manatiaki kōawa

rivers GROUP

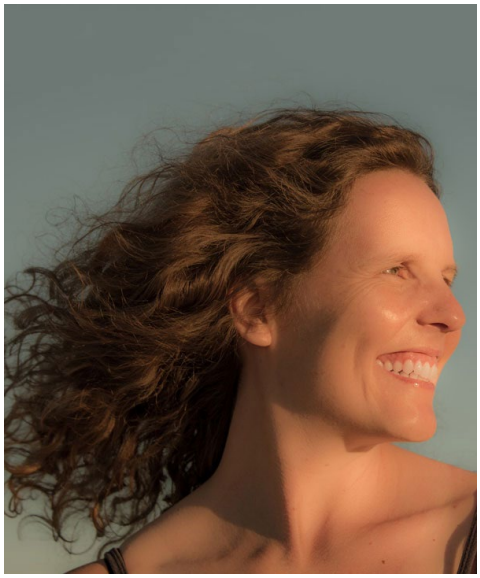
A joint technical interest group of Engineering New Zealand & Water NZ

INSIDE THIS ISSUE

NEWSLETTER

Issue 25 | April 2019

FROM THE CHAIR
Heide Friedrich



A warm welcome to our new members on behalf of the Rivers Group Committee. We had, in February, our annual whole-day committee meeting in Wellington, and I'd like to use this opportunity to introduce your 2019 Rivers Group Committee:

Chair: Heide Friedrich
Vice Chair: Laddie Kuta
Treasurer: Philip Wallace
Secretary: Edwin Baynes

Other Committee members:

Amanda Death
Brian Kouvelis
Graeme Campbell
Jo Hoyle
Jon Bell
Kyle Christensen
Sarah Basheer
Selene Conn
Trevor James
Verity Kirstein
Vicki McEnaney
Will Conley

Our first major event in 2019 is the Rivers Group and River Managers Workshop **10-11 April** in Whakatane. You can register here, and as a Rivers Group member pay a reduced registration fee. I'm looking forward to see you at the workshop, and invite you to come and have a chat with me. We always want to ensure that the groups' priorities are aligned with the desires of the membership and that's an opportunity for you to have direct input.

Our abstract deadline for submitting your work or projects for presentation at our annual conference is approaching quickly on **Friday 22 March**. The Rivers Group is bringing the River, Coastal and Estuarine Morphodynamics Symposium (RCEM2019) to New Zealand for the first time! We hope you can join us for the whole duration of the conference from **18-21 November 2019**. We have a Rivers Group day on Wednesday 20 November, for which you can also get a day registration if you can't join us for the whole duration. And we hope to see you also at the fieldtrip on Thursday.

Abstract submissions and registrations are open, and we are looking forward to see you in Auckland in November.
We are currently working on other 2019 events, keep watching this space.

Connect with us on facebook, and if you have articles for our newsletter, please contact Brian Kouvelis, our newsletter editor, directly.

I also would like to thank our 2018 Committee, and especially 2018 Chair Mark Hooker, for their contributions.

On behalf of the Rivers Group Committee,

Heide Friedrich
Chair

INTRODUCING OUR NEW COMMITTEE MEMBERS

Edwin Baynes, University of Auckland

Secretary

Edwin is a Post-Doctoral Research Fellow at the University of Auckland, having recently moved to New Zealand from Europe where he held academic research positions in both the UK and France. His current research interests include understanding how rivers respond in the aftermath of extreme events (e.g., storms/earthquakes) and how interactions between flow hydraulics and sediment transport processes come together to control the morphology of rivers. He can be found either in the field or in the laboratory, where he uses flume experiments to investigate the physical processes occurring in natural settings in a controlled environment.

Philip Wallace, DHI Water and Environment Ltd

Treasurer

Philip Wallace is a Principal Engineer with DHI Water and Environment Ltd., specialising in flood hazard modelling and investigations. He has over 30 years of experience in river engineering , river modelling and in floodplain management policy. Previously he has worked for the Wellington Regional Council, the Bay of Plenty Regional Council, the Wellington City Council and a range of consultancies. During his career, he has developed models for many river systems throughout New Zealand. He holds a BE (Hons) degree in civil engineering from the University of Auckland and an MSc (Hons) degree in resource management from the University of Canterbury.
As well as having a professional fascination with rivers, he values the role that river environments have as places of beauty and recreation.

Verity Kirstein, Canterbury Regional Council

Membership

Verity is a geographer and civil engineer currently working at Canterbury Regional Council based in Christchurch as a Senior River Engineer. Verity's 15 years of experience is in flood and coastal risk management, river engineering and asset management, in England and New Zealand with local authorities and a government body. Her current focus involves overseeing gravel extraction across the Canterbury region as a method of managing flood and erosion hazards.
Verity has more recently started to experience the recreational values rivers have to offer by completing a beginner's white-water kayaking course. Verity has been a member of the Rivers Group since 2016 and has recently joined the committee.

