



Australasian Chapter

Newsletter

IECA (Australasia) Presidents Report.

Michael Frankcombe



I have once again been fortunate enough to attend the IECA Conference and Trade Exposition in the USA. This year it was called ECO5 (Environmental Connection 2005) and was held in Dallas Texas. The ECO5 theme continues IECA's plan of

forming strategic relationships with other professional environmental organisations throughout the world. Many of those organisations were represented at the conference.

Approximately 2200 people attended ECO5 which was much better than Philadelphia last year that had 1700 attendees.

The USA conference every year has a greater international focus. At the international breakfast it was exciting to reunite with IECA members from South Africa, India, Singapore, Italy, New Zealand, South America, China, Malaysia and Sweden. More importantly it was great to hear about the progress being made to form Chapters in China and India. Australasian Chapter Board Members Doug Wimble and Bill Leggatt have been instrumental in making this happen.

Next years conference is in Long Beach California. It should be pretty exciting and a great holiday destination to boot.

One of the great attractions of the USA conference is the trade exposition. It is the largest trade exposition of its kind in the world. One thing that becomes apparent when attending these events on a regular basis is that there is not a lot of totally new products in our industry. Sure there are new variations on existing products such as new biodegradable logs that actually filter sediment contaminated water instead of ponding water but realistically it's rare that something brand new turns up. I'm pleased to say that just prior to going over to Dallas I was

introduced to a brand new product that has recently been developed by a sediment fencing contractor on NSW's Central Coast.

The name of that contractor is Peter McNeil. Peter has spent years installing sediment fencing. This experience has resulted in Peter developing a user friendly and substantially more efficient sediment fence mounting system. Details on his new product are provided elsewhere in this newsletter. It's really encouraging to see this type of innovation coming out of Australia. Well done Peter.

Keep in mind that the 2005 conferences are fast approaching. The Australian event is being run by the Stormwater Industry Association (SIA) in Port Macquarie 19 - 22 April. IECA are running erosion and sediment control short courses at this event. We are also involved in the New Zealand Water and Waste Conference (NZWWA) conference in Auckland 3 and 4 May. We are running a comprehensive short course program at this event.

Like our parent body the Australasian Chapter is working to form strategic relationships with other relevant environmental professional organisations. Our involvement with SIA and NZWWA is testimony to this. Bill Gardyne IECA Australasia Vice President has been working closely with both the Environment Institute of Australia and New Zealand and the Queensland Environmental Protection Authority. There is some discussion of running a joint erosion and sediment control seminar in either Cairns or Brisbane late this year. It is great to see Qld Government refocusing on erosion and sediment control issues. Thanks to Bill for his continuing commitment and hard work in making this happen.

As you can see we have a fair bit on this year. It's all about providing value and services to our members. I look forward to catching up with you at one of our events.

Michael Frankcombe
IECA (Australasia) President.

INSIDE THIS ISSUE:

East Ryde's Doug Wimble elected IECA President again.	2
IECA(Aust) Board 2005	2
Bushfires leave large areas exposed to erosion.	3
Complex Sediment & Site fencing.	3
Presidents Technical Tip - Hydro Mulch Tackifiers	4
Coming events	4

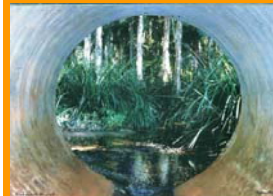
9th SIA Regional Conference on Urban Stormwater Management in NSW

APRIL 20th - 21st 2005

SUSTAINABLE STORMWATER:

You Are Responsible - Justify Your Decisions.

Port Macquarie



Photograph by Aaron Murphy courtesy Hastings Council & Camden Haven Community College Osmosis Project

THEMES:

SUSTAINABLE WATER MANAGEMENT

STORMWATER REUSE

WSUD CASE STUDIES

SALINITY

EDUCATION / LEGAL ISSUES

PLUS

IECA Workshop 19th April

Field Trip 22nd April.

