

Modelling SIG News

VOLUME 2

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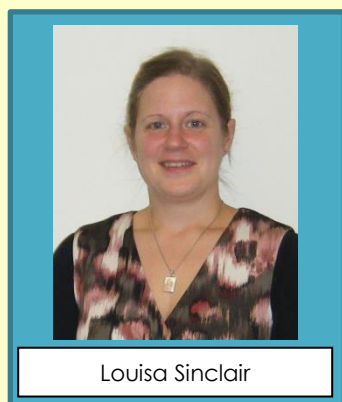
Trying something new

The Modelling Special Interest Group (SIG) has been talking about a newsletter for over a year and here is our second issue. We are keen to hear your thoughts on it and also what you would like to see in future editions.

Follow us online at:

http://www.waternz.org.nz/Category?Action=View&Category_id=328

Committee Member Profile Louisa Sinclair – Modelling SIG Chair



Happy New Year from the Modelling SIG Committee. We hope you all had a nice relaxing break and made the most of the weather.

I want to take this opportunity to introduce myself. I attended Queen's University, Belfast, UK for 4 years to complete a Masters in Engineering. During my studies I made the most of three four month summer placements working for Northern Ireland Water, a local engineering company McAdam Design and then a multinational, Mouchel (formally known as Parkman and Mouchel Parkman).

Upon graduating I went back to Mouchel where I was first exposed to hydraulic models. I worked with some old models my boss had built in HydroWorks. Thankfully my experience moved onto InfoWorks and I worked on a number of drainage area studies for Northern Ireland Water and Thames Water. As an engineer I was also involved in minor works schemes, watermain renewals planning and flood risk assessments to name but a few.

My family and I immigrated to Dunedin in March 2010 and I was pleasantly surprised when DCC was looking for a Hydraulic Modeller and thrilled when I was offered the job. Now over three years later I have expanded my modelling knowledge to clean water and enjoy the challenge of managing all Dunedin's models. I do miss having other modellers to work with which is why I am so passionate about the modelling committee.

Welcoming the new Modelling SIG committee members

Firstly a well-deserved thank you to Brian Robinson, our last committee chair. Brian is still a committee member and provides valuable advice. Thank you also to the members who are serving another year and retiring members Colin Roberts, Tristan Jamieson, Tom Parsons, Robert Kelly, and Jack Brennan are thanked for their efforts over the past two years.

I am pleased to welcome a number of new members to the committee – Jeff Booth, Vicki Koopal and Tim Lockie.

More information about the committee members can be viewed here:

http://www.waternz.org.nz/Category?Action=View&Category_id=333

Recent Events

Dunedin Modelling SIG Event

A Modelling SIG event was held in Dunedin on the 21st November. The Dunedin Opus office kindly hosted the event and provided drinks and nibbles. The event was small with only 10 attending however this enabled a very open discussion on the modelling topics presented.

Mark Baker from Rationale gave a very thought provoking presentation on model accuracy and selecting the correct model inputs for a sensible model output. He discussed the issue of peak populations caused by influx of visitors, say at New Year, then the likelihood of a 1 in 10 year rainfall event and a 1 in 5 year water level. A discussion around acceptable risk and providing clarification of model inputs and the subsequent model uses. As modellers I believe we need to ensure end users of the model outputs clearly understand the inputs used.

I presented a version of the presentation I gave in the Strategy and Planning Stream at the WaterNZ conference in October. The presentation discussed the recent model build and ongoing calibration of rural areas in Dunedin for both water and wastewater reticulation. The majority of the work has been done in house by council staff and I wanted to highlight the drivers, work plan and benefits of modelling these rural networks.

Past presentation from most Modelling SIG events around the county can be found here http://www.waternz.org.nz/Category?Action=View&Category_id=335



Auckland Modelling SIG Event

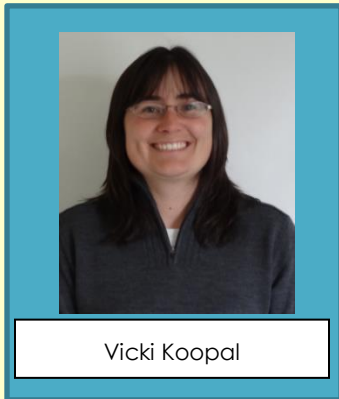
On the 31st October the Modelling SIG had a "get together" in Auckland dedicated to Rainfall and Runoff. Over 30 people attended the Opus hosted event and it was deemed a great success. Thanks to James Reddish who hosted and Mark Pennington (Tonkin & Taylor) who presented "New Zealand Rainfall and Runoff – an update from the steering group" and Graeme Horrell (NIWA) for presenting "High intensity rainfall estimation in New Zealand".



