



RGSQ Bulletin

ISSN 1832-8830

October 2023
Vol 58 no 09

Published by The Royal Geographical Society of Queensland Ltd., a not-for-profit organisation established in 1885 that promotes the study of geography and encourages a greater understanding and enjoyment of the world around us.

Patron: [Her Excellency the Honourable Dr Jeannette Young AC PSM, Governor of Queensland](#)

President: Mr John Tasker

What's happening on Council?

The Society's Council met on Tuesday 19 September. Items of interest include:

- Councillors spent some time checking the 2022/23 financial report from the auditor, the Council's annual report to members, and the notice of meeting for the Annual General Meeting.
- A good number of students had signed up as members of the Society following a presentation by our Young Geographers Group at the University of Queensland. We are planning to survey our student members to find out how to better serve them and retain more of them when they finish their studies.
- Thanks to the members who helped with the Australian Geography Competition mail-out, returning students' certificates and results to 700+ schools that participated.
- The Collections Committee is trialling using SharePoint cloud storage to hold the Society's digital collections.
- Positive feedback has been received on the Geography Matters presentations delivered via Zoom. Councillors questioned whether technical hesitancy was stopping some members taking advantage of this excellent series. If this applies to you, we'd appreciate your letting a Councillor or the Office know so we can decide whether to offer simple training on this.
- The IT Management Committee is looking at alternative phone and internet service provision to increase the available bandwidth.
- The last grant application from the Gambling Community Benefit Fund to upgrade the webcam and microphones had been unsuccessful. However, they had encouraged the Society to resubmit at the September round and the Property Committee had done so.
- The first of the Society's new student research grants had been awarded to Bohao Dong, a PhD student at the University of Melbourne. His research topic is *Using giant clam shell geochemistry to understand past environmental change and human-environment interaction on Lizard Island*.

- Only 4 of the 130 Soils for Science kits remain to be distributed to members and friends. Feedback has been that members have enjoyed collecting the samples knowing they were contributing to this health-related project.

For further information on any item, please talk to a Society Councillor at a Society event or send an email to info@rgsq.org.au.

Welcome New Members

We have much pleasure in welcoming *Burnett Mary Regional Group, Mohanad Alkudhairi, Laura Alvis Sanchez, Christine Fairweather, Shuai Feng, Shoshannah Fogarty, Amelia Handley, Yufei He, Emily Kinchin, Natasha Scally, Bronwyn Schlamowitz, Sally Thompson, Han Wang and Javier Leon* as new members. We hope your association with your new Society is mutually enjoyable.

2023 Annual General Meeting Tuesday 17 October 7.30 pm

Register: <https://rgsq.org.au/event-5401289>

This year's AGM will be held on premises and via teleconferencing using ZOOM.

Please register for the meeting on the RGSQ website at: <https://rgsq.org.au/whatson>.

If you are having trouble registering or have any questions about the AGM, please do not hesitate to contact us on (07) 3368 2066 or email info@rgsq.org.au. A link to the Zoom AGM will be emailed closer to the event day.

We look forward to your participation on the night.

WHAT'S ON

For all upcoming RGSQ events, please visit the Society's website www.rgsq.org.au under '[What's On](#)'.

GEOGRAPHY MATTERS

Reconciliation in Australian Conservation: The Emergence of Cross-Cultural Approaches in Ecology and Environmental Management

with A/Prof Emilie Ens and Ishara Sahama

10 October, 7:30 PM – 8:30 PM @ Zoom Only

Register: <https://rgsq.org.au/event-5416142>



Photo: A/Prof Emilie Ens (left) with Yolŋu miyalk (woman) and Wānga Wataŋu (Traditional Owner) of Gurrumurru Homeland, Djuna Wunurmurra. Photo supplied by Emilie Ens.

A/Prof Emilie Ens is a cross-cultural Ecologist based in the School of Natural Sciences, Macquarie University. Emilie has been mentored by and collaborated with many knowledgeable and generous Elders and rangers. Over the last 15 years she has continued to build these relationships and has developed new cross-cultural approaches to better understand and manage Country and environmental impacts and change. She, and her vibrant Cross-Cultural Ecology Lab group, work with multi-generational and multilingual groups on site specific projects in Arnhem Land, northern NSW and the Sydney region, as well as large scale regional and national collaborative projects. Her team work on a range of topics from invasive species to fire, climate change, wetlands, coasts, biodiversity, language and cultural knowledge documentation, and higher education transformation. Her work combines Western ecology tools with knowledge, techniques and priorities of her Aboriginal colleagues in an attempt to produce ethical and socio-ecologically just approaches to conservation.

