## Newport Surf Club Submission for the Reconsideration of the Panel's decission A. D. Gordon OAM

#### EXECUTIVE SUMMARY

It is Council not the Newport Surf Life Savings Club that is the applicant for the Development Application as it is the owner of the building; a matter Council seems to have had difficulties with separating its roles. There are unfortunately a number of matters in which the Council staff generated artificial constraints, as the regulator, on itself as the applicant, without any consideration of the likely impacts on the Club, the beach and the public, and the probity of doing so. The Club has become the unwitting "meat in the sandwich" between the Councils multiple roles and conflicts of interest. Further Council, as the applicant, has failed to explain to Club members and the community the reasons the why Council now seeks a reconsideration. This has resulted in Members of the Club and the community laudably supporting the Club and criticizing the Panel's decision without realizing that Council was the applicant and that it was the issues Council failed to adequately address, and the constraints it artificially imposed on the project that led to the refusal decision by the NSW State appointed Planning Panel, which included three recognised experienced coastal managers.

The fundamental reasons for the refusal can best be understood by close inspection of a "Figure 20" of the HCE report (taken from the Worley Parsons coastal vulnerability report and included later in this submission). This figure shows that as time progresses the shoreline of the Newport beach will retreat landward progressively making the current clubhouse more vulnerable to erosion events, and to increasing oceanic over wash and flooding of the clubhouse and it surrounds. Even under current conditions it is possible for the clubhouse to again suffer undermining and wave induced oceanic flooding. The fundamental problem that the figure highlights is that if the clubhouse is defended with the seawall proposed in the DA the clubhouse will progressively emerge as a headland splitting the beach in two and still suffer from oceanic flooding from the sea increasingly around the sides and back of the building. Unfortunately, while the building currently seems to be in a "reasonable "location; the lessons of the May 1974 event seem to have been lost with time. Further, there has been no robust resolution of how the wave overtopping is to be managed and how any solution will impact on both the practical accessibility from and to the beach and, importantly, the dynamic forces on the building or any limiting structure due to wave impacts.

In terms of the DA under consideration the Objects and requirements of the NSW 2016 Coast Act provide for matters such as not only the impact of the coastal processes on the structure but also the impact of the structure on the coastal processes and public beach amenity to be considered for the "life of the structure". However, the latter requirement seems to have been overlooked. Nor has the potential ill effects of the seawall on reduced ready access from the clubhouse to the beach as recession takes place been adequately considered. Further the implications of locking up sand behind the wall on the storm demand for sand at the southern end of the beach and at Bilgola (as covered in this submission) has also been overlooked. Council has effectively, and conveniently, disregarded the Coastal Act and SEPP and the adverse impacts of the seawall proposal. There are better solutions that do not have the same adverse impacts as those of the current DA and which can satisfy the dictates of the Coastal Act and SEPP and would provide the Club with the additions they have identified are needed. Submission Prepared by:

Angus Gordon OAM, BE, M.Eng Sc, FIE (Aust) , CP Eng.

Resident of the Northern Beaches area for 52 years, coastal engineer and coastal zone manager for over 50 years, undertaken projects in all States of Australia and overseas in Brunei, Dubai, Kuwait, Indonesia, Hong Kong and NZ. 87 technical papers published Nationally and Internationally, GM Pittwater Council 1996-2005.

TABLE OF CONTENTS	PAGE No
EXECUTIVE SUMMARY	1
INTRODUCTION	3
BACKGROUND IN BRIEF TO SURF CLUBHOUSES ON THE NORTHERN BEACHES	3
LESSONS LEARNT FROM A MAJOR STORM EVENT(S) – 1974	5
PROPOSED NEWPORT UPGRADE	7
ISSUES	8
EROSION and SHORELINE RECESSION IMPLICATIONS	8
WAVE OVERTOPPING	12
COMMENT ON ONE OF THE NEW SUBMISSIONS	14
SUMMARY	17
THE QUESTIONIs there an ANSWER?	18

#### INTRODUCTION

As a society we seem to difficulty learning about the inappropriateness of building and continued investment in assets, particularly expensive and important community assets, in vulnerable locations. This is regardless as to whether that vulnerability is due to coastal erosion, floods or bushfire. The current Council DA for upgrading the Newport Surf Club is a testament to this. As is Council's challenge to the decision of the Planning Panel, a State Government authority with expert coastal management members. All this has been compounded by Council's confusion as to how to competently manage its conflicts of interest generated by its multiple role as the regulator, the applicant and the planning assessor.

