

ecoflow

SEWERS MADE SIMPLE

ENGINEERS | DEVELOPERS | COUNCILS

WHY ECOFLOW?

OUR TRACK RECORD

Over the last 15 years, Ecoflow has installed more than 20,000 E/One pressure sewer systems throughout New Zealand. We have helped engineers and councils design the pressure sewer systems found in many developments across the country.

WORLD-LEADING TECHNOLOGY

Ecoflow exclusively use E/One pumps, internationally recognised as the industry leader for pressure sewer systems.

TRUE SPECIALISTS

Ecoflow is a true specialist - pressure sewer systems are what we know and all we do. We get involved in every aspect of the implementation process, from community consultation, through to commissioning and ongoing support.

WE'RE DOWN-TO-EARTH

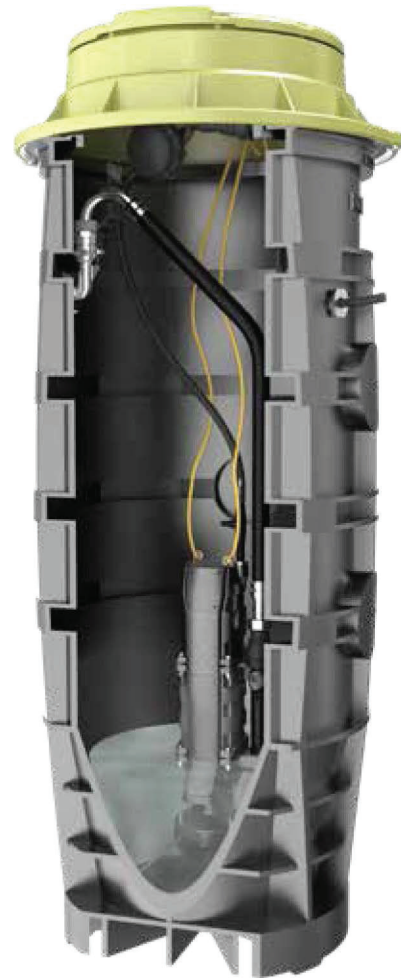
Ecoflow is a New Zealand-owned and operated company, with the original founders still working on every aspect of the business. Don't be surprised if you see them out in the field during an installation and talking with building company staff.

TOTAL RESPONSIBILITY

Being a small New Zealand-owned company, we're passionate, pro-active and supportive of every pressure system design and installation we do.

EXCELLENCE IN SERVICE

No matter where our customers are in New Zealand, Ecoflow is there to support them.



SERVICES

DESIGN

For your next project, Ecoflow can offer free hydraulic design, pipe layout and costings to assist with your option study.

AUDIT

Ecoflow can monitor your existing pressure sewer network to give you a better idea of performance. From the data collected, we can confirm design assumptions, estimate additional capacity, assess how the network is operating in terms of self-scouring and now, with use of smart pump controllers, we can manipulate flows to achieve better efficiencies and weed out sources of infiltration.

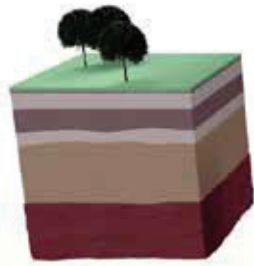
MAINTENANCE

Ecoflow exclusively use E/One pumps, which are designed to last in excess of 25 years in a corrosive wastewater environment. With more than 650,000 grinder pumps operating in 40 countries, E/One pumps have an international reputation for being reliable and robust, with minimal maintenance needed. If a pump does need a service, no matter where in New Zealand, Ecoflow is there to provide the necessary support.

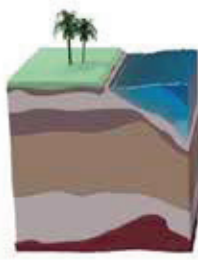
PROJECT MANAGEMENT

Ecoflow's in-house project managers can assist with the implementation of your pressure sewer network. Tap into our field experience to ensure your project is delivered without a hitch.

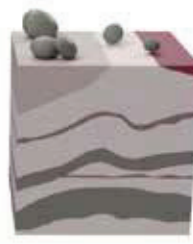




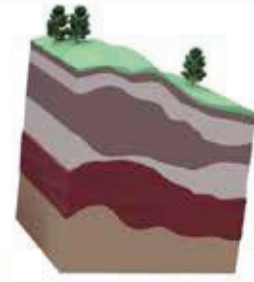
Flat



Wet



Rocky



Hilly

WHY CHOOSE PRESSURE SEWER OVER GRAVITY?