Photos: Graeme Horrell, Mark Pennington, James Reddish and Networking



Innovyze InfoWorks & InfoNet User Groups - Wellington



Vicki Koopal

On 12th, 13th & 14th November the InfoWorks and InfoNet New Zealand User Groups were held at the West Plaza Hotel in Wellington. The user days were organised by Jeff Booth Consulting Ltd (JBCL). The first day centred on InfoWorks Water Supply, the second around InfoWorks Collection Systems and Integrated Catchment Modelling and the third day was dedicated to InfoNet. Over 45 users attended the event with registrations for one, two and all three days.

Attendees were entertained with a wide variety of presentations from other users sharing their experiences with

the software. JBCL and Australian Innovyze staff also presented sessions on specific features and the latest advancements in the software packages and the ever popular Tips & Tricks.

Louisa Sinclair from Dunedin City Council shared her modelling experiences and recent projects on both the Water Supply and Collection Systems days and Ken Williams regaled us with tales of his investigations into lateral linking in ICM on the 13th.

Llew Lusty and Martyn Simpson from Wellington City Council shared the progress they are making with InfoNet Mobile and CCTV surveys in InfoNet respectively.



Photos:

Ann Pugh presenting at the Water Supply day, Collection Systems Presenters, Attendees enjoying a presentation at the InfoNet day

The user days were enjoyed by attendees with the following comments received:

'Very informative, I attended to gain an insight into the data requirements of WS. The user group has assisted with this greatly.'

'A perfect venue for interacting with fellow modellers.'

'Nice environment to pick up tips and talk about issues.'

User Groups are a great environment to meet modellers, share your modelling experiences with other like-minded individuals and they are also a good ground to practice presentation skills.

Recent Events continued

Water New Zealand's Annual Conference & Expo – Hamilton



Water NZ Annual Conference Modelling Stream



Jeff McLean

The Water NZ Annual Conference was held in October 2013. The Modelling Group Committee organised the modelling stream of the conference.

The profile of modelling has improved over the last few years, so we felt we should encourage presenters of modelling paper's to present in the general streams of the conference, and have the more technical modelling papers in the modelling stream. There were seven papers at the conference with significant modelling content, and three of those were presented outside of the modelling stream.

With a smaller number of papers, the modelling stream was condensed into a single day.

The stream began with a Keynote speech from Simon Pearce-Higgins of Melbourne Water, presenting on The Modelling Journey in Victoria, with a particular focus on how modelling has developed in Melbourne. There are some valuable lessons we can take from how modelling is done in Melbourne, particularly around how the wide variety of models interact.

There were four papers presented within the modelling stream; from Keith Woolley of Capacity, Gavin Hutchison of Beca, Vicki Koopal of Jeff Booth Consulting, and Jeff McLean of Opus. Topics covered included model governance, low pressure sewer modelling, small urban supplies and modelling of fire flows.

The technical part of the day was completed with three workshops. The first workshop was a discussion on the benefits of local authorities having in-house modelling capability, led by Louisa Sinclair and Emily Botje. Important benefits from having in-house capability were noted, but there are important risks in terms of documentation and succession planning which need to be dealt with. The second workshop was an update to the industry from Mark Pennington on the NZ Rainfall Runoff Guidelines, which is a project to provide guidance on hydrology around New Zealand. The third workshop was a follow on from our workshop last year, which identified data quality issues as the biggest challenge in our modelling industry. Andy Gibson and Marty Simpson led a discussion on how we could improve our as-built data, and whether we should consider adopting a specification for as-built data.

The modelling stream was finished off with the modelling dinner and quiz at Rebo, SkyCity, where prizes were awarded for the best written papers and presentations.

If you were able to attend the conference, we hope you found the modelling stream a useful and enjoyable experience, and we hope to see many of you this year.

See pages 5 and 6 for some photographs.

Stormwater Conference Update

The 2014 Stormwater Conference will be held at Rydges Latimer Square, Christchurch from the 14 – 16 May 2014. For more information visit the website

http://www.waternz.org.nz/Category?Action=View&Category_id=321



LinkedIn

You might have seen an invitation to join the Modelling SIG in LinkedIn. With technology and the way we communicate changing, the Modelling SIG is keen to keep up with the most recent trends.

