



Photo by Terry Reís

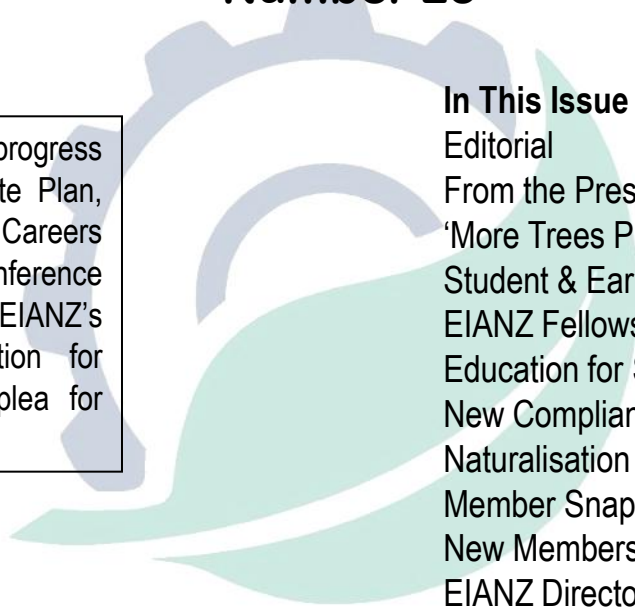
# The Environmental Practitioner

ISSN 1834-7738

Number 25

March 2012

In this issue of TEP we hear about the progress being made with the Institute's Corporate Plan, news from the Student & Early Careers Committee and the latest in the 2012 conference preparations. We also learn about EIANZ's participation in the Australian Education for Sustainability Alliance, and receive a plea for 'More Trees Please!' in urban areas....



## In This Issue

Editorial	2
From the Presidents Desk	3
'More Trees Please'	7
Student & Early Careers Update	9
EIANZ Fellows	10
Education for Sustainability	11
New Compliance Management Software	12
Naturalisation of Drainage Channels in NZ	14
Member Snapshots	17
New Members	19
EIANZ Directory	20

Opinions expressed in this newsletter reflect the views of the authors and do not necessarily represent the views of the Environment Institute of Australia and New Zealand Inc. unless specifically stated.



Photo by Dave Manson

## Editorial

Hallo everyone and welcome to the March 2012 issue of *The Environmental Practitioner*. I hope it has been a productive and interesting new year for all of you, and that you are looking forward to the new professional development and networking opportunities brought to you by EIANZ in 2012. Have a browse through this newsletter, as well as the website to get an idea of what is in store. Personally I'm looking forward to bringing a few more events up FNQ way (FYI local practitioners keep an eye out for a new schedule of 'Green Drinks' evenings in the tropics...). Likewise if you have an idea for an event or opportunity for EIANZ members and other environmental practitioners in your local area, don't be shy about contacting your local committee members. New outlooks and energies are always welcome.

Now for some techno-babblings. How many of you own a touch-phone? Probably 90% of you, though until recently I was happily positioned in the 10% minority. Part reluctance towards thoughtlessly accumulating gadgets and part stubbornness towards being told what would make my life 'easier' or 'better', I had clutched onto my shoddy stick-mobile with the cracked screen for perhaps five years (equivalent to thirty internet years). Then I was hit by touch-phone fever.

It might have been the night sky app (solver of so many camp-fire feuds regarding constellations), or maybe one interminably long session compulsively playing Angry Birds, I'm not certain. Suddenly I had joined the ranks of the obnoxiously absorbed, checking email while waiting in queues in the deli, impressing the oldies with integrated song-recognition and purchasing apps (or at least they pretended to be impressed), and chiming in at various junctures in social occasions with 'did you know that there's an app for that?'

Initially I had tried being somewhat aloof, somewhat cynical in my approach to my new security blanket, however it soon wore off. My phone is helping me explore, learn and problem-solve. I think it can even be used for making something called a *phone call*. But don't quote me on that.

So – did you know that there are apps for the environment and sustainability? Not hard to imagine that there would be. And since it gave me a reason to use my phone – I found some choice ones for you. Though no doubt by the time you read this, more will have been created.

**Shop Ethical!** – scroll through the many products at your supermarket and select a product based on its impact on the environment. You can also get the low-down on the environmental and social records of the companies behind the common brand names.

**Brain Café Geoquiz** – hundreds of geographic and environmental quiz questions under various themes including mountains and peaks, climate change, forests, deserts and plains, people and 'the big picture'. Good prep for trivia nights.

**GreenYou** – calculate your own carbon footprint on the planet through analysing transportation, housing needs, food sourcing and goods and services. After the calculation you can make your own Green Plan to see how you can modify your impact on the environment.

**Pollution** – access real-time air pollution data for over 1,300 cities worldwide. You can toggle through different forms of pollution and see the results overlaid on a Google map, based on your location if you allow GPS.

**Green Meter** – this app (freakily) computes your motor vehicle's power and fuel usage characteristics and evaluates your driving to increase efficiency, reduce fuel consumption and cost, and lower your environmental impact.