Trevor James, Tasman District Council

Trevor has been involved in monitoring and management of river water quality and aquatic ecology for almost 27 years. He has authored many State of the Environment reports and produced a communications plan and widely acclaimed video on these topics. In addition to running Council's River Water Quality, Freshwater Fish, Estuary and Bathing Water Quality Monitoring Programmes, and advice to resource consent and resource management planning (including collaborative governance groups) he has been very active in organizing events to raise awareness of issues facing our waterways. He has been on the organizing committee of two Freshwater Science Society conferences (chairperson for one of these), organized and presented at over 35 public events in Tasman District the last 15 years on river health. For Council's wetland mapping and protection programme he facilitated and presented at a series of seven, often heated, meetings with wetland owners. In the last 18 years he has developed programmes for assessing fish passage at in-stream structures on a regional scale. He was chairperson on the organizing committee of New Zealand's first conference on fish passage in 2013. Every year for almost the past decade he has run a programme to remediate on almost 100 fish passage barriers per year. In 2016 he organized and presented at the opening of World Fish Migration Day, in Richmond.

The New Zealand Water Model (NZWaM)
A new water modelling approach

Models have an important role to play in water management in New Zealand.

To be useful, models need to be both flexible and complex; flexible because they are needed for a wide range of purposes, and complex because they need to simulate complex natural and man-made systems (Figure 1). Ideally, these models will have a modular design, so that sub-models that represent hydrological, climatic, water quality, ecological and other processes can be added.

NIWA is leading the development of the New Zealand Water Model (NZWaM). NZWaM is an integrated platform that will link a wide range of environmental data into a modular modeling system. The physical domain of NZWaM extends from the top of the atmosphere to rivers, lakes, aquifers and estuaries (Figure 1).

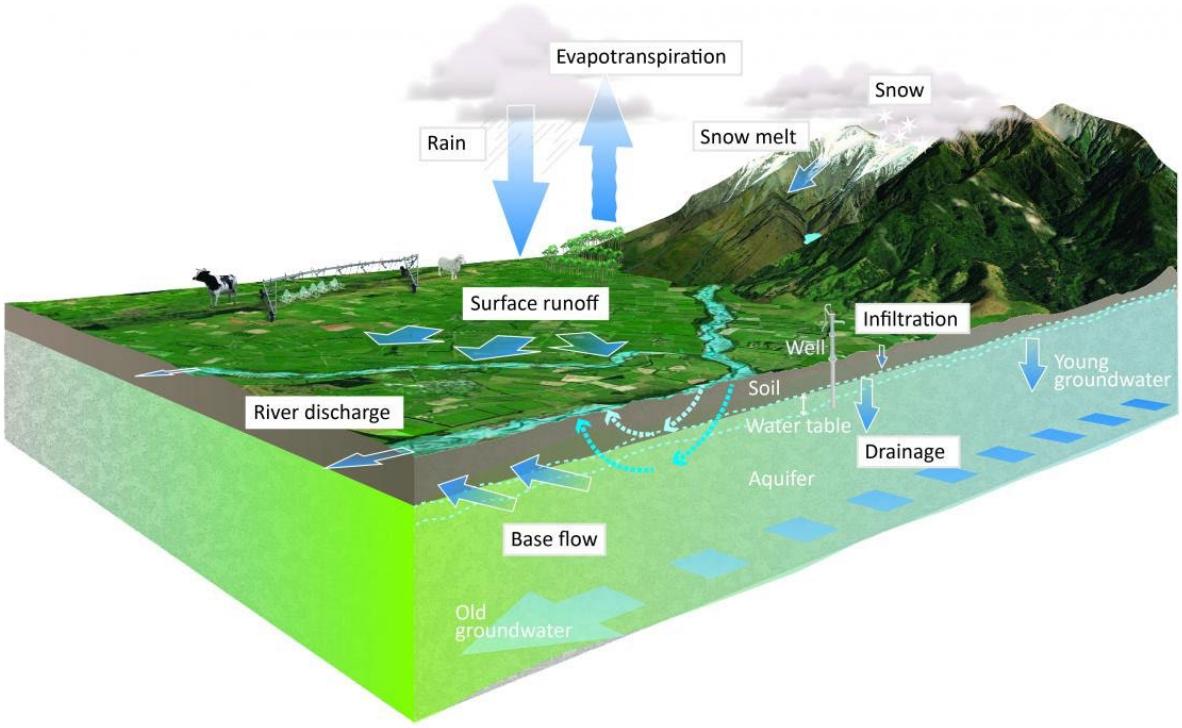


Figure 1. *Hydrological processes that are represented in the New Zealand Water Model.*

NZ Water Model - Hydrology

The New Zealand Water Model – Hydrology (NZWaM-Hydro) will be the first component of the NZWaM platform completed. NZWaM-Hydro is being developed via a partnership between NIWA, GNS Science, Manaaki Whenua - Landcare Research, Ministry for the Environment, Ministry for Primary Industries, Environment Southland, Horizons Regional Council and Gisborne District Council.

NZWaM-Hydro will provide essential hydrological information for land and water management and planning at national, regional, catchment, and sub-catchment scales in New Zealand. NZWaM-Hydro is scalable and the hydrological relationships in the model are transferable between locations, which make it suitable for many different applications. Potential applications include national and regional policy development, water allocation and flow setting, water accounting, and flow, flood and drought forecasting (particularly in ungauged catchments). The modular design of NZWaM-Hydro will allow coupling to sub-models that predict water quality (NZWaM-Water Quality) and ecological conditions (NZWaM-Ecology) as these are developed from other research NIWA is undertaking.

