The environment... ultimate legacy or balancing act?
Season's Greetings

The PIA Queensland office
Xmas break will be from close
of business on Monday 19
December 2016, re-opening

Best wishes to all members,
sponsors, advertisers and
supporters for a safe and
happy festive season and for
a prosperous and rewarding
2017.

From the president
From the chief executive officer
From the editor

News
2016 PIA Awards for Planning Excellence in Queensland
Grapes, apples and planning in Stanthorpe
Climate change, Paris and coastal planning
The degree of Master of Urban Studies, University of Queensland – a retrospective
Leading women in planning recognized
HOW TO manage density in greenfields and brownfields sites
HOW TO navigate the EPBC Act referral and approval process
HOW TO implement best practice stormwater management
The Great Wall of South Bank
Letter to the editor

Plan
Planning for Queensland’s environment, community and economy - a balancing act
The sustainability of the new SEQ Regional Plan
Chain of responsibility laws
Natural hazard mitigation planning in the United States
Tree envy - in a changing climate, urban greening can save lives and money
Recognising indigenous rights in planning
Warding off disaster by planning resilient communities

People
Welcome to new members
Q&A - Richard Moore

Place
Tropical Urbanism – Cairns City Image Study
Postcard from Oahu

Next edition
The focus for the Autumn 2017 edition is Transformation. Other contributions that
relate to current planning issues are also welcome. Contributions should be between
1,200 and 1,800 words and may be edited. Images, graphs and photographs are
essential. Language should be direct, concise and targeted at a wide audience. Items
may be reproduced with acknowledgement.

Contributions for the Autumn 2017 edition are to be received by Friday 10
February 2017. Email qld@planning.org.au

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Queensland Planner Journal of the Queensland planning profession.
December 2016, Vol 56, No4 Printed on 113gsm Titan Gloss, which is a
carbon neutral paper produced using sustainable forest raw material.
ABN: 34 151 601 937 ISSN: 1326-3374
It was my absolute pleasure and privilege to provide opening remarks at the recent PIA Awards for Planning Excellence in Queensland dinner recognising planning excellence, planning contribution and planning achievement.

The iconic Gabba played host to the event with more than 200 guests including The Hon Jackie Trad MP; Deputy Premier and Minister for Infrastructure, Local Government and Planning, and Minister for Trade and Investment, Ian Walker MP; Opposition spokesperson for planning, a range of mayors and councillors from across the State, PIA Life Fellows, PIA Fellows, PIA CEO Kirsty Kelly, Chair of the Commonwealth Association of Planners Dy Currie and Immediate Past President Kate Isles.

The night was a very significant milestone for our industry. It was 30 years ago the idea of recognising planning excellence, planning contribution and planning achievements was born.

It was the time when:

- Ronald Reagan was the President of the United States;
- Bob Hawke was the Prime Minister of Australia;
- Joh Bjelke-Petersen was re-elected the Premier of Queensland with an absolute majority and 38.6 percent of the primary vote;
- when crocodiles and a man called Dundee took Hollywood by storm;
- when Neighbours was launched and still graces, our nightly television screens;
- the songs We Built this City by Starship and, You’re the Voice by John Farnham were Number 1 hits in Australia;
- At Talaq won the Melbourne Cup;
- Hawthorn won the Victorian AFL;
- New South Wales won the State Origin Series 3-0, primarily thanks to Peter Sterling and Brett Kenny.

It was in 1986, with no budget, an enthusiastic Awards Committee was formed. I would like to personally thank and recognise on behalf of the Planning Institute of Australia, the foresight of that initial Committee in recognising the value and contribution that we as planners or indeed our planning customers make to our communities. The initial committee consisted of the late Basil Veal, Noel Christie and Mark Doonar. Importantly, these events cannot succeed without the support of sponsors. I wish to thank our 2016 Awards sponsors in particular our long standing gold sponsor, the Queensland Government, our silver sponsor Brisbane City Council and our bronze sponsors – Allens, City of Gold Coast; Buckley Vann; Colin, Biggers and Paisley; Ipswich City Council; Gadens Lawyers; and Toowoomba Regional Council. We also appreciate the support of Powerlink Qld, Mackay Regional Council and the Wendy Chadwick Memorial Trust.

It has been a big year for planning. A range of matters impacted on how we do business every day. We have seen a range of legislative and policy changes including:

- a new Planning Act;
- a long-awaited SEQ Regional Plan; and
- many announcements such as the NQ Regional Plan.

We saw growth blossom in the financial year 15/16 with:

- residential building approvals rising 11%;
- non-residential building approvals rising 12.9%;
- Qld taking 18.9% share of national population growth.

All this means is more work for planners and our planning customers.

In 2016 PIA Queensland commenced the review of the awards, met with red and blue political leaders and have been chipping away at policy documents for consultation with our members on:

- responding to the digital world;
- planning for the indigenous estate;
- transport; and
- regional planning.

The continuing professional development of members and non-members on all things planning continues to thrive under the leadership of our convenor Rosanne Meurling and her team.

Our outreach to rural and regional areas, in response to member concerns, has been ramped up, with:

- our Central Queensland Convenor Julie Brook holding another planning symposium in Mackay;
- our North Queensland Convenor Phillipa Galligan holding a planning symposium in Townsville;
- our (former) Darling Downs and Lockyer Valley Convenor Josh Leddy co-ordinating PIA’s first Rural and Regional Planning Conference in Stanthorpe; and
- the decision to hold the State conference in 2017 in Bundaberg to be led by Wide Bay/Burnett Convenor Michael Ellery.

To all our convenors and our young planner network, thank you for efforts in 2016. You are greatly appreciated and valued.

What we saw in 2016, as we collaborated and consulted across the State was enormous innovation, dedication and commitment to great planning outcomes. This is reflected in the comments from the Awards Committee and judges about the awards. The Awards Committee and judges said they were overwhelmed by the standard and calibre of entries this year and it is testament to the quality of planning occurring in Queensland.

The diversity of winners is a reflection of what is unique to our industry. Very few, if any, industries work across as many sectors as we do. Some of us are regulators and enablers, some of us developers, some of us community advocates, environmental scientists, real estate agents, infrastructure planners and the like. This diversity requires us to consider a broad church of views and walk a tightrope in balancing the views of our members when creating policy positions and advocating for better communities and a better Queensland.

This broad diversity is our strength and it is my view this strength is bound by a common thread; a belief that as planners, regardless of what we do, or who we work for, we seek to create better communities and places.

In 2016, I would like to sincerely thank PIA’s Queensland staff, all individuals who voluntarily supported the Queensland Division in some form and all planners and our planning customers, for your input, debate and passion shown on planning matters in 2016. It is valued and appreciated.

A special vote of thanks and appreciation to Dan, “the Man”, Molloy. This is his last edition as editor of Queensland Planner. A valued friend of the Planning Institute of Australia.

Have a great holiday season and look forward to 2017 with gusto.
Reflections on PIA’s journey
Kirsty Kelly RPIA, Chief Executive Officer

In taking on my “dream job” as a 34-year-old back in 2011, it’s fair to say that I knew that I had a big job ahead of me. But as I bow out, now at 40, I’m filled with pride to see how much the Institute has grown and transformed. There is, of course, still much to be done. However, I leave knowing that there’s a solid foundation and structures in place for the next CEO to take PIA to the next level. I look forward to watching the next stage of PIA’s journey and will be cheering from the sidelines.

I believe it’s critical for growth to periodically pause and reflect on progress and achievements, to learn from the challenges and celebrate the successes. 2016 saw the completion of the 2012-2015 Strategic Plan and the endorsement of the new PIA2031 Strategic Plan for the coming 15 years. The directions of the 2012-2015 Strategic Plan centred heavily round the implementation of the Membership Retention & Recruitment Strategy. Membership growth through Planning Matters: Membership Matters has been on Registered Planner as the representative body for planning in Australia. The substantive focus of the past year has been on Registered Planner as the organisation’s most critical strategic initiative. The commencement of the rollout of Registered Planner in early 2016 was the culmination of more than three years of work to review and transform CPP into a credible, competency-based model. Reaching this milestone is a personal career highlight for me, involving countless hours of deep thinking, robust discussions and extensive research. Following a significant program of member and stakeholder consultation, I believe that we have developed a robust model that has learned from the lessons of CPP and will position PIA and Registered Planners to be recognised by government and industry as highly competent, qualified planning professionals.

There is still some way to go in implementing Registered Planner, but alongside the supply of Registered Planners we are focusing equally on the creation of a demand for Registered Planner. Unfortunately, I won’t get to see this through, but early indications across the country are that governments and industry are interested in Registered Planners as a means of assuring that the advice guiding the planning and development of our cities and regions is coming from appropriately qualified and capable professionals.

Aligned with PIA’s commitment to developing high quality planners, our CPD and University Accreditation policies have been reviewed and updated in the past year, providing a strong basis for the education and professional development of planners. This is supported by a strengthened program of professional development across the country, including a nationally available program of webinars and a commitment to the sustainable expansion of Victoria’s Planet program to other states and territories.

Queensland volunteers have stepped up on the national stage this year to put on a couple of spectacular events. National Congress in Brisbane this year had the largest numbers of delegates, and (importantly) the largest cohort of PIA members, attending in at least the last decade. To compliment the urban focus of Congress, this year we’ve recently successfully trialled the inaugural national Rural and Regional Planning Conference held also in Queensland – Stanthorpe - meeting the needs of our planners working outside of the major capitals. The call for a Rural and Regional Charter for PIA arising from that event is a great example of the passion of PIA members.

It has been a strong year in policy & advocacy nationally, with PIA releasing the first of its Journey towards 50 million reports. 2016 has also been the first year of a Cities Minister, with PIA playing a role in the collaborative advocacy that saw the inclusion of a Cities portfolio in the Ministry. This was taken up by Angus Taylor MP as the Assistant Minister for Cities and Digital Transformation, and retained following the federal election. PIA has engaged strongly with the Minister and supporting departmental teams to assist in shaping the cities agenda. City Deals – a concept PIA advocated for in the 2013 federal election as part of the Urban Coalition – has also been taken up federally this year, representing another policy win for our Institute. It has been fantastic to be personally involved in the collaboration and advocacy that led to these outcomes, with various professional and industry groups coming together and uniting for a common cause.

Supporting the need for better cities, PIA is a key member of the Parliamentary Friends of Better Cities group, which is a non-partisan group through which PIA and other collaborators can engage with parliamentarians. This has raised PIA’s profile and provided the platform for the launch of our Journey towards 50 million report - Through the lens: megatrends shaping our future. This was a great success, attracting ongoing attention via a sustained social media campaign.

Social media, traditional media and other communications have been an area of increased focus in the past year with the employment of a national Communications Manager. Our media presence increased substantially, and more recently we have formed a partnership that will see PIA stories promoting planning reach an audience of more than 50,000 via an allied industry online platform.

Kirsty Kelly RPIA
PIA is continuing to look for new ways to increase our presence as the trusted voice for planning.

Governance of the Institute is undergoing continuous improvement and is well supported by the Board Secretariat, with a new electronic voting system introduced this year to further enhance the quality of PIA’s governance systems. Financial performance is solid, with the Board making strategic decisions to invest in advancing Registered Planner, resulting in a modest profit. Membership, event attendance and strong support from our sponsors continue to be the main financial drivers of PIA's success. PIA's management continues to prove that it is adept at controlling expenditure and generating revenue in a constrained and competitive operating environment.

Once again, the PIA team and the multitude of volunteers across the country have put in an enormous effort this year. The National President, PIA Board, Division Presidents, Division Committees and a raft of other committees and working groups across the country give up much of their time to contribute to advancing PIA and the profession. I’d also like to take the opportunity to thank the past volunteers, Directors and Presidents of the Queensland Division for their support of me personally on the journey over the last six years, including Gary White MPIA (Life Fellow), Sonia Kirby MPIA, Greg Tupicoff MPIA, Dyan Currie FPIA CPP, Darren Crombie MPIA CPP, Kate Isles MPIA and Todd Rohl MPIA. I would also like to acknowledge the great work and support of PIA’s Queensland-based staff, past and present, including Kay Duggan, Dan Molloy, Mel Adam, Dion Adam, Gillian Morgan and Richard Moore.

PIA is very fortunate to have this fantastic team of staff, and I have had the privilege of helping to guide them. We have taken the concept of ‘OnePIA’ and made it business as usual, moving from what was once a very parochial culture to forming a unified national organisation that works closely and positively together. I believe PIA is at the forefront of our industry in the flexibility and adaptability of its work environment, which has enabled us to attract and retain good talent. I am very proud of being able to provide a career path within PIA through which I’ve watched several team members blossom and grow professionally to take on leadership roles.

My heartfelt thanks to my team, past and present, for all your hard work on behalf of our members and for your support of me over the past six years as CEO. It has truly been an amazing experience to succeed in my dream job. Now it’s time to pursue a new dream.

Kirsty Kelly CEO
The 30th PIA Awards in Planning Excellence were celebrated at a gala dinner at the famous ‘Gabba’ on Friday November 11.

Here we present a list of the winners and sponsors. Congratulations to the winners and commendation recipients and a thank you to our generous sponsors. A full list of winners and commendations can be found in the Commemorative Book on the PIA website.

Awards for Excellence – Category Winners

**Outstanding Student Project Award – Secondary**

Light Rail Investigation by Emma McIntyre – Mt St Michaels College

*Sponsor: Queensland Government*

**Outstanding Student Project Award – Tertiary**

Commendation only - no award in 2016

*Sponsor: Queensland Government*

**Award for Excellence – Cutting Edge Research and Teaching**

Mastering the Art of Planning - 100 Stories from Urban Planning Practice by Robin King-Cullen RPIA (Life Fellow) - Planning Secrets

**Award for Excellence – Best Planning Ideas Award – Small Project**

Tropical Urbanism - Cairns City Image Study by Cairns Regional Council, Tract Consultants, Follent, Peddle Thorp, CA Architects, Total Projects Group Architects

*Sponsor: City of Gold Coast*
Award for Excellence – Best Planning Ideas Award – Large Project

Moreton Bay Region University Precinct by Moreton Bay Regional Council
*Sponsor: Gadens Lawyers*

Award for Excellence – From Plan to Place

Kwong Sang Walk by Toowoomba Regional Council, Dig It Landscapes, Place Design Group, Deicke Richards, Urbis
*Sponsor: Colin Biggers & Paisley*

Award for Excellence – The Hard Won Victory

Loganholme Local Plan by Logan City Council
*Sponsor: Toowoomba Regional Council*

Award for Excellence – Improving Planning Processes and Practices

Gold Coast Flora & Fauna Database by City of Gold Coast
*Sponsor: Buckley Vann Planning + Development*

Award for Excellence – Public Engagement and Community Planning

Clifton Township Concept Master Plan by Tract Consultants, Toowoomba Regional Council, Clifton State High School

Award for Excellence – Great Place

Beenleigh Town Square by Logan City Council
*Sponsor: Allens*

Wendy Chadwick Encouragement Award

Wet Tropics Plan for People and Country by Terrain Natural Resource Management
*Sponsor: Brisbane City Council*

Award for Excellence – The Robert Swider Memorial Award Young Planner of the Year

Julie Brook MPIA
*Sponsor: Queensland Government*

Award for Excellence – Planner of the Year

Kate Isles MPIA
*Sponsor: City of Ipswich*

Award for Excellence – Overall Winner

Tropical Urbanism - Cairns City Image Study by Cairns Regional Council, Tract Consultants, Follent, Peddle Thorp, CA Architects, Total Projects Group Architects
The conference was held at the Queensland College of Wine Tourism, where delegates enjoyed a smorgasbord of the tastes and flavours of the Southern Downs. It was a great success, as people came together to share a real sense of camaraderie, share in common issues and appreciate the opportunity to explore and exchange ideas and approaches suited to rural and regional Australia. Many rated it the best conference they’d been to!