Emilie will be interviewed by **Ishama Sahara**, a Human Geographer who focuses on systemic change through community engagement, social justice advocacy and holistic impact measurement. She works in an environment with researchers skilled at transforming human emotions and socio-cultural motivations into tangible outcomes that can be easily evaluated for its impact.

In this talk, Emilie will describe some of the advances being made around Australia whereby Indigenous and non-Indigenous Australians are working together to share knowledge and create uniquely Australian ways of managing Country. Science, governments and the academy are now catching up with the groundswell of practical and rapidly evolving cross-cultural approaches in ecology and environmental management. It is timely to celebrate these achievements and continue to build on them to develop new strategies and renewed energy to abate the contemporary crises of biodiversity loss and climate change. Emilie will argue that new linked approaches to biocultural, conservation and restoration may allow us to harness the increasing interest in cross-cultural approaches and the Indigenous caring for Country movement to address, what Ricardo Rozzi described as the wicked problem of the Anthropocene, Biocultural Homogenisation.

GEOGRAPHY IN CONVERSATION

Blue heart - the Wetlands Project at Yandina and other Carbon Sequestration Restoration Projects

24 October, 5:30 PM – 8:00 PM @ Gregory Place, Level 1/28 Fortescue St, Spring Hill Qld 4000

Register: <https://rgsq.org.au/event-5417498>



Photo credits: Craig Doolan and Valerie Hagger

Guest speakers, **Craig Doolan**, Coordinator Biodiversity & Waterways with the Sunshine Coast Council, **Dr Fernando Adame Vivanco**, Research Fellow working at the Coastal and Marine Research Centre, Australian Rivers Institute at Griffith University, who is an expert on the science of carbon sequestration in wetlands and **Dr Valerie Hagger**, University of Queensland, School of Environment and whose research focusses on coastal ecosystem conservation and restoration.

Each speaker will have 8-10 minutes to spotlight their work.

During the Q&A forum the audience will have 60 minutes to ask questions of the experts on their projects.

Members registering please post your questions on notice to the GIC forum:

<https://rgsq.org.au/geographyinconversation>

OR non-members

Email questionsonnotice@gmail.com

Time: 5.30 pm light refreshments – doors open 5.15pm

6:00 – 6:30 pm Presentations

6:30 – 7:30 Q&A Forum

7:30 – 8:00 Mingling

Place: Gregory Place, Level 1/28 Fortescue St Spring Hill

Geographers in the Spotlight

In July 2023, **Dr. Meg Sherval** was awarded a Fellowship of the Institute of Australian Geographers, (FIAG). The award recognises sustained and significant contributions to Geography by IAG members. Meg is an environmental and resource geographer who works in the Centre for Urban and Regional Studies at the University of Newcastle. She was a Councillor of the Geographical Society of New South Wales for six years and, within the IAG, she has convened the Rural Geography Study Group and co-convened the Legal Geography Study group. Meg's research interests are place-based and include issues of land-use change and transition, development of



new and emerging energy sources both locally and internationally, constructs of nature, resource use and the social, cultural, legal and political impacts of environmental change. She has contributed her expertise voluntarily to communities in NSW during the release of the NSW government's land use plans, and her work has contributed to the imposition of exclusion zones around wine regions and horse breeding regions of the Hunter Valley. She has also worked with communities in offering advice on presenting before the Independent Planning Commission as well as with Indigenous peoples to help protect sacred sites. We would like to congratulate Dr Sherval on being awarded a Fellowship of the Institute of Australian Geographers.

Contributed by: *Iraphne Childs*

Now open – RGSQ 2023 Photographic Competition

Qld's Weather: the good, the bad and the ugly

1 Sep 2023 -31 Oct 2023



Details are available on the RGSQ website:

<https://rgsq.org.au/event-5393404>

Borrowing books from the Ken Sutton Memorial Library

Our Library's book collection catalogue has been available for all members to read online through eHive for a few months. More recently we have arranged for members to borrow books from the library, three items maximum at one time, each item for a period of one month.

To find books in the catalogue, use the link to eHive from the Society's webpage:

<https://www.rgsq.org.au/collections>.