For more details, go to www.stormwater.asn.au or ph 1300 76 11 22

Erosion & Sediment Control Training



International Erosion Control Association

Brian Wunsch Centre
126 Avoca Rd, Wakeley,
Sydney UBD Ref: 229 A16

June 21 and 22 2005

For more information and to register contact the Chapter Office:

Ph: 1800 354 322

Email: admin@austieca.com.au

This Newsletter has been sponsored by:



AQUASEEDING
ALL OUR PROCESSES ARE ENVIRONMENTALLY FRIENDLY

East Ryde's Doug Wimble elected IECA President again.



*Doug Wimble,
IECA President for
the second time.*

Doug Wimble, Managing Director of Spraygrass Landscapes Australia, was elected to the presidency of the International Erosion Control Association (IECA) for his second term at the 35th Annual Conference and Exposition in Dallas, TX on Feb. 23rd. Wimble is a long time member and leader of IECA having first attended their technical conferences in 1981. He was instrumental in starting IECA's very first non-US Chapter, the Australasian Chapter, which encompasses Australia and New Zealand, and served six years as that chapter's president. He has served IECA as an International Director, and member of the IECA Board, and as the IECA International Vice-President. Wimble is IECA's first non US resident president.

Doug and his spouse Judy reside in East Ryde, New South Wales, and have three grown children, Katie, Luke, and David. Luke and David are following in their father's footsteps in the erosion and sediment control business, and Luke is currently the General

Manager of Spraygrass Landscapes Australia.

As one of his goals for IECA during his term as president, Doug hopes to see tremendous international growth and understanding of the problems caused by erosion.

Congratulations Doug.

Congratulations are also extended to Michael Frankcombe for being elected as Technical Vice President.

China Study Tour ~ Are you interested in a 5-day erosion and sediment control field tour of China? Maybe you are thinking of setting up distribution of your products in China? IECA is working with our China Ambassador to set up an educational field tour if enough members are interested. Contact IECA (Aust) Office.

SPECIAL POINTS OF INTEREST:

- **Australasian Chapter wins 2 "Partners in Excellence Awards" for Chapter Management and Education.**
- **Copies of Conference Proceedings from the 1998, 1999 & 2001 Chapter Conferences are available for free from the Chapter Office.**
- **Top technical issues survey, please complete & return.**

IECA (Australasia) Board 2005

IECA (Australasia) would like to congratulate Michael Frankcombe, Rachel Pearce and Grant Witheridge on their appointment as Directors to the IECA (Australasia) Board. Michael, Rachel and Grant have been appointed for a 3 year term. Michael has had a number of years on the Board and has been reappointed.

Rachel is currently employed by the City of Casey in Victoria as a Water Projects Officer where she is involved in projects relating predominately to water quality management and conservation. Rachel's area of interest lies in educating the industry especially in relation to new requirements with erosion and sediment control.

Grant has 22 years experience in stormwater management and hydraulic structures, including 7 years at the University of NSW Water Research Laboratory operating physical models of hydraulic structures. Grant has an interest in the operation of training courses and conferences. He is keen to help establish a better partnership between IECA (Aust) and the Storm Water Industry Association.

Michael Frankcombe has been re-elected as Chapter President, Bill Gardyne as Vice President and Brendan Swifte re-elected as Secretary. Suzan Frankcombe has taken on



*Michael Frankcombe, re-elected as
IECA (Aust) President.
Michael is based in NSW.*



*Rachel Pearce, elected to the IECA
(Aust) Board of Directors.
Rachel is based in Vic.*



*Grant Witheridge, elected to the
IECA (Aust) Board of Directors.
Grant is based in Qld.*

the role as Treasurer. Congratulations to all and thank you in advance for your efforts.

IECA (Aust.) wish to thank Chris Phillips and Neil Boland for their input as Directors over the last 3 years for Chris and 6 years for Neil. Chris has been terrific in proofing documents and articles and a great ambassador for IECA(Aust) in New Zealand. Neil was one of the main organisers behind the 2001 Brisbane Conference and made great efforts in developing an IECA(Aust) training program which would be recognised throughout Australia and New Zealand. A huge vote of thanks is extended to Marijke Morse who has had the role of treasurer for many years and ensured all reporting deadlines have been met as well as keeping the books up to scratch.

FOUNDATION MEMBERS:

- **Spraygrass Landscapes Aust.**
- **Aquaseeding**
- **Maccaferri**
- **Alliance Seeds & Revegetation**

Bushfires leave large areas exposed to erosion.