There are probably a lot more that you have heard of - and , yes, I am interested to know! (It will give me an excuse to use my phone).

**Bec McIntyre**  
EIANZ Communications Editor





Photo by Bec McIntyre

## From the President’s Desk

### Conference 2012 update – sponsorship and papers

The 2012 EIANZ Conference will be held in Sydney from 24-25 October 2012. Already we are getting great interest from potential sponsors and speakers. The Conference Organising Committee led by Faye Woodward is doing an outstanding job and the Committee has now released the call for papers for the Conference. The submission deadline for abstracts is 27 April 2012.

The Conference is one of the major benefits of membership. We have a great venue in 2012, and can accommodate around 230 registrants. We have a sense that this year’s event will be exceptional for its content and value for members.

This is an opportunity for EIANZ members to share lessons, present different perspectives on practice and make recommendations on how practice might be improved to achieve both better environmental outcomes and excellence in environmental practice.

The Conference Sponsorship Brochure is now out and available online here: <http://www.eianz.org/document/item/1711>. For those employers who are looking to support the professional development and standing of staff - get on board now! See [www.eianz.org](http://www.eianz.org) for more information on both sponsorship and the call for papers.

### Corporate Plan update

I’ve previously noted that following the meeting of the Institute’s leadership at Twin Waters in September, a Draft Corporate Plan was in preparation. That plan is now out for review and input from Divisional Committees.

It is built around delivering on the five key pillars of activity identified at Twin Waters, namely:

- Representation of the profession
- Supporting members
- Advocacy of excellence in practice
- Connecting practitioners
- Leading the profession.



A major focus of the draft plan is the improved alignment and support of the services EIANZ provides to members locally. The Institute has many service offerings, especially in the area of professional development. While these are able to be accessed on the website event calendar, their promotion, accessibility to all members and forward planning do not receive as high a profile as is ideal or currently possible.

The plan proposes the establishment of a core offering of local events (professional development and other) that would complement the core offerings of membership, including the Annual Conference, Journal, Newsletter, industry representation, website and so on. These would be promoted as an integrated offering in a way that would facilitate their access by members wherever they are based.

A further key initiative within the plan is the development and delivery of the STEPs program – Staged Training for Environmental Professionals. STEPs will support early career professionals from graduation through to certification. It’s seen by the Institute as an important further development in the support that EIANZ provides to the support of the profession and enhancing its recognition by the private and public sectors.



Photo by Bec McIntyre

## **Certification**

Across the region there is a trend towards the increasing recognition of the value of the Certified Environmental Practitioner (CEnvP) status as a mark of quality and technical competence. Over the past month I've had conversations with representatives from a number of private and public sector bodies (both in Australia and NZ) that have emphasised both the value of the CEnvP status and an evolving interest in its application as a possible requirement for undertaking certain types of work.

It's clear that this is an area of professional development that is on the move. It not only provides further proof of the value of the scheme to those Certified Environmental Practitioners in the market, but also underscores foresight of the EIANZ in establishing this initiative.

## **NZ initiatives**

Recently, I was in NZ with EIANZ colleagues in Christchurch, Wellington and Auckland. In Christchurch we thanked Tom Burkitt, outgoing EIANZ VP for NZ for his service. I also had the opportunity to meet with Professor Peter Skelton, one of the seven Commissioners of Environment Canterbury overseeing much of the reconstruction of that Christchurch following the devastating earthquakes of late 2010 and 2011. Peter, a staunch supporter of EIANZ, has agreed to present a plenary address at the Sydney EIANZ Conference, in which he will share lessons gained from the Christchurch experience for environmental managers and planners.

In Wellington, a series of meetings were organised by Wellington EIANZ Coordinator Susan Harris and the Institute's NZ Councillor, Di Buchan. Those meetings included representations to Wellington Regional Council and the NZ EPA on the work of the Institute and its members. I also had the opportunity to discuss with the CEO of Wellington Waterfront Ltd, Ian Pike, the innovative application of Water Sensitive Urban Design principles to stormwater management of Wellington Harbour.

Finally, in Auckland the Institute held an event hosted by Opus in its offices. Opus is a major supporter of the Institute with a large NZ base of members. The EIANZ Auckland Committee, consisting of Karen O'Donohue, Taryn Pearce and Justine Coup, coordinated an exceptional gathering of EIANZ members. The profile of the Institute continues to rise in NZ, and with it the membership base.

My thanks to those colleagues in NZ for coordinating my activities so ably during my visit.

## **SEQ Strategic Planning**

Finally, in February I had the pleasure of participating in a planning weekend for the EIANZ's South East Queensland (SEQ) Division. Thanks to David Carberry and Mark Williamson in particular for their leadership in SEQ. This annual event – a voluntary initiative of the Committee – provides a basis for the Division's delivery of services to members. In addition to planning the year ahead, the meeting provided useful input to the development of the Institute's Corporate Plan.



