



MORNINGTON ENVIRONMENT ASSOCIATION INC.

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Our Aims

To work to protect and enhance both the natural and built environment of the local area and to preserve the essential seaside character of Mornington, including flora, fauna, the foreshore, public and private land, and the seabed

To ensure that alterations to the environment protect natural systems

Where appropriate, to work to support, oppose, or amend development proposals that impact on the natural or human environment

To cooperate with other organizations with similar goals

Latest news and updates

Update 03/09/12 _____

MEA' S ANNUAL GENERAL MEETING & GUEST SPEAKER

Our AGM is on Thursday 11th October 2012 at 7.30 pm in the Meeting Room, Mornington Library, Vancouver Street Mornington.

Our guest speaker is renowned zoologist and ecologist, **Malcolm Legge**. He has just completed a major review of fauna on the Peninsula for the Shire, and has assembled lots of data on feral animals such as foxes, road kills, extermination of various species, - and will present ideas on what we can all do about these issues (installing nest boxes is one such action!)

We will have a short business meeting, and committee elections, but interested supporters are invited to attend. Further details will be provided at our next General Meeting on September 13th, same place & time.

GRANTS FOR HABITAT RESTORATION

MEA has had a very busy year working on public land around Mornington, restoring foreshore and cliff vegetation so that the areas retain their attractive scenic value, and better habitat is provided for birds, bats and gliders – some day, we will see echidnas that used to be here!

Red Bluff, the cliff at the southern end of Mills Beach, has two grants currently being developed. One, to restore the areas around the tracks and lookouts, is provided by Coastcare, and includes educational, research and weeding and planting projects. Another, much bigger grant has been provided by the Commonwealth government to remove the woody weeds and replant the central areas of the Bluff. Both are being undertaken by contractors Naturelinks, with our working bees involved for the next year.

If you are interested in helping, please contact us on morningtonea@gmail.com. We have been so pleased to see the increasing number of members of the Life Saving Club who are attending our working bees – many new to planting and weeding. Most are parents of Nippers, so the children come too, and are very helpful.

NEST BOXES

One of the grants include the trial building and installing of nest boxes in large trees to provide artificial homes for small birds, bats and gliders – all of whom are probably around, but can't find suitable hollows for nesting.

We are setting up special workshops to construct the boxes (with a TAFE instructor) and if you are interested, contact Joel Lee, a local resident and member of the Life Saving Club. His email is charlieandjoel@hotmail.com - times to be settled but probably 2 hours on 2 Saturdays in October. React now and get your name in!

WORKING BEES

Working bees to restore the foreshores along Mornington continue as usual. **Friends of Mills Beach** meet every 3rd Sunday morning at 9.30am, usually starting near the Life Saving Club and moving to the dunes and foreshore along Mills Beach, or around the car park area, or up the Red Bluff paths.



Working bees on Mills Beach at the slope near the Life Saving Club.

Tanti Creek Friends meet the last Sunday morning of every month at 9.30, meeting at the notice next to the footbridge at the estuary of Tanti Creek. On going weeding is necessary in the restored area there. Further upstream, planting on wet-tolerant species continues in the Green Paddock (on the creek at the end of Morrell Street). Refer to their separate Newsletter.
Both groups work with our contractors under grants from the Commonwealth Caring For Country grants, or Coastcare or Melbourne Water.

PLANNING ISSUES

Mornington Peninsula Heritage review Area 1: Mt Eliza, Mt Martha and Mornington review of heritage studies now on the Shire's website: www.mornpen.vic.gov.au and go to "Have your say" or obtain a copy from the Mornington Shire office in Vancouver Street Mornington.

Demolition of historic Glenbank homestead

While you are there, inspect the amended plans for **Andrew Kerr Frail & Aged Care Complex**, Cnr. Tanti Ave and Barkly Street Mornington. The Plans, originally rejected by the Shire, now include demolition of the existing hostel and the historical Glenbank building, redevelopment of the site to provide independent living units, modernization of the aged care beds, day respite centre and a 31 space basement car park. Comments are required by 5th September to the Planning Unit, Mornington Peninsula Shire Private Bag 1000, Rosebud 3939.

MEA inspected the old House and development plans in January 2012, and met some members of the management committee of Andrew Kerr. Several members have expressed their concern that a redesign by a sympathetic architect would have allowed the Glenbank home, a unique one in Mornington, to be retained, or at least, its façade. It could be converted into separate living units, using existing lifts, or converted into a medical centre. Even if it was surrounded by living units, it could still be retained as a heritage place.