(Visit NZWaM- Hydro Use and Applications for the full list of potential uses of the model)

Key Components

Figure 2 illustrates the key components of NZWaM-Hydro. At the core of NZWaM-Hydro is an integrated and dynamic geospatial database, the hydro-geofabric. The hydro-geofabric will store harmonised, standardised and up-to-date geospatial information. This information includes spatial and temporal data from direct observations (e.g., soils, geology, land use, climate), and derived parameters (e.g., soil moisture content at saturation, hydraulic conductivity in different hydro-geological layers). It will also include an updated digital river network with finer spatial resolution than the previous version, and surface and groundwater isotope data that is being collected by NIWA in collaboration with regional and unitary councils.

The surface water flow model of NZWaM-Hydro is based on NIWA's TopNet rainfall-runoff model, which is widely used for environmental flow setting and for evaluating water resource availability. This surface water flow model will represent evaporation, soil-moisture and groundwater recharge processes using the latest soil, landcover and climate data. It will be tested across a range of catchment types and conditions to maximise its applicability to all regions of the country.

The groundwater flow model is based on the GNS Equilibrium Water Table model. Its role is to predict aquifer hydraulic properties and groundwater fluxes. To develop this model, we bring together data in the hydro-geofabric, our understanding of losing and gaining stream reaches, and water-table fluctuations from the GNS model.

The water-age model is being developed with current and new surface and ground water isotope datasets. The isotope data will be used to identify water from different origins (e.g., rainfall, shallow and deep groundwater), which will allow identification of flow pathways within and between river networks and aquifers.

The surface water and groundwater models are coupled to represent water exchange between land, surfacewater bodies and aquifers, and the water age model specifies the location and rate of water exchange (Figure 2). The three coupled models run on supercomputers at NIWA's High Performance Computing facility.

Model benchmarking will involve the development and implementation of state-of-the-art operational methods to test the three models described above with respect to observed surface and groundwater data. Guidance on the potential uses and limitations associated with the models will be produced.

