

Institute for Sustainable Water Resources



Welcome to the ISWR Newsletter

30 June 2005

Google Scholar

For those who don't know (perhaps it was just me!), there is a new (beta version currently) search engine just released by Google, which is aimed at academics. It provides searches of publications and citations, etc, and provides a very quick "first-go" search engine, before you start seriously browsing the literature. Try it out at www.scholar.google.com

UNESCO Project Progressing

You may be aware that Ana Deletic, Grace Mitchell and Tim Fletcher have been coordinating a project for UNESCO, entitled "Data requirements for integrated urban water management". After a long delay in getting the project really moving, the authorship team (12 people from 8 countries) are really starting to produce some great information, that will hopefully provide a useful 'thinking tool' for those jurisdictions starting to consider integrated urban water management, and what data they'll need to make it work. The next working group meeting is in Paris in the first week of July.

Industry Linkages

In recent times, ISWR staff have been involved in a number of important industry advisory activities. A few examples are presented below (but I'm sure there are many more):

1. Grace Mitchell has been liaising with industry over the eWater CRC research activities.
2. Grace Mitchell, James Grove and Ana Deletic spent two days in New Zealand discussing collaboration opportunities with Landcare Research, and the Auckland Regional Council.
3. Tim Fletcher has been appointed to Auckland Regional Council's Stormwater Advisory Committee, meeting in Auckland for the first time on June 27 and 28th.
4. Melbourne Water has just released its "Water Sensitive Urban Design Technical Manual: Stormwater". The manual was reviewed by a Technical Committee made up of Russell Mein, Tim Fletcher and Earl Shaver (from Auckland Regional Council).

Urban Retrofit Project

Together with Chris Walsh from the Water Studies Centre, Institute staff (Tim Fletcher, Tony Ladson, Grace Mitchell, Rebekah Brown, James Grove) have been involved in submitting, with support from the Department of Sustainability and Environment, an application to the National Water Initiative, to fund a proposed demonstration of retrofitting Water Sensitive Urban Design to restore the ecological condition of a stream.

New Report on the Evaluation of Non-structural Stormwater Management Measures – Andre Taylor

Staff from the ISWR have recently completed a final monitoring and evaluation report titled "Monitoring and Evaluating an Education/Participation Campaign to Reduce Littering and Stormwater Litter Loads in a Small Commercial Shopping District in Melbourne".

In 2001 Monash university staff (via the CRC for Catchment Hydrology) formed a partnership with the Victorian Environment Protection Authority to undertake research into the use, value, cost and evaluation of non-structural best management practices to improve urban stormwater quality (non-structural BMPs). Such BMPs include education and participation programs.

As one of the products from this research, guidelines were developed for local government authorities to use titled “Non-structural Stormwater Quality Best Management Practices: Guidelines for Monitoring and Evaluation” (Taylor and Wong, 2003; available at www.catchment.crc.org.au). These guidelines were trialled on three distinctly different stormwater projects in Victoria before being finalised.

The recently finalised monitoring and evaluation report presents the final evaluation results of the largest of the projects that were used to trial the monitoring and evaluation guidelines. The trial involved an education / participation campaign that operated within the small commercial district of Snell Grove in Oak Park, Melbourne. This campaign was designed and implemented by Moreland City Council staff, while the evaluation was undertaken by Monash (ISWR) staff in cooperation with specialist social science consultants (Community Change Pty Ltd).

The evaluation involved pre-, during and post-campaign monitoring over 2002 to 2004, a paired catchment approach, and six of the seven different “styles” of evaluation developed by Taylor and Wong (2003). These six styles involved monitoring:

- the extent and quality of the BMP’s implementation (i.e. the education / participation campaign);
- changes in the awareness / knowledge of traders and the general public;
- changes in the attitudes of traders and the general public;
- changes in the self-reported behaviour of traders;
- changes in actual behaviour of traders and the general public; and
- changes in litter loads.

André Taylor led the evaluation project, Justin Lewis undertook the litter load monitoring work, while Justin and Dr Tim Fletcher undertook the analysis of the litter load data.

Over-all, the study found that the education / participation campaign produced generally positive but modest results against its objectives. From a trial perspective however, it produced many useful outcomes, such as specific improvements to the monitoring and evaluation guidelines and a greater understanding of better ways to design and implement similar education / participation campaigns in the future.

It is hoped that the recently finalised report will help others who are involved with the design, delivery and evaluation of education-based initiatives to minimise littering and stormwater pollution in commercial districts.