It was built in the Italianate style in 1875 for the Presbyterian minister, James A Caldwell, and eventually, in 1980 was bought by the Mornington Bush Nursing Hospital (now The Bays) and converted into an aged care home. It is administered by a volunteer committee, and is listed as a Heritage Place by the Shire. However, it is not on the Victorian register of Historical Places. It sits in a dominant position in the middle of the site and the committee told us that there could be no further upgrade of Andrew Kerr on this site unless the house was pulled down. MEA will make a submission on the proposal.

SHIRE'S PAPERS ON MILLS BEACH DRAFT PRECINCT PLAN AND DRAFT MORNINGTON COASTAL MANAGEMENT PLAN

Several members, including the president of MEA have made detailed submissions to both these recent Coastal Planning documents released by the Shire in July-August. Both are supposed to have editing done and be re-submitted to Council before Council goes into pre-election mode end of September.

You can check these submissions through the Shire's web page, or request a copy from us, using morningtonea@gmail.com

MORNINGTON HARBOUR PRECINCT AND STAKEHOLDER WORKING PARTY

Following the vote of the Council to reject the planning changes proposed by the Mornington Boathaven Ltd for a marina in the Harbour, the Shire appointed a facilitator, Bruce Taylor, to interview existing stakeholders and prepare a report for Council on what should be done in the future.

Council has accepted his recommendations that a Precinct Working Group be set up for the purpose of:

- Having a fresh look at what would be required to make Mornington Harbour better fulfill its role as a regional boating facility in the context of the State Government's current investment in reconstructing the Mornington Pier

- Building on the Schnapper Point Framework Plan and Coastal Management Plan for the Mornington Foreshore Reserve, to identify opportunities to improve the way the precinct functions for the full range of activities it currently supports, and ways to strengthen policy affecting future uses and development in the harbour precinct, and

- Supporting Council's preparation of a Harbour Precinct Plan that brings together the results of the above investigations into a clear and robust plan for the future of the precinct. More details are on the Shire's web page.

MEA is one of the members of the Working Party and will update this Web page as actions dictate. MEA considers we represent many of the community who were concerned about the original proposals. We presented a strong case against building a marina at the government Panel in February 2012 (see other pages in this web). If you would like to provide us with your own opinions on what should happen in the future, please send an email to morningtonea@gmail.com

MORNINGTON PIER

The state government has allocated up to \$15 million to finish the repairs to the Pier in this year's (2012-13) budget. The middle section, repaired in 2010-2011 is standing up well to the winter storms and the harbour is noticeably calmer, though virtually all the boats are up on the hard' - ie in the Mornington Yacht Club's boat park on the foreshore. There has been no word as to the commencement date or the likely tenderer. Stone wave screens will be hung all along the pier as well.

Meanwhile, the outer end is moving around and is fenced off from access by fishers and divers. Its undisturbed valuable aquatic life will be flourishing!
Give us your opinions!

Send an email to morningtonea@gmail.com and we will reply.
Updated 1st September 2012

Update 21/02/12 _____ We won!

Council last night voted to abandon the proposed marina in Mornington harbour 8:2 (for the proposal were Rogers and Goodrem) (with G Pittock away). They also accepted recommendations from Cllr Bev Colomb to set up a fresh planning process to engage all interested parties and government to review what can be done to provide a safe refuge and to push for reconstruction to the pier as a matter of urgency.

Capacity audience of many locals in Theatre applauded several speakers - much to the Mayor's annoyance, and then cheered and clapped at the final vote. Some members of the Yacht Club, the proponent for this non-feasible, expensive and exclusive proposal put up by their committee, boomed.

Councillors appeared relieved that the whole situation has been resolved - as were the members of MEA!

Jan Oliver
president, MEA
0417986077

Update 07/02/12

The Minister for Planning, Matthew Guy has passed his Assessment of the Panel report on the proposed marina in Mornington Harbour back to Mornington Peninsula Shire Council. Council will have to decide on the harbour rezoning and whether or not to allow the Planning Amendments. This is happening at a special meeting as below:
"Council will consider an officer's report on this matter at the following meeting:

- Special Council Meeting – 20 February 2012
- Time: 7.30PM
- Venue: Peninsula Community Theatre, Wilsons Road, Mornington.

The officer's report will make a recommendation in relation to the next step in the Amendment/Planning Application process and will be available on the Shire's website on Tuesday 14 February 2012 by noon. Please note that following the meeting, Council's decision will also be made available on the Shire's web site." (www.Mornpen.vic.gov.au/)

Though this is a public Council meeting, none of the public are permitted to speak. Those individuals whomade submissions to the planning scheme amendment have been notified by a letter dated 2/2/2012. You are all welcome to attend. We have been advised that a yes vote does not necessarily mean the marina would proceed, but a no vote would shelve the current proposal.