The Australian summer of 2002-2003 saw bushfires burn the greatest expanse of land (1.3 million hectares) since the 1939 fires, leaving large areas exposed to erosion.

One area badly affected by erosion was the Livingston Creek site at Omeo.

The restoration project for this site was sponsored by Landcare Australia and Bundaberg Rum as a part of the Bush Fund for water quality improvement works.

Treemax was involved in supplying our environmentally friendly Silt-Worm sediment control product which is made from recycled and organic biodegradable materials, together with Treeguard sleeves which are made from 95% remilled plastic, and Recover weed control mats, which are made from recycled tex-



Before restoration



After restoration

tiles.

At Omeo, the Silt-Worms were the perfect solution in slowing the water flow over the exposed soil, reducing sediment movement. The encouraged water penetration provided an ideal growing environment for the newly planted native seedlings. The Silt-Worms also facilitated the collection of the existing soil seed bank which was threatened to be washed away with water movement and erosion of the site. This seed was encouraged to germinate in the moisture and sediment rich areas behind each Silt-Worm.

After 3 months the site had experienced strong vegetation regrowth and stabilisation of the soil. The Silt-Worms will remain on the site to continue to assist the revegetation process and will naturally biodegrade over time.

Complex sediment and site fencing

Part of our role in IECA is to inform IECA members of new erosion and sediment control products and techniques. Many of these new products hail from the USA so it is great to see a new product that has been developed and produced in Australia.

IECA member and Director of Complex Siteworks Peter McNeil has spent a fair bit of time dealing with the various problems associated with the installation of sediment fencing and security fencing (and often both at the same time).

Peter has recently developed two products. The first is an "all in one" sediment fence mounting system and post cap called Complex silt caps. The cap is remarkably simple and has a flat prong that allows the sediment fence to be hooked on to the post. This allows the quick and easy mounting and tensioning of sediment fences greatly improving installation efficiencies. It also allows the sediment fence to be dropped at any time or place to gain access for machinery.



The Complex silt caps allow easy periodic retensioning of the sediment fence. The caps also act as safety caps helping address OHS requirements.

The second product is a temporary site security fence mounting system that is not only lighter than some of the other commercially available systems but is also split to allow the installation of sediment fence as well. The product is called Complex base blocks.

The Complex base blocks are made from recycled plastic and use recy-

cles concrete aggregate. The Complex system offers greater protection to the sediment fence by reducing the chance of it being destroyed by site traffic and machinery. It can also be easily dismantled to allow access for machinery and deliveries, and re-erected without the need for staple guns, sledge hammers etc.

Complex Siteworks are based on the Central Coast of NSW. For further information on these products contact Peter McNeil on 02 43810382 or 0412 349256.



International Erosion Control Association
(Australasia)

PO Box 33
Picton NSW 2571

Phone: +61 2 4677 0901
1800 353 322
Fax: +61 2 4677 0902
1800 353 227

Email: admin@austieca.com.au



International Erosion Control Association

We're on the web!
www.austieca.com.au

2005 IECA (Australasia) Board and Committee Members.

Michael Frankcombe

President and Chair CPESC committee,
Education committee.
mfrankcombe@austieca.com.au

Bill Gardyne

Vice-President, Education committee
bgardyne@austieca.com.au

Brendan Swifte

Secretary, bswifte@austieca.com.au

Tim Duckett

Director, Education Committee
tduckett@austieca.com.au

Bill Leggatt

Director and IECA(Aust) website developer.
bleggatt@austieca.com.au

Graeme Ridley

Director, gridley@austieca.com.au

Rachel Pearce

Director, rpearce@austieca.com.au

Doug Wimble

Director, President of IECA,
dwimble@austieca.com.au

Grant Witheridge

Director,
gwitheridge@austieca.com.au

Robert Coulsen

Associate Director

Ian Kiernan, OA, OAM

Patron

Sandra Lanz

Communications Officer,
slanz@austieca.com.au

Suzan Frankcombe

Treasurer

Presidents Technical Tip - Hydro Mulch Tackifiers, Michael Frankcombe CPESC.

Most of us have a poor understanding of what ingredients make up a hydro-mulch. Even fewer of us understand the glues or "tackifiers" that hold the hydro-mulches together and glue them to the soil.

