FLOW

# rivers GROUP

A joint technical interest group of Engineering New Zealand & Water NZ

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**NEWSLETTER** 

Issue 35 | April 2022

# MESSAGE FROM THE CHAIR

Selene Conn



Kia ora koutou, welcome to the first edition of FLOW for 2022! And what a start to the year we've had. A trough moved over the South Island in early February seeing intense rainfall occurring on the west coast, triggering a number of landslides and evacuations in Westport. Ex-TC Dovi followed close on its heels bringing heavy rain and high winds. Dovi caused localised flooding across the country, with several catchments in the Waikato bearing the brunt of the flood effects.

The arrival of Omicron in our community, transition to the red traffic light, and increasing case numbers has regrettably meant we have had to postpose our 'Room for the River' conference for a second time. We have designed the conference for maximum delegate participation and lots of opportunity for robust discussion for how we can effectively implement the 'Room for the River' concept. I would like to thank all of you who provided feedback to our recent survey about how you want to see the conference delivered, and I would like to acknowledge the challenges this second postponement has posed for many of you.

At this point we are looking to reschedule the conference to the 9-11th of November 2022, making this our only conference for 2021/2022. For the latest updates, please visit the conference website. To help make up the lack of a conference event in 2021, we are investigating a series of webinars that we can deliver to you in April to keep the conversations of 'Room for the River' happening across our community.

Our committee met on Monday 14 February to discuss our strategic priorities for the coming year. We have developed three focus areas for the committee this year, and we are excited about the opportunities for all of you to participate in them!

Our three focus areas are:

1. Increase outreach - We will look to develop a programme to increase the visibility of all the amazing river careers that are available in New

Zealand. Working with other existing programmes (such as The Wonder Project) we aim to get river practitioners into primary and secondary schools, as well as increased participation in University Career expos. We will also use our social media channels and FLOW contributions from our members as a vehicle for this effort.

- 2. Increase training opportunities We will look to work with other Engineering New Zealand TIG/SIG's as well as formal training providers to identify existing training opportunities relevant to a diverse range of river careers and look at ways to collate and share these on our website. We will also try to identify gaps in training opportunities and look to deliver informal upskilling opportunities in these areas, relying on the relevant expertise of our members.
- 3. Deliver on our objective "To assist in the integration of the principles of the Treaty of Waitangi, and Te Mana o Te Wai in best practice river management"
  - this will be delivered in three parts:
  - a. Develop a series of webinars to increase an understanding of the Māori worldview, and the motivations of Māori partners in the river work they do.
  - b. Look to increase our engagement with and encourage more Māori and Pacifica participation in the Rivers Group, to increase opportunities for mutual learning.
  - c. Look for ways that we can support and increase the involvement of Māori and Pacifica professionals/researchers and students in Rivers Group activities and into river

As I mentioned, we are really excited about our strategic priorities and are looking forward to finding ways you, as members, can participate and share your wealth of knowledge and experience. So, keep your eyes peeled for updates and calls for support.

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# MESSAGE FROM THE CHAIR

Selene Conn



I would like to sign off with a call to all of you to have a think about stories, research, photos, thoughts and musings that could be included in our quarterly FLOW newsletter. We only have four newsletters a year, but always struggle to get contributions. You have all told us in the past how much you value FLOW, but we rely on you all to help us create content. So, if you have something you'd like to share, get it into to us anytime (rivers.group@engineeringnz.org)! We are more than happy to save up contributions we receive throughout the year to put into the next FLOW.

Keep an eye out for the early email reminders for contributions, keep checking for updates and connect with us through our <u>Website</u>, <u>Facebook</u>, <u>Twitter</u> and <u>LinkedIn</u>.

Nga mihi nui and stay well.