Then click the RGSQ Collections Catalogue button and you will be taken to the RGSQ eHive page. From there you can browse the catalogue or search for books using keywords. To borrow books from the library, complete the Loans sheet held at reception. When you are finished with the books, please return the loans to the blue tub in the lecture area.

Library volunteers are now working on cataloguing the journals and maps - a big job. Once complete, members will be able to find RGSQ holdings by browsing the eHive catalogue.

Contributed by: *Jim Graham*



Treks and Activities

There are still some vacancies on two great trips organised for October and November:

Wednesday 11th October: [Visit to the unique Awassi Cheesery](#), including lunch there. We continue to the township of Grantham to inspect the move of the town to higher levels following the 2011 disastrous floods. We have arranged for a local expert to update us on present progress on this challenging project and to help us understand the effect on the local population and region.

Thursday 16th November: [A cruise on the "Lady Brisbane" down the Brisbane River](#) and cruising through Moreton Bay passing the many islands and inlets to Southport. Returning by coach back to Brett's Wharf. *Deadline for registrations - Thursday 12th October 2023.*

Full details of both these events are on the RGSQ website, and available to members and non-members and guests.

Everybody is always very welcome at all our events.

Report: Day trip to Seqwater Facilities, Gold Coast



On Friday 25 August, 27 members came together for a day trip to Seqwater facilities on the Gold Coast – the Desalination Plant at Tugun and the Hinze Dam at Advancetown. Our guide was an Education Officer from Seqwater, Karen.

Contrary to common belief and media reports, the Tugun desalination plant is not in 'mothballs'. It operates at a minimum one-third capacity providing drinking water to the Gold Coast. Sometimes it operates at higher capacity, feeding drinking water into the Seqwater distribution system.

The desalination plant is operated by Veolia Australia and New Zealand for Seqwater. While you may be familiar with the name Veolia from its waste management services, that is just part of the business of the global corporation. The design and operation of desalination plants is one of Veolia's diverse business activities.

After the health and safety preliminaries, we toured the plant's operational area, with our guide explaining the processes involved.

What we learnt: Built as a water security measure for South East Queensland and commissioned in 2009, the Tugun desalination plant converts sea water to drinking water by the process of reverse osmosis. Seawater is drawn from the ocean through a mushroom-like inlet

structure on the seabed about one kilometre off the coast and brought to the plant by pipeline. There it is first treated by conventional methods to remove suspended solids before being pumped at high pressure through reverse osmosis membranes to remove dissolved solids (mainly 'salt'). Finally, the water has lime and other chemicals added to meet drinking water standards set by Queensland Health.

The treated water is fed into the water grid and the concentrated brine returned to the ocean through a separate pipeline and diffusers at a distance from the intake. For every 100 litres drawn from the ocean, 40 litres of drinking water are produced, and the remaining 60 litres of brine is returned to the ocean and dispersed there. Continual monitoring is conducted to identify any emerging environmental impacts.

Seqwater has a fact sheet on the plant at <https://www.seqwater.com.au/sites/default/files/2021-11/2021%20-%20Fact%20Sheet%20-%20Gold%20Coast%20Desalination%20Plant.pdf>

After Tugun, we travelled to the other major Seqwater facility in the area, the Hinze Dam. There, our guide took us onto the dam wall and told us about how the dam operates.

Built on the Nerang River, the dam was originally constructed in 1976, raised in 1989 and significantly upgraded in 2011. The dam is the main drinking water supply for the Gold Coast region. The most recent upgrade saw the wall raised by 15 metres, doubling the dam's capacity, and providing increased water security and flood mitigation. It is an un-gated dam, meaning that when it reaches 100 per cent capacity, water flows over the spillway and safely out of the dam. There is also a system for relocating migrating fish upstream.

We had lunch at the dam and then returned home, having had a very informative and pleasant day.

Contributed by: Ralph Carlisle

REPORT: Geography in Conversation

Draft SEQ Regional Plan 2023



Stephanie Wyeth is a Professional Planner in Residence at the University of Queensland (UQ): the plan covers 12 local government areas and attempts to bring in all government documents. The decisions on the plan's directions were based on the latest data from the Bureau of Statistics. The main additions/changes from the 2015 regional plan relate to the current housing crisis and the future Olympics 2032.

By 2046 it is estimated that SEQ will have an additional 2.2m people, 1m more homes, 800,000 jobs, a very large increase in industrial land, and will be dependent on 70% renewable energy. The 1m extra housing will take only 1% of SEQ land.

