

13th ANZGG Queenstown, Tasmania – Program

Sunday 10th February

Registration in the foyer, 'Penghana', from 3pm

5:30 pm Welcome BBQ at 'Penghana'.

Opening address by Darryl Gerrity, Mayor, West Coast Council, 6:30pm

Monday 11th February

Conference sessions – Queenstown Memorial Hall, Orr St

8.00 – 8.30	Registration – Queenstown Memorial Hall	
8.30 – 8.45	Welcome and introduction	Ian Houshold
8.45 – 9.30	Film "Seeing Change"	Kim McKenzie and John Chappell
	Neotectonics and landscape evolution	
9.30 – 9.45	An overview of the neotectonics of Australia: the not-so-stable continent	Dan Clark
9.45 – 10.00	Local variability in landscape evolution, and the question of scale	David Gibson
10.00 – 10.15	Long term landscape evolution of the Western Australian Shield	Brad Pillans
10.15 – 10.30	Ancient landscapes of the western Canning Basin, north-western Australia: the significance of palaeovalleys in the modern landscape	Adrian Fisher and Pauline English
10.30 – 11.00	Morning Tea	
11.00 – 11.15	Late Cenozoic deformation of the Australian continent: evidence from the Eucla Basin.	Lisa Worrall
11.15 – 11.30	Evolution of the Drainage System of Western Tasmania.	Eric A. Colhoun
11.30 – 11.45	Application of <i>in-situ</i> cosmogenic nuclide analysis to landform evolution in Dartmoor, south-west Britain	Joseph H. Hägg, Michael A. Summerfield, Cristoph Schnabel, William M. Phillips, and Stewart Freeman
11.45 – 12.00	Catchment erosion over the past 100,000yr in southeastern Australia: insights on how erosion and sediment transport respond to climate change	A. Dosseto, S. P. Turner, P. Hesse, K. Fryirs and K. Maher
12.00 – 12.15	Landscape evolution on a passive margin: Rates of valley incision and plateau lowering in the Sydney Basin using cosmogenic ¹⁰ Be	Duane White, Kerrie Tomkins, Paul Hesse, Geoff Humphreys, David Fink
12:30 – 1.15	Karst landscape development in a coastal environment during the Pleistocene, Naracoorte S.A	Susan White & John Webb
	Keynote address	Mark Quigley/ Mike Sandiford
1.15 – 2.00	Lunch	

Late Quaternary climates	
2.00 – 2.15	Alluvial evidence for major flow-regime changes during the Middle and Late Quaternary in eastern central Australia Gerald Nanson, David Price, Brian Jones, Jerry Maroulis, Maria Coleman, Hugo Bowman, Tim Cohen, Tim Pietsch
2.15 – 3.00	Late Quaternary climate change in central Australia: mega-lake phases or extreme monsoonal events? Tim Cohen, Gerald Nanson, Brian Jones, John Jansen, Josh Larsen
3.00 – 3.15	Some problems raised by the Late Pleistocene valley-fills in the semi-arid Flinders Ranges, South Australia Martin Williams
3.15 – 3.30	A preliminary geospatial visualisation of a late Pleistocene fluvial wetland surface in the Flinders Ranges, South Australia Peter Glasby and Anthony O'Flaherty
3.30 – 3.45	The late Quaternary palaeoenvironmental history of Lake George, New South Wales Fitzsimmons, K.E. and Barrows, T.
3.45 – 4.15	Afternoon tea
Glacial and periglacial landscapes	
4.15 – 4.30	Landscape instability around the Last Glacial Maximum – geomorphic effects in southeastern Australia John Webb and Brian Finlayson
4.30 – 4.45	Late Pleistocene glaciation of Mt Giluwe, Papua New Guinea Timothy Barrows, Michael Prentice, Geoff Hope, L. Keith Fifield and Steve Tims
4.45 – 5.00	Cosmogenic nuclide dating in the Denison Range, Southwestern Tasmania Matthew McMinn, Kevin Kiernan & David Fink.
5.00 – 5.15	Pre-Last Glacial age for morphologically fresh moraines in the Western Arthur Range, southwest Tasmania. Kevin Kiernan, David Grieg and David Fink
5.15 – 5.30	Relative age dating of the Wahiona moraines, Mt Ruapehu Erin Nolan
5.30 5:30 -	Trish Fanning, David Dunkerley and Brad Pillans do the honourable thing - Queenstown Memorial Hall