In reconsidering the Planning Panel's refusal of the Newport Surf Club's clubhouse upgrade proposal, it is useful to consider the context of the clubhouse in terms of its relationship to the Newport beach and embayment, the history of clubhouse re-developments on the northern beaches and the objects and objectives of the 2016 Coastal Management Act and associated 2018 SEPP (now incorporated into the Resilience and Hazards SEPP).

While it is vital that clubhouse facilities be regularly upgraded not only to accommodate the changing rescue equipment but also to continue to maintain and attract new members to ensure beach safety for the overall community. However, these upgrades should not adversely impact on the very beach the Club is there to service nor put at risk the increasing threat to the Club operations due to developing future vulnerabilities in the life of the clubhouse.

Unfortunately, it is clear the Council has failed to recognise, the likely adverse impacts over time on both the beach and the club by requiring the current clubhouse building to be protected by a seawall. In doing so it has placed the Club in a difficult position by encouraging a development which will demonstrably produce an outcome which is contrary to the Objects, and requirements of the NSW Coastal Act, the future operations of the Club and the community's enjoyment of the beach. There are better solutions had Council a better understanding of coastal processes and future changes in those processes.

### BACKGROUND IN BRIEF TO SURF CLUBHOUSES ON THE NORTHERN BEACHES

Surf lifesaving has a vital role in risk managing the community's enjoyment of the beach and surf environment. It also provides key surf advice and lifesaving training to a wide range of volunteers. In addition, the clubs are important social centers for community activities. Given their primary lifesaving functions surf club clubhouses have historically been located as close as possible to the beach so that their equipment and in particular their rescue craft are readily accessible.

On the Northern Beaches many clubhouses are in relatively sheltered locations at the ends of beaches. Some however have little choice but to be in potentially more vulnerable exposed locations. Over the years some clubhouses have suffered damage at different times, and for different reasons. For example, at the other end of the Northern Beaches the Manly SLSC

clubhouse has had to be relocated and totally reconstructed, on three occasions, for differing reasons.

The storms of the late 1960s and early 1970s, particularly the two 1974 storms (May and June) demonstrated the vulnerability to damage of five clubhouses, Freshwater, Long Reef, North Narrabeen, Bungan and Newport. The damage at Freshwater, Bungan and Newport was similar with the beach frontage of the clubhouse being undermined and overtopping waves entering the building causing damage to the buildings themselves, and the stored equipment.

Long Reef was an unusual case as, although difficult to believe today, the waves broke down the boathouse door and entered the clubhouse building. But in this case, this was due to the northward deflection of the Dee Why lagoon entrance during the storms which removed the protective buffer of the dunes in front of the clubhouse. A relatively simple solution involved the subsequent redirection of the lagoon entrance and the re-establishment of the dune buffer. This buffer meant the clubhouse could be sensibly upgraded in place.

With both Freshwater and Bungan, after consideration of the potential future damage to the buildings and the amenity of the beach, the decision was taken to adopt a "managed retreat" approach by confining the upgrading and redevelopment to the landward side of the existing clubhouse. It was accepted that over time the old clubhouses would likely be lost in severe storms like the 1974 events or worse. The concept was that the new structures associated with the redevelopments, although connected to the existing building, could stand-alone once the old building was lost. The design featured a "breakaway" connection so the old building could be lost without damage to the new building but that to all intents and purposes the buildings were integrated for the time being.