Wastewater treatment and infrastructure is an essential part of any community. However, traditional gravity sewer systems are not the most appropriate or cost-effective solution in difficult ground conditions. Fall requirements for adequate flow by gravity may require deep excavations in hilly or flat terrain and additional expensive pump stations may be needed.

On the other hand, a Pressure Sewer System consists of an E/One grinder pump at each property pumping into a network of small-diameter, heavy-duty polyethylene pipe, which can be installed shallow and follow the contours of the land. Because the network is sealed it eliminates inflow and infiltration. This means peak wet weather design flows can be reduced. The catchment will be less of a burden on downstream existing (often ageing) infrastructure. The network is also more resilient to ground movements and is easily accessible for maintenance.

Ecoflow is New Zealand's leading supplier of Pressure Sewer Systems. With an E/One grinder pump, Pressure Sewer Systems provide a far more reliable, controllable transfer of wastewater from the household to the treatment plant than conventional methods

Pressure Sewer Systems are becoming increasingly popular amongst council asset managers, engineering consultants and developers thanks to the advantages and cost savings they offer over traditional gravity systems.

Plus, upgrading to smart controllers that communicate via a cellular network to an online portal gives councils complete control of their pressure sewer networks. This means councils can monitor and control the network, reduce peak flows, hold back pumping during storm events and offer a higher level of service to the homeowner.

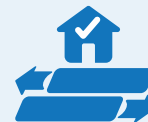
BENEFITS OF AN E/ONE PRESSURE SEWER SYSTEM



Sealed system, no infiltration
– lower impact on treatment plant capacity



Minimal maintenance – no manholes or large public pump stations



More resilient to seismic activity such as ground movement and liquefaction



24 hours of storage for each home



Difficult ground conditions – a Pressure Sewer System is suitable for flat, wet, rocky and hilly conditions



Lower cost of reticulation – lower material costs and shallower trenching



**Dependable, reliable:
over 650,000 units, 40 countries**

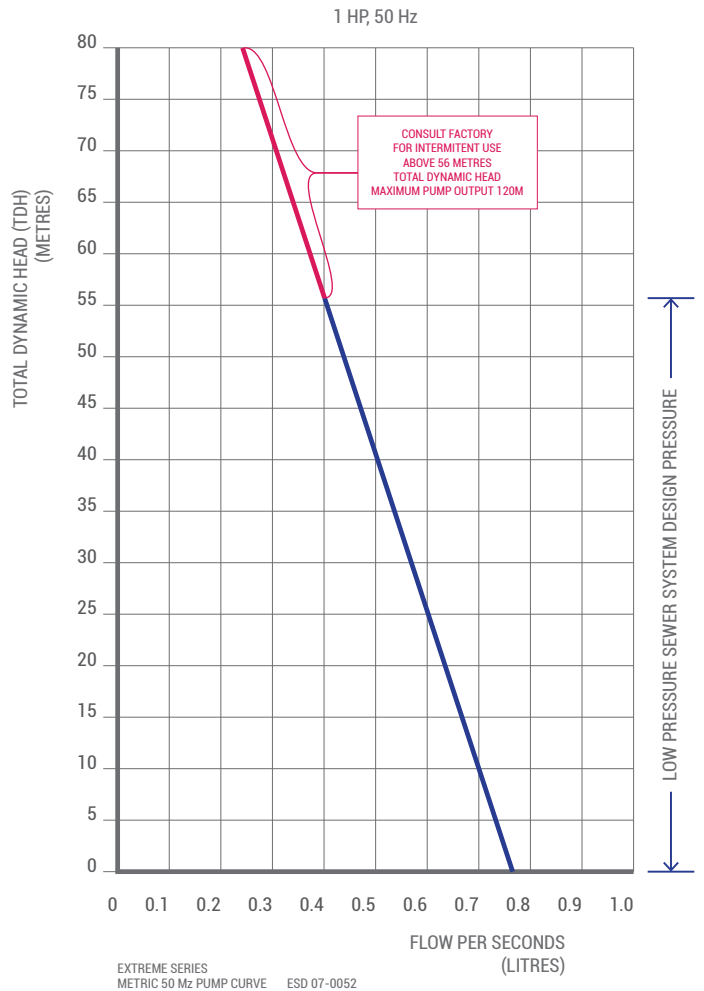
E/One's semi-positive displacement (SPD) grinder pump was developed specifically for pressure sewer systems. Its constant, predictable flowrate over a wide range of pressure provides the network designer with confidence, and the E/One pump's ability to pump at high head provides reserve hydraulic capacity and ultimately reduces design risk. It has benefited from nearly 50 years of fine-tuning and improvement. With over 650,000 units in 40 countries, the larger diameter, low velocity, high torque grinder offers market-leading reliability you can depend on.