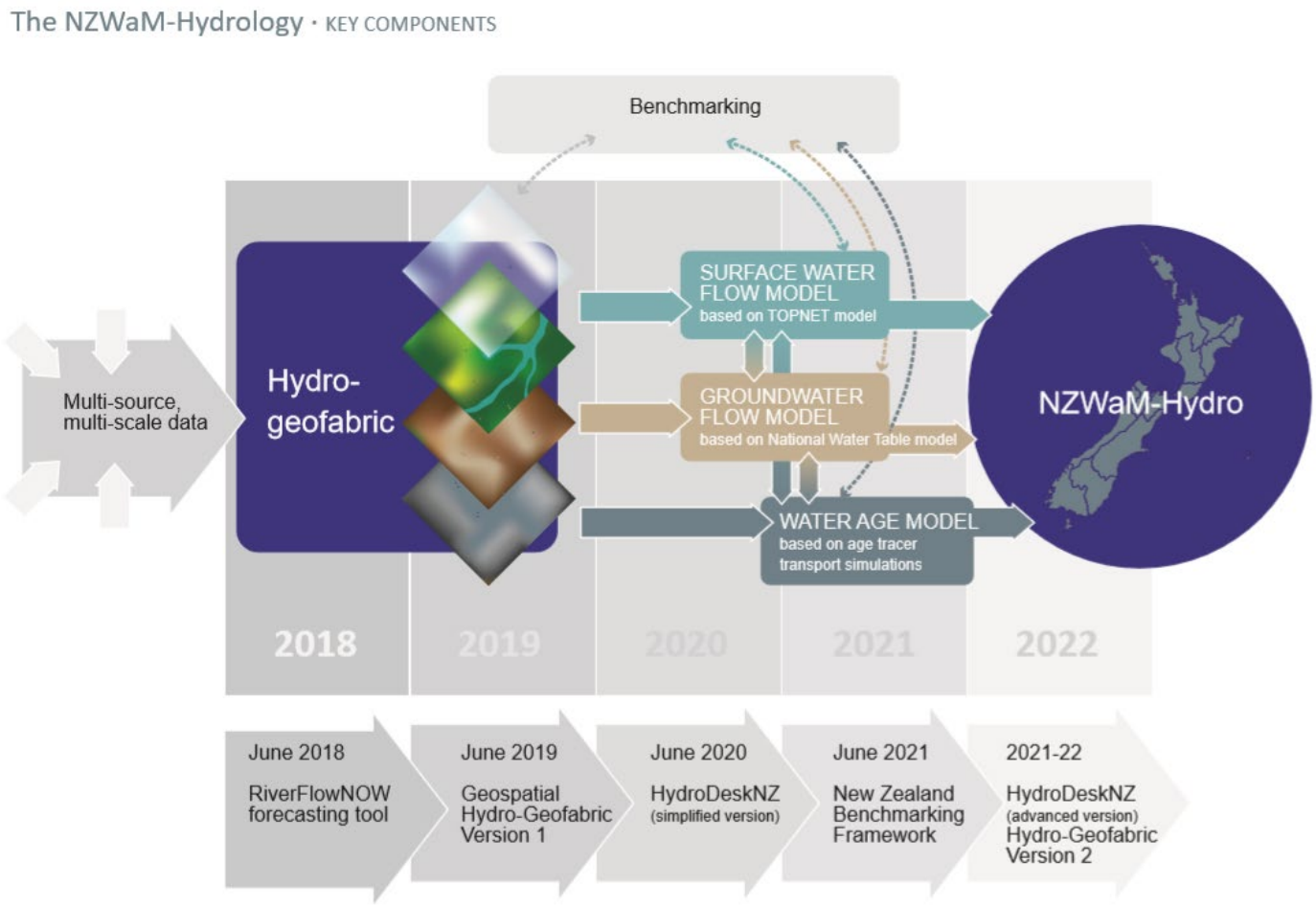


Figure 2. *Key components of the NZWaM-Hydro modelling framework.*

River flow forecasting

In addition to NZWaM-Hydro, NIWA is developing an operational river flow forecasting system. This system will provide hourly forecasts, two days in advance, for more than 60,000 rivers across New Zealand. The forecasts will delivered and displayed as flow categories, as shown in Figure 3. The categories are based on long-term flow simulations, which were generated from 40 years of climate records from hundreds of sites in NIWA's Virtual Climate Station Network. The forecasting operation uses NIWA's High Performance Computing facility to link the TopNet model with high-resolution weather model output and satellite and climate station data (Figure 3). A working group of stakeholders has been established to assess the river forecast information and direct ongoing model development and innovation strategies.

Future plans

In 2019, data from the hydro-geofabric will be used for a conceptualisation of groundwater systems, which will improve our predictions of variation in groundwater levels in space and time. A user-interface, 'NZWaMHydroDesk', will be released by 2020, and will allow a wide range of users to access data and model simulations held within the hydro-geofabric. All components of NZWaM-Hydro are scheduled for completion by 2022, with a period of data quality assurance and benchmarking, and improvements to both the user interface and hydro-geofabric.

As NZWaM-Hydro nears completion, new sub-models will be added to the NZWaM platform to extend its capabilities beyond hydrological predictions. The range of potential sub-models is very broad; the only constraint is that sub-models can be driven by output from NZWaM-Hydro (e.g., time-series of river-flows and groundwater levels). Sub-models under consideration include hydraulic habitat models for river biota to inform environmental flow-setting, models for predicting contaminant loads to water bodies under different land-use and climate scenarios, erosion and sediment transport models, and models that predict the extent and severity of land-slides, coastal inundation and other natural hazards.