This approach meant that no further attempts were made to protect the existing buildings as it was recognised that such protection would eventually compromise the public amenity of the beach and the operations of the SLSC. However, importantly, the existing buildings, albeit reduced in size in the case of Freshwater, were allowed to remain for the time being while they stayed functional.

North Narrabeen clubhouse is an interesting example of managed retreat where the old twostory clubhouse was approximately the same size as the current Newport clubhouse. It was in a similar coastal exposure location at the front of the current car park immediately adjacent to the active beach, and away from any headland protection. While of a similar size, location, and function as Newport clubhouse the building itself had little architectural merit.

When it came to upgrading and repairing the North Narrabeen Clubhouse building the decision was taken to totally remove it and construct a new clubhouse to the north of the carpark and further inland, next to Birdwood Park, ensuring there was sufficient dune buffer between the clubhouse and the likely beach fluctuations associated with future storm action and the likely shoreline recession during the life of the new building.



The old North Narrabeen Clubhouse on the old site, before the new club was constructed

All these decisions were based on a philosophy of minimizing the likely future adverse impact of the clubhouse on the coastal processes of the beach, the communities' beach amenity, and the vulnerability of the clubhouse asset given the public funds invested in these buildings. The decisions were the joint outcome of considerations between the Councils involved (historically Manly, Warringah and Pittwater) and the State Government and the community. I was involved in all these projects. I also observed, firsthand as a coastal engineer, the two 1974 storms and their impacts on the beaches and clubhouses.

A number of other surf club buildings on the Northern Beaches will face the same dilemma in the future but for present the Council appears to have determined there is still sufficient dune buffer in front of these clubhouses. It is important to recognise that with a couple of exceptions, the surf club clubhouses on the Northern Beaches are community buildings that are the overall responsibility of the Northern Beaches Council. Unfortunately, Council no longer seems to have a comprehensive asset management strategy for these buildings. Previous strategies as detailed in past documents appear to have been replaced by an ad hoc approach which is most unhelpful for surf club wishing to upgrade the facilities and for responsible investment of the significant funds required to upgrade these community assets.

### LESSONS LEARNT FROM A MAJOR STORM EVENT(S) - 1974

During May 1974 with a follow-up storm in June, Sydney experienced the worst storm damage in living memory, but not necessarily the worst storms possible. The May East Coast Low (ECL) developed on the NSW south coast on an easterly moving weather front. The intense ECL tracked north parallel to the coast, somewhat offshore generating waves of a "significant wave height" of approximately 10m and a maximum height believed to be close

to 20m. It eventually dissipated after crossing the coast north of Port Stephens. While the damage was widespread, because of its northerly direction of travel, the northern ends of the beach embayments suffered the most damage. The follow-up June storm damage was due to a large Low-pressure system centred in the Tasman that built on the earlier May event.

From a coastal sediment point of view Bilgola Beach, although apparently separated from Newport by a small headland is actually part of the same sediment embayment "compartment" when the offshore reefs are taken into account. The attached map shows Avalon and Bungan embayment are sand units separated by significant offshore reefs and that the Newport/Bilgola embayment is separated from the other two by large reef features. However, the reef separating Newport and Bilgola is comparatively a minor coastal process feature. Further the map shows the limited amount of sand in each embayment compartment and hence their vulnerability to coastal erosion and longer-term shoreline recession.



Map showing Newport/Bilgola sediment embayment and reef system Land green. Seabed - brown reef, yellow sand, orange shelly sand (from Gordon, Hoffman)

The intensity and direction of movement of any storm is a key factor, along with the offshore reef configuration, in determining the degree of damage and wave overtopping at any location within an embayment. Different storms can produce significantly different results. In May 1974 although Newport suffered erosion both in the southern and center regions Bilgola, being the northernmost part of the embayment unfortunately suffered far worse. The SLSC clubhouse at Bilgola had fortunately been built in the sheltered southern corner and was set back from the seawall so only suffered minor overtopping damage. However, the Newport clubhouse, on that occasion, while not being as exposed as some, suffered erosion and significant wave overtopping with damage to the clubhouse and the equipment housed within.