Dr Hugh Possingham is currently the Chief Councillor of the newly created Biodiversity Council and Chief Scientist of Accounting for Nature: there is a serious lack of communication between the planning and environment departments to solve issues. There is an agreement around the country between States, Territories and Councils to conserve 30% of everything environmental. This is not being done. Wivenhoe Dam is filling with nutrients and sediments and needs dredging immediately.

There needs to be a vegetation protection area of 100-150m width either side of creeks and waterways.

Fiona Caniglia Executive Director of QShelter: currently Qld has 71,166 homeless people, about 7.9% of the population. The recent Qld Housing Summit has been successful in putting together the Emerging New Housing Action Plan for Qld and a Housing Supply Expert Panel (Qld), both very effective and already actioned.

Elizabeth Watson Brown, Federal Member for Ryan attended the event as a guest and said that current government structures were too complicated to make a difference to the housing shortage.

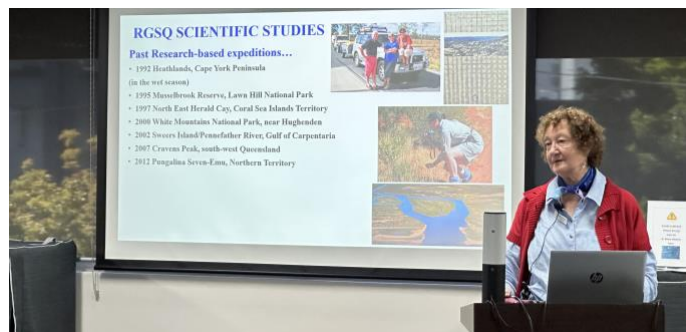
Q&A time: thousands of homes currently being built in response to the current homelessness are much smaller. Sustainable House Design Guides for climate sensitive homes have only been issued and enforced by the Sunshine Coast Council and Moreton Bay Council. It was said that communities and neighbours need to lean in to discuss with themselves how to protect local vegetation.

If you wish to put in an effective submission to the [SEQ Regional Plan](#), please read Chapter 4 and respond to the issues there.

Photo: Photo: L-R Graeme Rush, John Tasker, Philippa England (SEQCA), Pamela Tonkin, Chris Walker (SEQCA), Prof Hugh Possingham, Stephanie Wyeth, Fiona Caniglia, Neil Peach (Spring Hill Community), Elizabeth Wrason-Brown (Fed MP Ryan), Stella Rush; courtesy of Kay Rees

Contributed by: Daphne Stephens

Map Group Report: Binna Burra Tracks Project



At the Map Group meeting on 10th August Iraphne Childs gave us a presentation on the final report of the "Binna Burra Trails Mapping Project". This was a joint project with RGSQ, Binna Burra Management and two students from the University of Queensland, namely Vrinda Eswaran and Philip Gidley.

Binna Burra has always had tracks on their private land, separate from the walking tracks of the adjacent

Lamington National Park. As no road existed for the last 2 kilometres to the Lodge in the early days, these provided pathways from the Dump on the western side, as well as down the eastern side of the mountain to the Water Pump, Vegetable Gardens and the lookout at Bellbird, with its view down the valley to Egg Rock and Numinbah Valley. In the early 1970's a Lodge Loop and Senses Trail were added. The bushfires of 2019 destroyed the Lodge infrastructure and most of the surrounding forest. This, along with the emergence of new growth and weeds, took away most evidence of these old tracks.

Armed with old maps and stories, the project for the students, as part of their university assignments was to plot these old tracks and then produce a new map and a layout for rebuilding these pathways, where possible, or submit proposals for new tracks. On an early outing with Philip and others, to investigate the site of the project, it became apparent just how much of a challenge was ahead. New growth taller than us, knee high stinging trees, fallen timbers and many comments such as "the track was here somewhere" were the order of the day!

Another element of the project delved into the history and heritage of the tracks. This provided a background to the 'whys' and needs for these tracks. Without a past we don't have a present or a future.

Vrinda and Philip received high marks for their assignment and rightfully so.

Using slides and photographs Iraphne was able to give an outline of the students' final report. The full report can be viewed on the RGSQ website under [Projects](#). Thank you Iraphne for the presentation and for your time in journeying with the students during the project.

