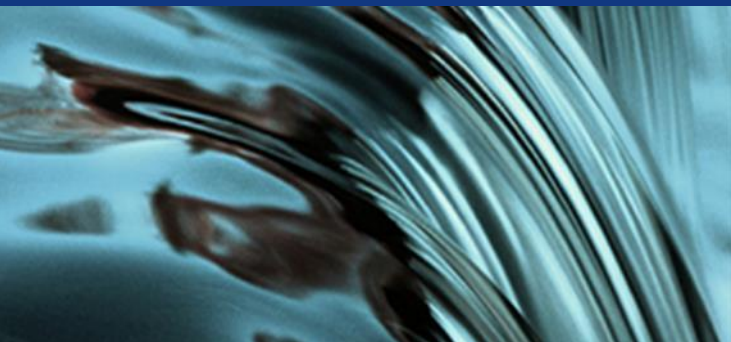


Knowledge • Innovation • Care

Call us today to discuss your needs

0800 628 356

Or for more information www.waterflow.co.nz



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