Bilgola May 1974. Some rocks were originally placed following a 1967 storm

As shown in the Newport/Bilgola sediment embayment the sand appears to be contained by the reefs and the long-term sediment volumes in this compartment do not appear to have changed suggesting no long-term shoreline recession. However, this result does not take into account the beach nourishment that took place following the 1974 events when additional sand was brought in from dredging in southern Pittwater, under the State's Beach Improvement Grant funding aimed at restoring the beaches after the 1974 damage. Looking to the future the unknown is the likely impacts of climate change. While the potential for shoreline recession due to sea level rise is now recognised a more subtle but important factor is the increase in ocean acidification currently being measured. This increased acidification is believed to be responsible for both dissolving shell material but also inhibiting its production. The extensive reef systems off Newport Beach are potentially the reason why the beach "sand" at Newport is over 50% shell, albeit as fine particles and hence Newport is potentially vulnerable to an emerging threat. That is not to say the shell content in the sand will suddenly disappear but rather over time its volume may well decrease.

While the role of shell production and potential impacts of loss due to acidification are yet to be well understood sufficient studies exist to raise awareness of the potential impacts. Given the uncertainties involved an adaptive approach to vulnerable asset management would seem a more rational approach than to utalise fixed engineering structures like seawalls.

### PROPOSED NEWPORT UPGRADE

The evidence provided in the current Newport DA and the associated material provided to the Panel demonstrate indicates that at the very early stages of the redevelopment concept, Pittwater Council naively, and contrary to the 1985 formal advice based on Public Works vulnerability studies, informed the Club that it would not favorably consider the progressive relocation of the clubhouse in a landward direction. Hence the current SLSC DA focused on upgrading the existing building. Further, again based on Council's naive advice, required the building to have substantial protection against erosion and undermining, without recognizing the consequences on the coastal processes and beach amenity. The frustration of the Club is therefore very understandable given they had originally, as stated at the Panel hearing, sought to consider a landward extension but had been reportedly advised that this would not be favorably considered by Council. This was despite there being some 20m on the landward side of the building between it and the children's' playground ( the maximum total width of the entire current clubhouse, including outstanding "wings" is only 11 metres) and that to the immediate north of the building there is one of the largest beachside car parks on the Northern Beaches.

### ISSUES

This submission is focused on the coastal erosion and recession affecting Newport Beach and the impact of the wall on the beach, the beach amenity and the impact of the coastal process on the club including wave overtopping. No comment is made regarding the club's desire to upgrade their facilities as the author is of the view this desire is commendable and therefore supported in principle.

#### EROSION and SHORELINE RECESSION IMPLICATIONS

The vulnerability of the current clubhouse and the potential future erosion and recession lines for Newport Beach are presented in "Figure 20" of the Horton Coastal Engineering's (HCE) report of August 2021. "Figure 20" was determined by previous coastal process and vulnerability studies undertaken for Council. These hazard vulnerability lines clearly show the existing clubhouse is not only currently vulnerable but that over time, if protected with a seawall, will emerge as a new "headland" as the beach recedes around it.

The information presented in the "Figure 20" predicts that during a severe storm, and over time, as shoreline recession progresses, any seawall protective measure for the existing building will result in the loss of the beach in front and the dunes alongside of the clubhouse, dividing the present beach feature in two. It also has potential adverse consequences for residences at South Newport and at Bilgola, as sand locked behind the wall is denied to the natural beach fluctuations which occur during storms. This can be expected to increased storm demand at the unprotected areas of the beach.

# The proposed seawall is therefore a significant breach of the Objects of the 2016 Coastal Act and not in the interest of the Club or the community.

"Figure 20" also provides support for the argument that the clubhouse is already vulnerable to damage (red line), wave overtopping and inundation. The blue "Immediate Wave Runup" on the diagram shows the potential extent of wave over wash during a severe storm under current conditions. It should be noted that during the 1974 May storm the wave over wash did impact directly on the clubhouse, its contents and on the region either side of the building.