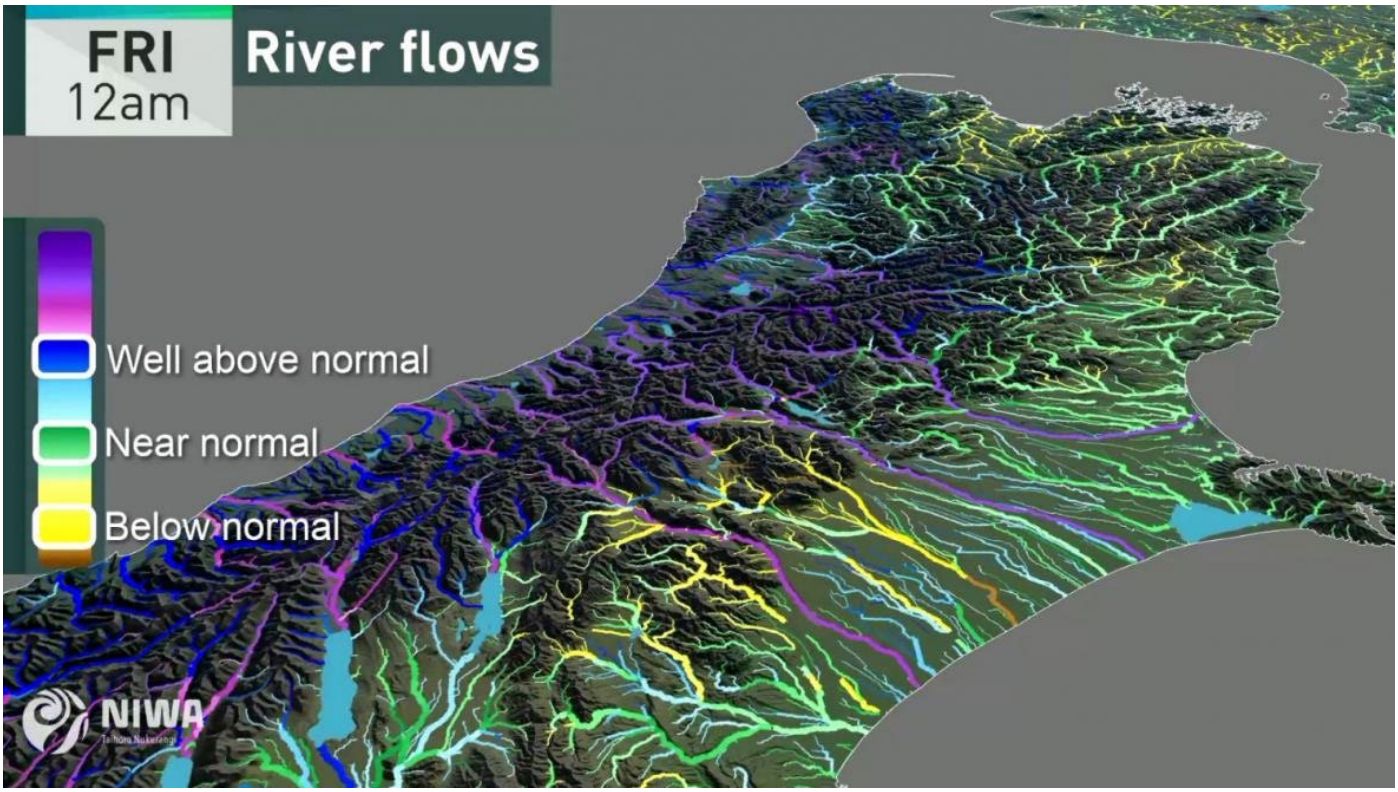


Figure 3. *Frame from the video generated from the operational river flow forecast system.*

Contact:
Dr Christian Zammit, Hydrologist.

Teamwork makes the stream work

Central Hawke's Bay students are following their passions by restoring the local river and making their school a better place to be.

The Mangaotai creek wraps around three quarters of Argyll East School and provides plenty of outdoor learning opportunities for the 70 students who attend the school.

Students often lead environmental projects and are assisted by their teachers. Their most recent endeavour has been to replant the area surrounding the creek and learn about riparian margins.

Teacher Rose Hay says students began by requesting the regional council to remove the cracked willow that was hindering the flow of the Mangaotai creek.

Noticing there were many weeds, such as convolvulus, blackberry and privet, remaining in the creek area, they formed a Mangaotai committee to spearhead the rest of the project.

"It's very science-based where the children are looking at the flora and the fauna, identifying what should grow and live there, so looking at the biodiversity of the area, looking at sustainability and taking on that kaitiaki role of looking after our land and our awa, our river."

The school is surrounded by two and a half hectares of farmland. Its environmental focus began as early as 2005, when a farm club was formed to give children the opportunity to use the school land as a learning experience, alongside farmers in the area. Students learned to raise calves and lambs and then sold them at the local stock sale. The money raised was used to upgrade fencing and purchase more stock.

After the school's board removed macrocarpa trees another environmental project to create wetlands began in an area quite close to the classrooms.

"The kids said, 'What are we going to do with all the weeds now growing here?'. Then we brought in an expert and did a plan where the kids worked out what they wanted there and designed pathways and bridges."

Being passionate about the environment has helped students with their learning in many areas of the curriculum, Rose says.

"Starting with the farm club all those years ago, it's just pure engagement of children," she says.

"We created a pontoon and the eel viewing platform, so that involved a lot of technology.

"English is covered as children are researching, interviewing experts, taking visitors around, writing signs and writing to sponsors.

"There's the Māori and te reo Māori aspect where we're looking at the culture and the history of the area from the Māori perspective as well as Pākehā influence. We learned the names in Māori of the animals and the plants and what Māori use them for.

"As numeracy goes it's the measuring of the area, doing the path and working out how much wood and gravel and mulch we need."

Continued on next page >>

Jonty helps create paths in the wetland by rolling the limestone.

Students learned about riparian margins and planting through an inquiry approach.

This environmental focus is now included in the school's curriculum and is an integral part of teacher planning, Rose says. The key competencies of thinking, relating to others, managing themselves and contributing, are reflected in the project management aspect of the learning.

The next step is to continue working on the corridors of planting and to maintain the areas that have already been planted, she says.

"It's very easy to plant, but it's maintaining it. The kids are really good at saying, 'It's really weedy out there, we need to do something about it.'"

In terms of fauna, students are continuing to learn about raising farm animals and are also learning about trapping pests, which reflects a localised curriculum.

"We had calves last year, so that was a great experience for some of the town children. We have chickens and we want to get some eggs and raise some chooks this year."

Students gained literacy skills by writing monthly reports on the calves' progress and articles for the weekly school newsletter.

Through an inquiry approach, students researched whether they would be able to have chickens at the school. Their inquiry covered breeds of chicken, cost of food, selling of eggs, best feed, coop design and construction. They built models of coops and presented these to the board. This helped them gain the technological skills which then allowed them to build the final coop with the help of an ex-principal and a grandparent.

Community involvement

Principal Julie Thelwall says students have a real love for the environment and really care for it.

"Their understanding and their knowledge of plants and animals in the environment is fantastic; it's amazing to hear them talk to visitors to the school and I learn from them as I walk around too," she says.

"Through having reflection days about our environment the kids have developed their own ideas for sustainability that we try to embed throughout the school; that's always happening and their creativity comes through in solving different problems that might arise."

Another important aspect of the environmental focus is the community involvement, Julie says.

As part of the respect and manaakitanga areas of the curriculum, the school gives guests a gift as they leave.