We have not yet looked at twitter, but that time might come.



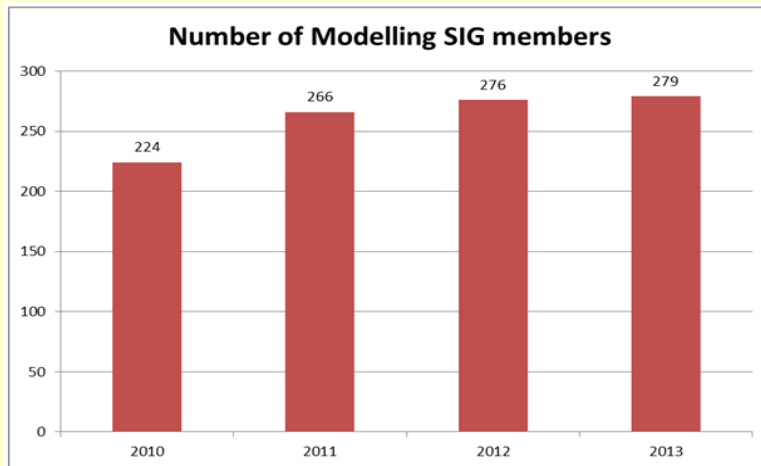
**Water New Zealand Mo
delling Special Interest
Group
Private Group**





1. Gavin Hutchison presenting on Dynamic Modelling of Pressure Sewerage Systems
2. Brian Robinson chairing the first session of modelling papers
3. Vicki Koopal presenting on the trial and tribulation of modelling a small urban water supply
4. Jeff McLean presenting an innovative approach to fire flow assessment for the Christchurch water supply rezoning
5. The modelling stream
6. Mark Pennington providing an update from the steering group on the development of NZ rainfall runoff
7. Andy Gibson providing an update on the WaPUG ideas from 2012
8. Marty Simpson discussing Wellington City Councils use of data specifications
9. Brian Robinson introducing speakers at the modelling dinner
10. Murray Gibb speaking before dinner
11. Murray Gibb presenting Gavin Hutchison with 1st place modelling paper award
12. Murray Gibb presenting Louisa Sinclair with 2nd place modelling paper award
13. Murray Gibb presenting Keith Woolley with 1st place modelling presentation award
14. Murray Gibb presenting Jeff McLean with 2nd place modelling presentation award

Modelling SIG membership



The group is now 13 years old and the trend over the past four years shows steady growth. The graph to the left shows Modelling SIG membership since 2010.

The group can be described as a representative mix of specialists and professionals involved with some aspect of water modelling. This includes staff of local and regional authorities, scientists, academics, consultants, managers and suppliers, ranging from graduates to seasoned members.

Modelling SIG Questionnaire

The Water NZ Modelling SIG Committee is hoping to find out a bit of information about its members and provide members with the opportunity to voice comments.

Please take the time to fill in this brief questionnaire (http://www.waternz.org.nz/Survey?Action=View&Survey_id=8) and we look forward to your feedback.

So far we have had under 20 responses. Last year we had 279 members so it would be great to hear from our members.

Please note you will need to log in to the Water NZ website to complete this survey. If you experience issues doing this please let me know.

Amy Aldrich amy.aldrich@waternz.org.nz

Future events

Water New Zealand's Modelling SIG - Christchurch Regional Meeting

The Water NZ Modelling SIG invites interested parties to attend an informal get together. Come along for a presentation preceded by light refreshments, followed by discussions whilst meeting other professionals with common interests.

Presentation: Rainfall Runoff Guidelines – Helen Shaw, Environment Canterbury

Venue: AECOM Office, Lincoln Road Special thanks to AECOM for their support.

Date: Wednesday 12 February 2014

Time: 5:30pm

RSVP to Amy Aldrich by Friday 7 February 2014

Email: amy.aldrich@waternz.org.nz Phone: +64 4 495 0894

Interested in hosting an event or sharing an interesting piece of modelling work? Please let us know. Our regional events only happen with the input of our members.

Events are generally hosted in a location with a meeting room that can hold around 20 people. The host company normally sponsors the event by providing some beverages and snacks. The gatherings are informal and a great way to meet other modellers and share experiences.

We hope to see you at an event near you soon.