**Figure 20: Erosion/recession coastal hazard lines, and Immediate Wave Runup Line, at Newport SLSC** Taken from HCE report 26 August 2021 – As determined by Worley Parsons 2015

The information presented by HCE focusses on the role of the "Secant wall" and rock toe in protection of the current structure from coastal erosion. Interestingly the "return wings" on either end of the wall are designed to cope with "end effects" under current conditions. That is, the design does not appear to include provisions for the anticipate the potential shoreline recession postulated in "Figure 20", as the returns are obviously too short. Importantly, while the impact of coastal processes on the structure is considered in the DA documents the adverse impact of the seawall on the public amenity of Newport Beach during the "life of the structure", as required by the NSW Coastal Act and SEPP appears to have had only cursory treatment.

#### Newport Surf Club Clubhouse



Extract from HCE (November 2020) showing a plan view of the secant wall and the end returns to accommodate anticipated outflanking under current conditions, but not future shoreline recession during the "life of the structure"

In addition, the HCE report includes some artists impressions of one solution.



From Horton Coastal Engineering 16 November 2020 (no "return" walls shown)

When compared to the other "artists impressions" this appears to suggest it represents the most eroded version. However, when compared to photos taken immediately after the May 1974 storm (Gordon) and the photo in HCE report (26 August 2021) which it is believed was taken a short time after the June 1974 storm demonstrate the "artists impression" is more than "optimistic" and does not represent what the clubhouse protective measures would look like after a severe storm, nor in the longer term following the predicted shoreline recession and climate change impacts (as required to be considered by the 2016 Coastal Act). Clearly not only the impact on the beach has been underestimated but also the adverse impact on the Club's readily access to the beach, particularly for surf craft, as demonstrated by the photo of Kingscliff clubhouse building shown further below.

Interestingly, the beach profile information used to support the DA is somewhat misleading in that the 1974 profile is clearly incorrect when compared to the available contemporary photography. The 1974 profile suggests significantly less erosion than the photographs

evidence demonstrates. This brings into question the credibility of the other profile data shown and apparently used for the design considerations. Profile data of this nature must always be used with caution as often the profiles are measured some time (often months) after storm events and following a beach recovery phase, and therefore do not provide reliable information on the actual beach erosion during, and immediately after storm events. They are therefore of limited use as input for the seawall design and the interpretation of beach response.



Photo taken on Sunday morning 26<sup>th</sup> May 1974 near low tide (Gordon)



Figure 5: Rock revetment being placed seaward of Newport SLSC on 28 May 1974

Importantly, the 1974 profile fails to show that even in a repeated 1974 event(s) there would be a vertical drop in front of the proposed steps (as per the artists impression) of several metres. The secant piles would be exposed, and beach access made difficult for the club and in particular for the launching of surf craft. Apart from that there would be a significant impact on the beach amenity for the community.

The following photo shows the "Secant" wall protecting Kingscliff surf club. Sometimes the sand level in front of the wall is higher whereas at other times the beach is so low that ready beach access along in front of the wall is impossible. The Kingscliff real-life example demonstrates Northern Beaches Council's lack of knowledge, experience and understanding of coastal engineering in that there are examples of similar clubhouse protective works that have been attempted in NSW, to the demonstrated detriment of the beach and club access.



Photo of Kingscliff SLSC Secant wall (Gordon)

#### WAVE OVERTOPPING

By following the "paper trail" of reports and submissions it would seem HCE was originally engaged to simply undertake the design of a seawall that would prevent undermining of the Newport Clubhouse. There appears to be no early consideration of the potential for wave overtopping nor the overall impacts a seawall might have on beach use and clubhouse operations. When these deficiencies were brought to the attention of the Council, some 2 years ago, instead of re-appraising the design, attempts were made to generate a range of speculative ad hoc works that might be retrofitted to the seawall design in an attempt to address the overtopping. Alternatively, to accept the overtopping waves and consider proposals to strengthen the building to withstand the overtopping and wave flow through. The obvious problem being the age of the building and that it was constructed on strip footings, not piles.