Photo by Bec McIntyre

### **Australian Education for Sustainability Alliance**

The EIANZ is one of the members of the Australian Education for Sustainability Alliance ([www.educationforsustainability.org.au](http://www.educationforsustainability.org.au)). As part of the Alliance, we will be taking part in a series of representations to the Commonwealth Government and other Members of Parliament outside Government to progress the work of the Alliance. The EIANZ's participation in this initiative has been led by Paul Keighley, the Chair of the Institute's Students and Early Career Standing Committee.

The Alliance will provide a further basis with which to raise the EIANZ's profile and standing with the Commonwealth Government, while also contributing to the development of a concept that can provide long-term reinforcement of the importance of the Institute's work in developing and promoting excellence in environmental practice.

My thanks go to Paul Keighley and his colleagues on the Students and Early Careers Committee for the work they do on behalf of the Institute, and in continuing to build the base for the EIANZ's organisational sustainability.

**Michael Chilcott** MEIANZ CEnvP  
President EIANZ

A graphic banner for the EIANZ 25th Anniversary. On the left, a white gear icon contains the number '25' with 'CELEBRATING' above and 'YEARS' below. To the right, the text 'Stronger Wiser Bolder' is written in a white serif font, with 'EMPOWERING THE PROFESSION' in a smaller sans-serif font below it. At the bottom, a dark blue bar contains the text 'EIANZ Annual Conference Sydney 24-25 October 2012' in white sans-serif font. The background of the banner is a gradient of blue and green.



# The Australian Environmental Assessments and Approvals Summit 2012

Examining the assessments and approvals processes  
to manage environmental issues

28-30 May 2012  
Radisson Blu Hotel  
SYDNEY

EARLY  
BIRD OFFER  
SAVE \$550

## MEMBER DISCOUNT

**EIANZ has negotiated a 25% discount off the standard rate for this event for all EIANZ members! This represents a saving of up to \$935 for the full Summit.**



## Call to Action for the 'Green' Industry to Plant More Trees

The Nursery & Garden Industry in Australia (NGIA) is inviting all of the green industry to come on board its new 'More Trees Please' phase of the Improve Your Plant Life Balance Campaign. "An important aspect of the campaign will be to show the real value of trees in urban communities, and we hope that any business involved in greening our environment will support and adopt the theme of 'More Trees Please' to 'Improve Your Plant Life Balance in 2012,'" said the Chairman of NGIA, Mr Craig Norman.

"The research shows the positive benefits of trees to our health and wellbeing, as well as their economic value. In the green industries - including landscapers, garden designers, landscape architects, parks and gardens managers - we all know that but we need to be promoting trees much more in our urban environments."

The NGIA has begun an information campaign targeted at key decision makers in the community including local government and real estate developers to promote the importance of the urban forest – trees and shrubs on both private and public land – to the community's health.

The Improve Your Plant Life balance website has been updated and the Facebook page will be continually updated with news and information about the campaign and the value of trees in our urban environments. The campaign intends to support and promote other major campaigns during the year such as Trees for Mum around Mothers Day in May and National Tree Day organised by Planet Ark in July.

A new software tool called *iTree* will also be promoted during 2012 as an integral part of the campaign. *iTree* is the most comprehensive software developed to date to quantify the economic and physical benefits of the urban forest.

The *i-Tree* tools were originally developed by the United States Department of Agriculture's Forest Service to aid in urban and community forestry analysis and benefits assessment. NGIA, Aborigiculture Australia, the Cities of Melbourne and Sydney and Enspec Pty Ltd consultancy are partners in the project to localise the software.

The National Environmental and Technical Policy Manager for NGIA, Dr Anthony Kachenko, says "we know that maintenance costs of trees have been an issue which has discouraged the use of trees in landscaping, particularly in public spaces, but *iTree* is clearly showing that the economic benefits of trees and our urban forests far outweigh the costs."

"*iTree* will provide the tool to give a real value to our urban forests in suburbs in Australian cities, validating trees' importance not only to our health and wellbeing but also to our economy," Dr Kachenko said. "All of us in the green industries need to educate the community, councils and other decision makers that trees are not a nuisance –they are a valuable and integral part of any public and private landscape." NGIA believes attributes of trees such as sun, wind and rain protection, cooler temperatures in summer, reduced traffic speed in tree-lined streets and health and recreational value in public spaces have been overlooked in recent years.

"One can see the impact of this in home gardens and landscaped spaces over the past decade. We are now at a time when no new development project should be without a good selection of suitable trees and shrubs to add to our urban forest."

**Neville Sloss**

For more information visit [www.plantlifebalance.com.au](http://www.plantlifebalance.com.au) or contact Dr Anthony Kachenko on (02) 9876 5200

# EIANZ Annual Conference 2012

Call for Papers is now Open!!! Download the guidelines [here](#)



Sponsorship Prospectus now available [here](#)

Follow us on Twitter - @EIANZconference

Watch the promotional video [here](#)

<http://www.eianz.org/>

## Students and Early Careers Committee Update

2012 is looking like a fantastic year in the students and early careers space at the EIANZ. We've laid a lot of the groundwork in the last year or so, and it looks like there will be some excellent progress this year.