For a copy of the report, please contact André Taylor, ph. 02 6582 0762, andretaylor@iprimus.com.au.



Litter around trading premises, Snell Grove, Oak Park, Melbourne

A few things to report from Grace....

eWater

Well, many of you will be feeling more informed about eWater after the last day of the CRCCH retreat in Marysville. It nominally commences on July 1, despite not all the paperwork being signed, which is expected to be complete in the next month. This hold up is not going to really change things for us, as we are still getting on with the planning process. There is still a focus on defining industry needs at the moment, although the research planning will ramp up later this month with a two day workshop in Canberra involving the research program leaders and deputies, the eWater executive and a selection of invited extras.

We should heard back from Gary about the next steps in the Eol's for the first six months this Friday, according to his email of last Thursday. So we will have more definition about our research activities occupying us for the next six months then.

NZ Landcare Research Visit

Ana, James and I all headed to NZ for a few days, 8 – 10 June, to meet with researchers at Landcare Research. Their web sites states "Manaaki Whenua - Landcare Research is New Zealand's foremost environmental research organisation specialising in sustainable management of land resources optimising primary production, enhancing biodiversity, increasing the resource efficiency of businesses, and conserving and restoring the natural assets of our communities."

It was interesting to learn about how research operates in New Zealand and hear about the challenges they consider they face in managing water in the urban environment. It was certainly a lot wetter and greener than here. Our primary interest was in their Centre for Urban Ecosystem Sustainability (CUES), which spans social and economic as well as technical research domains and is a collaboration between Landcare research and The University of Auckland.

Probably the best discussion I had while I was there was with two of their economists, some of the more switched on ones that I have discussed urban water issues with. Some 60% of their research program budget goes towards social and economic research so it certainly is a significant component of their activities. From their end they were very interested in the STI Biofilters program, as they are conducting some similar research, albeit on a smaller scale.

Smart Water Fund

Round 3 of Smart Water opened last week, with a launch at the Melbourne Museum. Round 3 funding is available through various funding streams:

Stream 1 - Research and Development into key challenges facing the water industry

Stream 2 - Open Category for Victoria-wide Urban Innovations

Stream 3 - Research and Development throughout Victoria-wide urban areas

Note that Smart Water Fund is administering Stream 3 on behalf of the Victorian Water Trust.

See <http://www.smartwater.com.au/mainf.asp> for further information.

The launch was also used as a good opportunity to present certificates to the academics who had won DSE postgraduate scholarships. Monash won two of the five, with our very own Rebekah Brown being one of the recipients. Sorry – I don't have a photo of the certificate presentation.

Modelling temporary water trading in the Goulburn System – Erwin Weinmann

You might have wondered what research activities I have been involved in recently (apart from unfunded field studies on our farm in the Strathbogie Ranges). In line with CRCCH research priorities in the last funding round, my interests have turned from flood research to questions of water allocation and how the capabilities of water allocation models currently used by the industry (e.g. REALM in Victoria) can be enhanced. More specifically, the research has focused on how to model the impacts of temporary water trading on rural water supply systems.

With a team involving researchers from Monash and Melbourne Universities and industry representatives from the Department of Sustainability and Environment, the Department of Primary Industries, Goulburn-Murray Water and Sinclair Knight Merz, I have been working on the development of the WRAM-REALM integrated modelling system which simulates the reallocation of water resulting from temporary water trading. This research builds on a previous CRCCH project led by Gary Codner. The Goulburn System in northern Victoria, as represented in the Goulburn System Model (GSM), was used as a case study example for our project.

The testing and initial application of WRAM-REALM to the Goulburn System has confirmed the feasibility of modelling in an integrated fashion some of the key hydrologic and economic factors that affect the allocation and supply of water in complex rural water supply systems. A workshop introducing WRAM-REALM to industry representatives was held on 23 June 2005, and a CRC Technical Report summarising the project outcomes is being finalised.

A particularly interesting (and sometimes challenging) aspect of this work was that it involved collaborative research with economists who see and model the world somewhat differently than engineers. I think in the end we managed to speak nearly the same language and bring together the best features of both worlds. From this cooperation I've learned quite a lot about economic optimisation models but when I buy my next car I will probably still rely on my gut feeling.

I should also mention that Marnie Griffith in her PhD research, supervised by Gary Codner, Sergei Schreider and myself, is looking at similar issues, but she is focusing on the role of uncertainty in irrigator decisions and is modelling temporary trade in a more detailed fashion.