During discussions with Council some 2 years ago this author pointed out that it was internationally recognised sound practice to physically model test any proposals for managing the overtopping to both seek the optimal design solution to limit overtopping and to determine the residual wave impact forces on the structure and building so they could be design accordingly. This comment was subsequently reiterated by WRL in their later report. However rather than follow this internationally recommended approach Council continued with engaging consultants to make desktop assessments of the pot pourri of options. Physical model testing of options is both simple and economic for situations like that at Newport and is still a relevant matter if the current seawall proposal is to advance since the additional costs of any of the proposed options and their design implications need to be taken into account.

In considering the current proposal it is noted that the concrete path in front of the Newport clubhouse is reportedly at a level of between 5m and 5.5m Australian Height Datum (AHD). AHD is approximately mean sea level at Newport. During a 1974 type storm event that focused on the clubhouse overtopping waves could be expected to reach up to +7m AHD (this is not spray but actual waves). This is from experience elsewhere and supported by the extent of expected wave over wash as shown in the previous Figure 20 from HCE. Based on the evidence presented by HCE and by WRL the wave overtopping of the footpath, and hence wave impact on the building during an extreme storm affecting Newport could be expected to be 1.5m to 2m unless alternative arrangements have been made to extend the protection above that offered by the "Secant" wall. Again, this is the depth of wave overtopping and does not include the spray.

A recent example of the extent of wave over wash and spray that can occur is shown in the following photo taken at Collaroy on the night of 6<sup>th</sup> June 2016 (the night after the peak of the storm). The Ground level at this site is between 6.5m and 7m AHD. The property in the photograph had a near vertical sea wall of concrete blocks with some toe rocks. The photo is included to provide an indication of what can happen. The offshore wave height at the time was approximately 60% of that during the 1974 storm. On this occasion (2016), for a number of reasons including storm travel direction and hence reef sheltering effect, Newport was not exposed to the level of damage as occurred in 1974.



Collaroy 6 June 2016 wave overtopping and spray with ground level 6.5 to 7m AHD (Gordon)

### COMMENT ON ONE OF THE NEW SUBMISSIONS

There are a number of submissions by supporters of the Club. However, these generally do not seem to realise it is the Council, not the Club that is the applicant, nor that Council staffs' artificial constraints which they have imposed on the design, as if they were regulating a DA submitted by a third party. Interestingly Some of the recent submissions are actually from various Council staff who have responded to referrals to their areas of Council by other areas of Council, clearly demonstrating the confusion within Council and their lack of proper, robust, processes. Interestingly these conflict-of-interest responses to referrals generally recommend "Approval"; a completely inappropriate process for a Council to have in place for assessment of their own applications.

One new lengthy submission however is a report by a consultant, Rhelm in November 2022. It states that it was prepared to accompany the Northern Beach Council's lodgment of an application seeking review of the Panel's determination.

The report seeks to chronical the history of the surf club and matters pertaining to the clubhouse. Unfortunately, would seem Rhlem may not have had access to certain information regarding the nourishment of the beach which took place following the 1974 storms, nor have they considered the potential issues associated with the high shell content of the beach sand. It does however point out that the current building is not the original clubhouse but rather the third version, and one that has also been substantially modified a number of times (a matter which caused the earlier heritage studies to question the heritage value of the

building). The chronology also indicates that Council did not take into account the fact that the PWD 1985 report was based on the previous PWD hazard studies. That is, the Plan of Management failed to include potentially the greatest constraint: the loss of the area and assets covered by the POM due to coastal recession. Further, when the Council subsequently had a coastal hazard and vulnerability analysis undertaken in 2015, which basically supported the earlier PWD work, the Council did not re-consider the POM to recognise the further evidence that the area and assets covered by the POM may well not exist in the future. Unfortunately the POM process is not well suited to this type of eventuality as it inherently assumes the area under management is "permeant".