On Wednesday, study tours included both a bicycle and bus option. The bicycle tour included a 25km bike ride and was co-led by our conference Master of Ceremonies (MC) Greg Vann LFPIA CPP and illustrious ‘Southern Downite’ Cecil Barnard MPIA; who both wore the yellow leaders jersey on the tour which took in local landmarks, some big granite boulders, and a final sprint to a winery or two. Planners on this tour experienced the natural beauty, landscape and eco-tourism opportunities on ‘the Downs’.

The bus tour was led by Clancy Sloan PIA (Assoc.) from Southern Downs Regional Council (SDRC) and involved discussion on the planning issues and responses surrounding local land uses such as tourism, wine-making, agriculture and other ‘foodie’ industries. The tour started with Sutton’s Farm juice factory, cidery and distillery; followed by a visit to one of the region’s largest apple packing sheds, and was rounded out with a wine tasting masterclass at Summit Estate Wines. The planners on this tour enjoyed a first-hand look into the importance of agro-tourism and unique planning issues on the Southern Downs.

SDRC (our host local government) led a main street heritage tour on Thursday morning. Special thanks to Annette Doherty MPIA CPP, Ken Harris and team for their informative walking tour.

There were many impressive presentations over the two days. A flavour of both keynote and key message presentations included those from:

- Costa Georgiadis, host of Gardening Australia, gave a brilliant and inspirational address. He likened planners to Caper bushes, which are deep-rooted plants - like the roots a planner has in their community, where the outcomes we plan for are resilient to the political and social changes. Costa also saw planners in rural and regional areas as not only ‘tough mongrels’ but also ‘vascular surgeons’ i.e. standing tall and steadfast in the face of a challenge and that we are facilitative in clearing unnecessary bureaucratic obstacles, with the intention of allowing essential lifeblood to keep pumping through the town. Costa also reflected on the positive contribution of planning to the communities he has worked in, however he believes that we need to celebrate the outcomes more often, and focus less on the process.

- Jennifer Howard, Assistant Minister for Local Government, spoke to the wide program of regional planning initiatives being undertaken by the Queensland Government.

- Greg Chemello MPIA, General Manager for Economic Development Queensland, presented on the ‘Advancing our cities and regions strategy’ and strategies on regional liveability precincts and sustainable energy projects.
• Professor Jim Cavaye, from the University of Southern Queensland’s Institute for Resilient Regions presented a wide ranging take on the challenges facing our regions, as well as the opportunities they uniquely present.

• Brittany Lauga MPIA - MP for Keppel - chaired a Q and A inspired panel discussion which included notable practitioners and academics from the planning industry. This included insights from a politician’s perspective, and involved discussion on what role a planner may play in their communities.

• Ian Sinclair MPIA (Fellow) and George Milford MPIA both talked ‘Food over Food’ at a special Friday morning breakfast session. This included discussing planning, food security and promoting agro-ecotourism and artisan farming opportunities.

• Stuart Moseley RPIA (Fellow), Deputy Director General of DILGP, presented on regional futures, including the benefits of planning at a regional level, and how this can be approached to address planning issues such as conflicts between town development/growth and regionally important agricultural industries.

• Kirsty Kelly RPIA, PIA CEO, presented on the role and importance of rural and regional areas in strategies looking forward to an Australia with a population of 50 million people.

The conference was also fortunate to receive over 65 high quality abstracts, and 28 were selected to present at concurrent sessions. Some which attracted a lot of interest included Sue Calvin from Taree (NSW) about the effectiveness of tactical urbanism in the main street of a regional town and Thomas ‘Sherlock’ Gardiner of tactical urbanism in the main street of a regional town and Thomas ‘Sherlock’ Gardiner MPIA (Rockhampton), a young planner who outlined the lessons learnt and how to wrangle rural/region planning bull by the horns. In addition, Stephen Smith (DILGP) presented a masterclass on the Murweh (Charleville) south-west planning scheme project, which involved a collaborative partnership between the state, local government and community to help this smaller local government plan for their communities via a streamlined plan-making process.

Thanks to the team of five who presented informative snapshots on agricultural land management, and the intensive poultry and pork industries - Stephen Potts (DAF), Mark Baker-Jones and Nell van Weerdenburg (both Dibbs Barker), David Ireland MPIA (PSA) and Janine Price (Australian Pork Limited). The diversity of presentations was as impressive as the high quality of delivery by all. The focused rural and regional theme produced a great sharing of planning knowledge from across Australia.

One of the key benefits of holding a conference in a rural and regional area is the ability to experience the town as a local would. The main conference dinner was hosted at the Granite Belt Brewery, and involved sampling the local craft beer. The wrap up social function was held at the Granite Belt Brewery, and involved sampling the local craft beer. The wrap up social function was held at a local historic pub, where Costa joined us for the evening talking about tales from the road and his experiences in working directly with the community on contributing to a town’s identity.

During the planning and preparation of the conference, the organising committee recognised the need for an outcome of the conference. This was the inception point for the Rural and Regional Planning Charter. The charter attempts to establish a strategy for a planning agenda for a more liveable and prosperous future for rural and regional communities and planning in Australia. The charter received positive support and comment, and will be distributed to all attendees for further consideration. Trevor Budge AM MPIA (Life Fellow), from City of Greater Bendigo, also led a very productive group discussion on Friday afternoon.

The organising committee also deserves a huge congratulations and acknowledgement; the committee included Cecil Barnard MPIA (SDRC), Chris Buckley MPIA (Life Fellow) (Trac), Damian Rigby MPIA (TRC), Hayley Seears PIA (Graduate) (TRC), Mel Adam (PIA QLD) and myself as conference convenor.

Specialist input and advice from Andrew Foley MPIA (USQ), Ian Sinclair MPIA (Fellow) (Edge Planning), Marita Basson MPIA (USQ), Paula Grant RPIA (TRC) and Richard Moore (PIA QLD) was also greatly appreciated. To Greg Vann LFPIA CPP for his skilled and entertaining duties as MC - thank you! He kept the conference running efficiently and is a born natural to that role.

Our sponsors also deserve a special thanks; Major - Queensland Government through DILGP; Gold - City of Logan; Silver - Colin Biggers and Paisley; Toowoomba Regional Council and John Gaskell Planning Consultants; Special and event sponsors and supporters – Southern Downs Regional Council; Buckley Vann – Planning + Development; King and Company - Solicitors; University of Southern Queensland; Edge - Land Planning and Reel Planning - Urban and Rural Strategies.

At the last call on Friday afternoon there was a strong vote to conduct a second rural and regional planning conference within 12 months … so watch this space in a rural and regional community near you!
Climate change, Paris and coastal planning
Laura Gannon MPIA

Professor and Director of the Global Change Institute at the University of Queensland, Ove Hoegh-Guldberg, delivered this year’s Keeble Lecture on the topic of climate change, the Paris agreement and coastal planning. With a background in biology, Ove has focused his studies on the impacts of climate change, particularly as they relate to the Great Barrier Reef. He has featured on the ABC program ‘Australian Story’ and having him deliver this year’s Keeble Lecture was a true privilege. Ove’s lecture was on point, only weeks after the release of the Queensland Climate Adaptation Directions Statement, and immediately following the enactment of the Paris Accord on 4 November, putting in place legally binding limits on global warming for the first time.

Ove commenced his lecture highlighting that the concentration of dialogue and communication with regard to climate change impact must tie back to the solid scientific base which exists, with 97% change impact must tie back to the solid communication with regard to climate warming for the first time. In terms of how we are currently tracking, Ove spoke to a rapid upward trend of record breaking temperatures experienced in 2015. To date, including 2015, 15 of the 16 warmest years on record have occurred during the 21st century. The odd sceptic may emerge forth and seek to rationalise this trend by suggesting it could be part of long-term weather variability. What does Ove think? It is difficult to dismiss climate change as a significant factor in global warming trends when solid science says we should be seeing more extreme temperatures and weather events, and we in fact are.

The reality is that major changes will occur across every sector of society, every ecosystem and every bit of geography across the globe. The risk from coastal flooding alone is estimated well into the hundreds of billions of dollars in Australia, which includes a significant proportion of essential community infrastructure. The tourism industry in Australia is particularly vulnerable. Great Barrier Reef mortality is escalating, likely faster than you might have anticipated. Ove suggests that by the mid-point of this century it is potentially going to be ‘curtains’ for the Great Barrier Reef unless significant action is taken on a global scale to mitigate the impact of global warming. Like it or not, this means carbon pricing. It may not be the only tool in the toolbox, but it is a fairly critical one because of the need to drive a rapid change. The longer we resist, the more significant the potential to drive long term impacts.

Looking through the planning lens, climate change impacts translate to more than just dealing with a rising sea level and more intense natural hazard impacts – as if the task ahead wasn’t already monumental. It is also about facilitating a changing economy in key areas such as energy generation, transport, manufacturing, and the list goes on. Changing employment markets are key to improved climate mitigation and adaptation, and fostering such changes sooner rather than later is imperative to maintaining economic, environmental and social well-being.

In terms of how we are currently tracking, Ove spoke to a rapid upward trend of temperatures over the past +100 years, with 2016 tracking to take the title of the warmest year on record, beating out the record breaking temperatures experienced in 2015. To date, including 2015, 15 of the 16 warmest years on record have occurred during the 21st century. The odd sceptic may emerge forth and seek to rationalise this trend by suggesting it could be part of long-term weather variability. What does Ove think? It is difficult to dismiss climate change as a significant factor in global warming trends when solid science says we should be seeing more extreme temperatures and weather events, and we in fact are.

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The Paris Accord implies that 95 per cent of fossil fuels now must stay in the ground. Whilst there may be approximately 15,000 GT of CO2 (fossil fuel reserves) yet to be capitalised upon, we now have a budget. That budget is 500 GT of CO2 that we globally have left to emit to the atmosphere before global warming exceeds 2 degrees. That equates to about 15 years’ worth of carbon emissions at current rates. Thus, we have a finite window for action.

What does this mean for planners? The impact of climate change is going to be felt much sooner than you or I may have anticipated. We need our economies to shift, we need our communities to be aware, and to be protected. We also need to protect our invaluable environment and all of its natural functions.

If we consider the impact of the Christchurch earthquake, 50 years’ worth of sea level rise impact occurred in just a few seconds due to the ‘sinking’ of large stretches of the city. We don’t know what is around the corner, events that could potentially expedite long term impacts. Despite this, Ove conveys the message of a good news story. We have solutions, and we have the opportunity to change. We have the opportunity to mitigate and to formulate adaptation plans. We can mitigate and adapt to climate change.
Queensland Planner – Summer 2016 – Vol 56 No 4 – 9

The degree of Master of Urban Studies, University of Queensland – a retrospective

Victor Feros MPIA (Life Fellow)

Having recently been notified of a University of Queensland (UQ) Planning Alumni Reunion, I was prompted to reminisce about the pioneering Master of Urban Studies Degree (MUS) course.

Professor Lewis Keeble, Past President and Life Fellow – uniquely, and what is more, for all time – of both the British Royal Town Planning Institute and of the Royal Australian Planning Institute, conceived the Master of Urban Studies Degree curriculum at UQ in 1968 and introduced it in 1969, reflecting his visionary commitment to multi-disciplinary planning.

The Department of Town Planning commenced at UQ in 1972.

Notwithstanding the outstanding success of initial enrolment placements, the Board of Studies in Urban Studies recommended in 1975 the curtailment of the MUS “because of the introduction of the Masters of Regional Science and other new Masters degree courses, as these substantially overlapped with the options in the MUS course” (the options were, principally, Urban and Regional Planning, but also included Government, Law, Urban Design, amongst others). In consequence, the Urban Studies Masters was replaced by the Master of Urban and Regional Planning Degree (MURP), however with noticeably reduced curricular requirements.

The conferral of the Master of Urban Studies Degree was accordingly limited to 1971 – 1979, with just 22 awarded, overwhelmingly to male recipients (21). These graduates were dominated by surveyors, engineers and architects, with possibly only one emerging from the humanities (in Geography).

Sadly, a significant number of recipients have since passed on, which is unsurprising, given the passage of some 40 years and more, and the very nature of later-age entry of post graduate studies. Not even a handful actively pursued a solely town planning vocation – not in any way an adverse commentary, rather due acknowledgement to the very multi-disciplinary ethos of the degree, which after all was its intended purpose.

The MUS recipients were:

Brown, A Lex
Brown, Darrell D
Brown, Ronald A
Davis, Brian C
Divett, Neil G
Feeney, Brian J
Feros, Victor G
Glasscock, James T.C
Haupt, W. Thomas
Higginson, Colin R
Hitchcock, Pacquita
Jones, Ronald S
Jordan, James G
McNaught, Donald V
Mersiades, Nicholas G
Pearse, Samuel H
Piggott, Christopher M
Snelling, John D. F
Toms, Kenneth N
Will, Barry F
Wheeler, A. John
Yardley, Dennis V

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Queensland Planner is the journal of the Queensland planning profession. It is published quarterly in March, June, September and December. The journal is supplied free to PIA Qld members.

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At the Awards dinner on 11 November, Sandy Vigar and Mary Mealey were elevated to Life Fellow and Fellow respectively.

Sandy Vigar has given conspicuous service to the profession of planning and to PIA over her 37 years of professional practice. There are few in the profession who share the depth and breadth of Sandy's professional experience.

Sandy is a past president of the Queensland Division of PIA and is distinguished as the first female National President. Sandy has been a natural leader in her places of employment from a young age, and leading major multi-disciplinary project teams is her forte.

In these many ways her career is ground breaking for women in the planning profession in Australia.