The presentation is available under Past Events on the RGSQ website <https://rgsq.org.au/2023events> or directly on YouTube: <https://www.youtube.com/watch?v=oKoEKRcm67k>

Photo: Kay Rees

Contributed by: Neville McManimm

RGSQ heads to Aotearoa

On 19th October 19 RGSQ members will depart on our tour to the South Island of New Zealand. We have organised the tour with travel agent, Mr. Stuart Betlem from Integrity Travel Durack. Past President and Councillor Iraphne Childs will be the tour leader.

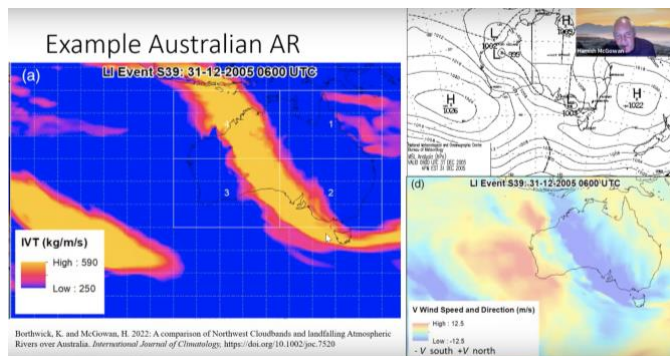
We will spend 3 days with Prof. Jamie Shulmeister, former RGSQ President and now Head of Geography at the University of Canterbury. Jamie will be guiding us around Christchurch and to some of his research field sites in the vicinity of Aoraki/Mt. Cook. Another highlight of the tour will be an overnight boat trip on Doubtful Sound in the Fiordland. We return to Brisbane on Thursday 2 November. *Nau mai haere mai ki Aotearoa!*

Contributed by: Iraphne Childs



REPORT: Geography Matters

Rivers in the Sky: Atmospheric Rivers



Professor Hamish McGowan, Professor of Atmospheric and Climate Sciences at the University of Queensland (UQ) presented on the topic of Atmospheric Rivers (ARs).

ARs have a lateral boundary where the atmosphere is carrying 250kg of moisture per metre per second. Meteorologists describe them as a long narrow, transient corridor of strong horizontal water vapor typically associated with a low-level jet stream ahead of the cold front of an extratropical cyclone. They are typically 800 kms wide, 3 kms deep and over 2000 kms long transporting 500 milligrams per second; twice the flow of the Amazon River. In Australia we might hear them referred to as North-South cloud bands, transporting moisture from the tropical region to the north of The Kimberley down through the centre of the continent ahead of a cold front towards SE Australia and Tasmania.

ARs source moisture from tropical and extratropical sources. They are cold fronts transporting water sourced from the tropics into the middle and higher latitudes. The transport of water vapour is poleward. There are 5 categories of ARs, from 1 – 5 with 5 being exceptional meaning that it carries more water over more time. ARs over Australia are moderate to strong level; 2-3. The geographical distribution is coastal, west coast and not inland. 4-6 ARs may exist at any one time across the globe.

With global warming there will be a considerable increase in the number of ARs. This is already measurable. For every 1 degree the atmosphere warms its water holding capacity increases by around 7%. Over the last 120-130 years there has been an increase in atmospheric warming of 1-4 degrees Celsius, which equates to a 10-12% increase in water holding capacity. However orographic processes raise that water holding capacity to 13-15%.

Hamish McGowan and Mary Voice, a preeminent climatologist who holds positions nationally and internationally, then discussed the subject. An interesting fact was that at least 1 AR has a name - the Pineapple Express - which transports moisture from the Hawaii region across the North Pacific to the coast of northern California.

Contributed by: Pamela Tonkin

Contributors: Kath Berg, Ralph Carlisle, Iraphne Childs, Jim Graham, Neville McManimm, Kay Rees, Chris Spriggs, Daphne Stephens, Pamela Tonkin

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October 2023

Lecture/Meeting:

Geography Matters: Tue 10 October

Reconciliation in Australian Conservation: The Emergence of Cross-Cultural Approaches in Ecology and Environmental Management

Geography in Conversation: Tue 24 October

Blue heart - the Wetlands Project at Yandina and other Carbon Sequestration Restoration Projects

Trips/Activities: Wed 11 October

Grantham and Awassi Cheesery

Thu 19 Oct – Thu 2 Nov

RGSQ's NZ tour

The October Council will meet on the third Tuesday of the month.

2023 AGM - Tuesday 17 October.

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