

Engagement and Consultation in Coastal Management.

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Community Engagement and Consultation during the past 25 years of coastal management in New South Wales:

Abstract

A new and “innovative” Coastal Management Act is to be proclaimed in New South Wales but has community engagement and consultation kept pace with the growth in knowledge of coastal processes and how they should be managed?

In its first test, did the Coastal Management Act 2016 live up to expectations?

Has there been a major step forward when it comes to community engagement and consultation. Is education of communities threatened by coastal hazards a feature of the new era of coastal management and what exactly are the social benefits that come from the coastal management reforms now in place in NSW?

For those of us who have been involved with communities directly affected by the threat of coastal hazards these questions may be difficult to raise and answer in an objective manner but there are good reasons to stand back and consider just what has occurred over the past 25 years. What tests can be applied and how can we compare engagement with affected coastal communities from the past and for those now faced with the renewed reality of coastal hazard threats. Do they have a better understanding and do they feel that their community understands how the daily threat impacts on their livelihood and wellbeing?

This discussion will review consultation and engagement with coastal communities over the past 25 years and compare the latest practice with those of the past to assess improvements. A number of case studies will be reviewed including personal accounts from community representatives. There will also be a brief consideration of these questions related to community engagement and consultation undertaken following the coastal storms of 1974 and 1978.

Introduction

NSW Coastal Communities threatened by coastal hazards

New South Wales (NSW) Coastal Communities at Byron Bay, Old Bar, Coffs Harbour, Great Lakes, Lake Macquarie, Gosford, Collaroy and Eurobodalla are amongst many around Australia that have been faced with the threat of coastal hazards from early settlement. In the past 25 years under the Coastal Protection Act 1979, these threats have intensified, largely as a consequence of the consideration of future sea level rise projections and as those directly affected have become separated from a previously

supportive or empathetic wider community by council and state government planning that attempts to shift all costs and responsibility onto those directly affected.

Beachfront and waterfront property owners are the first to be demonised as wealthy landholders whose development on environmentally sensitive land damage the environment as rising seas move landward. These people increasingly have become the target for environmental groups and Councils with a strong environmental focus.

From this apparent dislike for those who dared to develop beachfront and waterfront property, an often unstated policy of planned retreat has morphed into a huge division between environmentalists and property owners and equally a division between communities of those who are affected and those who are not forgetting that the vast majority of properties affected by projections of rising seas are not waterfront or beachfront properties.

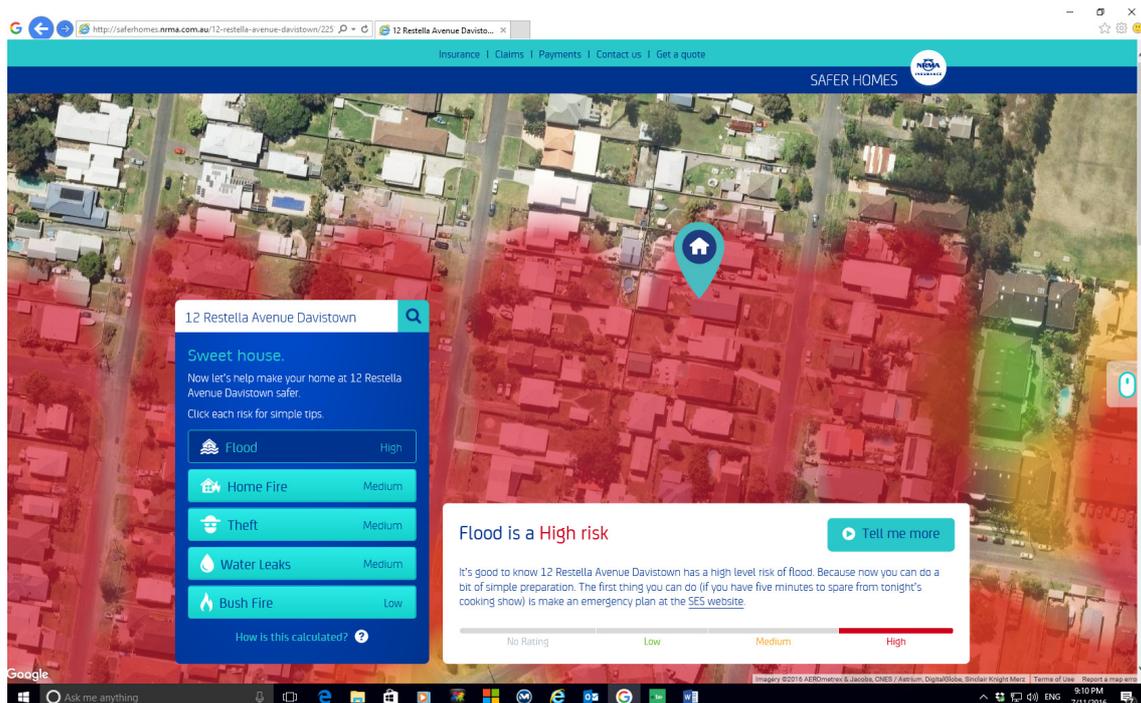
Those communities in low lying coastal areas have also quite suddenly been caught up in an often exaggerated threat of future coastal hazards driven by projections of rising sea levels without any understanding at all of the threat they face. Section 149 notations only educate property owners when they decide to sell their properties.