How the E/One works

All household wastewater flows to the underground chamber, which is sized to include 24hrs emergency storage. At the heart of the station is the E/One grinder pump.

Pressure sensors in the head of the pump signal the controller to activate the pump at a predetermined level. E/One's low speed, high torque, 133mm cutter wheel has reduced inlet velocity, which slowly introduces the debris into the cutter and is less likely to jam, bind or suffocate.

Wastewater is then pumped via progressive cavity rotor and stator. The precision cast and polished stainless-steel rotor can pump many kilometres to the discharge point or treatment plant, reducing the need for lift stations.



Grinder Pump Performance Curve

PRODUCTS

CHAMBER OPTIONS



E/One Simplex 2010iP – single pump

Designed for residential dwellings.

- Standard storage flows
- Diameter (mm): 815
- Height (mm): 2130
- Weight (kg): 74
- Total Capacity (L): 718



E/One Duplex 2014iP – dual pump

Designed for commercial or industrial areas.

- Greater storage/flows
- Diameter (mm): 1140
- Height (mm): 2030
- Weight (kg): 132
- Total Capacity (L): 1337



Custom T Tank – multiple pump systems

Designed for commercial or industrial areas.

Custom design storage/flows

Ecoflow can design a system solution that meets your storage/flow rate needs

INTELLIGENT PRESSURE SEWER



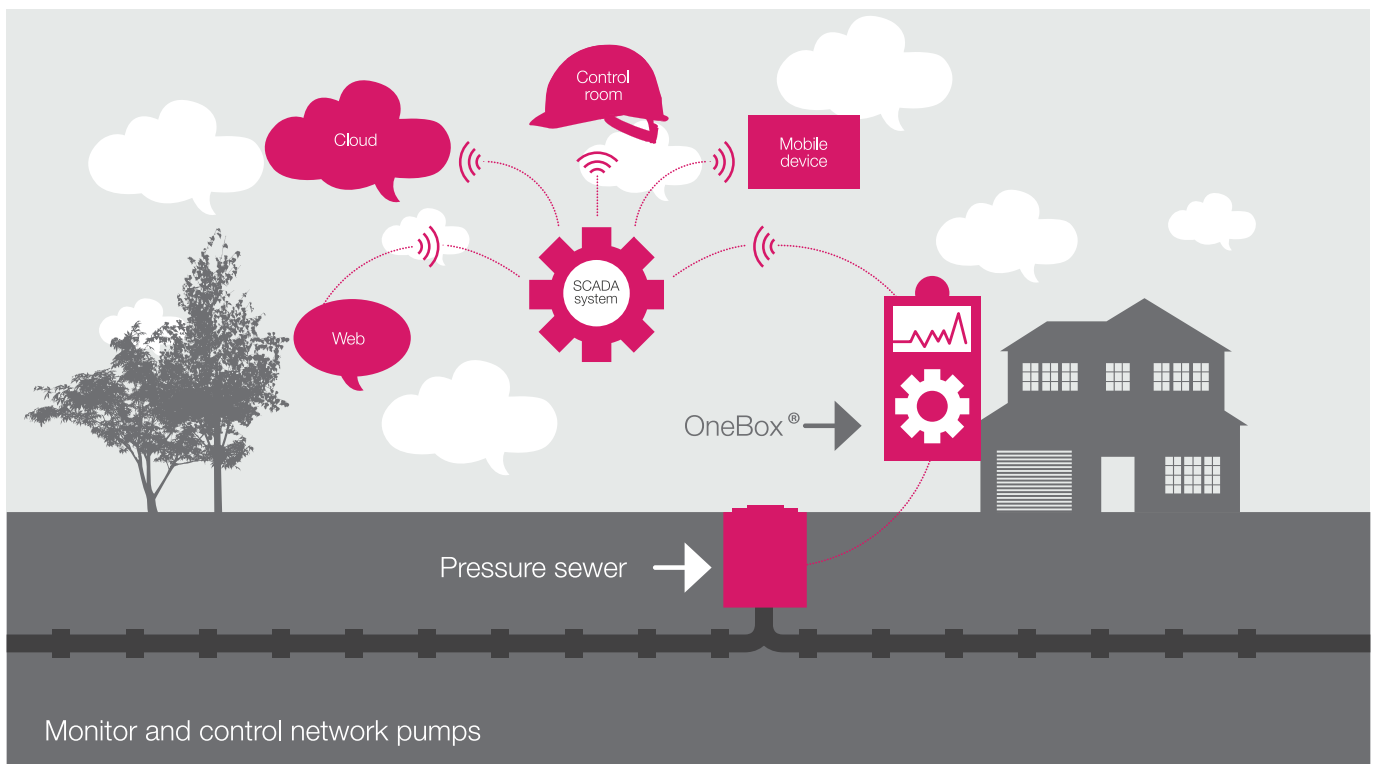
OneBox[®] **iota.**

iota Onebox Controller

Monitor and control your low-pressure sewer system remotely and in real time.

With the Onebox Intelligent Sewer you can monitor the status of the sewer connection to regulate flows and remove peak volumes from the network. You can significantly reduce flows compared to gravity and uncontrolled pressure sewer systems, and also avoid exacerbating overflows downstream during storms.

OneBox Intelligent Sewer provides opportunities for significant savings in capital expenditure and allows growth with the least amount of impact on downstream infrastructure, minimising capacity constraints.