Similarly, Mary Mealey helped pave the way for women professionals over thirty years and has actively promoted the objectives of the profession both through her work and through involvement with the PIA.

She has been a strong supporter of professional development over many years, including her regular commitment to the PIA mentoring program.

Mary has contributed to the education and professional development of young planners and that commitment continues today via her consulting in a senior policy and education role with the Department of Infrastructure, Local Government and Planning on the current evolution of Queensland’s planning legislation.

Congratulations Sandy and Mary – wear your pins with pride.
HOW TO manage density in greenfields and brownfields sites

Steve Craven MPIA

At the September HOW TO seminar, the audience was treated to a residential urban design lesson by Peter Egerton, Regional Technical Director – Urban Design, RPS Group.

With a brief to outline responses to the challenge of increasing densities to meet dwelling targets, Peter began with a quick history lesson as a reminder that small-lot living is not new. Despite planning strategies designed to markedly increase densities, average suburban densities have effectively lifted in recent years from 15 dwellings per hectare to 20-25 dwellings per hectare.

Nevertheless, in certain developments, substantially higher densities are being achieved. Peter detailed the experiences of a number of residential communities developed in recent years, including Ridgewood (in Parkinson), Northlakes, Bells Reach (Caloundra West), Fitzgibbon Chase and Sunshine Cove (Maroochydore). These and other examples show a gradual increase in housing density since small lot housing was “introduced” some 25 years ago. It has mainly been achieved by increasing the proportion of small lots and experimenting with terrace housing lots as small as 70m², but market acceptance has not been quick or guaranteed. Of the examples, the current stages of Fitzgibbon Chase have the greatest net residential density, at 38 dwellings per hectare.

Fitzgibbon is also perhaps the most innovative of the examples given. It has experimented extensively with housing form and layouts, including rear access and utility lanes that leave front yards free of cars and the "streets" available for interaction with neighbours. In addition, the rear lanes open up opportunities for alternative housing forms, such as loft homes above garages.

The lessons learnt can be summarised as:

- Orientation for optimum exposure to sunlight and breeze is vital, though in Queensland, that is not necessarily to the north.
- Parks assume great importance to compensate for limited on-site open space; a number of small/pocket parks that are immediately accessible to houses is preferable to conventional, larger but less accessible parks.
- Although a planning strategy may target high residential densities, the experience is that the market has been cautious and may not accept it, so it should not be relied on entirely to achieve dwelling targets.

PLANNING ESSENTIALS – 2017 seminar series

PIA is excited to launch the 2017 premium PD seminar series – PLANNING ESSENTIALS.

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- Essential traffic planning for planners
- Essential infrastructure charging for planners, and more.

The seminars will be held in Brisbane City and will also be available via Livestream for those not able to attend in person. More details on each seminar and registration arrangements are available on the PIA website: www.planning.org.au/qld.

Not only is it an excellent opportunity to extend essential professional skills, but you will also earn PD points and build your networks over light refreshments offered prior to the Brisbane event. Book all 10 seminars by Friday 20 January 2017 and only pay for eight!
HOW TO navigate the EPBC Act referral and approval process

Peter Gill MPA

The Environment Protection and Biodiversity Act 1999 (Cth) (EPBC Act) was the subject of the October 2016 PIA “How to…” seminar. Presenting were Kathryn Pacey and Wayne Moffit, who addressed the topic through firstly a review of the statute and requirements of the Act, and secondly insights into the practical application of the Act’s referral process respectively.

The EPBC Act regulates a number of matters, but in particular regulates the impact of actions on matters of national environmental significance (MNES), including matters such as world heritage values, RAMSAR wetlands, listed threatened species and ecological communities and migratory species, the Commonwealth marine area and the Great Barrier Reef Marine Park, and coal seam gas development and mining activities.

Kathryn Pacey is a Partner at Clayton Utz. Her particular focus is on major projects approvals and environmental assessments and has managed project approvals from application stage through to compliance for some of Queensland’s biggest infrastructure and resources projects. Kathryn helps clients with their obligations under environment laws, from the day-to-day issues such as site environmental compliance, through to the complex and high-profile problems of incident management.

Kathryn dissected the Act for us, defining its role and application, and then outlining from a legal perspective the key matters of relevance through the referral and assessment processes applicable.

As Kathryn observed, the scheme of the Act when considering “actions” (i.e. projects, developments undertakings etc) which may be “Controlled” under the Act, relies largely on self-regulation. The onus lies with the proponent to determine the likelihood of a project’s impact on MNES, and where actions may be controlled actions, refer the project to the Minister for determination. There are several potential outcomes:

- The action is a “controlled action”, and therefore requires assessment and approval under the EPBC;
- The action is not a “controlled action”, and requires no further assessment under the EPBC;
- The action is not a “controlled action” provided it is undertaken in a certain way (i.e. subject to conditions); or
- The action is clearly unacceptable.

This aspect of self-regulation is critical to the application and navigation of the Act. In many projects, referral may not be required at all, or may be undertaken for purposes of legal surety with no further requirement likely for EPBC Assessment. On the other hand, projects may warrant assessment, in which case as Kathryn pointed out, the provision of robust and appropriate documentation to the Minister for consideration is critical.

Wayne Moffit is the director and principal consultant at 28 South Environmental. With nineteen years of experience as an environmental manager and ecologist in Queensland, New South Wales and Victoria, Wayne has lead assessment in a wide range of environments and development settings and has advised clients in both the public and private sector on matters including; ecological assessment and management; threatened species management; bushfire hazard assessment and management; ecological monitoring; sensitive area development; and statutory compliance.

Wayne’s presentation illustrated the practical application and implications of the EPBC Act, and continued the theme of requisite “self-awareness” when dealing with its provisions, providing specific project examples ranging from relative certainty the referral was not required (residential tower in Fortitude Valley), to a clear requirement for referral (Flagstone PDA, koala species impact).

While the details of each project, and the approach to assessment and negotiation bespoke to each is too lengthy to reproduce here, in all cases Wayne identified some common themes critical to effective assessment and referral processes:

- Address the EPBC early, even in the case that referral is highly unlikely;
- Engage early – pre-referral meetings and ongoing contact are invaluable, particularly where you are well prepared; and
- Focus the referral material clearly to matters relevant to the EPBC.

The ‘take home’ messages from both presentations were in accord:

- It is relevant to consider the need for EPBC referral on all projects, even though it is more likely to have significant implications for larger projects such as greenfield land development, mining and coastal development;
- If it is determined that a referral is not required, ensure that appropriate documentation is prepared and retained;
- Where referral is required, present a compelling suite of material, and in particular where impacts are identified, recognise these and focus clearly on mitigation and management strategies;
- There are complexities to the process, however a prudent and well informed early approach will serve to minimise later difficulties.

Overall it was an excellent presentation from both our speakers, evidenced by the lively question time following.

Thank you to Kathryn and Wayne.
The November HOW TO implement best practice stormwater management seminar was held at the Allens venue and appealed to attendees with a broad range of professional backgrounds. The seminar focused on the implementation of stormwater management solutions in Australia and how appropriate solutions are critical to the health of a region’s waterways, community and economy. The seminar provided an engaging practitioner perspective from Brad Dalrymple who is the Principal Environmental Engineer and Team Leader of the Urban Water Team in BMT WBM’s Brisbane Office and the President of Stormwater Queensland.

Brad highlighted his top 10 recommendations for how to achieve best stormwater management which included:

**Understand the problem:** urban development changes the water balance significantly by creating areas that are impervious and removing vegetation that reduces infiltration. The aim of stormwater management is to achieve a natural water balance in an urban setting. The health of our waterways is critically important to Queensland’s economy in terms of the tourism/recreation, primary industries and recreational fishing sectors.

**Recognise that stormwater management is important:** the community considers marine and waterway health is of most concern to them during surveys undertaken by Healthy Waterways in 2010 and its importance is reflected in the commitments and vision strategy documentation produced by many local governments in Queensland.

**Understand the solution(s):** the solution is to achieve water sensitive urban design, which mitigates the impacts of urbanisation on the natural water cycle while creating a connection between communities, landscape and the management of local water (Healthy Waterways 2010). This forms a linkage with solving the problem of creating urban areas that function like a natural environment.

**Understand that ‘best practice targets’ aren’t really ‘best practice’:” there are a number of regulatory drivers (e.g. Sustainable Planning Act 2009, SEQ Regional Plan, State Planning Policy and Environmental Protection (Water) policy 2009) that require construction and operational phases of a project meet particular targets, however to achieve the target you do not need to achieve leading practice. Healthy Waterways (2010) confirms that targets do not necessarily achieve a no-worsening of pollutant loads compared to current or natural catchment conditions.

**Aim for multiple objectives:** achieve leading practice through an integrated design process with specialist skills. This approach requires encouragement and support from the client.

**Plan:** Long term strategies for total water cycle management is critical to plan out the infrastructure and funding requirements for local government that is best achieved through collaboration with technical specialists, asset managers and the community. Brad highlighted a Moreton Bay Regional Council case study that incorporated scenario testing and modelling to identify potential management solutions for the region’s catchments with a long term 30 year outlook for the region.

**Collaborate:** emphasise for the importance of collaborating with multiple disciplines and stakeholders while developing urban water design solutions was highlighted, particularly being inclusive of knowledge from asset managers and the community. The installation of educational signage that describes the environmental improvement created by the water sensitive urban design can support increased understanding from the community.

### Implement appropriate asset management

At a minimum this should include regular removal of accumulated material, know where assets are, know what assets are and ensure sufficient resources (e.g. staff, equipment/machinery, funding) to maintain and manage for both private and public owned assets.

**Recognise that often ‘the devil is in the detail’:”** ensure the water sensitive urban design solutions are designed and installed properly, as minor mistakes can have large negative consequences for the environment (e.g. erosion, scouring) and cost of the infrastructure (e.g. retrofitting infrastructure).

**Learn and improve:** Review of existing processes, barriers and potential solutions to monitor and identify improvements as well as examining the success and failures of other projects to develop appropriate solutions.

The seminar highlighted the importance of ensuring that stormwater management avoids focusing solely on operational water management as it is essential that the construction phase is also addressed with appropriate design solutions that reduce contributions of sediment to the receiving waters. Brad emphasised that often the small frequent flow events are overlooked, however their environmental impact can create significant sediment and pollutant loads on the receiving waterways to the detriment of our environment, community and economy in Queensland.
The Great Wall of South Bank
Matthew Leman PIA (Assoc.)

Park(ing) Day: it’s not a new phenomenon, but with rising pressures on public space, it is an important one. Park(ing) Day, which is now in its 11th year, provides people all over the world with the opportunity to reclaim a small slice of public space (namely on-street car parks) for public enjoyment.

By transforming car parks into public parklets, Brisbane Park(ing) Day 2016 aimed to inspire a more vibrant, creative and sociable city - a vision which the Queensland Young Planners (QYP) achieved through their park, titled “It’s a planner’s game, build your own parklet”. The intention of QYP’s parklet was to invite public input regarding its design, which was altered throughout the day, according to recommendations canvased on social media and from passers-by. Milking the opportunity to exhibit the merits of people-led placemaking, QYP used 600 milk crates, to produce an udderly remarkable street-side oasis. The parklet did not lac(tose) recognition, with QYP receiving both a Judges’ Highly Commended award, and the People’s Choice Award.

Pictures of the parklets can be found on Instagram by searching #BNEParkingDay, or by following @QLDYoungPlanners.
Dear Editor

In the Spring 2016 issue (Vol 56 No3), Steve Craven provided a useful report of the HOW TO seminar on the new infrastructure framework.

Steve reported that a cap on infrastructure charges will remain, and that the gap between infrastructure costs and revenue from developer charges is likely to increase. This is particularly concerning in light of the large population growth forecast for SEQ.

This cap is based on a widely-held, but mistaken, belief that infrastructure charges increase the cost of housing. This belief was rebutted in the report of the Henry tax review (Chapter E4-5). Under market conditions in larger local government areas with a growing population, the price of land is whatever the market will bear.

If developers could increase their prices, they would, regardless of the level of infrastructure charges. A project feasibility study starts with the estimated sale price of the residential lots and then deducts the costs and the profit margin to determine the maximum price that can be paid for the broadhectare land. The higher the infrastructure charges, the lower the price paid for the broadhectare land.

Gold Coast City Council followed this mistaken approach in 2012, when it introduced the Construction Kickstart policy. This offered large discounts on infrastructure charges for development substantially commenced by March 2013 and completed by March 2015. However, the government’s own data (Residential land development activity profile) shows that the median price of vacant residential land in Gold Coast city between Oct 2012 and March 2015 was almost constant. That is, the reduction in infrastructure charges was not associated with a reduction in the cost of vacant residential land.

Economist Cameron Murray at theconversation.com says home buyers do not pay infrastructure charges.

With government budgets restricted, the development industry will need to make a greater contribution to the cost of new infrastructure than it has done in the recent past. Both economic theory and development industry practice suggest that increasing infrastructure charges up to full cost recovery levels will not have much impact on housing prices if phased in over time. The phase-in will allow developers to adjust the prices they pay for broadhectare land.

Brian Feeney
Gold Coast

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Queensland’s environment is sensitive to climate variations. We only have to look at our state’s history of extreme weather events to see how the climate is changing. With evidence suggesting we can expect more of the same, the role of planning has become more important than ever. Balancing the need to create a sustainable and resilient community with the needs of agriculture and urban land use are paramount.

Recently, the Queensland Government released for public consultation *ShapingSEQ – the draft South East Queensland Regional Plan 2016*. The draft plan has a strong focus on protecting our natural environment and growing in a sustainable way with its 50 year vision seeking to ‘nurture the natural systems that sustain us’. The principles sitting behind the plan recognise that without a healthy environment, we will not have a liveable community. And a sustainable community allows our economy to thrive.

For the first time, the draft SEQ regional plan recognises that climate change is a global issue and acknowledging this means dealing with its potential consequences for SEQ. Over the next 25 years the region’s population is expected to grow to approximately 5.3 million people with the need for more than 780,000 jobs. Across Queensland the population is expected to swell to 7 million by 2036. A coordinated approach to planning is needed to manage this growth sensibly and ensure we protect and adapt to our environment.

*ShapingSEQ* - based on the five key themes of grow, prosper, connect, sustain and live - takes a strategic, coordinated approach to dealing with the issue of climate change. From its 50 year vision to specific strategies, *ShapingSEQ* aims to address the issue of climate change throughout the document.

Through effective and timely planning, we can limit the adverse impacts and better manage our climate risks. *ShapingSEQ* understands that Queenslanders are naturally drawn to live in areas where the environment is most enticing. Our beautiful coastlines and hinterland provide for a unique Queensland lifestyle, but with this comes potential risk. The draft plan supports a regional settlement pattern to minimise the community’s exposure to natural hazards and the impact of climate change, such as sea level rise.