Coastal Hazard Mapping

Once the NSW State Government completes its mapping of coastal hazards to support the proposed Coastal Management State Environmental Planning Policy, coastal communities of NSW will be faced with mapping of coastal hazards by Federal, State and Local Government.

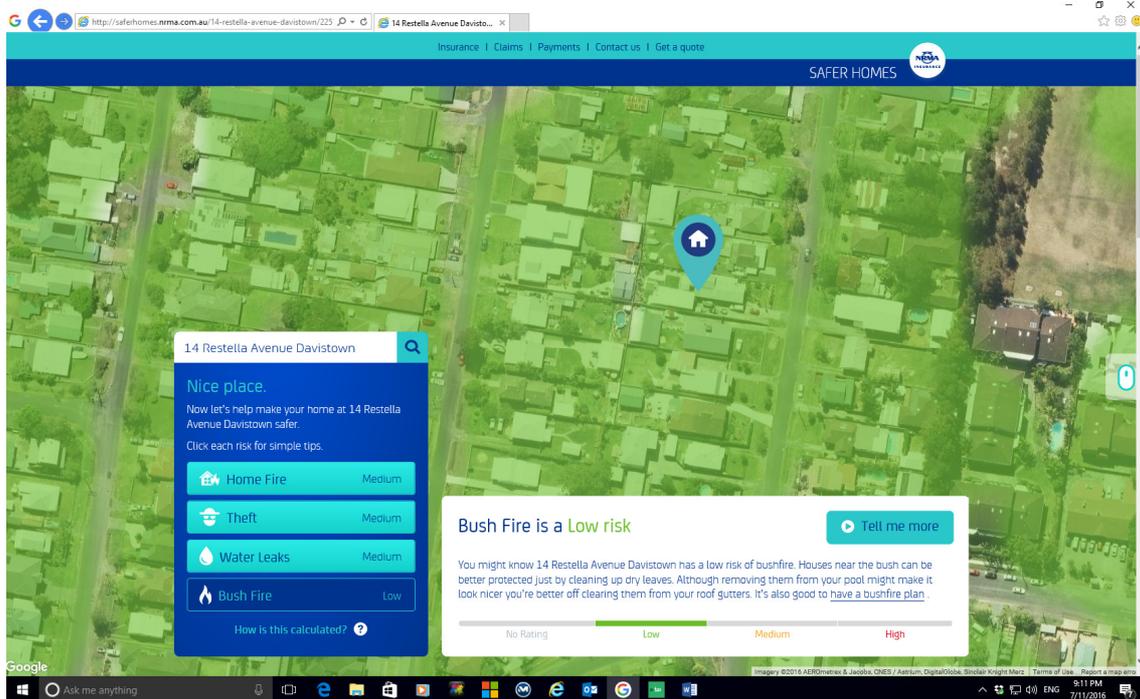
Through the recently published NRMA Safer Homes Website, the level of risk may also be assessed for home insurance using mapping of individual properties. In communities such as Davistown and Empire Bay, council classified low hazard flood liable areas have been upgraded by the NRMA to high risk.

Fig1 NRMA Safer Homes Website



However just one house further North along the same street and the high flood hazard disappears to become low bush fire hazard shown below in Fig2.

Fig2 NRMA Safer Homes Website



However Figure 3 below from the Brisbane Water Floodplain Risk Management Study indicates a low flood hazard for all of the same area.

There is an obvious inaccuracy with the NRMA information but considering that all current flood data for Brisbane Water has been provided to the Insurance Council of Australia (ICA) and the NRMA is a major member of the ICA, this discrepancy is difficult to explain.

Fig3 Brisbane Water Foreshore Floodplain Risk Management Study Fig D3.6 - Existing 100 Year ARI – Cardno March 2015