Tuesday 12th February

Aeolian landscapes and the onset of aridity		
8.45 – 9.30	Keynote address – the descent into aridity	John Chappell
9.30 – 9.45	Dating of Australian longitudinal dunes using cosmogenic nuclides	Toshiyuki Fujioka , John Chappell, L.Keith Fifield and Ed Rhodes
9.45 – 10.00	Morphological diversity in the Australian continental dunefield: Results of a new mapping project and insights into dune formation	Paul Hesse
10.00 – 10.15	Linear dune and dunefield development: Complexities and implications for palaeoclimates	Josh Larsen Gerald Nanson, Tim Cohen, and Brian Jones
10.15 – 10.30	Identification of palaeo-drought episodes in the catchments of the Snowy Mountains Hydro Scheme and Murray-Darling Basin, Australia	Samuel Marx , Hamish McGowan, John Denholm
10.30 – 11.00	Morning Tea	
11.00 – 11.15	Soils and geomorphology (A tribute to Geoff Humphreys) Relationships in Global Soil Distribution as Revealed by a World Soil Database	Jonathan Gray and Geoff S. Humphreys
11.15 – 11.30	The role of fire in landscape development, southeastern Australia	Kerrie Tomkins and Geoff S. Humphreys
11.30 – 11.45	Toward large scale simulation of surface armouring and weathering	S. Cohen , G.R. Willgoose and G.R. Hancock
11.45 – 12.00	Spectral remote-sensing techniques for regolith characterisation and mineral exploration in Queensland, Australia	Matilda Thomas , Thomas Cudahy and Mal Jones
12.00 – 12.15	Four faces of stratigraphic instability: divergent mechanisms of slope failure	Mike Crozier
12.15 – 12.30	Sediment tracing using rare earth elements (RRE), Main Range National Park, Queensland	David Higgitt
12.30 – 1.30	Lunch and Poster session	
	Landscape management and Geoconservation	
1.30 – 1.45	People and sheep, wind and water: geomorphic processes and human impacts in Tierra del Fuego, Argentina, and consequences for the archaeological record.	Patricia Fanning , Monica Salemme, John Pickard, Fernando Santiago and Jimena Oria
1.45 – 2.00	Development of the Tasmanian River Condition Index – comparing apples with apples	Alexandra Spink , James Grove, Ian Houshold, Fiona Dyer

2.00 – 2.15	How to fit an Escalator into a Letterbox – Dividing Tasmanians rivers into categories useful to the measurement of condition	James Grove , Alexandra Spink, Ian Houshold, Fiona Dyer
2.15 – 2.45	Convergence of the waters: now is the time to plan for a national system of catchment-scale river-reserves.	Ian Rutherford and Ian Houshold
2.45 – 3.00	The original Lake Pedder: <i>A post-mortem</i> geomorphology and <i>pre-partum</i> prospects.	Kevin Kiernan
3.00 – 3.15	The Queensland regolith project: our progress and practises	Michael Craig , Matilda Thomas; Mal Jones, Joanne Morrison, Ian Robertson, Tessa Chamberlain, Ben Harnes, and Brad Pillans
3.15 – 3.30	Predicting Wind Erosion Hazard in Western Queensland, Australia	Nicholas P. Webb , Hamish A. McGowan, Stuart R. Phinn, John F. Leys, Grant H. McTainsh
3.30 – 4.00	Afternoon Tea	
	Landscape management and Geoconservation	
4.00 – 4.15	A revised map of Australia's physiographic regions: a hierarchical map unit approach to geoscience mapping	Colin Pain
4.15 – 4.30	Volcanic Geosites, and their use in Geoparks and geotourism, with examples from SE Australia	E. B. Joyce
4.30 – 4.45	Geomorphological impacts of armed conflict: Implications for assessment of environmental war crimes?	Kevin Kiernan
4.45 – 5.00	Linking the geomorphology, vegetation and soils on the Murray River floodplain for salinity management	Vanessa Wong , Jon Clarke and Colin Pain
5.00 – 5.15	Quaternary subalpine slope materials stability: a landslide/landslides on the Great Western Tiers, Tasmania.	Deborah Hunter
5.15 – 5.30	Mass movement on the great Western Tiers, Tasmania	Andrew Hammond , David Wilson and Peter McIntosh
5.45 – 6.30	Australasian Fluvial Group Meeting	
7:30 –	Geomorphic-trivia-Queenstown-Memorial-Hall- <i>IAE meeting</i>	

Wednesday 13th February – Mid-conference field trip to Mt Lyell mine, glacial deposits and King River Gorge, return 8.30 pm

8:30 Hall.