Regional biodiversity corridors are also identified and protected to enhance ecological functions and resilience. The settlement pattern guides sustainable development to reduce impacts on natural assets while enhancing the role they play in climate change adaptation and mitigation. For example, mangroves can buffer the community and infrastructure from the impacts of storm surge. Large areas of bushland can host climate adaptation zones for plants and animals; while urban green infrastructure reduces the urban heat island effect. The impact of these strategies is far reaching. More resilient natural environments and communities are created alongside long-term economic, recreational and health benefits.

*ShapingSEQ* also seeks to prioritise public transport and active travel for a range of reasons, including reducing greenhouse gas emissions. This aligns with the state’s transition to a low carbon future. Another first for the draft plan is that local strategies integrate subtropical urban design and encourage the use of renewable energy across the five themes.

The draft plan boasts regional specific policies, illustrated through a series of maps, which are based on the latest science, socioeconomic and natural resource assessments. These maps guide planning that balances agriculture, environmental and urban uses.

Importantly, the draft regional plan does not operate in a vacuum. *ShapingSEQ* recognises if its policies are to be brought to life they need to align with other key government and community initiatives, such as Resilient Rivers, SEQ Natural Resource Management Plan and the Brisbane River Catchment Floodplain Management Strategy.

Regional plans, such as *ShapingSEQ*, take their direction from the State Planning Policy (SPP). The SPP outlines the principles and polices needed to deliver at a local and regional level, and guide development that will advance the social, economic and environmental needs of all Queenslanders.

The North Queensland regional plan will also take its lead from the SPP. Preliminary work has commenced on developing North Queensland’s first draft...
Lockyer Valley lettuce farm (Khemistry)

Initial discussions with local governments in the region have identified an opportunity to collectively plan for and capitalise on the growth of the renewable energy sector, particularly emerging solar farms and bio-fuel industries. The draft plan will recognise the influence of climate changes and its potential impact on agriculture and water supply.

Currently, the SPP, alongside the draft Planning Regulation and the State Development Assessment Provisions (SDAP), is under review as part of the reforms being delivered in conjunction with the Planning Act 2016. The state’s planning instruments ensure climate change is recognised as a key factor in the planning system. These documents are expected to be released for public consultation in late 2016. Although the proposed changes to the SPP are not extensive, the revised policy provides a stronger mandate to address climate change factors. These include taking into account a projected sea level rise of 0.8 metres by 2100, addressing climate change impacts through effective design and location of buildings, the integration of transport and land use planning and the delivery of quality urban design.

The draft SPP recognises climate change as an important consideration for planning at all levels. Land use planning has a variety of roles in climate change, including establishing sustainable settlement patterns, promoting quality design, ensuring integrated infrastructure provision, appropriately managing the risks associated with natural disasters, providing for greater energy efficiency and adapting to changing conditions.

Coastal planning is a key element in the planning reform process. The Government has committed to delivering on its election commitment to save the Great Barrier Reef. The goal is to reinstate world class coastal planning laws to ensure the Great Barrier Reef is not adversely affected by development along our coastline. However, coastal planning laws are not limited to the Great Barrier Reef catchment. The Government understands a state-wide approach is needed to ensure Queensland’s coastal environment is protected and managed sustainably. Achieving this election commitment requires a coordinated approach to planning instruments.

Improving community resilience by mitigating and adapting to the impacts of climate change is a vital component of the draft SPP. Climate change policy will be integrated in all relevant state interests and a specific reference to climate change is to be included in the guiding principles. For example, the draft SPP aims to ensure the coastal environment is protected and enhanced while also supporting opportunities for coastal development and maintaining public access to coastal land. The relevant code for coastal planning (now known as State code 8: Coastal development and tidal works) will also undergo a comprehensive review.

The draft SPP state interest for natural hazards, risk and resilience requires local governments to identify and appropriately consider the risks of natural hazards in areas where development is intended. Similarly, the state interest for biodiversity emphasises avoiding, minimising and mitigating impacts on matters of environmental significance. This includes revised policies for matters of national, state and local environmental significance, and a requirement to maintain ecological processes by avoiding the fragmentation of environmental values.

Water quality is also vital for our state. The draft SPP recognises that Queensland waters should be protected by avoiding and minimising adverse impacts from development on water quality. Water quality requirements are expected to align with best practice and support local governments to adopt flexible and localised solutions for stormwater management that protect environmental values.

Next year will herald a new planning era for Queensland. We will enjoy a planning framework which supports Queensland’s people, economy and environment to continue to thrive in the context of a changing climate. The new system will focus on adapting and mitigating climate change impacts and strengthening community resilience. Climate considerations will be integrated into planning and decision making processes by all users from state to regional level and local government. Ultimately, the new Planning Act 2016 promotes sustainable development and provides the basis for minimising and responding effectively to the impacts of climate change.
Now that the draft SEQ Regional Plan has been released we have the opportunity to assess its goals in relation to sustainability. I do so having researched the implications of oil depletion on the future of sustainable urban residential development in Australia. My research focused on the impacts on built environment and how we might adapt to oil depletion in the construction of residential development and possible effects on the sustainability of urban form. This resource aspect of sustainability is considered to be important, because cities in Australia and other developed countries depend so heavily on the oil economy (e.g. Droge 2006). Vulnerability caused by future oil depletion could fracture the socio-economic framework and drastically affect the quality of life; particularly at the vulnerable suburban scale (Newman et al. 2009). This research has recently led to the award of a PhD through Bond University. The findings are relevant to the goals of the SEQ Regional Plan when by 2041 the region is expected to be home to nearly two million extra people (Shaping SEQ 2016:30).

It is first necessary to set the scene regarding oil depletion. While the weak global economy has continued to depress oil prices since an initial recovery after the great recession of 2008-2009, planners must not be complacent about the future of oil supply. The International Energy Agency (IEA) in its 2010 World Energy Outlook summary report (IEA 2010: 6) acknowledged that global conventional crude oil output had peaked back in 2006 at 70 million barrels per day (mb/d), but noted unconventional sources were growing strongly to maintain a steady total oil output of 86 mb/d. However, the IEA 2015 World Energy Outlook commentary on oil production prospects suggests that:

After 2020, even though oil prices reach levels that allow upstream investment to pick up again, the collective output of non-OPEC countries does not resume growth, particularly once production from the United States – so important in the market over the decade to 2020 – reaches a plateau and then enters a gradual decline. As it does so, the United States yields, in the mid-2020s, the top spot in the global output ranking to Saudi Arabia … By 2040, conventional crude oil accounts for only 66% of total production, compared with 87% in 2000 (IEA 2015: 132-133; 132-145).

I will not dwell on oil supply forecasts, since the Saudi oil reserve figures are state secrets, so any forecast is speculative. However, the key message is that serious oil depletion is an almost certain prospect within the 25 year horizon of the SEQ Regional Plan. The imperative to replace oil with alternative transport ‘fuels’ (including electrics) and support from renewable energy sources is being suppressed by current low oil prices at the pump, despite production cuts by OPEC countries announced in late 2016. The necessary lead time to act is forever shortening, despite the warnings by many serious analysts including such notables as Peter Newman, Jago Dodson and Neil Sipe.

Since the Planning Institute of Australia first devoted a journal issue in December 2006 to articles on energy planning (Wright 2006) and peak oil (Tayfield 2006), some forward thinking local governments in SEQ—Moreton Bay (2009) and Sunshine Coast (2010) Regional Councils, and Redland City Council (2010)—have published strategies making specific references to peak oil and oil vulnerability, mainly in the climate change and liveability context.

A key finding of my research reinforces the need for more compact cities and limitation of outer suburban development, which is contrary to the mixed message contained in the Grow goal aiming for SEQ to ‘have a consolidated urban structure of well-planned and more complete communities. There is sufficient land to accommodate the projected population and employment growth in an affordable and sustainable way’ (italics added) (Shaping SEQ 2016:32). Reliance on the urban footprint principles needs to be reviewed in the light of future oil constraints, which are ignored in the regional plan (Shaping SEQ 2016:84).

The Shaping SEQ second poll on the Grow theme asked what kind of housing do you think SEQ needs more of? The results (reproduced below) point towards a more compact urban form, however, new houses would normally be built in a greenfield setting; and suburban townhouses—the preferred dominant new form—could also be encouraged as infill development. The 29 per cent preference for apartments, including small house size alternatives, is more supportive of my findings for a much more compact and connected sustainable urban form as advocated in the Connect goal below:

- Townhouses – 47% and Houses – 25%
- Small apartments (suitable for 1-2 people) – 8%
- Large apartments (suitable for more than two people) – 21%

My findings on mobility support the Connect goal for SEQ to be a region of more complete and inter-connected communities. However, while the communities are ‘supported by a multimodal and integrated transport system that prioritises public and active transport for commuter trips (Shaping SEQ 2016:56), my research suggests that an emphasis on mobility to support a compact, efficient and sustainable future must go further than current transit oriented development (TOD) concepts. Each urban structural unit (which could be a precinct or suburb) should be developed or transformed into a 1km/15 minute radius walkable neighbourhood model promoting what I have termed public-active mobility oriented development (P-AMOD).

Such a model would incorporate principles of urban metabolism and embodied/operational energy reduction into planning for an efficient land use pattern, as partially advocated in the Live goal to deliver energy efficient living (Shaping SEQ 2016:76). However, an oil-constrained future advocates higher densities throughout all P-AMOD precincts.

The Sustain goal must be cognisant of the future reality of oil depletion as well as climate change. Unfortunately the current political climate and the very low oil price manipulation as at late-2016 are not conducive to such strong leadership, which would hasten the transition for example towards alternative fuels for, and electrification of, the private vehicle fleet. The latter has implications for urban form at the precinct scale for car recharging stations and on-street parking facilities. It will be fascinating to...
see how the forecast take up of autonomous vehicles will have effects on urban form relating to car parking.

My research concluded that transport aspects of oil dependency strongly suggest short to medium term resilience of the existing suburban form is strongly related to alternative ‘fuels’ or electric power supply for private car transport. This is relevant to non-commuting trips, which could become problematic in conventional powered cars and literally drive people towards inner city living. A conceptual model was synthesised from the literature review and analysis of sustainable cities to illustrate the possible transformation of existing suburbs to the oil constrained future. Figure 1 shows two extreme hypothetical adaptive and maladaptive transition scenarios in three phases after the peak oil plateau:

1. Adaptive transition by proactive infill densification, improved public transport and alternative fuel cars, low emission and renewable energy sources

2. Maladaptive transition to dysfunctional urban forms by poor community awareness, inadequate policy direction, reactive and delayed action.

My research suggests three phases after the global peak oil plateau:

The initial mitigation phase of oil depletion (after the conventional oil peak plateau) could see significant price increases for private car fuels. This will lead to prioritisation of petroleum usage to extend the time horizon for the benefits of the resource and provide oil-based essential materials and petrochemicals relied upon for building products and systems, etc. This implies not waiting for the post-peak oil plateau period to be wasted, but taking adaptive action at government level in the short term with fully educated community support.

The later adaptation phase when oil depletion gradually becomes a significant transport constraint on suburban living as fracking of tight-oil declines (IEA 2015), the full implications of the society’s reliance on the oil economy becomes evident. Community action will be complemented by government action to fully develop the public transport system. The transition town movement will become much more active in the community to provide guidance and a rallying point for energy descent strategies.

The oil-constrained phase sometime after 2025 with uncertain food and energy security requires complex reorganisation for movement of people, goods and resources. The timely guidance of governments beyond phase (a) and (b) strategies will determine the trajectory of suburbs towards a sustainable or dysfunctional future. Regional councils may coordinate community urban farms, or protect private gated enclaves respectively in such futures. Development and market forces favour the wealthy in housing choice and relocation closer to work, public transport system and inner city facilities. Changes to alternative leasehold land tenure could alleviate the impact of rising residential land values to make inner city housing more affordable.

Conclusions

A transformative and regenerative approach to planning urban form is imperative if the SEQ urban communities are to become sustainable in an oil-constrained future. While the proposed SEQ goals promote short to medium term resilience of the predominant existing suburban form, in the longer 30-50 year term the full implications of the society’s reliance on the oil economy will become evident. The timely guidance of governments to think about implementing oil adaptation strategies will determine the trajectory of suburbs towards a sustainable or dysfunctional future. A transformation of suburbs into a sustainable or dysfunctional future. A transformation of suburbs into a sustainable or dysfunctional future. A transformation of suburbs into a sustainable or dysfunctional future. A transformation of suburbs into a sustainable or dysfunctional future. A transformation of suburbs into a sustainable or dysfunctional future. 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The chain of responsibility laws took effect earlier this year when the State Government passed the Environmental Protection (Chain of Responsibility) Amendment Act 2016.

The objectives of this Act was to amend the Environmental Protection Act 1994 (EP Act) to:

- facilitate enhanced environmental protection for sites operated by companies in financial difficulty; and
- avoid the State bearing the costs for managing and rehabilitating sites in financial difficulty.

The laws followed concerns about sites operated by companies in financial difficulty continuing to comply with their environmental obligations, especially in light of the looming downturn in the mining sector.

One of the most significant components of these new laws is the expanded powers afforded to the Department of Environment and Heritage Protection (DEHP) in respect of environmental protection orders (EPOs).

Now, in some circumstances, EPOs can be issued to persons who are considered to be “related” to a company carrying out an environmentally relevant activity (ERA), instead of issuing the EPO to the company who actually conducts the ERA. This is a critical element of the State Government’s plan to establish a “chain of responsibility” to ensure operators of sites continue to comply with their environmental obligations.

Related persons include holding companies of the company conducting the ERA, some landowners on which the ERA is being carried out and, significantly, persons considered to have a “relevant connection” to the company.

The “relevant connection” test is broadly drafted and can capture a person that:

- Is capable of significantly benefitting financially, or has significantly benefited financially, from the carrying out of a relevant activity by the company; or
- Is, or has been at any time during the previous 2 years, in a position to influence the company’s conduct in relation to the way in which, or the extent to which, the company complies with its obligations under the EP Act.

A person may “influence a company’s conduct” by giving a direction or approval by making funding available, or in another way (EP Act, s.363AB(3) (b). That was a relevant factor in the decision by the DEHP to issue Mr Peter Bond with an EPO in May this year. Mr Bond was the former Chairman and Managing Director of Linc Energy Limited (Linc). Linc was the holder of various environmental authorities for the Chinchilla CSG Gasification Plant. The company was placed into voluntary administration and subsequently resolved to be wound up. Pursuant to the chain of responsibility laws, Mr Bond was personally issued with an EPO which required Mr Bond to take action to rehabilitate land at the Chinchilla GSC Gasification Plant and also provide a bank guarantee in the sum of $5,500,000.