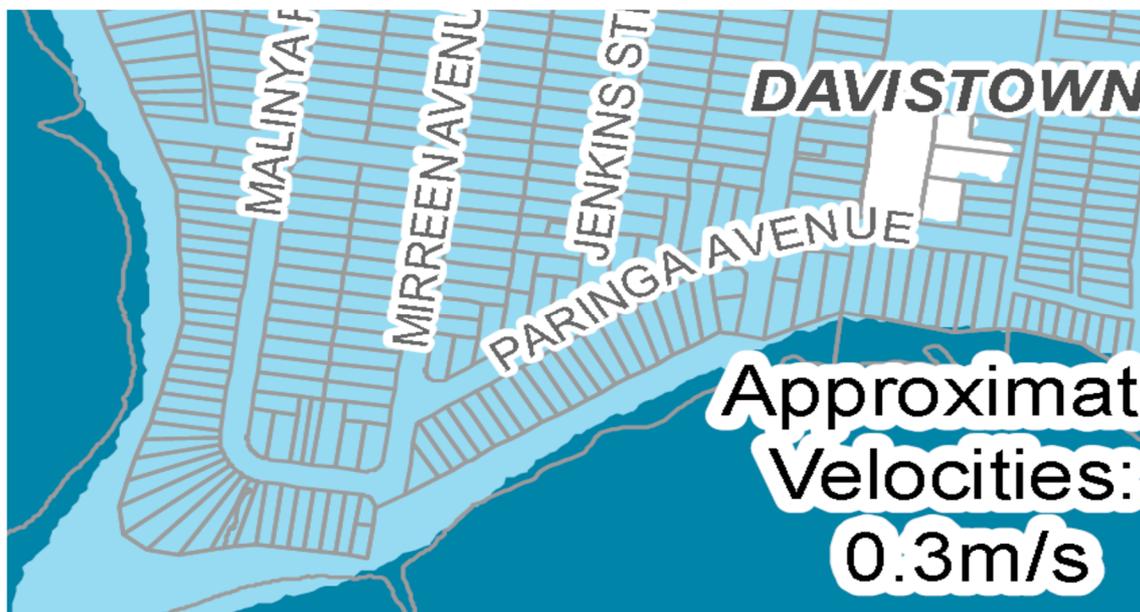
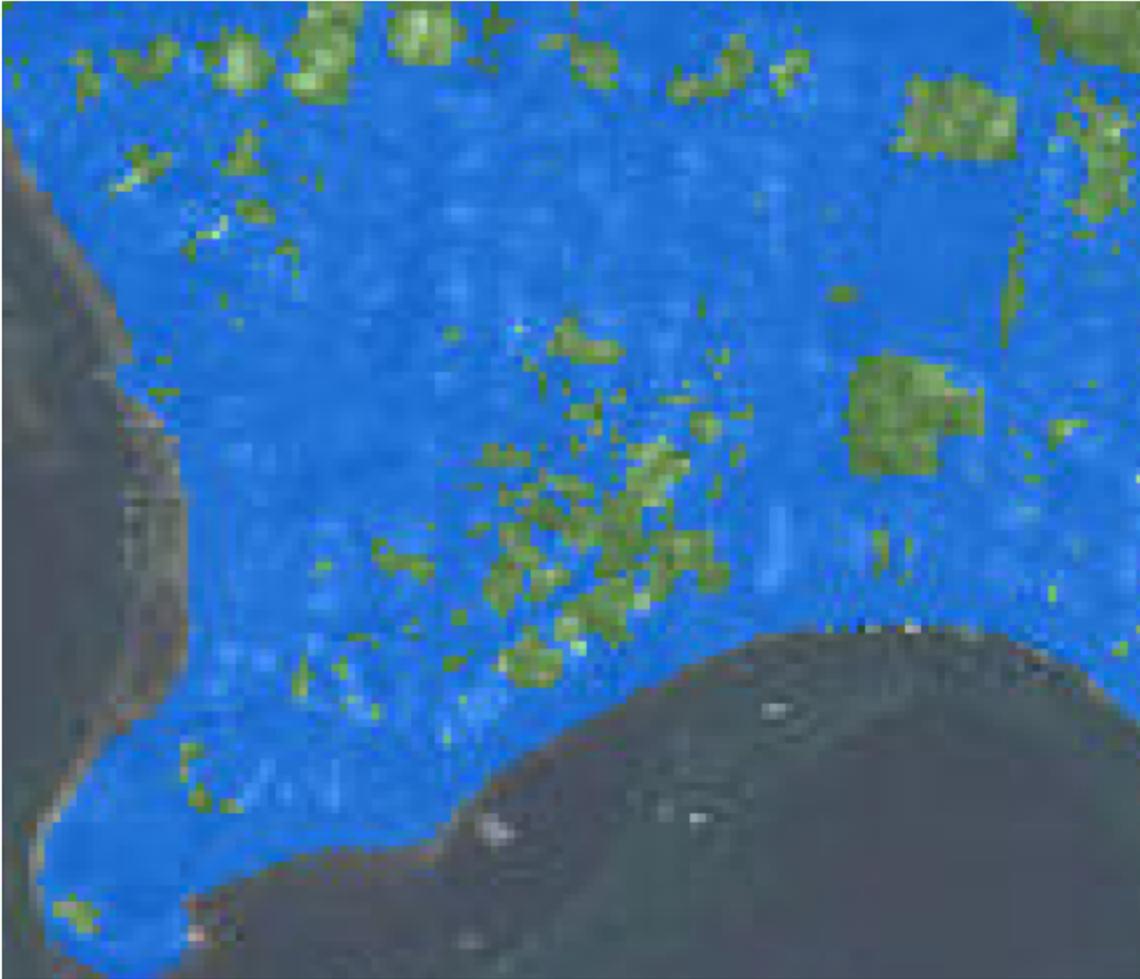


Fig4 Coast Adapt - IPCC 8.5 Scenario for 2050 SLR + HAT = 1.39 - NCCARF



The recently published Federal Government mapping in Fig4 adds an additional level of uncertainty indicating “flood free islands” during an average high tide in 2050 which is just 34 years away.