9:30 – 1.30 Tour of the Mt Lyell mine workings and new tailings facilities

- History of the Mt Lyell operation
- Geology and glacial geomorphology of the Linda valley
- Geoheritage assessment and management
- Development of an environmental management system for mine drainage
- Management of tailings

Geoff Cordery - Environmental Systems Manager, Copper Mines of Tasmania

Dr Keith Corbett, - geologist

Dr Eric Colhoun – geomorphologist

John Halton - Mt Lyell Enviro-tours

Doug Hayden - Dougie's Mine Tours

Dr Kevin Kiernan - geomorphologist

Dr Lois Koehnken - Technical advice on water

1:30 – 2.45 Lunch, ‘Penghana’

3.00 – 8.30 – Geomorphology and land management in the Queen and King River valleys – West Coast Wilderness Railway

- Neotectonics and landscape evolution
- Impacts of mining operations on fluvial systems
- Geomorphological monitoring programs and interactions with Hydro Tasmania operations
- Environmental rehabilitation trials – King River floodplain and delta

Geoff Cordery

Lois Koehnken

Ian Houshold

Thursday 14th February

Coastal processes and sea level change	
8.45 – 9.00	Looking at estuarine processes in terms of attractors E. J. McLean & J.B. Hinwood
9.00 – 9.15	Cross Sectional Form in Muddy Tidal Creeks Gareth Davies
9.15 – 9.30	Reef-island evolution in the Mamanuca Island group, Fiji. David M. Kennedy and Hamish W. McKoy
9.30 – 9.45	Deciphering Holocene sea-level change in New Zealand from detailed barrier stratigraphy acquired utilising ground-penetrating radar Amy J. Dougherty and Scott L. Nichol
9.45 – 10.00	Late Quaternary geomorphology of the lower Manawatu floodplain and estuary Alastair Clement, Craig Sloss, Ian Fuller
10.00 – 10.15	Changing sediment sources, deposition rates and human impact: Macquarie Harbour, western Tasmania. Paul Augustinus
10.15 – 10.30	Latest results from the Huon Peninsula, PNG John Chappell
10.30 – 11.00	Morning tea
11.00 – 11.15	A nationally - consistent coastal landform map for Australia Chris Sharples
11.15 – 11.30	Geomorphology of atolls and their vulnerability to climate change Colin D. Woodroffe
11.30 – 12.30	Keynote address and discussion
12.30 – 1.30	Lunch and Poster session
	River evolution
1.30 – 1.45	Karstic morphology in quartzose rocks: Santana River basin at middle Paraiba do Sul river valley, Minas Gerais state, Brazil Uagoda, R; Avelar, A.A. & Coelho Netto, A.L.
1.45 – 2.00	Fluvial Architecture of the Murray River at Chowilla, South Australia Jonathan D. A. Clarke
2.00 – 2.15	River terrace sequences in the Widdien Valley: relationships and processes Michael D. Cheetham, Annabelle F. Keene, Richard T. Bush and Wayne D. Erskine
2.15 – 2.30	The evolution and stability of peat swamp channels, Barrington Tops, Australia Rachel Nanson
2.30 – 2.45	Geomorphology of the entrenched Murray River floodplain, Lindsay-Wallpolla Islands, Victoria Jonathan D. A. Clarke
2.45 – 3.00	Fluvial grain-size trends in a sedimentary basin: The Lachlan River, Murray-Darling Basin Justine Kemp
3.00 – 3.15	Using evolution and speciation of troglitic fauna as a relative dating technique to determine the age of ancient palaeochannel deposits in the Pilbara region of Western Australia. Arthur Clarke
3.15 – 3.45	Afternoon tea