Importantly the Rhelm report cornicles the level of confusion Council has had over the time in regard to its roles and conflicting involvement during the preparation of the Development Application, and during the entire process. The report clearly demonstrates the Council's lack of understanding of its potential conflict of interest and that it has been Council's inappropriate "interference" in the process which has resulted in staff imposing strictures on the potential opportunities that should have been available to the Club.

An interesting additional issue Rhelm raised is the projected terrestrial flooding potential for the Newport village area and the clubhouse region. Rhelm argues that the current clubhouse is excluded from the area of projected terrestrial flooding (Figure 3.2) whereas other potential clubhouse relocation options, such as a landward extension would be in an area of risk (terrestrial flooding risk), albeit "Low". However, while RHELM's Figure 3.3 clearly shows the existing building is already in an area of flood risk due to oceanic flooding it was not identified as such in the flood constraint analysis. As already stated, the existing building is not only in an area identified to be subjected to oceanic flooding such flooding actually took place during the May 1974 storm when water flowed through the building. Therefore, when considering flooding as a potential constraint both the terrestrial flooding and oceanic flooding should have been taken into account. It would seem however that Rhelm has apparently overlooked this. The failure to take both forms of flooding into account adversely influences their later "constraints summary", which they rely on for their analysis and conclusions.

Although having a small section titled "Coastal Hazard", apart from a diagram that clearly indicates the current building is in the present-day immediate hazard zone there is no discussion regarding the likely impact of the seawall on the coastal processes of the beach, nor any mention of the very relevant Coastal Management Act and associated SEPP, and the associated Objectives.

Rhelm's analysis of options relies heavily on HCE's reports which do not consider or analyse the likely impacts of the seawall on the public beach amenity and coastal processes during the life of the structure, a basic requirement of the NSW Coastal Act. Rhelm introduces no new material regarding the key issues of the impact of a seawall on coastal process and the amenity of the beach, particularly the adverse impacts which will develop into the future, as postulated by Figure 3.3. Significantly Rhelm appears to have not taken the NSW Coastal Act and the SEPP in their analysis. The Act should have been a key consideration of the Newport DA. As a result of their focus on the current situation the potential adverse impacts on the beach amenity over the "life of the structure" and adverse impacts on other developments in the Newport coastal compartment which includes South Newport and Bilgola, as time progresses, and the predicted beach recession takes place does not appear to have been seen as a "constraint".

In regard to beach access from the club and taking into account the apparently "preferred option" Rhelm states:

"The Newport SLSC building has a direct connection to the beach along its entire eastern facade. This is not only significant from a heritage perspective, but also with regard to the functionality and operation of the club."

Rhelm appears to have not had access to the information provided by WRL to the Council. This clearly shows that if the seawall proposal is implemented both beach erosion and shoreline recession is predicted to end that direct connection to the beach from the clubhouse, in a similar way as has occurred at Kingscliff. Such a situation would clearly be to the disadvantage of both the Club and the community. The future disconnect that is likely to develop is best illustrated by Figure 4 in WRL's 2021 report to Council, as reproduced below. There is a similar diagram in one of the HCE reports but it uses the compromised beach profile data that is obviously incorrect, as per the 1974 photographs.



From Water Research Laboratory UNSW report to Council 8 July 2021

While providing no analysis, or basis or facts to support their conclusion Rhelm states:

"The consent authority can be satisfied that the proposed seawall will not result in any adverse impacts upon the amenity or function of the beach or intertidal zone and will not impinge upon public access to/from the beach."

This is clearly contrary to the available information including even a basic understanding of the implications of Rhelm's Figure 3.3, and the WRL's Figure 4 above and is therefore unsupported speculation and therefore certainly not something the "consent authority can be satisfied" with.