It has taken me years to get a working understanding of hydro-mulch tackifiers. This understanding has evolved from trialling different tackifier rates and mixes, talking with various hydro-mulch application contractors and glue manufacturers.

There are two main types of tackifiers used in Australia: cross linked guar and co-polymer Poly Vinyl Alcohol (PVA's).

Guar glues evolved in the food industry. There is a fair chance that we all have consumed a guar product at some time in our lives. Hydro-mulching contractors have indicated to me that they use guar because they have excellent flow characteristics making the application of the hydro-mulch easier. They are completely biodegradable and won't set hard potentially impacting on the ability of emerging shoots to penetrate the hydro-mulch matrix.

The main disadvantage of the guar is that they can "re-wet" after rainfall, that is, after application if rain falls, the guar can absorb water and lose some of their strength. This is potentially a problem on steep slopes and in areas of high rainfall intensity.

Co-polymer PVA's are probably not as "environmentally friendly" as the guar but they are a lot more durable. Once they have been applied they will set "hard" and will not re-wet. The advantage over guar is that the PVA's will do a better job at holding the hydro-mulch matrix on steep slopes and will withstand higher intensity rainfall. The main disadvantage is that they can "crust over" severely limiting the ability of shoots to emerge through the matrix. They are also more expensive than the guar. Curasol is a commonly used Australian PVA tackifier although I'm led to believe the name has now changed.



Some of the other tackifiers used in the USA but not commonly used in Australia include those made from Psyllium husks and Polyacrylamides (PAM's).

Some of the commercially available hydro-mulch tackifiers in Australia are a mixture of a number of these products. For example Envirotack is a mixture of guar and

psyllium gums. Sometimes they will add 10% PVA for additional strength.

I'm told that the suppliers of Envirotack are developing a new product called Envirotack Plus that instead of using the PVA for additional strength will use a PAM.

The black art of hydro-mulching is to know which glue to use and in what situation. It also depends on what type of organic mulch is proposed to be used. Here are a few examples that may steer you in the right direction: In low intensity rainfall environments or flat slopes use guar glues. Hydro-mulching contractors recommend application rates of 40 to 60 kg/ha with 2000 to 3000kg/ha of organic mulch. For medium to high intensity rainfall environments and on extremely steep slopes I have used a 50% guar and 50% PVA mix up to 200kg/ha total with success with 6500 to 8000kg/ha of organic mulch. Somewhere around 120 to 150 kg/ha is likely to be adequate in most slope environments.

I'm very interested in trialling a 50% guar, 50% PAM mix.

For a spray on weed blanket I have used 300 to 400kg/ha of PVA with 8000 kg/ha of organic mulch. This particular mix has lasted for more than five years in the wet tropics of Far North Queensland.

If you are struggling to understand what hydro-mulch tackifier(s) to specify I'd strongly recommend that you contact a number of hydro-mulching contractors via our website and discuss your requirements with them. If you are still uncertain after going through this process contact me via the IECA(Aust) web site and I'll either try to help you out or will put you in touch with someone that can.

Coming Events

Sydney, NSW

How to Select & Construct BMP's for Construction Sites - four easy steps to success; Planning and Implementing a Revegetation Program for Erosion Control - sowing the seeds for success; A Dummy's Guide to Design of Erosion and Sediment Control Measures - a plain English presentation for non-engineers. **June 21 -22 2005.** email: admin@austieca.com.au, ph: 1800 354 322

Port Macquarie, NSW

How to Select & Construct BMP's for Construction Sites - four easy steps to success; Port Macquarie, **Tues 19 April, 2005;** email: admin@austieca.com.au

SIA NSW Regional Conference 2005 "Sustainable Stormwater" You are responsible: Justify your decisions. **20-22 April 2005.** www.stormwater.asn.au/nsw/events.asp, ph: 1300 76 11 22

Auckland, NZ

4th South Pacific Stormwater Conference 2005, Carlton Hotel, Auckland, **4-6 May 2005,** www.nzwwwa.org.nz/events.

Birbane, Old

Ozwater Watershed - The Turning Point, Convention & Exhibition, Townsville 5 - 7 May 2005, Brisbane **8 - 12 May 2005.** www.awaozwater.net