Mr Bond applied for an internal review of the decision to issue the EPO and then commenced an appeal to the Planning and Environment Court. One of the grounds of appeal is that Mr Bond was not a “related person” to whom the EPO could lawfully be issued.

There was a preliminary hearing in August 2016 (Bond v Chief Executive of Environment and Heritage Protection [2016] QPEC 40), however the full appeal against the decision to issue the EPO to Mr Bond is still yet to be heard. While we await judicial guidance on a number of these new provisions, including particularly the extent to which a person will be considered to have a “relevant connection” to a company, there are lingering concerns that the provisions simply allow DEHP the ability to pursue any entity financially equipped to rehabilitate or rectify any environmental damage notwithstanding that the entity may not have been extensively involved in the ERA.

Another feature of the chain of responsibility laws is a requirement that the Land Court can only stay a decision by the DEHP to require a financial assurance if the holder of the environmental authority (EA) provides at least 75% of the amount of the financial assurance sought (EP Act, s.522A).

A financial assurance is a financial security provided to the Queensland Government by the holder of an EA. Essentially it provides the government with a financial security to cover any costs or expenses incurred in taking action to prevent or minimise environmental harm or to restore the environment, should the holder fail to meet their environmental obligations. A financial assurance may be required as a condition of an EA or a transitional environmental program before the relevant activity is carried out. There however also circumstances throughout the life of the EA when the amount of the financial assurance can be reviewed and amended.

The obvious concern with this approach under the chain of responsibility laws is that the holder of an EA will be required to provide security for a considerable amount of the disputed financial assurance in circumstances where it has not yet been independently determined by the Court that the quantum of the financial assurance imposed by DEHP was appropriate. Notwithstanding this concern, the requirement was passed and is now reflected in sections 522A and 535B of the EP Act.
The Land Appeal Court in the Alphadale decision (Alphadale Pty Ltd v Chief Executive Department of Environment and Heritage Protection [2016] QLAC 6) has now provided guidance on when the Land Court can stay a financial assurance decision without the EA holder providing the 75% payment. In that case, the appellant was successful in arguing that the requirement to pay 75% did not apply in the circumstances of that case because section 522 of the EP Act only applies pending internal review and before an appeal is lodged to the Land Court.

In this case, because the stay application was made to the Land Court after an appeal had been filed, it was held that section 522 and section 522A of the EP Act did not apply and instead the Land Court’s power to grant a stay pending the determination of the appeal was pursuant to section 7A of the Land Court Act. Section 7A puts the Land Court in the same position as a court of unlimited jurisdiction which has the power to stay a decision to secure the effectiveness of an appeal, absent a requirement to provide a 75% security.

It is important to note that if the stay application is made to the Land Court before any appeal is filed (such as if the stay application is made pending an internal review decision), sections 522 and 522A will apply and the financial assurance decision can only be stayed if the 75% payment is provided.

It is also important to note that this argument is unique to appeals to the Land Court. In the context of an appeal to the Planning and Environment Court (the forum for appeals in respect of financial assurance decisions relating to non-resource activity EAs) the provisions are drafted with more precision and the Planning and Environment Court will not be able to grant a stay of a financial assurance decision until the 75% payment is provided.

We anticipate that the State Government is considering amendments to the EP Act to address the outcome which eventuated in the Alphadale decision. The explanatory notes relevant to section 552A strongly imply that the person drafting this amendment to be introduced by the chain of responsibility laws thought that a stay could be granted pursuant to section 522 which would last until an appeal was decided. The Land Appeal Court acknowledged this, however they ultimately found the explanatory notes (paragraphs 25-28) of little assistance for “they do not use language which assist in deciphering legal meaning and betray little understanding of the precise legal concepts in the subject provisions of the Act.”

In conclusion, proponents of ERAs need to think very carefully about the extent of the risk to their companies, associated entities and persons related to the company conducting an ERA. As with many new laws there are concerns about the potential for unintended consequences. Judicial determinations will provide guidance and clarity on the provisions, yet against the background of the so-called “urgent” and “confronting difficulties” sought to be addressed by the chain of responsibility laws, judicial decisions may simply compel re-drafting of the legislative amendments to secure the intended outcomes. There is also the real potential for other States and Territories to follow Queensland’s lead and amend their respective environmental laws to establish a chain of responsibility. We continue to watch with interest.

Olivia Williamson is a Senior Associate at HopgoodGanim Lawyers. Olivia gratefully acknowledges the work of Thomas Buckley and Elizabeth Harvey, from HopgoodGanim Lawyers, in earlier alerts published relating to chain of responsibility laws.

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Natural hazard mitigation planning in the United States

Nathan Slaughter

The best time to plan for how to reduce damage and loss of life from future disasters is when skies are blue. Seems like common sense, right? Planning today helps reduce the detrimental impacts of future hazard events. But across the world, it seems that most tend to react to disasters once they’ve occurred, rather than proactively plan, before the event occurs, to reduce the impacts of these events.

In the year 2000, the United States government passed a law (the Disaster Mitigation Act of 2000) that requires state and local government entities to develop hazard mitigation plans as a prerequisite for receiving federal funding for implementing hazard mitigation projects. Most states, counties, cities and towns want to remain eligible for that funding, so they develop hazard mitigation plans that must be approved by the Federal Emergency Management Agency (FEMA). The Disaster Mitigation Act came about primarily as a result of seeing a continuing cycle of unwise development in hazardous areas, properties in these hazardous areas being damaged by natural hazard events and then the same properties being rebuilt in the same areas with little or no thought given to how to reduce future damages.

The Disaster Mitigation Act was also partly inspired by the fact that flood insurance in the United States is only available through the federal government and the costs associated with paying the claims of structures located in flood zones was becoming too much of a financial burden for the country. The hope was that if the incentive was given to develop hazard mitigation plans, future damages could be avoided.

The Hazard Mitigation Plan

The hazard mitigation plan outlines specific actions for the government entity to undertake to reduce the impact of the natural hazards they are facing. Primarily, the hazards considered in the US include flooding, wildfires, earthquakes, landslides, high winds from thunderstorms, hurricanes and tornadoes and other natural occurrences that threaten life and property. FEMA has developed guidance documents and official regulations that must be met by each plan (https://www.fema.gov/hazard-mitigation-planning-resources). Each plan must be reviewed and approved by FEMA and then officially adopted by its governing body.

The planning process involves completion of the following steps.

Process of development

Generally, plans are developed with the input of a planning team. These teams are made up of officials representing the government developing the plan and other stakeholders from a variety of disciplines. Each participating jurisdiction may determine the composition of their own planning team.

Public participation is critical to the planning process, and required by FEMA. Usually, the planning team will provide an opportunity for the public to provide input about the plan through a variety of methods. Some choose to hold public meetings during the process and some will develop public surveys to capture public input. The purpose of getting the public involved is to solicit input, participation and feedback from any interested residents and businesses that can help further define the hazards or actions to be taken for reducing the impact of those hazards.

The participating jurisdictions seek to ensure that the general public and other potential stakeholders remain aware of the planning process and are given the opportunity to participate as appropriate. This includes making the components of the draft plan available for public review and comment.

Hazard identification and analysis

During this step, the planning team will work together to identify and compile relevant data on all potential natural hazards which threaten the participating jurisdiction. Information collected usually includes historical data on natural hazard events that have occurred in and around the participating communities and how these events impacted on people and property. Based upon historical occurrences and best available data from agencies such as the National Weather Service, the planning team works to identify and describe all natural hazards that threaten the participating jurisdiction. Detailed hazard profiles include information on the frequency, magnitude, location and impact for each hazard in addition to estimating the probabilities for future hazard events. Maps are often developed to delineate identified hazard areas and previous hazard occurrences. The main point of this exercise is to determine which hazards need the most attention, through mitigation, for reducing the impacts of future occurrences.

Risk assessment

The next step in the process involves the collection and integration of data, including an inventory of assets that may be affected by natural hazards, such as people, housing units, critical facilities, special facilities, infrastructure and lifelines, hazardous materials facilities and commercial facilities. This information is generally collected from national and state databases and local data is integrated, where possible.

Once this data is compiled, the planning teams assess potential impacts from each hazard using FEMA’s Hazards U.S. (HAZUS) multi-hazard loss estimation model (https://www.fema.gov/hazus) and other risk modeling techniques and GIS analyses. The resulting information...
provides local jurisdictions with detailed information that outlines the full range of hazards they face and potential social impacts, damages and economic losses. Another key component of the risk assessment is assessing the potential future impact of natural hazards based upon the current and projected development trends for each participating jurisdiction.

**Capability assessment**

Many times, the planning team will also conduct a capability assessment for each participating jurisdiction that examines and evaluates the programmatic, technical, administrative and fiscal capabilities to mitigate the effects of natural hazards. This includes the identification and analysis of relevant plans, policies, and programs already in place at the local level such as land use plans, flood control programs, natural resource studies, zoning ordinances, building codes, subdivision regulations, and capital improvements.

The purpose of the capability assessment is to detect any existing gaps, shortfalls or conflicts within existing or on-going government activities that could exacerbate community hazard vulnerability. The assessment also highlights the positive measures already in place or being done that should continue to be supported and enhanced if possible through future mitigation efforts. The results of the risk assessment and capability assessment provide a general foundation for determining the specific type of mitigation strategy each participating community develops and ultimately adopts.

**Mitigation strategy development**

The planning team next works to draft an overall mitigation strategy for the participating jurisdiction. The planning teams usually begin this process by identifying the general goals and target objectives for the hazard mitigation plan. The goals and any objectives are usually developed as a result of reviewing the findings of the risk and capability assessments. Based upon these goals and objectives, the project team will identify, review and analyse a comprehensive range of appropriate mitigation measures for the participating jurisdiction to consider in reducing the effects of natural hazards. Such measures include preventative actions (i.e. open space preservation), property protection techniques, natural resource protection strategies, structural projects, emergency services and public information and awareness activities. Planning teams will sometimes seek to identify potential multi-objective projects such as combining floodplain management with parks and recreation opportunities.

As part of this step, the planning team also prepares a method and schedule for evaluating and updating the hazard mitigation plan.

**Plan review, adoption and approval**

In accordance with Federal requirements, the governing bodies of each participating jurisdiction must review and approve that portion of the overall plan that affects their jurisdiction. Following the plan adoption process, the plan will be submitted for formal approval by FEMA. Plans are then approved for a period of five years and require updating thereafter.

**Benefits of Hazard Mitigation Planning**

There are many benefits of hazard mitigation planning. Simply going through the planning process can help communities better protect vulnerable properties and save lives. When taken seriously, hazard mitigation planning can help communities develop meaningful risk reduction activities such as implementing new plans, policies or procedures that are aimed at reducing vulnerability. The planning process can also help build relationships within state and local governments by fostering relationships that normally may not occur.

**Room for improvement**

There are also challenges. Many jurisdictions, especially those with limited vulnerability and/or capacity may not take hazard mitigation planning seriously. Those that do plan, often do it poorly, not involving appropriate stakeholders to participate in the process, not conducting a thorough risk assessment and/or not making the appropriate connections between the risk assessment and the mitigation strategy therefore, discouraging any meaningful change. In addition, while funding for planning is provided to state and local governments, such funding is usually provided to emergency managers which sometimes leads to complications in organising, implementing and delivering such complex planning activities.

**Conclusions**

The Disaster Mitigation Act has been in place for over 15 years. As of June 30 2016, all 50 states, the District of Columbia, and five US territories have FEMA-approved state mitigation plans. A total of 22,765 local governments have current (FEMA-approved or approvable-pending-adoption) local mitigation plans and an additional 145 tribal governments have current tribal mitigation plans. Over 82 per cent of the nation’s population lives in communities with current mitigation plans. This represents solid participation across the country and a good step towards reducing vulnerability to hazards in the United States. Other countries such as Canada and England are considering similar approaches for combating future hazard occurrences which are taking place more frequently and with more intensity as a result of climate change.

Nathan Slaughter is a certified professional planner with the American Planning Association and certified floodplain management specialist with MWH, now part of Stantec from Raleigh, North Carolina.
Plan

Managing climate change is a major challenge for Queensland’s cities. Built environments are increasingly subject to intensifying climate change impacts including flooding, bushfires, cyclones and heatwaves (Matthews et al., 2015). Perhaps surprisingly, extreme heat is the most dangerous climate change impact facing all Australians (Coates et al., 2014). Heat stress now accounts for more deaths than cyclones, floods, bushfires and storms combined.

Extreme heat events connected to climate change directly challenge how we plan and design settlements. Heat-related impacts are exacerbated by poor design. Impacts are increasingly manifesting in suburbs, especially in newer developments on the urban fringe. Drivers include urban densification policies, contemporary trends for bigger houses and apartment living. All lead to less space for gardens and trees (Hall, 2010). One way to lessen temperature increases is through urban greening, yet many new housing developments are delivered with little greenery.

Quantifying the value of suburban greening

The term ‘urban heat island effect’ describes situations where the urban cores of cities are hotter than the surrounding countryside. Heat-island effects are now widely recognised by planners (Feyisa et al., 2014). There is a growing body of research that focuses on the consequences of urban heat islands in urban cores (Kleerekoper et al., 2012). Comparatively little research exists to examine and mitigate heat effects in the suburbs. Given the limited research and the fact that most Queenslanders are suburbanites, our green infrastructure team and Griffith University has strategically focused on the suburban scale.

Our goals include: understanding the consequences of heat stress for suburbs; identifying the potential for green infrastructure to mitigate extreme heat effects; discerning residents’ understanding of green infrastructure; using remote sensing to measure the capacity of greening to lower heat; working with planners to increase green infrastructure uptake and; working with the development industry to design greener suburbs that are cooler yet still affordable.

Plentiful street trees, well-designed parks and other types of suburban greenspace help to reduce ambient air temperatures. Advantages accrue in many suburbs with the addition of increased greenery. For example, a 5% increase in tree cover can reduce daytime temperatures by as much as 2.3°C. More greenery offers other advantages including increasing residents’ physical activities and improving social interactions (Byrne et al., 2015). In short, greener neighbourhoods are cooler, healthier and happier.

Current research shows that people who live in greener, leafier suburbs tend to be wealthier. Unfortunately, poorer suburbs are often dense with much lower levels of greenery. Residents consequently suffer more heat stress. ‘The concentration of poorer people in hotter places is called ‘thermal inequity’ (Byrne et al., 2016).