"It's important for the kids to have their families involved, working together with the wider community.

"A lot of the trees that they planted were from seeds that they've collected themselves. Today we've still got lots of trees here to be able to give gifts that have come actually from the kids growing the trees themselves."

Argyll East School won a $500 grant from the Rivers Engineer Group for their riparian project, to go towards eliminating the plant pest problem on the banks of the Mangaotai and plant native flora.

Students researched which plants could be used to form a riparian margin and the vertebrates (trout, native fish, kōura and tuna) that lived in the stream.

Once the plantings are fully established, the school expects the creek will become a healthy waterway, as data from stream monitoring would suggest.

Jonty, Archie and Regan climb the cracked willow blocking the Mangaotai.

WHAT STUDENTS ARE SAYING...

GABRIELLA

We had to organise with parents and people to see how we could help make the Mangaotai the cleanest it could be. We cut down the willows and cleared the area and we also had to work as a team and include other people's input.

I think it's important because the younger kids will be able to spread the message about taking care of our environment and it's also important to make our school look and feel nice. It also teaches us teamwork and to apply yourself at anything you can do.

I learned to look after our environment while it's still healthy, clean and a happy place to be in. I also learned that if you have your mind set you can achieve if you work as a team and some people don't have a Mangaotai or that land at their school so we should look after it, because if we're not careful the waterways will be filled with rubbish.

BAXTER

I was in the original Mangaotai committee so we were the ones who designed it and asked the playgroup and all the classes what they wanted. We made up a plan of what we wanted and then we asked to build it and did it.

I think it was important that everyone got involved and helped out and helped be part of our team.

I learned about Māori history, about the people who came here and how they got their food and water and all about the animals and the pests and the weeds and the plants that we had to get rid of or plant.

Our next step is to connect the Mangaotai to the wetland to create a corridor for the animals and birds to go from one place to another.

Students build bridges that span the wettest part of the wetland.

"The kids are really good at saying, 'It's really weedy out there, we need to do something about it'."

William and Cam rake the limestone over the weedmat.

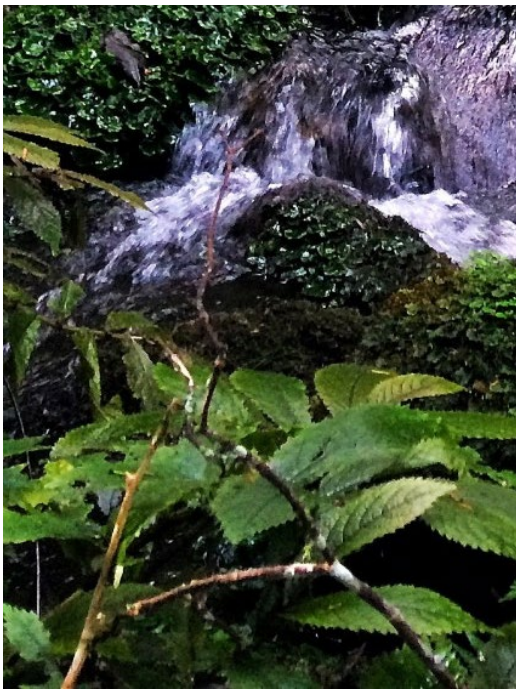
NZ RIVERS GROUP PHOTO COMPETITION... AND THE WINNERS ARE!!

1st Place: Joel Wallan

Waimakariri Sunrise

2nd Place: Jo Hoyle

Maruia magic



3rd Place:

Ashlee Lawrence

Pipiwai Crane Road

WHAT'S BEEN

WHAKATANE WORKSHOP

The Rivers Group and River Managers Forum recently held a joint Workshop in Whakatāne "Lessons learnt from the large flood events in the Bay of Plenty Region". It was well attended by River Managers, land management officers, river engineers, river scientists, hydrologists, and specialists from all over the country. Hearing about the events leading up to some of the large floods and being put 'inside the flood room' was a fantastic experience for all of us, and hearing about what worked and what needed improvement provided us all with some learnings to take back to our respective places of work. It was also a fantastic experience to be walked through the independent review process and findings for the Edgecumbe and Ngongotaha flood events by Kyle Christensen. A big thank you to all those who attended, to the River Managers Forum, and Graeme Campbell, for seeding the idea for the workshop, and to Bay of Plenty Regional Council, especially Mark Townsend, for sharing their stories and experiences.

Presentations from the workshop are available on the Rivers Group website – go to the member only area (https://riversgroup.org.nz/members-area/login/) to login. If you haven't registered for the members only area yet, please follow the instructions in this link https://riversgroup.org.nz/register/ , its free to all Rivers Group members

ENGNZ RIVERS GROUP AND RCEM INTERNATIONAL CONFERENCE 2019

REGIONAL AND STUDENT EVENTS

Regional and student events are currently being finalised for the year. These will be posted on the website and the Rivers Group Social media sites.

A schedule of these futures events will also be included in the next newsletter. In the meantime be sure to check the Rivers Group website

NZ RIVERS GROUP MEMBERS HONOURED AS FELLOWS OF ENG NZ

The EngNZ Rivers group would like to congratulate NZ Rivers Group members David Bouma and Sioban Hartwellbeing honoured as Fellows of EngNZ at the recent EngNZ Annual forum.