ACCESSORIES

Boundary Kits



Provide a connection point for each individual house. These are especially useful for greenfield development as they eliminate the requirement for live tapings. Ecoflow's boundary kits come with polyethylene stubs pre-welded and pressure-tested to 16Bar.

Flushing Points



Provide an access point to the network for flushing or sucking if the downstream network is isolated. Ecoflow's Flushing point is pre-assembled, and pressure tested to 16Bar.

15 YEARS OF ECOFLOW

20,000 PRESSURE SEWER SYSTEMS INSTALLED

Far North District Council

SEPTIC TANK REPLACEMENT

2009 - Opua
2012 - Opua stage 2
2013 - Awanui
2017 - Kerikeri

Auckland Council

2008 - Point Wells septic tank replacement project
2009 - Failed step system replacement
2010 - Millwater greenfield subdivision
2010 - Huapai failed gravity system replacement
2012 - Matakana septic tank retrofit

Tauranga District Council

2018 - Mataphi (Smart Sewer)

Marlborough District Council

SEPTIC TANK REPLACEMENT

2009 - Grovetown

Mackenzie District Council

SEPTIC TANK REPLACEMENT

2010 - Fairley

Whangarei District Council

SEPTIC TANK REPLACEMENT

2012 - Ruakaka

Western Bay of Plenty District Council

SEPTIC TANK REPLACEMENT

2011 - Maketu
2017 - Te Puna (Smart Sewer)

Rotorua District Council

SEPTIC TANK REPLACEMENT

2007 - Hinemoa Point
2008 - Brunswick/Rotokawa
2010 - Okere Falls
2010 - Lake Okareka
2011 - Hamurana

Christchurch City Council

2011 - Rebuild, replacement of failing gravity system (post-earthquake)
2016 - Ongoing, greenfield development (Smart Sewer)

Dunedin City Council

SEPTIC TANK REPLACEMENT

2010 - Allanton

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CONTACT US FOR A FREE CONSULTATION

AUCKLAND

Physical Address: 5 Ride Way, Albany, Auckland

Postal address: PO Box 300 249, Albany, Auckland 0752

Phone: 09 447 1793

Fax: 09 447 3901

CHRISTCHURCH

Physical Address: 19B Avenger Crescent, Wigram, Christchurch 8042

Phone: 03 349 2506

Email: info@ecoflow.co.nz

Website: www.ecoflow.co.nz