Thermal inequity in Gold Coast City

Our green infrastructure team at Griffith University recently partnered with the City of Gold Coast Council to assess the potential of urban greening to combat heat stress. Our work focused on the suburb of Upper Coomera, located in the Gold Coast’s northern development corridor. Gold Coast city has grown rapidly in recent years and continues to do so. The population is expected to double to over 1 million in the next two decades. Growth management policies are increasing densities in many suburbs. Land clearing on the suburban fringe for development typically removes much of the native vegetation, which in turn increases heat.

The Gold Coast, like many cities, is now seeing a trend where comparatively disadvantaged people seek more affordable housing in outer suburbs like Upper Coomera. Less affluent residents are increasingly concentrated in suburbs where housing is packed tightly into smaller lots, leaving less room for trees and greenery. This leads to hotter houses and neighbourhoods and residents paying higher electricity prices to keep cool.

A recent research article from our project demonstrates that thermal inequity is a real concern in Upper Coomera (Byrne et al., 2016). We employed a mail-back survey of 1,921 households to determine: residents’ perceptions of climate change;
household energy costs; how people cool their houses and; residents’ attitudes towards using green infrastructure to reduce heat stress.

Our findings were stark, pointing to high levels of thermal inequity and household vulnerability to heat stress. We found more than 90% of residents were aware of climate change and almost 70% were concerned about it. Residents living in townhouses were particularly worried. Paradoxically those living in dwellings with dark roofs were less worried, as were those with larger families. This suggests that people choosing to live in houses with dark roofs either don’t understand the heat implications or don’t have a choice; residents with larger families may have more immediate and urgent concerns.

The financial cost of keeping cool was pronounced, with over 90% of respondents using expensive air conditioning. We ran statistical analyses and discovered that families with children and renters are especially vulnerable. Interestingly, people living in townhouses were less likely to purchase energy efficient devices to lower energy expenses, as were those with more children. This could be because those respondents are struggling financially and unable to afford the outlay costs for new appliances even if payback occurs over time through reduced bills.

Our findings on residents’ attitudes point to broad community support for increased urban greening to combat heat. Almost two thirds of respondents favoured tree planting; more than half felt there was insufficient shade on local streets. While 90% of surveyed residents saw shade as a key benefit of trees, only just over half understood that trees could lower air temperatures. While most residents recognised tree maintenance costs as a disadvantage, they still favoured more greening. Interestingly, we found many planners shared that perspective in prior research we conducted (Matthews and Byrne, 2016).

Overall, we have found that many disadvantaged households with less disposable income live in dwellings that were more vulnerable to heat and pronounced thermal inequity. Yet support amongst residents for more urban greening is encouraging. A program of planning-led urban greening in Upper Coomera would benefit from strong community buy-in.

Lessons for planning practice

Our findings can inform planning practice in Queensland and beyond. Urban greening has many advantages for climate change adaptation. It is comparatively inexpensive and politically palatable. Its rollout is supported by the Federal Government’s recently established urban greening agenda.

Unfortunately the legacy of poor urban design in higher density neighbourhoods like Upper Coomera means that it is more difficult to green them, especially through tree planting. There is often less land available for greening as yards are smaller and verges are typically dominated by on-street parking.

We recommend education campaigns about the benefits of urban greenery and better urban design guidelines to provide more space for trees and vegetation. Longitudinal studies of suburban microclimates could help developers to proactively ‘design-in’ urban greenery in future, while allowing councils to retrofit existing suburbs. Careful species selection would reduce maintenance issues.

Heat stress is a major cause of mortality in Australia, but it can be reduced through good planning and suburban design. Climate change means planners need to make use of green infrastructure a mainstream practice. Developing evidence-based knowledge about the best forms of greenery to reduce heat stress in Queensland suburbs will generate long-term economic and social returns. It will also assist planners in embracing green infrastructure to combat thermal inequity, now and into the future.

Dr Tony Matthews is a lecturer and Jason Byrne is an associate professor at the School of Environment, Griffith University.

References


Matthews T and Byrne J. (2016) If planners understand it’s cool to green cities, what’s stopping them? Available at: https://theconversation.com/if-planners-understand-it’s-cool-to-green-cities-whats-stopping-them-55753.

In May 2016 the Queensland Parliament passed a new Planning Act, which in a first for planning law in Queensland requires that in advancing the purpose of the Planning Act, we ‘value, protect and promote Aboriginal and Torres Strait Islander peoples’ knowledge, culture and tradition’. This is a momentous step-change in the history of planning law in Australia, that Aboriginal and Torres Strait Islander peoples’ knowledge, culture and tradition have been explicitly acknowledged, and therefore protected, valued and promoted.

This provision has implications for all entities operating under the Planning Act 2016 (Qld), namely of course, the Department of Infrastructure, Local Government and Planning as well as a host of other State Government departments and agencies, all local governments in Queensland, and all other entities performing functions under the yet to commence Planning Act. This applies to all lands and waters within the control of local governments in Queensland and as such, all planning policies (§4 of the Act) must demonstrate how they have addressed ‘Advancing the purpose of the Act’.

The Sustainable Planning Act 2009, in ‘Part 2 – Planning Schemes’ states that a local government and the Minister must be satisfied the local government’s planning scheme coordinates and integrates the matters, including core matters, dealt with by the planning scheme. Core matters include, amongst other things ‘valuable features’, which in turn include ‘areas or places of cultural heritage significance, including, for example, areas or places of indigenous cultural significance’.

The significance of the new Planning Act is the explicit acknowledgement of Aboriginal and Torres Strait Islander knowledge, culture and tradition in advancing the Act’s purpose, which affects not just the matters that a planning scheme has regard to, but all facets of land use planning.

There is presently no procedure or handbook that tells a planner how to advance the purpose of the Planning Act in respect to valuing, protecting and promoting Aboriginal and Torres Strait Islander peoples’ knowledge, culture and tradition or how to demonstrate compliance. Moreover, this also means that the Native Title Representative Bodies (appointed under the Native Title Act 1993 (Cth)) to represent Aboriginal and Torres Strait Islander people on native title matters have also never dealt with this level of influence from a planning Act.

In the absence of any previous policy or detailed guidance notes from the Queensland Government relating to the inclusion of Aboriginal and Torres Strait Islander peoples’ interests in planning law, this paper identifies two important matters that planners practicing in Queensland must be cognisant of in conducting planning activities. These include planning for the Indigenous Estate and the places where Aboriginal and Torres Strait Islanders live.

As this edition of Queensland Planner is about ‘The Environment’, it seems only logical to discuss what this means relative to some myths about planning and Aboriginal and Torres Strait Islanders, their estate and where they live. This background gives an important perspective on how the new purpose of the new Planning Act may be operationalised in the future.

**Indigenous Estate in Queensland**

It is important that planners gain an appreciation of the size of the Indigenous Estate and how the planning process must be adapted to suit the complex legislative arrangements that affect its use and development. In Queensland the Indigenous estate comprises of:

- Freehold lands (pursuant to the Aboriginal Land Act 1991 (Qld), Torres Strait Islander Land Act 1991 (Qld) and the Land Act 1994 (Qld));
- Lands and waters that are subject to an exclusive possession native title determination under the Native Title Act 1993 (Cth); and
- Lands and waters that are subject to a non-exclusive possession native title determination under the Native Title Act 1993 (Cth).

Altman (2014) maintains that since the introduction of the Native Title Act 1993 (Cth) Indigenous Australians now own, manage or control much of northern Australia under statutory land rights and native title determinations and account for 48 per cent of the 3 million km² of land north of the tropic of Capricorn (Altman 2014). However, if all native title claims are successful, as much as 70 per cent of Australia could be under some form of Indigenous title. This also suggests that all future development in northern Australia (in particular) will need to be carefully negotiated with Indigenous land owners.

What is of greatest concern to us as planners and the Aboriginal and Torres Strait Islander people we have been fortunate to work with, is the assumption by outsiders that Traditional Owners do not seek to develop their lands or create an economy on the pretense that they want to live a traditional lifestyle. In many cases, Traditional Owners are seeking or supportive of their lands being used to gain a foothold in the local or regional economy. It is critical therefore that planners familiarize themselves with the United Nations Declaration on the Rights of Indigenous Peoples, especially their rights to development. It is time for the planning profession to respond through the design of appropriate planning methods that truly engages with Indigenous peoples about their world views and values. There are distinct differences in environmental philosophy between Indigenous and non-Indigenous cultures which profoundly shape perceptions about land use and environmental management. These need to be acknowledged from the outset of any planning project.
Table 1. Indigenous population in key local government areas in Queensland

<table>
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<tr>
<th>Area</th>
<th>Aboriginal</th>
<th>Torres Strait Islander</th>
<th>Both</th>
<th>Total Indigenous</th>
<th>% Indigenous of total Population</th>
<th>Indigenous people/km²</th>
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<td>Cairns Regional Council</td>
<td>6,907</td>
<td>4,176</td>
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<tr>
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<td>1,727</td>
<td>1,176</td>
<td>10,703</td>
<td>6.1</td>
<td>2.83</td>
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<td>Area: 3,786.6 km²</td>
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<tr>
<td>Mt Isa City Council</td>
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<td>100</td>
<td>122</td>
<td>3,206</td>
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<td>Brisbane City Council</td>
<td>12,598</td>
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<td>14,630</td>
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<td>Total Q Urban Areas</td>
<td>30,370</td>
<td>7,199</td>
<td>4,398</td>
<td>41,976</td>
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<td>5,946</td>
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<td>1,412</td>
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<td>90.1</td>
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<td>Torres Strait Region/Island</td>
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<td>4,911</td>
<td>872</td>
<td>5,902</td>
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<td>4.29</td>
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<td>Queensland</td>
<td>122,896</td>
<td>20,094</td>
<td>12,834</td>
<td>155,924</td>
<td>3.6</td>
<td>.089</td>
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<tr>
<td>Area: 1,734,238.8 km²</td>
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Finally, there has been scant acknowledgement of the ‘fundamental responsibilities that planning has in advancing its relations with Aboriginal and Torres Strait Islander people in Urban Queensland’ (after Wensing and Porter 2015). Planning must as a matter of priority, identify methods and strategies for implementation in day-to-day planning in seeking to advance the purpose of the new Planning Act, in respect to valuing, protecting and promoting Aboriginal and Torres Strait Islander peoples’ knowledge, culture and tradition.

Sharon Harwood RPIA is, Senior Lecturer James Cook University. Ed Wensing, MPIA (Fellow) is Adjunct Associate Professor, James Cook University. Dominic Hammersley MPIA is Business Development Manager/Principal, Planning Cardno.

Urban Aboriginal and Torres Strait Islander residents

While the above statistics seem significant for the future of northern Australia in terms of the spatial extent of the Indigenous Estate, Queensland cities in fact possess the greater concentration of Queensland’s Aboriginal and Torres Strait Islander peoples. Table 1 illustrates that Brisbane City Council has the highest concentration (per square kilometre) of Indigenous residents living within the spatial extent of its jurisdiction followed by Cairns Regional Council and Townsville City Council.

Despite the higher concentrations of Aboriginal and Torres Strait Islander peoples in Brisbane and other major centres compared to the rural and remote parts of the state, there are fewer successful native title determinations in the major cities and regional centres (see Wensing and Porter 2015). This has significant implications for planning, because if the planning process does not engage with the Aboriginal and Torres Strait Islander population in our cities and major regional centres, then their needs and aspirations are unlikely to be met. This also has implications for planning processes elsewhere in the State. For example, current planning processes are not designed to take account of Aboriginal and Torres Strait Islander peoples’ statutory land rights or native title rights and interests.

The Australian Human Rights Commission (2010) has prepared a Community Guide to United Nations Declaration on the Rights of Indigenous People which states that ‘Equality recognise differences and does not mean assimilation’. This means that Indigenous Australians have the right to practice and enjoy their culture as well as participate in broader society. So while Aboriginal and Torres Strait Islander residents may not be living on their ancestral lands they still have the right to continue to practice their culture where they live.

Conclusions

Planning has already realised some of the incongruities between the philosophies of Indigenous and non-Indigenous people and the impact that this has on the use and development of the Indigenous Estate. For instance bushfire hazard management does not take into account the application of traditional fire management practices and the subsequent reduction in hazards through these techniques. Moreover, the matter of housing on the Indigenous Estate remains unresolved as a consequence of different cultural conceptualisations of the term ‘dwelling’. An interim compromise has been found in Cook Shire with the introduction of a ‘Good Living Area’ for seasonal camps, but more work needs to be done to respond to the aspirations of Traditional Owners to live and work on their Indigenous Estate on a more permanent basis.

References


Legislation


Warding off disaster by planning resilient communities
Mateusz Buczko

Natural disasters are all too common in Australia, and have increased in frequency over the past 10 years. They are also very expensive: at present, they cost our economy $6.3 billion per year, a figure that is set to increase to $23 billion in 2050. Material losses aside, there is the far more tragic human toll – over the last decade, catastrophes such as the Black Saturday bushfires in Victoria and Cyclone Yasi in Northern Queensland have claimed more than 200 lives and directly affected hundreds of thousands more, leaving long-lasting emotional trauma and huge tears in the social fabric of impacted communities.

There is not much we can do in the short term to prevent cyclones, tsunamis and other extreme environmental events from occurring. Yet how much damage and suffering they cause is not simply a matter of their severity. There is another critical, often-overlooked factor: the capacity of people living in at-risk areas to prepare for and withstand such events. This capacity to anticipate, plan for, mitigate and recover from environmental risks is known as ‘resilience’.

A resilient community is one that has been primed to resist the effects of a disruptive event. It is also one that is dynamic, flexible and quick to respond and recover in the wake of such events. Building this resilience is ever more critical in Australia as natural disasters are set to not only continue but potentially increase in frequency and severity.

Land use planning – a form of urban planning which seeks to ensure land is used and developed in an orderly, efficient and ethical way – is instrumental in helping build long-term resilience in our communities. In the words of COAG’s National Strategy for Disaster Resilience, “Land use planning systems and building control arrangements reduce, as far as is practicable, community exposure to unreasonable risks from known hazards, and suitable arrangements are implemented to protect life and property.”

Yet currently there is a lack of guidance on what the responsibilities are of planners and built environment professionals in this regard. Aggravating this is the fact that natural hazard management processes are often geared towards engineering solutions such as structural mitigation, which require a level of technical knowledge and understanding that can exclude planners from meaningfully participating.

This is not to say that considering natural hazards in land use planning is altogether new in Australia. Settlements would naturally evolve over time in response to hazards as they presented themselves. If major or recurrent floods occurred, for example, they would compel settlers to relocate their homes and businesses to a safer area, with the unstable areas being left as public open space. Resilient building techniques such as stilts, and ecological management practices such as vegetation management, would also help people to live with or resist natural hazards as they adapted to Australia’s unique and sometimes challenging environment. Finally, laws and regulations, in the form of land use management mechanisms, would be developed by governments to help protect their settlements from risks.