Selene Conn Chair

# INTRODUCING OUR NEW COMMITTEE MEMBER



Amber Nicholson Rivers Group Committee Member

Amber Nicholson (Ngāruahine) is a lecturer at the Auckland University of Technology in the Management Department, having previously worked for ten years as an affiliate to of the Mira Szászy Research Centre for Māori and Pacific Economic Development, University of Auckland. Amber's research explores ways to enhance wellbeing through recognising and honouring the ancestral landscapes in which business operates. Amber focus on the committee is to assist in the strategy to meet the Rivers Group key objective #5 "to assist in the integration of the principles of the Treaty of Waitangi and Te Mana o te Wai in best practice river management."

You can learn more about the whole committee at <a href="https://riversgroup.org.nz/committee/">https://riversgroup.org.nz/committee/</a>

# ARTICLE: KOPURERERUA RIVER REALIGNMENT TO RESTORE PATH OF TAURIKURA

Ko au te awa, Ko te awa ko au (I am the river and the river is me).

In partnership with Ngāi Tamarāwaho and Bay of Plenty Regional Council, Tauranga City Council is leading the work to realign and restore the Kopurererua River. The realignment work will get under way from 1 February 2022, along with the creation of a new cycle path and a new wetland at the Kopurererua Valley Reserve, a 364-hectare inner city reserve in Tauranga.

When Kaleb Winiata, Ngāi Tamarāwaho representative, first heard that the Kopurererua River will be realigned to reinstate the path of his hapū's kaitiaki (guardian) Taurikura, he felt proud, excited and confident about the future ongoing partnership between Ngāi Tamarāwaho and Tauranga City Council.

Taurikura was a chief's daughter who fled her village in shame after refusing to collect water for her koro (grandfather). She turned herself into a ngārara (lizard) and swam the Kopurererua River out to Tauranga Moana. She landed on the rocky island of Karewa, near Matakana, and is the ancestor of the tuatara that live on the island.

"The river is linked to our identity. For the hapū, the Waikareao Estuary and the Kopurererua Valley are collectively regarded as being the kete kai (food baskets) of Ngāi Tamarāwaho," says Kaleb.

"The swamps (once navigable) and the Kopurererua River were valuable for their fish, particularly eels, kahawai, mullet, parore and īnanga (whitebait). Harekeke (flax) and raupo were all important resources for our people in their various kainga (homes) scattered up and down the valley.

"With the realignment of this river, we'll see fish and bird life return to the valley, we'll see the spawning of īnanga, and we'll have a place that everyone can visit and enjoy, from cyclists and walkers, to anglers, community groups and whānau," says Kaleb.



Figure: Kopurererua Valley Reserve

#### A brief history of Kopurererua Valley Reserve

Commission Chair Anne Tolley says February marks a significant milestone in Council's relationship with Ngāi Tamarāwaho.

"The Kopurererua Valley is special to Ngāi Tamarāwaho. Realignment of the Kopurererua River was identified early by the hapū as being important to them. The first stage of this was completed in 2006.

"Tauranga will benefit from this work both culturally and environmentally," says Anne.

Director of Spaces and Places at Tauranga City Council, Paul Dunphy, says this project will continue the work to create green destinations of interest for residents to enjoy on a daily basis, as well as attracting visitors to the city.

"The Kopurererua Valley Reserve is a very precious place in Tauranga Moana."

Katherine Glasgow, Land Management Officer, Bay of Plenty Regional Council says the realignment of the Kopurererua River channel and subsequent creation of wetlands would have significant benefits for the health of both the river and the Waikareao Estuary.

"The water quality will be markedly improved due to a wetland's ability to hold sediment and filter contaminants before entering a harbour.

"The results of this key partnership project will go a long way to enhancing the mauri (life force) of the Kopurererua River and ultimately provide climate change resilience," says Katherine.

Construction will begin from Tuesday 1 February 2022 and is estimated to be completed in 2024.





Figures: Artist impression of the new cycle path and wetland

For more information on the river realignment, and other great things happening at the reserve, visit the Kopurererua Valley Reserve Restoration webpage.