David Bouma

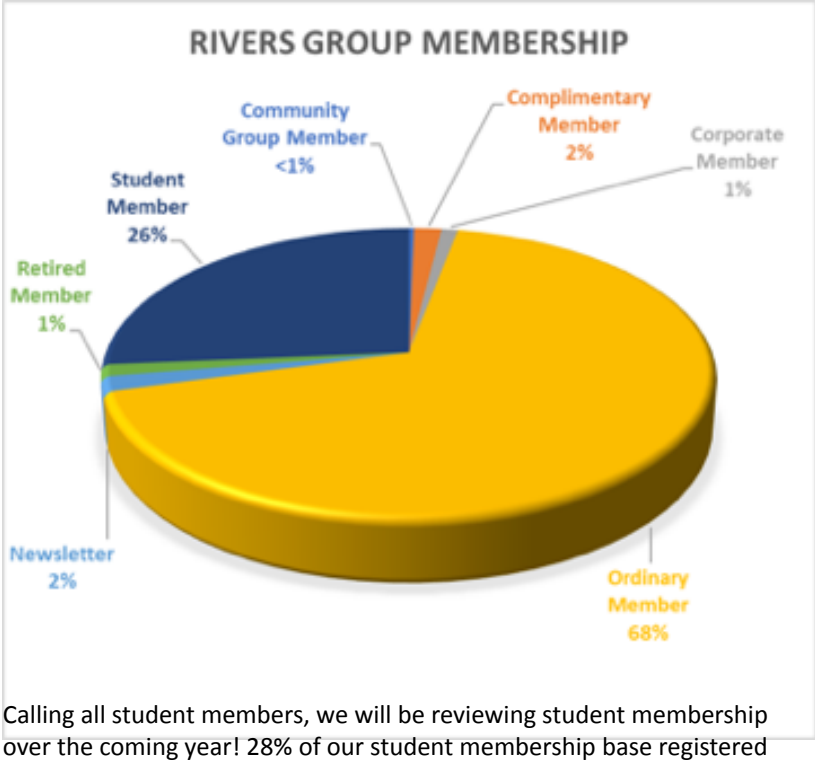
David Bouma has 31 years' experience in water resources, civil and environmental engineering projects in New Zealand, South East Asia, the Pacific and Africa. He has made a significant contribution to Tonkin + Taylor and its clients through his project work and various management and leadership roles. He served on the management committee of the New Zealand Society of Large Dams for eight years and has recently been elected as a member of the International Commission on Large Dams Technical Committee on Levees.

Sioban Hartwell

Sioban Hartwell has held a number of leadership roles in the water industry, and currently leads GHD's water business in New Zealand. She is a past president of Water New Zealand and currently sits on the Straterra Board. Sioban's career has covered a wide range of water infrastructure projects, and she is particularly known for her technical strength in urban stormwater and minewater management. She has a strong track record of organisational and professional leadership, and is an advocate for diversity and inclusion in the workplace.

MEMBERSHIP UPDATE

Membership Update: Did you know that our membership comprises of 7 different categories and that 68% of our membership is made up of (extra) ordinary members?



Calling all student members, we will be reviewing student membership over the coming year! 28% of our student membership base registered back in 2009. 10 years on and are you still a student? If you have graduated we welcome you to become a fully-fledged member of the group. For details on the membership classes please refer to our website https://riversgroup.org.nz/joining-the-rivers-group/

Our membership total as of April is 304 members. The membership base has grown well since our formation in 2009 with an average of 15 new people per year to the group over the last 5 years. We are keen to see our numbers continue to grow so do mention the group to friends, colleagues and associates. Having a growing membership base increases the fees collected which fund our events including the annual conference, the Arch Campbell Award, and grants for research.

On the subject of fees, this is a call out to those of you that have not paid your annual subscription. There are 29 members who are unpaid. Be a good Lannister and always pay your debts. We urge you to settle your outstanding fees as soon as you can and soon after your annual invoice is issued each year. Further correspondence will be sent to the unpaid group to remind them of their financial commitments.

JOB VACANCIES

Job Details:
Reference #6512 **Posted on:** 10 April 2019 **Closes:** 3 May 2019 12:00
Location(s): Newmarket, Hamilton, Wellington, Christchurch
Expertise: Ecology Job Level: Senior Professional (8-10 years), Specialist (11-14 years) Senior Specialist (15 years +)
Work Type: Full time, permanennt

Principal / Senior Freshwater + Terrestrial Ecologists – AKL, HAM, WGTN or CHC

Life at T+T is waking up in the morning and actually looking forward to getting into the office or out in the field. Hard to believe right? Ultimately, we like to have fun and be challenged every day, which we believe contributes to our success.

We are proud to have the biggest Ecology consulting team in New Zealand with a diverse range of technical ecological specialists, and with that comes great collaboration and opportunities for our staff! We are currently on the hunt for Principal or Senior Freshwater and Terrestrial Ecologists that are looking at taking the next step in their career and who are keen to join our team and be part of our exciting journey.

What will you be doing?