However, built environment practice is becoming more about ‘settlement adaptation’ than mere mitigation nowadays. Settlement adaptation means using land and designing dwellings and infrastructure in such a way that it conforms to the natural form and flows of the surrounding environment. This draws on the same logic as the analogy of the willow in a hurricane, which, because it is flexible and able to bend to the wind, survives the event – unlike the sturdy but brittle tree, which is left broken, battered and even uprooted. A community that is able to adjust to its environment is able to absorb and recover from environmental events more easily than one which tries to resist or control those forces.

At present, however, settlement adaptation is much easier said than done. The Australia’s country towns 2050: What will a climate adapted settlement pattern look like? report cites three major obstacles to implementing settlement adaptation strategies: a lack of resources among small councils to plan and implement actions; the ineffectiveness of current national and state government legislative frameworks to mobilise local government in this regard; and the pressure on local governments to prioritise immediate needs over the long-term thinking required for settlement adaptation planning and policy-making.

This is where PIA’s National Land Use Planning Guidelines for Disaster Resilient Communities comes in. This newly-released document, made possible by Australian Government funding as part of the National Emergency Management Projects 2014-15 initiative, champions the role of land use planning in creating resilience. In its own words, it is intended to “provide the context, process frameworks and tools for how to integrate natural hazard risk reduction and resilience into land use planning practice.”

At a high level, the guide’s purpose is to instil practitioners with an understanding of how they can incorporate settlement planning, social demography and non-hazard settlement considerations into hazard management planning.

PIA CEO Kirsty Kelly calls it a “living document” – an important first step towards a national-level best practice guidance for practitioners grappling with the issues of natural hazard resilience, pre-disaster planning and post-disaster recovery. “Testing and jurisdictional implementation of this document is also intended to occur over time,” she writes in the guideline’s foreword, encouraging readers “to comment on this document and provide suggestions to improve it to better respond to this evolving area of land use planning practice.”

There is no doubt that climate change and population growth are rapidly
Plan

measures like sea walls to early-warning systems and evacuation procedures to building codes that better protect residences and infrastructure from the elements. Resilience is about preparing communities to stave off catastrophes but also to recover from them and continue functioning if they occur. It is about places and assets but above all it is about people – their psychological well-being and social connectedness as well as their physical safety. As Jim Palmer of the Waimakiriri District Council said after the 2011 Christchurch earthquake, “We will not be measured by the kilometres of road and pipes that we replace, we will be measured by how our people come through this.”

That is why it’s critical for land use planners to lend their expertise towards the embedding of resilience in communities – by identifying risks, developing plans and policy, and helping to continually improve the governance processes upon which good implementation of these relies. Planners play a crucial role in engaging community members, emergency services personnel, government and other relevant organisations to be actively involved.

Hence the settlement adaptation approach towards hazard mitigation elevates land use planning from a supporting role to a leading one, ensuring settlements are built in ways that are in accord rather than discord with the surrounding environment.

PIA’s Land Use Planning Guidelines serves as a crucial starting point for navigating today’s regulatory, administrative and legal frameworks to achieve effective prevention, preparation, response and recovery. Actioned in conjunction with the longer-term recommendations of PIA’s Planning in a changing climate position statement, they can see planners across Australia become the champions of community safety, strength and sustainability… ensuring, as much as possible, that the environmental hazards and events we can forecast today do not turn into the natural disaster stories of tomorrow.

Mateusz Buczko is PIA’s Communications Manager.

INFRASTRUCTURE CHARGES REDUCTION FOR RETIREMENT AND AGED CARE ACCOMMODATION

Brisbane City Council is offering a 33% reduction of infrastructure charges for qualifying developments for retirement and aged care accommodation.

To qualify, developments must:

• be for a retirement facility and/or residential care facility which is compliant with the relevant provisions of Brisbane City Plan 2014
• provide a quality living environment that is fit for purpose and contributes towards design excellence within the industry
• be given development approval between 1 September 2016 and 31 December 2019 (inclusive) and substantially commence building work by 31 December 2020
• enter into an Infrastructure Agreement with Council prior to the development commencing operation.

Council is committed to supporting the delivery of accommodation for our ageing population as part of our vision for a well-planned and liveable city.

For further information visit www.brisbane.qld.gov.au and search ‘infrastructure charges’ or call Council’s Infrastructure Coordination team on (07) 3403 8888.
Congratulations to the following Members who have achieved milestones in their PIA journey since August 2016.*

John Adams RPIA (Fellow) - Elevation to Registered Planner (Fellow)

Michael Ball RPIA - Elevation to Registered Planner

Matthew Burke MPIA – Re-joined

Peta Champion MPIA – New Member

Michelle Cottrell MPIA – Re-joined

Neil De Bruyn RPIA - Elevation to Registered Planner

Aysin Dedekorkut-Howes MPIA – New Member

Anthony Franklin MPIA – Re-joined

Nathan Freeman RPIA - Elevation to Registered Planner

Thomas Gardiner MPIA – New Member

Paula Grant RPIA - Elevation to Registered Planner

David Hansen RPIA - Elevation to Registered Planner

Byron Jones RPIA - Elevation to Registered Planner

Robin King-Cullen RPIA (Life Fellow) - Elevation to Registered Planner (Life Fellow)

Michaela Lehman MPIA – Re-joined

Darryl Low Choy RPIA (Fellow) - Elevation to Registered Planner (Fellow)

Fiona Macleod MPIA - New Member

Daniel Martiri MPIA – Elevation to Full Member

Kate Matthews RPIA - Elevation to Registered Planner

Garth Moore RPIA (Fellow) - Elevation to Registered Planner (Fellow)

Urbi Musso MPIA - Elevation to Full Member

Jeff Nelson MPIA - New Member

Keith Noble RPIA - Elevation to Registered Planner

Andrew Parker MPIA – Re-joined

James Paw RPIA - Elevation to Registered Planner

Natalie Plumble MPIA - Elevation to Full Member

Lynette Prince-Large RPIA - Elevation to Registered Planner

Charlotte Swanston MPIA – Elevation to Full Member

Felicity Tait RPIA - Elevation to Registered Planner

Karen Vella MPIA – Re-joined

Simone Wise MPIA – New Member

*Reflects membership records as at 11 November 2016
Former Queensland Manager of the Australian Institute of Company Directors, Richard Moore took up the position of QLD/NT Manager for PIA in July. Richard has made a smooth transition into the world of planning and shared some thoughts with Queensland Planner.

How do you view your role with PIA?

I see my role as helping to ensure PIA remains relevant, innovative and continues to promote the positive contribution Planners make to our communities. To support the Queensland Committee and regions in ensuring we continue to provide relevant services to PIA members.

What is your professional background?

I started my working life in the oil & gas exploration sector as a geological data engineer working on oil rigs both onshore and offshore here in Australia and in different parts of the world. An exciting career, but not without its challenges at times.

I fell into association management during a downturn in the oil industry and have thoroughly enjoyed this sector in helping develop professionals in their respective careers.

What were the highlights of your time at Company Directors?

Working with some of the finest business leaders in Australia. To see their dedication to contribute to the success of their respective organisations, whether that be for profit or not for profit, was professionally very enjoyable.

Also, taking our programs and courses to the Pacific island nations, meeting wonderful people and providing quality governance training was extremely satisfying.

What are the main challenges for the planning profession?

Some of the key challenges facing the profession include attracting and retaining talent; raising awareness of the role of planners amongst the wider community, planning for climate change, and the ongoing short-term pressure on our politicians which impacts on our long-term policy making.

You worked on last month’s 2016 Rural and Regional Planning Conference in Stanthorpe. How important is the connection with regional members?

Extremely important, this conference highlighted the need for PIA to cater for the diversity of our membership. We came away from this conference recognizing that the issues facing planners in rural and regional centres are perhaps not given as much focus as they deserve. Also, there is much to learn from the experience planners develop in working across so many different issues in rural and regional settings.

What are you passionate about … other than work?

Besides family and travel, I do enjoy playing some ordinary golf on some extraordinary courses.

What places inspire you?

I have been very fortunate to have travelled to Asia many times for work and pleasure, and the people, food and culture fascinate me. Places like Barcelona and Chicago for the architecture, but hey look at where we live…….

Complete this sentence - Planning matters because … it provides the basis on which we utilise our community / social, environmental and cultural resources. Planners matter because if you look at the areas in which they work ie urban growth, transport, environment, social needs, economic, technology, quite simply they make a real difference to our future communities and ongoing wellbeing.
Tropical Urbanism – Cairns City Image Study
Cairns Regional Council, Tract Consultants, Follent, Peddle Thorp, CA Architects, Total Projects Group Architects

Tropical Urbanism – Cairns City Image Study won the ‘Best Planning Ideas – Small/Local Project’ Excellence Award at the 2016 PIA Qld Awards for Planning Excellence and then capped off the awards presentation on 11 November by winning the Overall Winner’s Award. The following is an edited extract from the winning submission.

Project background
Cairns is framed by two World Heritage areas, the Wet Tropics Rainforest and the Great Barrier Reef Marine Park. Cairns is, quite literally, a ‘city in a rainforest.’

It is this close proximity between nature and the city that attracts tourism, energises the experience of locals, and positions Cairns as a unique tropical urban environment. Protecting and enhancing this environment through planning and innovative urban design is paramount for the continued economic and community success of the region.

In Cairns, the relationship between built form, city planning and landscape is expressed as Tropical Urbanism and is a defining characteristic of the Cairns identity.

Cairns Regional Council and local experts in the fields of architecture and urban design have, since 2009, been defining Tropical Urbanism through research, policy development and master planning of the built environment.

Over the past 20 years, the planning policy surrounding building height limits in Cairns has remained relatively unchanged. Historically the topic of building heights within Cairns has generated measurable community and political interest as Cairns has a predominantly low-rise skyline which affords spectacular views back to the mountain ranges and out to the ocean from key vantage points.

This interest manifests itself in a number of ways.

During the public consultation on the CairnsPlan 2016 planning scheme, which occurred in 2013 and again in 2014, submissions received from industry groups and professionals challenged the long-standing policy on building height in Cairns. Furthermore, in the lead up to commencing the Cairns City Image Study, a number of development applications had been lodged with Council proposing development that would greatly exceed the building height limits within the Cairns City Centre and North Cairns areas. Understandably, community interest piqued.

This prompted the need to review the Council’s long-standing policy on building height limits within the Cairns City Centre and North Cairns areas with the view to consider increased development opportunities but in a way that would allow Cairns to retain its vision as a ‘city in a rainforest’.

The project
The Cairns City Image Study was a collaborative planning exercise undertaken in 2015 by Cairns Regional Council in partnership with the consultant team and local architects. The study focused on an area encompassing the Cairns City Centre and adjacent North Cairns area. This area is flanked by the Cairns Airport to the North and Port of Cairns to the South – both key stakeholders in the outcomes of the study. The proximity of the Cairns Airport to the study area meant that any changes to built form within the area would need to consider impacts on the operational airspace of Cairns Airport and, in particular, the constraint of the Obstacle Limitation Surface.

The study was the culmination of previous work, since 2009, on defining Tropical Urbanism and a ground-breaking review of the building height limits within the Cairns City Centre and adjacent North Cairns area. The study resulted in the preparation of a contemporary vision for the built form of the City and associated planning scheme provisions to deliver this vision.

The City Image Study delivered:

• A contemporary vision and strategic policy statements for built form within the Cairns City Centre and North Cairns
• A definition of Tropical Urbanism
• Unique planning requirements for both the Cairns City Centre and North Cairns areas;
• An amended Cairns City Centre local plan code and associated mapping;
• An amended Building height overlay code and associated mapping;
• A Planning scheme policy on Tropical Urbanism; and
• A fact sheet on Tropical Urbanism and the key policy outcomes of the study.
All of these outputs were delivered in a format for the purpose of being readily included within the CairnsPlan 2016 planning scheme.

**A visionary approach**

The outcomes of the study represented an original and innovative approach by defining concepts and incorporating measures that are special to Cairns.

**Biophilia**

Biophilia is a term that describes the “extent to which humans are hard-wired to need connection with nature and other forms of life”. It means that cities and their environment, and in particular their natural context, are intrinsically linked. This concept was explored throughout the study and sets an aspirational context within which Tropical Urbanism can be made more relevant and enduring.

**Tropical Urbanism**

Tropical Urbanism is thought to have its origins in Cairns. Whilst Cairns Regional Council and local experts in the fields of architecture and urban design have been exploring and developing the concept of Tropical Urbanism since 2009, this study was able to further define the concept of Tropical Urbanism in the context of a city’s responsibilities for town planning and development control.

The Study defined Tropical Urbanism as:

- The integration of landscaping and tropical design elements into the built environment. Development that expresses Tropical Urbanism incorporates:
  - Shelter from sun and rain;
  - A contrast of light and shade;
  - Sufficient spaces around and between buildings;
  - Minimisation of radiant heat and heat island effects;
  - Air circulation, breeze permeation and passive cooling;
  - Generous outdoor living spaces with large window and balcony openings;
  - Generous floor to ceiling heights;
  - High quality landscaping;
  - Quality public and private spaces that proliferate and enliven the urban form; and
  - Passive design that responds to the tropical climate.

To the project team’s knowledge, this is the first time the term and concept of Tropical Urbanism has been defined and used in a statutory land use planning instrument.

**Vertical landscaping**

Vertical landscaping is increasingly used to enable Biophilia to characterise urban areas where, in traditional podium-dominated town centres, there is a lack of opportunity for landscaping at ground level. Vertical landscaping softens and screens as well as reduces the heat load of building elements. Vertical landscaping also provides high-rise occupants, at risk of disconnection from the environment, a tangible experience of nature.

The Study introduced the requirement for development to incorporate vertical landscaping that covers 15% of each building façade for the full height of the building. To the project team’s knowledge, the CairnsPlan 2016 is the only planning scheme in Australia to include a percentage requirement for landscaped façade coverage.

It is a simple technique but one which makes a powerful contribution to the public interest.

Vertical landscaping can be achieved: by deep landscaping at ground level that within 5 years projects coverage to the façade; by landscaping on the tops of roofs; podiums and basements, and/or by vertical gardens, green walls and trellis planting.

In the Institute for Sustainable Futures Australia’s Urban Tree Canopy Report, Cairns was ranked as having the highest percentage of tree canopy of any city in Australia at 79%. Although the city already boasts a high level of canopy cover, there remains a strong need to ensure that this asset is both protected and enabled to continue to permeate urban areas.

The inclusion of ground level based planting in this percentage calculation...
encourages the retention and future maintenance of large, established trees on development sites.