With the addition of proposed NSW State Government Coastal Hazard Mapping there is a good chance of further uncertainty and discrepancy.

The experience of affected residents over the past seven years demonstrates that this type of mapping can impact on both property values and home insurance. With nothing more than a visual indication that land is subject to a flood or tidal inundation is provided, it would have been preferred that details such as depth, duration and velocity had been included to make this information more accurate and educational.

But it is almost pointless raising such matters with insurers, councils or government agencies as they first challenge your interpretation and then blame each other or explain the issue away as different scenarios of flooding or tidal inundation.

In a society that is supposedly built on egalitarianism, social values and liberalism, it has come as a shock to many how quickly and how easily, a threat that challenges all communities in the form of climate change projections has become a wedge between those affected today by current and future coastal hazards and those who are not.

Inaccurate or incomprehensible coastal hazard mapping is a dangerous tool in the wrong hands!

June Storm 2016

In a country such as Australia where we rely heavily on the support of volunteers and where citizens either contribute financially or volunteer for those organisations, it has been a revelation for many coastal communities affected by coastal hazards to see how a long time culture of community collaboration and voluntarism has been corrupted by politics.

This was obvious in the recent storm event of June 2016 where suburbs on the NSW Central Coast and on Sydney's Northern Beaches were subjected to the same impact of a wild coastal storm that caused coastal erosion. But only residents on the Northern Beaches were provided with the direct action of emergency services workers who protected private homes using 20kg hessian sandbags and sand from the beach, a practice supposedly banned by the Coastal Protection Act 1979 and certainly not provided in the CM Act 2016.

The people in beachfront properties at Wamberal received no such assistance and to this point in time have been refused any assistance at all, despite the precarious state of many homes and the risk to public safety!

At Collaroy however, interim protection works have been installed under S124 of the Local Government Act by a sympathetic amalgamated council and under the watchful eyes of two State Ministers, a Premier and past Prime Minister and local Federal MP.

Was this the first test of the CM Act before it was passed as a Bill and did the new legislation meet this test?

Fig5 Collaroy June 2016



Fig6 Collaroy June 2016 – Interim protection works installed



Fig8 Wamberal Beach June 2016



Fig8 Wamberal Beach 8 November 2016



Fig9 Wamberal 8 November 2016 – New construction on the beach



Residents with the assistance of a local MP engaged and consulted the Central Coast Council on 18 August 2016. All residents present offered to contribute to permanent protection works and Council promised to write back to them but they are still waiting.

The recently adopted CZMP for Gosford Beaches is yet to be re-submitted and certified by Minister Stokes.

Consultation Requirements under the Coastal Management (CM) Act 2016

The Coastal Protection Act (CPA) 1979 Section 55E requires that there be at least three weeks of public exhibition. Details including places and times where a CZMP will be publicly exhibited must be indicated in a public notice in a locally circulated paper.

Section 55F of the CPA requires a council to consider all submissions made in writing.

The CM Act simply requires consultation to be undertaken in accordance with provisions of the proposed Coastal Management Manual.

Does this new Act signal the final nail in the coffin for community engagement and consultation in terms of coastal management and does this represent a failure of the CM Act before it is proclaimed in 2017 - possibly as early as January?

Under Section 16 of the CM Act, consultation is a statutory requirement and in *"S16(2) to be undertaken in accordance with the relevant provisions of the coastal management manual but in S16(3) A failure to comply with this section does not invalidate a coastal management program."*

But in the CM Act under Coastal Management Manual Section 21(4) "The Minister may review and amend the manual from time to time" without the scrutiny of Parliament.

Another test to come for *"one of the most innovative pieces of coastal planning legislation in the world"* as stated by R Stokes NSW Parliament Hansard on the second reading of the Coastal Management Bill 31 May 2016.

What has been put in place with this world class legislation is an opportunity for consultation to be ignored without the fear that a coastal management program would be invalidated!

Perhaps this decision is more easily understood when we look at the view of the State Member for Pittwater, Minister for Planning and Environment Roberts Stokes who stated while debating the Coastal Management Bill on the 31 May 2016:

"I do not believe that engaging in interminable delay is the right approach. Instead I believe we need to bed down legislative reforms and then undertake detailed consultation to finalise the mapping of vulnerable areas of our beaches and coast line, which have been a cause of discord, division and uncertainty for a long time."

The issue for Minister Stokes was that around 75% of submissions related to the draft exposure CM Bill did not want the Bill to be approved by parliament without the essential detail of a promised SEPP and accompanying coastal hazard mapping.

As is normal practice on consultation related to Coastal Management, Minister Stokes will announce and release the draft consultation Coastal Management State Environmental Planning Policy and hazard mapping just before the end of the year and just before the Christmas period.