Key to the increased focus of the Institute on students and early career practitioners will be the roll-out of the STEPs program. While it has been in development for some time, the STEPs implementation has received a renewed level of attention from the Institute. Watch this space for developments in the next few months. In parallel with the STEPs roll-out is the revival of the mentoring program, which links students and early career practitioners with experienced mentors within the Institute. Mentoring is coordinated at Division/Chapter level, with the Institute committee providing support and consistency.

One of the main things I am looking forward to this year is the first ever dedicated EIANZ students and early careers day, to be held in association with the annual conference. Called the "EIANZ Students and Early Careers Congress", it will be held on Tuesday 23 October 2012 in Sydney. This will be a day of professional development activities targeted at environmental students and early career practitioners, with a bit of fun and informal networking thrown in. Details are being worked on now, so lock the date into your diaries and tell your friends!

Other areas of focus for the committee this year includes increasing our interactions with universities, developing and implementing a more comprehensive student awards program, leading the EIANZ's involvement in the Australian Education for Sustainability Alliance and increasing student representation on EIANZ committees.

We are always looking for new members to join the committee, especially from those Divisions that are currently un-represented on the committee. Contact me for more information.

### Paul Keighley

Chair, on behalf of the EIANZ Students and Early Careers Committee

+61 415 983 330

[paul.keighley@gmail.com](mailto:paul.keighley@gmail.com)

## Carbon Bloating?

The Australia Institute has recently released further research into the pricing of carbon. *Carbon Bloating: The unintended consequences of giving away free permits to big polluters* looks at the recently passed legislation which will see big polluters pay for their greenhouse gas emissions. In particular this Technical Brief looks at the yet to be finalised important detail of the compensation program and regulations which will include such matters as the assistance rates paid to emissions-intensive trade-exposed (EITE) industries.

The Technical Brief can be downloaded here: [Carbon Bloating: The unintended consequences of giving away free permits to big polluters](#)

**Kerrie Tucker**



Photo by Terry Reís (NRA)

## EIANZ Fellows

Title	First	Last	Division
Mrs	Lynn	Bain	ACT
Dr	Maxine	Cooper	ACT
Mr	Rolfe	Hartley	ACT
Dr	David	Hogg	ACT
Prof	Graeme	Kelleher	ACT
Mr	Mark	O'Brien	ACT
Mr	Richard	Sharp	ACT
Mr	Lachlan	Wilkinson	ACT
Mr	Peter	Wright	ACT
Dr	Adam	Smith	FNQ
Mr	David	Bell	NSW
Mr	Graham	Brown	NSW
Mr	Frank	Downing	NSW
Mr	Warwick	Giblin	NSW
Mr	Nicholas	Graham-Higgs	NSW
Mr	Randall	Scott	NT
Hon Prof	Peter	Skelton	NZ
Prof	Ian	Spellerberg	NZ
Dr	Morgan	Williams	NZ
Dr	Cecil	Camilleri	SA
Dr	Andrew	Lothian	SA
Dr	Jackie	Venning	SA
Mr	Philip	Millin	TAS

Title	First	Last	Division
Dr	Philip	Bachelor	VIC
Dr	Tom	Beer	VIC
Dr	Terry	Bellair	VIC
Mr	Michael	Crowe	VIC
Dr	Peter	Ellyard	VIC
prof	Frank	Fisher	VIC
Mr	Robert	Gell	VIC
Mr	Richard	Graham	VIC
Ms	Zena	Helman	VIC
Dr	Neil	Marshman	VIC
Dr	David	Mercer	VIC
Dr	Charles	Meredith	VIC
Dr	Peter	Nadebaum	VIC
Prof	Felicity	Roddick	VIC
Mr	Robin	Saunders	VIC
Prof	David	Stokes	VIC
Dr	Geoffrey	Wescott	VIC
Prof	John	Zillman	VIC
Mr	Barry	Carbon	WA
Dr	John	Ottaway	WA
Mr	Graham	Slessar	WA
Mr	Steve	Wilke	WA

Title	First	Last	Division
Prof	Robert	Beeton	SEQ
Prof	John	Brannock	SEQ
Mr	Howard	Briggs	SEQ
Mr	Simon	Cavendish	SEQ
Mr	Alan	Chenoweth	SEQ
Ms	Claire	Gronow	SEQ
Mr	Bill	Haylock	SEQ
Dr	Hugh	Lavery	SEQ
Mrs	Mary	Maher	SEQ
Dr	John	Thorogood	SEQ
Mr	Jonathan	Womersley	SEQ

**Erratum:** In the last issue of TEP, a list of EIANZ Fellows was published. However, due to a database error, retired fellows were not included. Please find on this page an updated list! (to March 2012)



Photo by Bec McIntyre

## Education for Sustainability

The EIANZ is participating in a new initiative, the Australian Education for Sustainability Alliance (AESA). This Alliance was formed around a vision that all Australians should receive effective education that instils knowledge, practices and values of sustainability. At a time when our planet increasingly confronts its environmental limits, it is important that we are equipped to face those challenges.

