



## About us

The Centre for Ecological Technology Solutions (CELTS) was founded by Associate Professor Aisling (Ash) O'Sullivan in 2006 to fill the research gap in Ecological Engineering within Aotearoa New Zealand. Ecological Engineering/ Pūhanga rauropi solves problems for societies and for the environment by designing solutions based on the interdependency of people and their ecosystems. CELTS is part of the Department of Civil and Natural Resources Engineering / Pūhanga Metarahi me te Rawa Taiao at the University of Canterbury (UC).



*Kia tika, kia pono, kia aroha - doing what is right with integrity and empathy*

## Our Logo

The CELTS' swirl reflects the acronym of the team name and also gives homage to Ash's Gaelic heritage growing up in Éire (Ireland) and now to her adopted homeland in Aotearoa New Zealand. The spiral symbolises the balance of the inner and outer worlds as well as the circularity of life. From nature's clever designs, beautiful things can emerge, like the koru!

## Our Mission

We lead and empower the next generation to design Ecologically-Engineered solutions to rehabilitate water habitats. These solutions are fundamentally based on respecting the interdependency of people and their ecosystems. We use education and impactful research to reverse engineer the escalating and intertwined environmental, social and economic challenges.

## Our Vision

Create clean water design solutions that are holistic, valorise waste resources and are regenerative so align to a circular economy. Our implemented solutions make a measurable and sustained impact in reversing water quality pollution within a generation.

# Our Values



We respect each other and value our differences —*whanaungatanga*



We partner; with each other and with ecosystems/papatūānuku —*tiakitanga*



We communicate clearly and frequently —*kōrero*



We reflect on how we can improve —*whakahautanga*



We champion our talented team —*manaakitanga*



We're passionate about using Ecological Engineering solutions to achieve our mission —*pūhanga rauropi mōhiotanga*

# Our Priorities

1

Build a movement that uses fundamental ecological principles as the basis of engineering problem-solving for sustainable societies.

2

Grow and empower an intergenerational resource capability to safeguard our wellbeing through wise use of natural capital.

3

Make transparent our design solutions through quantitative and qualitative tools.

4

Question and challenge the appropriateness of conventional engineering solutions.

5

Influence policy and standards for environmental, social and ultimately economic gains.