Will Minister Stokes perception of "detailed consultation" be achieved and will future consultation required by the Coastal Management Act 2016 be an improvement on consultation required by the Coastal Protection Act 1979?

Brief Review of Past and Current Community Engagement and Consultation in NSW

Byron Bay Shire - Belongil

After more than twenty years of procrastination over the development of a coastal management plan, Byron Shire Councillors adopted a Coastal Zone Management Plan (CZMP) on 20 September 2016. Despite compliance with the mandatory requirement for consultation in the Coastal Protection Act, local conservation groups attempted to subvert due process during the final approval process by a noisy demonstration inside Council Chambers but after more than twenty years a coastal management plan was finally adopted.

Shortly thereafter the residents of Belongil whose homes were threatened with forced planned retreat were rewarded with success in the NSW Supreme Court which gave them long term certainty and a small amount of compensation for the 20 years of damaging confrontation between themselves and Byron Shire Council.

Despite these gains achieved over many years of litigation, the Green dominated Byron Shire Council elected in September 2016 announced almost immediately that the recently adopted CZMP would be withdrawn.

Byron Shire Councils involvement with the very small community of beachfront property owners living on the Belongil Spit is an example of the absolute failure of community engagement and the huge costs that such failure results in.

The relationship between Byron Shire Council and these residents can only be considered acrimonious and likely to become more so as the many parties and government agencies involved attempt to return the situation to a point where the Byron Shire Council Policy of “planned retreat” can be fully implemented along the Belongil Spit.

Can common sense prevail? Not likely!

When councils and residents are at war with each other, as we see at Byron Bay, the outcome will be damaging for all sides. The solution is unknown but without true engagement and consultation there will never be an acceptable outcome and likely more damaging litigation!

Lake Macquarie City Council (LMCC) – Marks Point Belmont South Adaptation Plan

Lake Macquarie City Council utilised question and answer forums from an early stage and ultimately developed a workable adaptation plan for residents of Marks Point and Belmont South that is broadly accepted in those communities.

They also used a contracted mediator to manage workshop meetings and open forums. The advantage being that when argument becomes robust and potentially personal in focus, the mediator can refocus the interests of those participating back to the actual issue and possible solutions.

LMCC originally undertook a process of community engagement and consultation from 2008 to address the risk of increasing flood levels driven by projections of rising seas. First attempts were poorly received by communities such as Marks Point and Belmont South.

Lake Macquarie City Council (LMCC) adopted a Sea Level Rise Preparedness Adaptation Policy in 2008 that allowed 0.91m sea level rise by 2100. Flood planning levels for residential construction were to be increased from 1.88m AHD for the current flood event to 2.27m AHD for the year 2050 and 2.85m AHD for the year 2100.

In 2012 the Lake Macquarie Waterway Flood Risk Management Study and Plan resulted in an increase of the Flood Design Level (FDL) from 1.38m AHD to 1.5m AHD for the waterway above the Swansea Bridge, resulting in an increased current Flood Planning Level (FPL) from 2.27m AHD to 2.36m AHD. This included a sea level rise projection of 0.4m by 2050.

Just two community representatives participated in the LMCC Floodplain Risk Management Committee. Just one was present when the study was accepted for recommendation to councillors.

Multi coloured flood mapping that accompanied the adopted management study indicated:

- permanent inundation by 2100;
- the 100 year Average Recurrence Interval (ARI) event in 2011 – up to 1.5m AHD;
- the 100 year ARI event in 2050 – up to 1.86m AHD;
- the 100 year ARI event in 2100 – up to 2.32m AHD.

In 2013 residents of Marks Point formed an action group in response to Lake Macquarie City Council's decision to declare large areas of their suburb to be at risk of permanent inundation by 2100, increased levels of lake flooding by the year 2050 and the classification of properties as "high risk" that were not affected by the current 1% flood event.

Residents also invited Coastal Residents Incorporated from the Central Coast to assist them resulting in over 200 Lake Macquarie residents joining this association.

Residents quoted significant increases in home insurance and declining property values. Some elderly residents transitioning from independent living into retirement centres and nursing homes were forced to sell their homes at values they considered to have been badly affected and reduced by the flood mapping and Section 149 Planning Certificate notations.

In June 2014 with the support of Lake Macquarie City Council, local residents formed an Adaptation Group for the suburbs of Belmont South and Marks Point to develop an adaptation plan specific to their suburbs. The draft adaptation plan was completed and presented to local residents and councillors and then adopted by LMCC in March 2016.

The main features of this plan are the immediate mitigation of localised flooding by the maintenance, repair and installation of simple stormwater controls and the gradual raising over time of residential land and residential floor levels so that ground levels and floor levels are above the current 1% flood level.

On 29 October 2014 LMCC published the Coastal Zone Management Plan for Lake Macquarie. The sub-committee of the Adaptation Group Committee then decided to establish a new incorporated association – Lake Macquarie Coastal Residents - and to expand its involvement into the development of the new CZMP for Lake Macquarie.