The Alliance is comprised of organisations from the education, union, youth and environment sectors that want a higher prioritisation of sustainability in the education system. To achieve its vision, the AESA is advocating government to implement best practice policy around education, including:

- Quality sustainability curriculum content for all schools embedded into the Australian Curriculum;
- Whole-school approaches to environmental and community outcomes through the Australian Sustainable Schools Initiative (AuSSI);
- Equipping students with skills for a sustainable economy through tertiary sustainability programs; and
- Supporting the workforce for a transition to green industry through continued professional development.



On 20 March, the AESA will launch its activities with an advocacy day at Parliament House. This will be the beginning of a campaign to achieve a public commitment and plan from all political parties by April 2013. Ongoing efforts will include lobbying to politicians at all levels of government, researching and developing best practice education for sustainability, and raising awareness of the issue among education and sustainability professionals.

### Sara Redmond-Neal MEIANZ

For more information, please visit the AESA website at <http://www.educationforsustainability.org.au/>. You can also find them on Facebook and Twitter.

If you would like to contribute or otherwise be involved in this initiative, please contact: **Paul Keighley**, EIANZ Students and Early Careers Committee Chair, at [paul.keighley@gmail.com](mailto:paul.keighley@gmail.com).



Photo by Dave Manson

## New Software Simplifies Compliance Process

The long and arduous compliance assessment process has just become streamlined and paperless.

ComplySure is a new Australian made and tested compliance management software that enables users to track, manage and report against regulatory approval conditions, site requirements and compliance obligations, without the cumbersome paperwork checklists and double handling of information.

Compliance management is traditionally a challenging and time consuming process within some government agencies and many industries (e.g. mining, manufacturing, water, waste management, chemical, construction, commercial, food, oil and gas).

Designed and produced by environmental consulting firm EnviroRisk Management, in association with IMS, ComplySure reduces the cost and time involved in compliance assurance programs.

The software streamlines compliance assessments and enables immediate, anytime access as to how well a company is performing. Reports are standardised, detailed, automated and time efficient.

The software and the information can be securely accessed over the internet at any time by authorised people, so it makes the process more efficient especially for multiple site industries.

ComplySure is particularly suited to safety, health and environment professionals, risk managers, quality and facilities personnel and other specialists whose responsibility is to regularly monitor and report on compliance.

Benefits of ComplySure include:

- Multi-site management information at the touch of a screen
- Automated reminders to ensure you don't miss important renewal dates
- All licence, permit and consent conditions are in the one place
- A schedule of monthly compliance items warranting action
- Reminders of tasks arising and recording details of 'closed out' items
- Simple audit check-sheet with data capture and recovery
- Automated reporting and action plans on non-conformances.

For more information on ComplySure, visit [www.complysure.com.au](http://www.complysure.com.au) or call 1300 784 478.

Dennis Rutzou



Sustainable CHOICE

 **ComplySure™**  
Compliance Management System

## APRS-EIANZ Media Partnership - New Website

APRS are pleased to announce the launch of our new web site

*Australian Environmental Management*

<http://www.australianenvironmentalmanagement.com.au/>



**DISCOUNTED RATE (\$100 off standard rate) has been negotiated for EIANZ members for the 2012 Food Summit!**

## The Naturalisation of an Artificial Drainage Channel – Any Ecological Benefits?

With much of Christchurch being built on wetlands, numerous artificial drainage channels were excavated in the late 19th and early 20th centuries. Many of these are box drains lined with wood or concrete to prevent the collapse of vertical banks. When these channels were built they were valued only for their drainage capacity, while today, with the Christchurch City Council's (CCC) "six values" approach, the waterways of the city are recognised for their ecological, landscape, recreational, heritage, cultural, and drainage values.

In 2006, a 640 m section of the unimaginatively named No. 2 Drain received significant funding to be naturalised by having the box lining removed, the banks re-graded and vegetated, a stony substratum installed, a road culvert improved for fish passage, and a large stormwater detention basin created. EOS Ecology was involved in the design and build phases to ensure the ecological benefits of the naturalisation were maximised and specifically to ensure habitat for a locally rare resident fish species (bluegill bully - *Gobiomorphus hubbsi*) was retained and enhanced. While such projects are often assumed to have ecological benefits, most are never adequately monitored to determine if this is the case.

Fortunately, in this instance the CCC had the foresight to have a survey of habitat condition, aquatic invertebrates, and fish carried out prior to the naturalisation works. EOS Ecology designed and conducted this survey, which involved four sites (three within the naturalisation section and one control) being sampled once before (2006) and twice after (2008 and 2010-11) channel naturalisation works. Construction occurred mid-2007 to mid-2008. In 2010-11, the invertebrate survey occurred in December 2010 while the fish survey was done in March 2011 (after the February 22 earthquake).