You will enjoy the professional freedom and independence of running your own projects under the guidance of and with the support of some of the best ecologists in the country. At Tonkin + Taylor you'll be working on challenging projects right from the start with the opportunity to contribute to great ecological outcomes, work directly with clients and to manage your own projects and work programme. The sort of work you can expect to be involved in or to manage are:

- A range of scientific and ecological services and applications in a variety of freshwater, terrestrial and wetland ecosystems, including habitat and vegetation mapping, species surveys, and species translocation;
- Assessments of Environmental Effects (AEE) on large multi-disciplinary projects across transport, water, industry, waste and energy sectors;
- Development and implementation of Ecological Management Plans for a range of ecosystem types and associated species;
- Development and implementation of water quality monitoring programmes;
- Ecology related regulatory policy and integrated scientific, engineering and ecological services;
- Sustainable development (conservation, ecosystem services, biodiversity, urban development, agricultural intensification) initiatives and operations at a regional and national and international levels, e.g. climate change adaptation reports for nations in the South Pacific; and
- Science innovation for improved resource management, e.g. inputs into guidelines and policy surrounding biodiversity offsets.

About you:

- As a minimum MSc degree in Ecology or equivalent experience
- 8+ years professional work experience in a regulatory, research and / or consulting environment
- Excellent written and spoken English language skills
- Strong analytical and mathematical abilities
- Solution focused with problem solving skills and initiative
- Attention to detail and high presentation and professional standards
- A desire work in large and supportive Ecology team with a diversity of skills sets

We believe strongly in investing in our people and there will be development opportunities in this role. The role could involve a mix of team leadership, project management and technical work depending on where your career aspirations lie. We will provide you with training, and we also promote an open culture where innovation and lateral thinking is encouraged.

We offer at each of our office locations an annual wellbeing allowance and wellbeing programme, an active social club, a personalised learning and development plan and a stimulating and supporting working environment. We are proud of our fun, supportive, and high-achieving company culture.

Every day we embrace our company values of Care, Creativity, Excellence, Courage, Collaboration, Zeal.

APPLY NOW, or if you would like any more information about this position, please contact Dee Johnston djohnston@tonkintaylor.co.nz

Water Resources Modelling Engineer - DHI Water and Environment Ltd.

DHI is a global and independent company dedicated to working on challenges within the fields of water, environment and health. Within these fields, we provide a wide range of consulting, research and policy services as well as leading edge technologies and products. At DHI, we are constantly looking for passionate and talented people who are eager to join us.

By joining DHI, you will not only become part of a dynamic and collaborative global team of experts; you will be empowered to innovate, engage and grow in your area of expertise. DHI is committed to disseminate our knowledge effectively and across our worldwide network of offices.

Do you have strong water engineering skills and interest in water modelling? Do you have good communication skills and enjoy supporting both colleagues and customers? Would you like to be part of a vibrant team operating from our three offices, in Auckland, Wellington and Christchurch? If yes, we can offer you an exciting position, great working environment and the opportunity to shape and develop your career.

The Role

As a Water Resources Modelling Engineer you will be involved in a variety of water resources modelling projects we currently offer and carry out for our clients around New Zealand. We work with the governmental organizations, local and regional authorities, cities and towns and industry. Our water resources projects cover the wide-ranging topics such as flood risk assessment, real-time flood forecasting, river operations, integrated catchment assessments and water quality. You will be a part of a friendly and diverse team striving to deliver to our clients' needs. You will need to be able to travel, both in NZ and internationally.

Responsibilities

- Working on a wide range of water resources projects including detailed flood modelling and real time flood forecasting;
- Assisting with software and services support enquiries as required;
- Helping to promote and deliver innovative solutions tailored to specific client needs;
- Helping in various types of projects as required.

Education and Experience

- A Bachelor's degree or higher in Civil Engineering, Environmental Engineering or related field;
- Preferably 2 to 4 years of working experience.
- Preferably 1 to 3 years' experience using MIKE software

Skills and qualifications needed to succeed in the job

- Experience in using MIKE software products, MIKE FLOOD in particular;
- Experience in using ESRI ArcMap; ArcGIS
- The ability to work individually as well as in a team;
- Good communication and interpersonal skills;
- Demonstrated experience and knowledge in hydraulics and or hydrology;
- A high standard of both oral and written English;
- Experience with (or Interest in) algorithms or software development will be an advantage;
- Postgraduate degree will be considered an asset.

DHI Offers

- A job in an international recognised company with a premium brand;
- A great opportunity to utilise and expand your skills by working on challenging leading-edge projects;
- A unique chance to work with highly motivated colleagues from all around the world;
- Continued career and skills development;
- Competitive compensations and flexible working conditions;
- Five weeks of annual leave.

Office Location

You will be based in our Wellington office.

Applications / Next Step

Please submit your application including Cover Letter and CV.

Deadline for application is 29th April 2019. For further information please contact Suzana Shipton, +64 21 508005, szs@dhigroup.com.

The application form will include these questions:

- Which of the following statements best describes your right to work in New Zealand?
- What's your expected annual base salary?
- How much notice are you required to give your current employer?
- Have you completed a qualification in engineering?