Human disturbance and river management		
3.45 – 4.00	A response gradient of river adjustment and recovery across the upper Hunter catchment: Impacts of human disturbance since European settlement.	Kirstie Fryirs, Gary Brierley, Alexandra Spink
4.00 – 4.15	Don't fight the site: Geomorphic considerations in catchment-scale river rehabilitation planning	Gary Brierley, Kirstie Fryirs
4.15 – 4.30	Modelling within-reach variability in sediment remobilisation potential: an approach for targeting river rehabilitation efforts	Jo Hoyle, Andrew Brooks, John Spencer
6.00 – 7.00	ANZGG AGM <i>Silver Hills</i>	
7.00 –	Conference dinner <i>Silver Hills</i>	Speaker – Patsy Crawford

Friday 15th February

Tropical and dryland rivers	
8.45 – 9.00	Highly variable floodplain deposition in wet tropical streams throughout the late Holocene; Implications for sediment delivery to the GBR lagoon.
9.00 – 9.15	Some components of the sediment budget in a large tropical river - Mitchell River, Gulf of Carpentaria.
9.00 – 9.30	A review of factors controlling alluvial gully erosion and a proposal for quantifying changes in gully erosion rates in the Mitchell River, northern Queensland
9.30 – 9.45	Effect of an extreme storm event on catchment hydrology and sediment transport in the Alligator Rivers Region, Northern Territory
9.45 – 10.00	The long profile of the lower-Mekong River: Identifying major controls on pool morphology susceptible to river regulation and navigation improvement works
10.00 – 10.15	Links between floods, landslides, soil erosion and rates of floodplain accretion in the sugarcane belt of the Labasa River, Vanua Levu island, northern Fiji.
10.15 – 10.30	Transmission losses in ephemeral dryland streams: the role of mud clogging in channel margin sediments
10.30 – 11.00	Morning tea
	River Management: from theory to management
11.00 – 11.45	Keynote address
11.45 – 12.00	The delineation of valley margins as the basis for a valley confinement index using different resolution DEM data: implications for continental scale river classification approaches.
12.00 – 12.15	Assessment of flood variability in eastern Australia.
12.15 – 12.30	More than rolling stones: Geomorphic response models for environmental flow assessments in southeast Australian rivers.
12.30 – 1.30	Lunch
	S. Leonard and J. Nott
	Andrew Brooks , John Spencer, Jeffrey Shellberg, Jon Knight and Leo Lymburner
	Jeffrey Shellberg , Andrew Brooks, Jon Knight and John Spencer
	M.J. Saynor , G.W. Staben, D.R. Moliere, J Lowry & K.G. Evans
	Iwona Conlan , Ian Rutherford, Brian Finlayson & Andrew Western
	J.P. Terry , R. Lal, S. Garimella
	David Dunkerley
	Gerald Nanson
	John Spencer , Andrew Brooks and Jon Knight
	Paul Rustomji , Neil Bennett and Francis Chiew
	Geoff Vietz and Ross Hardie

River Management	
1.30 – 1.45	Formation of pool-riffle sequences in a sand-bed stream of the upper Hunter Annabelle F. Keene, Richard T. Bush, Michael D. Cheetham and Wayne D. Erskine
1.45 – 2.00	They bite back: geomorphic hazards when rehabilitating planform controlled sand bed streams Andrew Brooks, Nicholas Cook and David Outthet
2.00 – 2.15	Natural Sequence Farming and Fluvial Geomorphology: dichotomy or misunderstanding? John Field and Nathan Weber
2.15 – 2.30	Geomorphology and the Management of Melbourne's Urban Streams Sandra Brizga
2.30 – 2.45	Influence of woody debris on channel hydraulics in the lower Avoca River P.J. Sandercock, A. Allgaier, B. Abernethy, A. Brooks, Treadwell, R. Morden, S. Lang
2.45 – 3.00	Where did the River go? Physical interventions in the Latrobe River and their implications for predicting and managing for channel change Mark.R. Stacey, Ross.E. Hardie
3.00 – 3.30	Afternoon Tea
3.30 – 3.45	The Avon River: A road to recovery? Historic channel incision, present day flood response and future management Elisa.A. Zavadil Ross.E. Hardie
3.45 – 4.00	Methods to assess bedload transport relevant for benthic invertebrate communities in mountain streams Arved Schwendel, Russell G. Death & Ian C. Fuller
4.00 – 4.15	Sedimentation of the Avon River Pools downstream of Toodyay, Western Australia Ross N. Perrigo, Jim Davies, Bernard Kelly
4.15 – 4.30	... and another thing.... Farewell and Post-conference field trip information Ian Houshold and Tim Cohen