**No. 2 Drain  
Bluegill Bully  
reach  
(before)**

No. 2 Drain is a very low gradient system draining a predominantly horticultural catchment on the northern fringe of urban Christchurch. As such, it has a mostly soft-bottomed (sandy) substrate, low water velocities, and an invertebrate and fish community dominated by species that prefer or are tolerant of such conditions. The invertebrate community was dominated by snails (the New Zealand endemic *Potamopyrgus antipodarum*), seed-shrimps (Ostracoda crustaceans), and non-biting midge larvae (Orthocladiinae).

The fish fauna was dominated by three species of endemic Eleotridae bullies (common bully - *Gobiomorphus cotidianus*, upland bully – *G. breviceps*, and bluegill bully – *G. hubbsi*) and one Anguillidae eel species which is also found in eastern Australia, the shortfin eel (*Anguilla australis*). Of the species encountered, the most notable was bluegill bully, which is more typically found in larger, swift, stony-bottomed rivers where they live among the rocks in swift riffle habitat. Bluegill bullies are rare in Christchurch and the No. 2 Drain catchment is the only area in which they are known to occur.



## The Naturalisation of an Artificial Drainage Channel *ctd...*

This species is listed as “declining” by New Zealand’s latest freshwater fish conservation status report (<http://dx.doi.org/10.1080/00288330.2010.514346>) and was found exclusively in the lower section of No. 2 Drain, which had a stony bed and moderate water velocities. EOS Ecology ensured special attention was paid to retaining the habitat preferences of this species during the design of the naturalised channel to ensure bluegill bullies would persist in No. 2 Drain. During the naturalisation works, the existing bluegill bully habitat was dewatered for over nine months. To avoid the loss of this locally unique fish population, ~100 individuals were housed in captivity by EOS Ecology for the duration of construction and released into the “new and improved” habitat once flow resumed.

The naturalisation project increased instream habitat complexity but did not result in any dramatic changes to the aquatic invertebrate or fish fauna within the subsequent 2.5 years. However, more subtle changes were notable, with several sensitive caddisfly (Trichoptera) taxa appearing less than six months after habitat improvement, albeit in low numbers (accounting for less than 1% of all invertebrates captured). It is difficult however to attribute this solely to the improved habitat as they also appeared at the upstream control site. Fish were abundant in the naturalised section within six months of flow resuming, indicating rapid colonisation. After 2.5 years, the naturalised section supports a similar fish fauna as it did prior to naturalisation.

Our post-naturalisation surveys have only encompassed 2.5 years of re-colonisation and it is possible new invertebrate and fish species may colonise given enough time. For a number of species however, there are likely to be limitations to natural colonisation (e.g. physical barriers such as tidal control structures, culverts, and urban areas, and the nearest source populations may be beyond the dispersal limits of some species).



**No. 2 Drain construction**



Photo by Bec McIntyre

## The Naturalisation of an Artificial Drainage Channel *ctd...*

Encouragingly, the bluegill bullies had persisted some 2.5 years after reintroduction and had colonised the new areas of habitat specifically designed to suit their substrate and flow preferences, although it was evident that the 22 February earthquake had damaged some of this habitat. Another notable effect was an apparent influx of large numbers of common bullies, most likely due to the large substrate providing both habitat and spawning sites.

Additionally, during the surveys schools of inanga (known as common galaxias in Australia - *Galaxias maculatus*) have been observed moving upstream indicating this species is benefiting from fish passage improvements to a road culvert (e.g. resting spot below culvert and coarse substrate through culvert). Although not specifically measured as part of this study, it is evident the naturalisation has made No. 2 Drain more appealing to a number of bird species including the native pukeko (known as purple swamphen in Australia - *Porphyrio porphyrio*) and endemic New Zealand scaup (a diving duck - *Aythya novaeseelandiae*).

Overall, this naturalisation project could be considered to have had major improvements to landscape values and minor improvements to ecological values all while maintaining the drainage values that were the original purpose of No. 2 Drain. Most importantly, the bluegill bully population seems to be self-sustaining and capable of increasing their range along No. 2 Drain wherever habitat is suitable.

**Alex James MEIANZ**

EOS Ecology, Christchurch, New Zealand

Earthquake footnote: The 22 February 2011 earthquake damaged the specially-designed bluegill bully section through lateral spreading of the banks, inputs of liquefaction smothering the coarse substrate, by changes to water levels, and reduction in water velocity. This has effectively reduced the area of suitable bluegill bully habitat and we are hopeful this section will soon be recreated to suit the needs of this special native fish.



**No. 2 Drain Bluegill Bully Reach - After Naturalisation Works (2010)**



Photo by Dave Manson

## Member Snapshot – Rebecca Voyer

**Quals:** Bachelor Applied Science (Protected Area Management), Associate Diploma Applied Science (Wilderness Reserves and Wildlife), Graduate Diploma Occupational Health and Safety

### **What do you do?**

Corporate Environmental Superintendent for Leighton Contractors Western Region, which means I provide project support for environmental management, mentor and develop our younger environmental professionals, undertake audits, and review and improve our environmental systems and tools. I also try to lift the profile of environmental sustainability within the company and help develop strategic direction for all of the above.