The membership fees and donations paid by Lake Macquarie residents to Coastal Residents Incorporated were transferred to the newly formed association and members from Lake Macquarie became members of Lake Macquarie Coastal Residents.

Although there are still many years of community engagement to be undertaken, the LMCC has been able to develop a pilot adaptation strategy for residents at Marks Point and Belmont South that could be applied to communities in locations such as the Central Coast (Gosford & Wyong), Eurobodalla, Great Lakes, and Wollongong and Sutherland and Narrabeen in Sydney.

This success has been the result of a willing collaboration between LMCC and committee members of the Lake Macquarie Coastal Residents Association.

Despite ongoing issues related to implementing the adaptation plan, the two organisations appear to be committed to a plan that despite initially considering retreat as an option was transformed into a plan that has the potential to revitalise some of Australia's oldest suburbs while improving amenity as infrastructure is upgraded. With that commitment to future certainty there is no doubt that community wellbeing will also once again be a feature of these communities.

At this time, LMCC has developed a proposal that the Adaptation Plan will be referenced in the Local Environmental Plan and hopefully included in the local Development Control Plan and noted on Section 149 Planning Certificates.

Central Coast Region – Wyong and Gosford Amalgamation

The Central Coast Regional Local Government came about from the amalgamation of Gosford City Council (GCC) and Wyong Shire Council (WSC) but at this time there are two different approaches to coastal management.

Wyong

Wyong Shire Council developed a Coastal Zone Management Plan for its open coastal beaches in 2011. Planned retreat was implemented as a management option for Wyong's beaches. There were development constraints for all development proposals seaward of the 2100 hazard lines with "time limited development consent" being enforced for new development between the 2050 and 2100 hazard lines.

Cabbage Tree Bay is now protected by a rock revetment part funded by the previous Department of Environment and Heritage under Minister Sartor while a recent proposal for the construction of a training wall on the northern side of the Entrance Channel is estimated to cost \$50 million over 50 years including beach renourishment for the North Entrance Beach.

Sand is also regularly pumped from The Entrance Channel and onto the adjacent southern Entrance Beach.

Wyong Shire Council's previous policy for flood liable land around local coastal lakes required a flood planning level based on a 1% flood event plus freeboard and projected sea level rise by the year 2100. Where there were difficulties for owners to build to such levels, they were permitted to build to a lower floor level provided they accepted time limited development consent of 40 years duration. Wyong Councils policy of time limited development consent forced property owners to agree to remove all previously approved development after 40 years, subject to rising sea levels.

These consent decisions were noted on Section 149 Planning Certificates.

In 2012 a new elected council removed the provision of time limited development consent for flood liable areas and set an interim sea level rise policy benchmark based on the current 1% flood event. This policy was to be reviewed once the Stage II Coastal Reforms are implemented.

Wyong Council's CZMP was also revised and a simpler risk management approach was adopted allowing greater flexibility for beachfront development and also removed the constraint of 40 year time limited development consent.

Gosford Open Coastal Beach Frontages

The previous Gosford City Council Development Control Plan (DCP) for open coastal beach frontages provided for planned retreat with severe constraints on properties seaward of current hazard lines. These hazard lines were implemented following a comprehensive process of community engagement and consultation resulting in the 1995 Coastal Management Plan for Gosford's open beaches and in a later plan for Broken Bay beaches.

Development on beach frontage at Wamberal Beach was however permitted seaward of current hazard lines but no more than 8 metres from a revetment planned for construction for around the last 30 years and yet to be commenced.

Such approvals provided potential for future litigation against Gosford Council while the revetment remained unbuilt. Around 200 homes west of the Wamberal dune system are also threatened in the event of a breach of the Wamberal dune system.

In 2015 Gosford City Council adopted a new Development Control Plan based on revised hazard lines from the 2014 Hazard Definition Study. This new DCP relaxed some previous development constraints for all open coastal frontage properties but at the same time removed the previous provision for development at Wamberal Beach which allowed developed up to 8 metres from a proposed revetment which today has still not be built.

As a consequence of these changes, significant numbers of properties along Wamberal Beach no longer have any development potential with an approved building to be located so close to landward boundaries as to prevent or severely constrain any future development behind the approved building line.

Cantilevering has been offered as an option to allow dwellings to be cantilevered over the building line but the issue for any cantilevered structure will be backspan and the anchoring of the structure the cantilevered section is connected to.

Many owners are still unaware of this constraint.

Due to Council not actively engaging the community during the exhibition period for the DCP and not directly informing the owners of open coastal frontage properties of the new DCP, only six submissions were received - one in favour of the proposed DCP. Many affected property owners are still unaware of the implications of the revised DCP for their properties due to this total failure to directly engage and consult those residents affected. During the consultation period there were no information sessions and despite the establishment of a Council Coasts and Catchments Committee, committee members were not formally advised that the draft DCP had been placed on exhibition.