**Street canopy**

The natural rainforest provides a dense canopy to protect those below from rain and sun and features cool deeply shaded spaces below. One of the signature design elements of the study is the Street Canopy which is an architectural abstraction of the rainforest canopy and provides a tall sheltered space for pedestrian protection from the elements. This design element will further define how Tropical Urbanism is experienced at street level and can incorporate landscaping elements in this plane. The street canopy is expected to occupy the full frontage of the site and has been raised to a height to make visible and activate additional commercial uses on the second storey. The canopy also preserves the traditional scale of street “containment” by 2 to 3 storey buildings and is an elegant and consistent step between the street and taller buildings that will sit on podia beyond the canopies.

The canopy provides a generous volume for cooling breezes as it casts additional shading over adjacent roads contributing to a reduction of the heat island effect and a reduction in internal air temperatures. This initiative takes the humble street awning to a new paradigm.

The study is an innovative and responsive planning project driven by the extraordinary physical context and personality of Cairns.

**An adaptable approach**

The study delivered built form outcomes that directly respond to the physical context of the study area and the overarching vision for Cairns as a ‘City in a rainforest’. However, it also provided built form outcomes that are responsive to development in the tropics.

‘Around half of the world’s population – some three billion people – and 80 per cent of the planet’s animal and plant species live in the tropics.’ This study represents a significant contribution of Tropical expertise that can be offered, transferred and adapted to suit the needs of other tropical cities.

The study incorporated measures for commonly experienced planning issues such as retention of views and vistas to significant landmarks and landscapes. The study resulted in the introduction of a maximum building width of 40m within the Cairns City Centre and 30m within the North Cairns Area. This measure aims to ensure that significant views to the surrounding mountain ranges can be retained and the visual bulk and impact of tall buildings is minimised.

The study also introduced requirements for 50% of each façade to be shaded by incorporating permanent features to the building such as protruding balconies, overhangs and building articulation.

These approaches have the potential to be readily applied in other local government areas.

The project team has presented the Tropical Urbanism policy and Cairns City Image Study at the Planning Institute of Australia 2016 Planning Congress, the Queensland Environmental Law Association Cooktown Regional Intensive 2015 and the International Urban Design Conference 2015.

**A collaborative approach**

The Cairns Regional Council team, consultant team and local architects worked hand-in-hand to prepare the study.

The study was a collaborative process and involved engagement with representatives from Cairns Airport and Ports North who had a direct interest in the outcomes of the study. Members from the Council’s Planning Scheme Industry Reference Group were engaged at key stages in the study and provided valuable industry insight and experiences. Local architects Roger Mainwood and Carlo Amerio were engaged
by Council to provide input into the study and to test the draft policy outcomes using their local experience.

The elected Councillors were engaged throughout the process and took ownership of the importance of balancing tropical urbanism and economic growth.

Broader engagement with the community was undertaken as part of consultation on proposed changes to the Council’s draft planning scheme. ‘The progression of the policy outcomes identified by the study was ultimately dependant on the level of acceptance by the community. The community support received during the consultation period confirmed the policy direction and validated the vision.

A viable approach

Ensuring that any new built form outcomes were achievable and economically viable was a key objective of the study. The planning scheme provisions underwent significant testing and review by the consultant team, industry reference group and local architects to ensure they were fit for purpose and commercially viable.

The team explored initiatives on a range of individual sites and considered all of the opportunities and constraints dictated by location and size.

A feature of the Cairns City Centre is the numerous areas with small lots of varying ownership. The previous policy on height in Cairns relied on the amalgamation of several smaller lots to achieve the minimum lot sizes for taller buildings. A key outcome of the study was the removal of minimum lot sizes for tall buildings to allow developers with smaller lots the opportunity to build tall buildings without relying on the acquisition on surrounding lots.

This not only opens development opportunities to a wider pool of potential investors, but also introduces new built form opportunities to the city centre. A diversity of building type and heights, all ‘linked’ by the street canopy is the expected outcome.

The conundrum of off street parking provision, often a project ‘killer’, can be handled in the podium, screened from view by active land uses within the podium and by the street canopy.

The different development context between the Cairns City Centre and Cairns North necessitated a different design response for each. For North Cairns the focus was on built form that integrates into the landscape whereas for the Cairns City Centre it is about landscape that integrates into the built form. A strong emphasis on landscaping, and scale, features strongly in the North Cairns, whilst the Street Canopy and landscaping above the podium dominates in the Cairns City Centre.

The Study represents a turning point in the public’s and Council’s perception of building heights in Cairns because of the visionary but skilfully managed alignment of development opportunities with social and environmental goals which seek to preserve Cairns’ identity as a ‘City in a rainforest’.

The legacy will be streetscapes that are quintessentially Cairns – cool and green with a built environment that is a physical manifestation and ongoing evolution of Tropical Urbanism.

The study is responsive. The need to address the issue was identified and positive and decisive action was taken to respond professionally and politically.

Once buildings are in the public domain they form part of a community’s psyche and are landmarks for generations.

What the judges said …

….the project represents a turning point in the public’s and Council’s perception of building heights in Cairns. The project delivers a contemporary and viable policy for built form through planning scheme provisions that increases development opportunities whilst preserving Cairns’ identity as a ‘city in a rainforest’.

Cairns Regional Council are highly commended for undertaking a collaborative planning exercise, working with local architects to test the draft policy outcomes and capitalise on their local experience. The judges acknowledge that broader community engagement was undertaken as part of consultation on proposed changes to the Council’s draft planning scheme.

The study represents a significant contribution of Tropical expertise that can be offered, transferred and adapted to suit the needs of other tropical cities. Cairns is defining itself as a leader worldwide in the area of tropical urbanism and this project is likely to redefine the image of the CBD.

The Tropical Urbanism - Cairns City Image Study and the integration of this study into the CairnsPlan 2016, will create a great legacy for planning and the City of Cairns.

The judges felt that this project was particularly outstanding and worthy of the overall award because the project:

1. is highly innovative, represents forward thinking and establishes a clear commitment to leading by example;
2. has allowed Council and the project team to ‘think outside the square’ through bold planning and political decisions which will leave a lasting legacy;
3. is undeniably Cairns and embodies a clear vision for the future of the CBD that is likely to redefine the City Centre;
4. will enhance the Cairns leadership in the establishment of sustainable and appropriate forms of urban development in a tropical setting;
5. provides a significant contribution to reforming the way similar cities around the world respond to the modern challenges of managing growth and development.
Postcard from Oahu
Dirk Van Der Kamp PIA (Assoc) and Ciaran Callaghan PIA (Assoc)

Aloha!

Oahu, more commonly referred to as the heart of Hawaii, is home to the State capital, Honolulu, and Waikiki where, out of sheer coincidence, we recently spent 10 days on holiday (or vacation in American terminology).

Though geographically small, taking only one and a half hours to drive around the whole island, Oahu certainly left lasting impressions … mostly good but some not so good.

The highlights

The North Shore is characterised by an often-remote coastal setting devoid of any dense forms of development and is made up of scattered coastal villages and small local centres, interspersed by the occasional gated, luxury resort. The paucity of development gives rise to a plethora of pristine shorelines and beaches with unparalleled opportunities for surfing as well as scuba diving, snorkelling and swimming with turtles, sharks and dolphins. It is an ideal getaway destination, to escape the bustling city lifestyle and spend a few days enjoying some of the world’s best reef breaks, relaxing on the sandy white beaches, drinking martinis and navel gazing.

Waikiki is a very active and compact precinct - a veritable tourist paradise. Distinct from the CBD that is Downtown Honolulu, Waikiki comprises a plethora of hotels, shops and restaurants. These dominate the main strip, including the largest outdoor shopping centre in the world located approximately 10 minutes north of Waikiki. Waikiki is most famous for its beach which is approximately 3km long and contains a combination of public use areas and hotel frontages. The live band culture certainly contributes to the Waikiki experience with most restaurants, bars and hotels offering opportunities for local bands to perform. It is a popular destination, with crystal clear waters, and many sailboats and catamarans are visible sailing in the distance. This city centre is truly alive and active with standard trading hours from 9am-12am each night, a striking dissimilarity to Brisbane.

Despite mixed first impressions of Oahu at the dated Honolulu International Airport (in a commercial and industrial area) it’s not long before we were awestruck by the natural beauty of the island.

The mountains compliment the more popular beaches and offer a range of unique hiking experiences, some in dry, harsh coastal settings and others in lush rainforest locations, but all offering 360 degree panoramic views.

Unlike many hikes around South-East Queensland, we regularly shared hiking trails with hundreds of people. The Government departments charged with running and maintaining the hiking trails were under-resourced by comparison to back home. As a result, many of the hikes are inaccessible, due to safety risks and a lack of facilities, but also due to the sacred nature of some sites which contain the ancient burial grounds of Hawaiian chieftain tribes.

Complementing the mountains is the array of beaches, surf-breaks, reefs, waterfalls and lagoons, which accommodate a range of water-sports and leisure activities. Open ocean swimming with sharks was a highlight.

While the beautiful beaches and breathtaking scenery are something to be marvelled at, Oahu is also rich in culture.
The multicultural roots of Hawaii combine primarily Japanese, European, Chinese, Filipino and of course Polynesian ethnicity, which in turn has created a strong sense of multiculturalism. Food, art, music, shops and language have all been influenced by the varying spread of nationalities that inhabit the island. From the Japanese restaurants (some of which don’t require tipping) or the Filipino dominated populace (second largest ethnic group in Hawaii), the island certainly embraces ethnic diversity. Multicultural places visited included:

• Byodo-In Temple – a replica non-denominational Japanese Buddhist Temple commemorating the 100 year anniversary of Hawaiian Japanese immigrants
• Iolani Palace - the only official state of royalty in America which previously housed the Hawaiian monarch is now a public museum and national historic landmark.
• Pearl Harbor – In addition to being an active military base, Pearl Harbor also contains a collection of varying memorials and decommissioned warships paying tribute to the fallen lives on the infamous day of December 7, 1941.
• Polynesian Cultural Centre (PCC) – one of the most frequented destinations in Oahu, the PCC contains simulated tropical villages representative of various Polynesian culture and is also a school offering scholarship programs for Hawaiians with the aim to preserve Polynesian culture.

The people are relaxed and easy-going and have found a great balance between respecting and promoting the Polynesian culture of Hawaii as well as embracing and accommodating the variety of external cultures, culminating in a truly international destination.

The lowlights

Though few and far between, our journey to Oahu did present some negatives. When visiting Oahu and Waikiki, it is clear that these were built for the tourist population. This obviously provides positive economic stimulus to the local area however after a few days in Waikiki and the surrounding parts of Honolulu, it became clear that being so heavily geared towards the short-term visitor has somewhat compromised the liveability and amenity for permanent residents.

Walking through the streets of Waikiki there is a clear disparity amongst socio-economic classes and you are often struck with an uneasy image of overseas shoppers indulging in one of the many high-end retailers whilst the less fortunate local residents seem excluded. Waikiki’s main strip of Kalakaua Avenue presents a welcoming, luxurious pedestrian environment, with an abundance of water features and streetscape vegetation, however this quickly dissipates as you move further inland, with a noticeable difference only a block back from the beach. Unfortunately, crime is also a frequent occurrence on Oahu and tourists are often targeted.

When it comes to transport around the island the car is still king. Travel around Waikiki is easy enough on transport shuttles, however any chance of exploring the island outside of the major tourist centre requires a car. Famous walking trails, which are outside Waikiki, are only accessible by car or shuttle bus. This renders many of the island’s best natural features difficult to access for tourists. Oahu’s only public transport is buses, which for their seemingly small fleet and lack of infrastructure, do well to cover such a significant portion of the island. These buses utilise the same road infrastructure as private forms of transport, meaning there is little to no dedicated public transport infrastructure on the island. On a positive note, one simple inclusion is bike racks on all Hawaiian buses. Given the size of the island, this simple idea effectively
integrates active and public transport and means you can almost always ride a bike to a nearby bus stop and easily jump on.

The proportion of vehicles to the island’s size and population has a number of negative impacts on the function of the City. Peak-hour congestion is common on the freeways and pedestrian connectivity of Waikiki is also compromised, with pedestrian and vehicle conflict common on the busy city streets. After witnessing the success of light rail on the Gold Coast, we felt that something similar could be very beneficial in Waikiki and even downtown Honolulu.

There was evidence of a clear intent to invest in renewable energy on Oahu, which is a definitive positive for the island. However these structures have been met by strong local opposition, as residents believe windfarms have destroyed the natural scenic beauty and landscape profile of the islands and impacted on wildlife.

**Lessons for South-East Queensland**

Oahu is unique but there are certain aspects that should be noted.

Hawaiians do a fantastic job of marketing themselves as a tourist destination. They have recognised the island’s tropical beauty as its major asset and capitalised on its value. The associated service industries of accommodation, food, entertainment, outdoor activities and retail have also been developed in a way to support the tourist industry.
Importantly, there is recognition that the natural environment is a finite resource and no complacency can be afforded, so efforts are made to protect this, by eco-tourism measures such as restrictions on visitor numbers, and access to protected areas.

Oahu is also a great example of how to promote culture, preserving it whilst also sharing it with visitors and making it an economic attraction. The tourism industry offers Polynesian experiences as part of its array of “must do” packages, and these serve to educate outsiders as well as preserve the heritage for the local inhabitants. It would be hard to leave Hawaii without experiencing and being educated about the Polynesian culture even in a small way, as exposure is prevalent in daily life such as food, music and language. Tourists with an express interest and visiting with the specific aim of learning about the culture can fully immerse themselves with many opportunities to embrace the experience. We could learn from this, especially with regard to how well we educate international visitors about indigenous Australians.

As well as preserving and promoting culture, Hawaiians do a terrific job of promoting while conserving natural assets. The best example of this is Hanauma Bay State Park, an example of eco-tourism, requiring an entry fee and limiting visitor numbers each day. Entry entails viewing an educational video, so visitors are aware of the importance of proper protection of the natural flora and fauna, while providing a spectacular snorkeling experience.

The ability of the Hawaiian people to maximise results with limited resources is notable. An example of a small investment with large dividends is the installation of bike racks on all buses which greatly improves the integration of public and active transport on the island.

In South-East Queensland there is a tendency to struggle with this integration. The result is a non-productive competition of all forms of road vehicles (cars, buses, trains, bicycles and motor bikes) to access city centres. Effort should be directed at how our transport modes can better complement each other, rather than compete for dominance.

Oahu is a stunning place, with beautiful people and a definite must-do for all keen travellers interested in experiencing new cultures and lifestyles.

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Lessons from an experienced planning lawyer

If your lawyer can’t give you a fixed fee for giving you legal advice, why not? Do they know the law, or don’t they?

If your lawyer can’t give you a fixed fee for components of work in litigation, why not? Fixed-fees incentivise efficiency.

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