### **How did you get there?**

After twelve years of project-based environmental positions across Australia for Leighton Contractors, an opportunity presented itself to undertake a corporate role in Western Australia and assist with developing the strategy and direction for environmental management and sustainability within the region.

### **Best aspects of your work?**

The diversity of the people you work with and the locations you work in, and the opportunity to be involved in adjusting peoples' mindsets about the environment and sustainability.



### **Biggest environmental concern?**

Irresponsible development and use of natural resources.

### **How and why did you get involved with EIANZ?**

I wanted to know who else was out there in the environmental professional world and be able to have access to other like-minded people. There were limited forums available for this back in early 2000 and EIANZ was one organisation that seemed all-encompassing and beneficial to belong to. The information shared through The Environmental Practitioner keeps me up to date with best practice methods and alternative opportunities which I can try to introduce in my working environment.





Photo by Dave Manson

## Member Snapshot – Wil Allen

### **Quals**

BSc (Hons); Grad Dip (Applied Science).

### **What do you do?**

Environment Manager for SMEC Canberra.

### **How did you get there?**

The round-about way.

### **Best aspects of your work?**

The varied and interesting work, the support for innovative ideas and the challenge of finding win-wins.

### **Biggest environmental concern?**

Loss of biodiversity in the Australian landscape.

### **How and why did you get involved with EIANZ?**

EIANZ has a long history of bringing professionals together around engineering developments and environmental issues. I think they offer a focus on the boundary between these two worlds. That is why I joined.



## Member Snapshot – Sophie Hagan

### **Quals**

Master of Environmental Management – Sustainable Development from Queensland University, Australia.

### **What do you do?**

Currently, I am the Environmental Advisor for the Ministry of Municipality and Urban Planning, Qatar (overseas).

### **How did you get there?**

Believing that I could make a difference!

### **Best aspects of your work?**

Project managing high-profile projects at the national level in a different culture and social context.

### **Biggest environmental concern?**

Lack of environmental concern and having have to build policy and regulations from scratch.

### **How and why did you get involved with EIANZ?**

It is a respectable organisation of trained and qualified environmental professionals.





Photo by Terry Reís (NRA)

## New Members

Division	First Name	Last Name	Category
FNQ	Glen	Richards	FULL MEMBER
FNQ	Megan	Ireland	ASSOCIATE
FNQ	Zoe	Chesters	ASSOCIATE
FNQ	Catherine	Miller	FULL MEMBER
FNQ	Brioni	Armstrong	ASSOCIATE
FNQ	John	Foley	FULL MEMBER
FNQ	Jacqueline	Dupavillon	FULL MEMBER
FNQ	Fred	Lubin	FULL MEMBER
FNQ	James	Hill	FULL MEMBER
FNQ	Alexander	Morison	FULL MEMBER
FNQ	Anthony	Backer	FULL MEMBER
NSW	Ben	Annan	FULL MEMBER
NSW	Russell	Tacken	FULL MEMBER
NSW	Fenn	Hinchcliffe	FULL MEMBER
NSW	Paula	Nott	FULL MEMBER
NSW	Myfanwy	Peebles	STUDENT
NSW	Julian	Prior	FULL MEMBER
NSW	Lexie	Frankham	FULL MEMBER
NSW	Suzanne	Mildren	FULL MEMBER
NSW	Kelly	Leedham	FULL MEMBER
NSW	Leng	Boonwaat	STUDENT
NSW	Emily	Cotterill	FULL MEMBER
NSW	Michelle	Evans	STUDENT
SA	Fiona	Sutherland	FULL MEMBER
SA	Jasmine	Richards	FULL MEMBER

Division	First Name	Last Name	Category
SEQ	Mark	Longbottom	FULL MEMBER
SEQ	Mark	Bennett	FULL MEMBER
SEQ	Kathryn	Ewing	FULL MEMBER
SEQ	Nick	Swanson	ASSOCIATE
SEQ	Sarah	Persijn	FULL MEMBER
SEQ	Dexter	Chew	STUDENT
SEQ	Prue	Pettett	ASSOCIATE
SEQ	Carl	Mitchell	FULL MEMBER
SEQ	Lyndon	Gordon	FULL MEMBER
SEQ	Beth	Clouston	FULL MEMBER
SEQ	Andrew	Wills	FULL MEMBER
SEQ	David	Patterson	FULL MEMBER
SEQ	James	Holliday	FULL MEMBER
SEQ	Scott	Thomson	STUDENT
SEQ	Nathan	Waltham	FULL MEMBER
SEQ	Samuel	Smith	ASSOCIATE
SEQ	Kerry	Wastell	FULL MEMBER
SEQ	David	Den Hertog	FULL MEMBER
SEQ	Matthew	Fredriksen	ASSOCIATE
SEQ	Geordie	McMillan	FULL MEMBER
SEQ	Zoe	Jeffery	STUDENT
SEQ	George	Morris	ASSOCIATE
SEQ	Virginia	Barrios	ASSOCIATE
OVERSEAS	Farhan	Javed	FULL MEMBER