Fig10 Building Line - Wamberal Beach – Worley Parsons 2015



Dunford V Gosford City Council

In December 2014 in the Land and Environment Court Gosford City Council attempted to defend a decision not to approve a development application by Esther Dunford to demolish an existing building and construct a new home on open coastal frontage land on Wamberal Beach. During the hearing the Council attempted to introduce a draft CZMP in support of their defence of Council's refusal of consent. According to the judgement, GCC introduced the CZMP as a document endorsed for adoption by the Council's Catchment and Coast Committee.

From a hearing before Justice Sheahan on 1 May 2015 to determine costs, the decision of the Land and Environment Court 12 June 2015 noted comments by counsel for Gosford Council, Mr Fraser in Section 21 of the decision:

- (2) the proposed revetment wall had been discussed for 25 years, but Mr Fraser conceded it was "all talk and no action" (Tp137, L16); (3) much of Council's argument was admitted by its counsel to be "spin" (Tp142, c.f. p119)

The Gosford Council Coasts Committee had been asked and agreed, to endorse the document without actually seeing it to assist Council. At a meeting of the committee just days before, committee members were encouraged to support this request of

Council Officers present at the meeting because it was said that funding was at risk due to a demand by the “Minister” that the CZMP be immediately presented for certification.

It was the Emergency Sub-Action Plan for Wamberal Terrigal Beach that the Minister was demanding to be presented, not the CZMP and yet the Land and Environment Court believed that a draft CZMP endorsed by community representatives had been presented to the court in support of Councils defence of its rejection of a Development Application.

It was impossible for this plan to be legitimately endorsed by community representatives because they had not seen it in a completed form.

As far as the committee was concerned this was simply a mechanism to support the provision of funding that was at risk of being withdrawn by the State Government because of an unrealistic timeframe for the completion of the CZMP. The EAS was not discussed at this time.

June Storm of 2016 - Wamberal

The aftermath of the storm in June 2016 resulted in a continuing erosion of sand at Wamberal Beach threatening to undermine around 10 homes. At a meeting with representatives of the Central Coast Council in August 2016, owners of properties at Wamberal Beach were told that the only option available for the provision of temporary or emergency protection works were those provisions under the Coastal Protection Act.

Owners of properties at risk and still at risk today were not informed of alternative provisions under the Local Government Act or under the existing Coastal Infrastructure SEPP that would allow the provision of interim or temporary protection works as had been implemented by Gosford Council at Ettalong in 2014. Council also informed owners at that meeting that Council could not fund either interim works or in fact permanent protection works and had insufficient funding to actually commence the processes required now to develop a submission for funding from the NSW State Government under recently announced grants available from 2017.

Despite owners of severely affected properties being prepared to fully finance interim works, the Council to date has refused to assist – unlike the action of the recently formed Northern Beaches Council where interim works were installed within 2 weeks after the storm. At this stage, Northern Beaches Council has funded the cost of these works.

Is this the result of “25 years of spin and all talk and no action” as noted by Justice Sheahan?

Brisbane Water Foreshore Floodplain Management

In 1978 and early 1980’s Gosford Council used an adopted flood planning level that was initially developed using a freeboard of 300mm and a flood design level (FDL) 2.04m Standard Datum derived from a maximum observed flood level of 2.04m Standard Datum and provided by NSW Public Works.

In 1987 the FPL was agreed to be changed to 2.3m AHD following a meeting of the Floodplain Management Committee.

It was well documented that the adopted FPL was based on the maximum flood height occurring during a flood event in May 1974 caused by a major storm surge said to be close to a 1:200 ARI event.

By the late 1980's the FPL had been progressively introduced to other foreshore suburbs but many of these **had not experienced** the same maximum level of flooding as had been experienced in Gosford Harbour.

A revised freeboard of 500mm was later introduced in line with recommendations in the 2001 Floodplain Development Manual resulted in a revised FPL of 2.45m AHD. The additional 200mm included an allowance for projected sea level rise.

Various progress associations complained during this period that the new minimum FPL set an unrealistic floor height. In many cases over 1.5m above ground level.

Gosford City Council completed a flood risk management study for Brisbane Water Foreshore in September 2009 and in May 2010 issued letters to 7500 residents advising them that their properties were potentially affected by sea level rise. Notations were placed on Section 149(5) planning certificates providing similar advice. A further 1500 letters were sent out around a month later.

Affected residents formed an association and campaigned against the Section 149(5) planning certificate notation claiming it affected property values. In June 2012 following a public march through Gosford and a rally, Council determined that the Section 149(5) notations would be removed.

Up until that point consultation was one way from residents to council with no apparent engagement by Council to resolve the issue.

The Mayor at an early meeting with concerned residents in 2010, rejected claims that Council should have consulted residents regarding the S149(5) notations, disparaged a 3000 signature petition and generally dismissed all concerns of fairness.

No general engagement with affected Gosford residents was undertaken until 2014 when the management study and plan was exhibited.