#### SUMMARY

The applicant for the Newport clubhouse upgrade DA was/is Northern Beaches Council because the clubhouse is a public building owned, and therefore risk managed, by Council. Council, being the Applicant has a duty of care to ensure there is/has been, no undue improper influence on the process by Council staff. Unfortunately this does not seem to be the case and Council's potential conflict of interest has demonstrably not been well handled.

It would appear that HCE was originally engaged by Council to simply design a seawall to manage the undermining of the clubhouse due to the type of erosion experienced in 1974. Wave inundation of the clubhouse, the impact of a seawall type solution on the present and future beach, access issues and compliance with the Coastal Act, the associated SEPP and the Planning circulars on the subject do not seem to have been part of the original brief. Once these matters were raised with Council, they were subsequently dealt with in a somewhat ad hoc manner which failed to enable a comprehensive integrated solution to be achieved for the key issues. In regard to wave over topping and flooding of the clubhouse, for example, the result was simply a range of suggestions without providing adequate information on what was required, how effectrive any proposal would be, and the likely additional costs and design constraints associated with each of the several suggestions.

The somewhat piecemeal end product would seem to be an artifact of how Council engaged HCE and WRL, and others from time to time. The ad hoc and inadequate end product unfortunately demonstrates that Council did not understand the advice it was receiving. It is important to note that over time HCE reports and those of WRL seem to have attempted to have Council realise the likely issues by including relevant information, but that Council failed to understand and respond appropriately. For example, Council was advised by WRL and an external specialist that the proposed alternate proposals aimed at managing the potential significant wave overtopping, the resulting inundation of the clubhouse and impacts on the building should be physically model tested to determine their effectiveness, their likely additional cost and the residual wave impact forces on the clubhouse, or any new addition to the structure to manage overtopping. Physical model testing is a standard engineering practice recommended in international literature for the type of proposals at Newport. However, Council chose to repeatedly disregard this advice.

Similarly, Council has repeatedly failed to identify the likely adverse impacts of the proposal seawall on the existing clubhouse on the beach amenity and the performance of the coastal compartment over time as required by the 2016 Coastal Act and accompanying SEPP. Regardless of the information as to both erosion and long-term recession there appears to be nothing detailing expectations over "the life of the structure" as required by the Coastal Act.

#### THE QUESTION....Is there an ANSWER?

The underlying question that must be asked is why not follow the lead of Freshwater and Bungan and leave the existing Newport clubhouse in place and accept that at some time in the future it is likely to be damaged albeit somewhat protected by the undesigned and poorly constructed rock work put in place after the 1974 storms. The existing clubhouse could be modestly upgraded as required to maintain its relevance while recognizing its eventual fate. Given the currently proposed seawall involves a very significant expenditure, of several millions of dollars, the savings achieved by adopting the proposed approach could be applied to construct a substantial new extension/clubhouse as a piled structure on the landward side of the existing building. This new extension being configured so as to become part of a future new clubhouse facility when the existing building is lost. The new structure could be constructed so that its floor level was above that of both terrestrial and oceanic flooding. It should be noted that the likely savings of not constructing a seawall will be far greater than in the current DA estimate as the cost of concrete has substantially escalated in the recent past and the original costing did not include the extra work required to manage the wave overtopping issue, which is likely to be substantial regardless of what "option" is eventually adopted.

For those who are concerned that the above proposal potentially violates the findings of the heritage studies should carefully read those reports themselves and not rely on the Council's misrepresentations of the findings. The real heritage issue, as well covered in the studies, is the importance of the Surf Life Saving Club, that is, the people and their culture, not the building which is described in the heritage studies as the third clubhouse at Newport and a poor example of the "Mediterranean style". Further, the heritage studies recognise the existing clubhouse has been significantly compromised over time by both external and internal modifications.

In summary, the Club could construct a substantial new extension/clubhouse which better fits its needs from the savings that can be realised by not constructing the suboptimal seawall. It would appear the seawall is a structure that Council seems to believe is essential to protect its confused understanding of the "heritage" of the Club and that Council has failed to realise that its confused understanding and priorities will result in a substantial adverse impact to the public beach amenity and the operations of the Club.