Division	First Name	Last Name	Category
TAS	Pearse	Buchanan	STUDENT
VIC	Keith	Primrose	ASSOCIATE
VIC	Raghava	Dasika	FULL MEMBER
VIC	Nicola	Waldron	FULL MEMBER
VIC	Bianca	Aquilina	FULL MEMBER
VIC	Ed	Boucaut	FULL MEMBER
VIC	Jason	Downes	ASSOCIATE
VIC	Fadi	Al-Zubaidi	STUDENT
VIC	Andrew	Titterington	STUDENT
WA	Daniel	Jordan	FULL MEMBER
WA	Wendy	Xu	FULL MEMBER
WA	Kerryn	McCann	FULL MEMBER
WA	Timothy	Hamilton	FULL MEMBER
WA	Denise	McCorry	FULL MEMBER
WA	Karen	Foster	FULL MEMBER
WA	Chris	Kennedy	ASSOCIATE
WA	Zara	Kurdzinski	STUDENT
NZ	Owen	West	FULL MEMBER
NZ	Stephanie	May	FULL MEMBER
ACT	Samantha	Vertucci	ASSOCIATE
ACT	Tyrie	Starrs	FULL MEMBER
ACT	Ian	Batterley	FULL MEMBER
ACT	Marcus	Sainsbury	FULL MEMBER

Photo by Bec McIntyre

## EIANZ Directory

Executive	
President	Michael Chilcott
Vice President Australia	Tiffany Thomson
Vice President NZ	Jeska McNicol
Secretary	John Braid
Treasurer	Leo Fietje
Communications Editor	Bec McIntyre
Immediate Past President	Bill Haylock
Divisional Councillors	
ACT	Margaret Nicholson
FNQ	Adam Smith
NSW	Faye Woodward
NZ	Di Buchan
NT	Cathy Waldron
SA	Stewart Duncan
SEQ	Mark Williamson
TAS	Axel von Krusenstierna
VIC	Paul Kelly
WA	Keren Raiter

Standing Committee Chairs	
External Relations	Patrice Brown
Policy & Practice	Richard Hoy
Journal Editorial	Prof. Helen Ross
Membership Promotion	Nick Kariotoglou
Professional Development	Dr David Hogg
Student & Early Careers	Paul Keighley
Certification Board	Nigel Murphy

Central Office	
Operations Manager	Anne Young
Membership Administrator	Catherine McCafferty

Special Interest Sections	
Impact Assessment	Lachlan Wilkinson
Ecology	Simon Mustoe
Climate Change	Tiffany Thomson

Division/Chapter Presidents	
ACT	Mark O'Brien
FNQ	Lyndall Harvey
NSW	Fabian Sack
NZ	Jeska McNicol
NT	Ian Hollingsworth
SA	Maria Furulis
SEQ	David Carberry
TAS	Kathryn Pugh
VIC	Elizabeth Hurst
WA	Toni Munroe

## Professional Indemnity Insurance

---



In the world that we live in, protecting your assets is more important than ever.

Whether you are an independent Environmental Consultant or a principal of a practice, the professional services you provide expose you to the risk of civil liability.

Marsh has developed a Professional Indemnity facility for Environmental Consultants. This facility is open to members of the Environment Institute of Australia and New Zealand. Professional Indemnity insurance can protect Environmental Consultants for breach of their professional duties (subject to the terms and conditions of the policy).

The policy arranged by Marsh provides cover for the following:

- > Fidelity (\$50,000 maximum)
- > Fraudulent or dishonest conduct of any employee
- > Automatic Reinstatement (one)
- > Joint Venture Liability
- > Defamation
- > Former Principals
- > Statutory Liability + more

Marsh is one of the world's leading providers of risk management and insurance services. The facility negotiated by us, provides a good quality cover at reasonable premium.

For more information or a no obligation quotation, contact:

**Contact:**           **Rachel Grima – Account Executive**  
**GPO Box 1229, Melbourne, VIC 3000**  
**Phone: (03) 9603 2760 Fax: (03) 9603 2753**  
**Email: [rachel.grima@marsh.com](mailto:rachel.grima@marsh.com)**

Marsh can now also arrange a no obligation business insurance quotation, please contact:

Lambros Moschoyiannis  
Email: [Lambros.Moschoyiannis@Marsh.com](mailto:Lambros.Moschoyiannis@Marsh.com)  
Telephone: 03 9603 2249

Marsh Pty Ltd (AFSL 238 983, ABN 86 004 651 512) arrange the insurance and are not the insurer. This advertisement contains general information only and does not take into account your individual objectives, financial situation or needs. For full details of the terms, conditions and limitations of the covers, refer to the specific policy wordings and/or Product Disclosure Statements available from Marsh on request. Please note that the Design Institute of Australia receives a financial benefit from the sale of a professional indemnity insurance product, enabling them to continue to develop and provide further services to their members. (12/0012).