Tony's time management tips

A common problem; wanting to send big files over the internet and not being able to. There are a few of things worth trying. First, try compressing the file in WinZip or something similar (but you knew that already).

You Sent It <http://www.yousendit.com/> promise to deliver files of up to 1 GB over the net. Just ignore the annoying pop up ads and it usually works fine.

Another possibility is WinRAR <http://www.rarsoft.com/index.htm> This works like WinZip but you can split your archive into volumes of various sizes. A useful option is to compress a file into volumes of about 1.5 M, send each part in separate email messages, put them all in the one folder at the other end and then use WinRAR to put the parts back together and uncompress the file. You can even set this up with a self extractor if the receiver doesn't have WinRAR. A trial version of WinRAR can be downloaded for free. Go to the Downloads section of the WinRAR website.

For Monash people, it's possible to make files available over the web. There are some cryptic instructions for setting up personal web pages at users.monash.edu.au. To get started, you need an account on a computer called SNG. Fill in the account request form at <http://www.its.monash.edu.au/staff/accounts/> or for Civil Engineers, talk to Andrew Haines. My personal page is at <http://users.monash.edu.au/~ladson/>

The final possibility I plan to mention is Skype <http://www.skype.com/> This program is mainly set up to facilitate internet telephony but you can also send large files to other Skype users.

CRCCH Annual Workshop

The final Cooperative Research Centre for Catchment Hydrology annual workshop (aka love in) was held from 14-16 June at the Cumberland in picturesque (but sadly not snowy) Marysville. The CRC CH is wrapping up after 14 years, so this workshop was a chance to reflect on its successes as well as the lessons learned. Being both an associate student and a relative newcomer to the CRC, I was fairly unaware of the influence the CRC has had on land and water management, and it was interesting to note the differences in approaches now compared to a decade ago. The workshop was also a great opportunity to catch up with (and pick the brains of) colleagues based at other organisations. And of course, a love in wouldn't be complete without a few social activities. Noteworthy moments include Tim Fletcher's onslaught of what I think were meant to be jokes, Ana Deletic learning the intricacies of croquet, Grace Mitchell being so eager to get the hell out of there that she left her bag behind, and a few unnamed persons carving up the dancefloor.



James, Pete, Stephen Wealands (Melbourne Uni) and Yaron in the billiards room



Geoff, Justin, Yaron Zinger and Graham Rooney at the celebratory dinner



Dave McCarthy, James Grove, Peter Poelsma, Geoff Taylor and Justin Lewis at the celebratory dinner



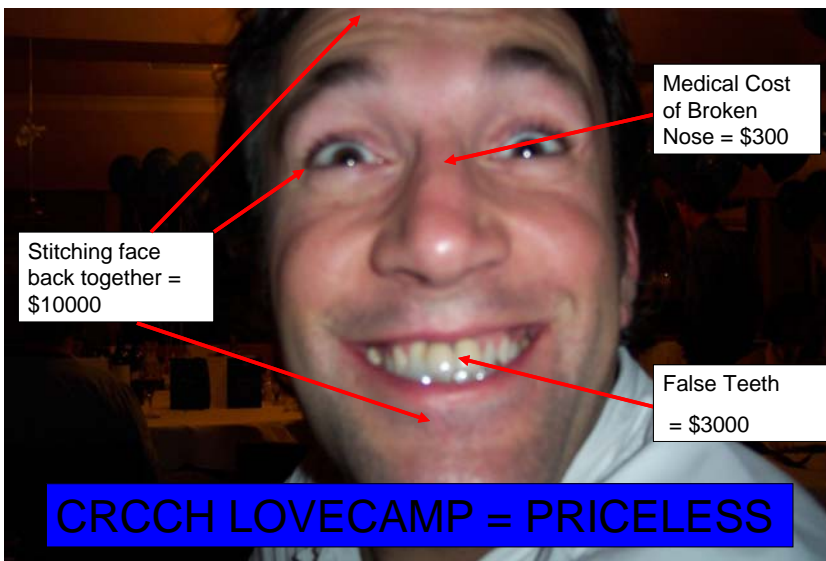
Elisa Zavadil (Melbourne Uni), Susan Daly, Dave and Yaron at the celebratory dinner



Pete explaining... something... to Lisa Carpenter



Yaron reveals there's another side to him



CRC CH's very own Destructoboy!