#### Background

The project will deliver the following benefits:

- The realignment of the river channel, and the subsequent creation of a wetland will slow the flow of the water, improving water quality, assisting in flood control, and ultimately providing climate change resilience. Approximately 200,000 plants will be planted to restore the valley and assist with this resilience.
- The realignment of the river will recreate fish and bird habitats, and help to restore the mauri that has been lost over time. It will restore the path followed by Taurikura as she swam out to Tauranga Moana, and finally landed at Karewa Island.

Community access and connection to the reserve will significantly increase.





The NZ Rivers Group is proposing to co-fund a scholarship for a student research project with the dual aims of:

- Attracting top students to pursue careers in river related fields.
- Supporting research projects which address real-world river management questions.

We are looking for proposals from organisations who have a suitable project which would benefit from research as part of a one-year masters research project.

What do partner organisations get out of it?

There will be a student working full time for approximately one year to research the questions you have identified. This is a substantial amount of research, with expert supervision from university academic staff, which can help deliver knowledge of value to your organisation.

This provides a potential pathway to recruit skilled students with relevant post-graduate qualifications.

This strengthens relationships with local university researchers.

What is required from a partner organisation?

An appropriate research idea: This could be anything river related. For example, a Regional Council river engineering team who would like some physical modelling of different erosion protection solutions, a community group who would like to map locations best suited to river restoration, or an engineering consultancy who would like to develop automated analysis workflows for an aspect of the flood modelling process.

Co-funding toward the research scholarship: These scholarships would allocate \$30k to cover university fees, some research costs (e.g. fieldwork, travel, equipment) and a student stipend for one year of research. The Rivers Group can co-fund up to approximately 50% of this cost.

Optionally you may also want to provide some co-supervision of the student project, or potentially host them in your organisation for part of their project – we would encourage both.

#### Timeline:

Before 30 June 2022:

- Contact us with your idea for a research project (<u>rivers.group@engineeringnz.org</u> or any of the committee members).
- Identify potential academic supervisors and work with them to flesh out the project scope. If required, we can help identify an appropriate supervisor (you may already have a supervisor in mind – that's fine).

Between June and September 2022:

- 3. We select a project(s) to co-fund
- 4. For successful project(s) the university works with the co-funding organisation to recruit/identify an appropriate student

Summer 2022-23:

Project starts for a duration of up to 1 year. An appropriate start date could be the end of the 2022 academic year (to allow fieldwork to take place over the summer), or at the start of Semester 1 (February 2023).

# GENERAL INFORMATION

# Call for contributions

For our newsletter FLOW we are always looking for articles from our membership. Please consider submitting an article, case study, update or notice for the next issue of FLOW.

The upcoming submission deadlines for 2022 are as follows:

Issue	#	Deadline for contributions
June 2022 issue	#36	Monday, 16 May 2022
September 2022 issue	#37	Monday, 15 August 2022
December 2022 issue	#38	Monday, 14 November 2022

Please format your contribution as follows:

- Length of around 500 1,500 words, preferably in Microsoft Word format (Articles should include: title, name of the author(s), affiliation(s), and section headings; illustrations and/or tables are strongly encouraged)
- If possible, attach images in jpg (file size 300KB-1MB) and at high-resolution separately
- Provide credits and captions for your images

If you have articles which are longer, please email us and we will work out a way forward together with you.

Please email <u>rivers.group@engineeringnz.org</u> to submit your FLOW contributions or any news you want to share. We look forward to receiving your contribution.

# Rivers Group Manatiaki Kōawa Mission Statement

The New Zealand Rivers Group Manatiaki Kōawa was formed in 2009 to provide a forum for 'Working together to promote good river management'. It is a place for people with an interest in rivers, flood risk management and the operational and environmental issues of catchments and river systems to come together.

We currently have over 300 members, and promote a multi-disciplinary approach to river management, reflecting cultural and societal diversity in an integrated and holistic manner. Our membership reflects this, with our members coming from a wide range of river management, science and engineering, and planning backgrounds - working as consultants, or in local, regional and central government, research institutes and universities.

New members can sign up here https://riversgroup.org.nz/joining-the-rivers-group/.

# RIVERS GROUP COMMITTEE MEMBERS

#### **Chair:**

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### **Secretary:**

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