Gosford Council at this time would only issue a combined planning certificate that included both a Section 149(5) and Section 149 (2) planning certificate. This allowed council to attach information to a contract for the sale of land that is not prescribed under Section 149(2) of the Environmental and Planning Assessment Act.

Gosford City Council was the only council in NSW to implement this arrangement which it is estimated to have resulted in additional Council fees to vendors of property of at least \$10million dollars over the period this policy was in place. In June 2015 this practice ended following extensive lobbying by Coastal Residents Incorporated.

Flood mapping was implemented to indicate the extent of the current 1% flood event for Brisbane Water Foreshores including flood mapping that took into account future floods combined with raised sea levels for 2050 and 2100.

A separate map was also published on Gosford Councils Geographic Information System (GIS) in 2009 that claimed to represent the extent of a 1% flood event for Brisbane Water Foreshores. Instead it represented the extent of Gosford Council's Flood Planning Level of 2.45m AHD. In the case of thousands of properties, this represented a height up to 1 metre above the 1% flood event that had been determined by investigation for a flood study completed in 2009.

The GIS mapping indicated that the whole of St Huberts Island would be submerged by a 1% flood event despite the reality that most developed land forming St Huberts Island is around 1m AHD or higher and the modelled 1% flood event for St Huberts Island was 1.5m AHD. Very little of the island would be adversely affected by a 1% flood event with a peak duration of around 6 hours.

Home insurance also became a major issue as insurers readily referred to the flood mapping on Council's GIS. Again following extensive lobbying by Coastal Residents Incorporated, the flood mapping was changed to accurately reflect the extent of the 1% Flood and not the FPL of 2.45m AHD.

The Draft Brisbane Water Foreshore – Coastal Floodplain Inundation Risk Management Study September 2011 had included management option proposals for planned retreat, land swap and voluntary acquisition.

Community engagement and consultation re-commenced in June 2013 with 8 appointed community representatives involved in the development of the Brisbane Water Foreshore Management Study.

The Brisbane Water Foreshore Management Study was exhibited for 12 weeks from August until 12 November 2014 and included a management option that will allow private land to be raised *above current 1% flood event level* by "spot filling".

In 2015 the Brisbane Water Foreshore Floodplain Risk Management Plan was adopted by Council for exhibition. Despite concerns expressed by 4 out of 8 community representatives, the majority of foreshore suburbs were provided with revised Flood Planning Levels (FPL) resulting from the use of a variety of Flood Design Levels for different foreshore areas compared to a previously adopted single FPL for the whole of Brisbane Water. This was based on the highest observed flood level occurring in Gosford in 1974 and despite the concerns of many residents at that time that Council had adopted an exaggerated Flood Planning Level for the majority of foreshore suburbs a single Flood Planning Level was adopted.

Now that the Brisbane Water Floodplain Management Plan (BWFMP) has been adopted, development applications (DA) indicate that in Davistown and Empire Bay the revised FPL has been reduced by around 300mm.

Gosford City Council Floor Level Survey 2015

When Gosford City Council adopted the BWFMP it included adoption of a floor level survey of over 4000 homes around the Brisbane Water Foreshore. The Catchments Committee was not given an opportunity to see the results of the survey before it was included as an appendix to the BWFMP.

The Office of Environment and Heritage provided funding and oversight for the project which was believed to cost in excess of \$400 000. The survey was also to be made available to the Insurance Council of Australia to form part of a detailed database for use by ICA members.

Council was advised that there were significant errors in the document but the complete management plan including the flawed floor level survey was placed on exhibition.

It was found that surveyed floor levels for a significant number of homes constructed on 2 lot subdivisions had been reversed. Floor levels were shown as ground levels and

ground levels were shown as floor levels resulting in a published survey indicating that many homes had floor levels below ground level.

In other cases, new homes that had been approved for occupation were shown to have floor levels below the required Flood Planning Level. This occurred where an approved internal landing in the entry was below the FPL or in some cases where it was believed that garages were being used for habitation.

In Figure 11 below, the home was constructed with an internal landing lower than the actual approved Flood Planning Level floor level

There was also an issue with homes that had been extended and had a range of floor levels as a consequence of building extensions.

The survey was withdrawn from the Plan.

This issue would never have occurred if the Committee had been fully consulted and involved in the process of review.

Fig11 Davistown – constructed in 2014 – FPL 2.450m AHD – floor level survey indicates a FPL of 2.042m AHD or 408mm below the required FPL



Conclusion

Has community engagement and consultation related to coastal management improved over the past 25 years?

Generally there has been a greater attempt to raise issues related to coastal management using a range of technologies previously unavailable. However the success of Lake Macquarie City Council in developing an adaptation plan that is supported by those residents affected by current and future coastal hazards is perhaps the ultimate test of success.

When all affected NSW communities reach that point it could be the right time to claim one of the most innovative pieces of coastal management legislation in the world but the major step required is to actually sit down with communities, engage them, listen to what they offer and then together achieve solutions.