Further information is available from Frank Mangan, Team Leader Strategic Projects and Planning, MornPen Shire, Tel 03 59501963.

Update 12/01/12

NEWS ON THE MARINA PROPOSAL FOR MORNINGTON HARBOUR

On 4th January 2012, the Mornington Peninsula Shire published the Assessment of the Panel Inquiry into the Mornington Harbour by the Minister for Planning, Matthew Guy. The Minister and his Department have supported all the 17 recommendations of the Panel. The report is dated June 2011, so the Minister has been sitting on it for 6 months.

The report is on the Shire's Web site with the link
<http://www.mornpen.vic.gov.au/Files/StrategicPlanning/C107Ministersassessment.pdf>

Mr. Guy states that this report "represents the final step in the Environemnt Effects Statement process ...by providing advice to decision-makers on the likely environmental effects of the proposal..." "This Assessment will inform the decisions required under Victorian law for the proposal to proceed..."

The process now required will be for the Councillors of the Shire to vote on the re-zoning of the harbour to allow a large private development in public water. The Shire will also be responsible for finding parking spaces for the expected large number of cars, with their boat trailers, to park for hours around Mornington. Arrangements are now being made for the Shire Council to consider this Assessment, as well as the original Officers report of October 2010. This report recommended that the Marina **not** proceed and that an independent body be set up to consider any or all options for Mornington harbour so as to provide a safe haven for emergency boat situations.

Local Mornington MP, David Morris has called on the Council to reject the marina plans. He states that the "Assessment demonstrates all the flaws so apparent in the policies pursued by the former Labor government, particularly the proposed development of a regional boating facility at Mornington." The Minister's assessment is necessarily based on this flawed policy framework." (Media release 11 January 2012). "The Assessment provides clear evidence that the proposed marina should not proceed".

Environmental Assessment?

The Minister had concluded that the environmental effects would be "generally of low to moderate significance and can be further reduced and addressed through both the detailed design phase and the identified management and mitigation measures, and are therefore acceptable". He ignored the presence of four endangered species – two seahorses, and two pipe fish found around the beach and under the pier. The federal government will now be involved because protection of these is required under the Environment Protection and Biodiversity Act.

He completely ignored the community's submissions and pleas that the beaches, especially Mothers and Scout will be completely altered, that the harbour will no longer be able to support its marine life, nor be able to be regularly cleaned by natural tidal movement.

The Minister has visited the harbour with the Minister for the Environment and David Morris MP, and should be aware of the high value placed on these beaches, and of the scenic value and amenity of the harbour. Mornington is based around its harbour and tourists and locals want to be able to see the clean water, the expanse – with its existing boats but without a 3 metre wall reaching across the harbour, nor with rows and rows of motor boats.

Where was the Mornington local flavour in this whole Assessment?

What about the Yacht Club?

There are rumours about the dissatisfaction from Yacht Club members with the proposal by Mornington Boathaven Ltd, set up by the Club to undertake the whole project. There are questions as to where the funds will come from – at least \$19 million will be required, though the full economic data was never made available to the Panel or the community. Also, to meet the 17 recommendations from the Panel, Boathaven has to re-design the wave screen wall, make it less dominating, and redesign the pier "hook" to allow tall ships to enter the harbour. The cheaper swing moorings have to be removed so funds will have to rely on the pen sales or leases (\$100 000 each apparently). So far, the Club has not commented.

MEA maintains that we do not need a marina in the Harbour. There appears to be no public benefit of the whole proposal.

Various safety measures have been undertaken in 2011:

- The middle section of the pier has been repaired with a solid structure nearly at water level, which provides protection to the middle harbour even in northerly winds.
- New moorings have been installed and the Yacht Club is now inspecting these when forecasts are of strong winds.
- Weather forecasting has improved too, and boat sailors are acting on these.
- Martha Cove, down the coast, is also taking more boats permanently and has offered emergency berths at no cost to boats caught outside the harbour.

Refer to MEA's Press release of 10th January 2012 for further comment.

What do we do now?

We suggest you write to David Morris (PO Box 2000, Mornington 3931) or ring him on 59754799, about how you feel. You can also write to the Minister Matthew Guy, Minister for Planning, 1 Spring Street, Melbourne 3000, questioning if he really approves of the marina.
Encourage Council to vote against rezoning by contact Cllr Bev Colomb, MornPen Shire, Private Box 1000 Rosebud, or email her on colomb@mornpen.vic.gov.au.

Update 29/06/11

GOVERNMENT PANEL REPORTS THAT THE MORNINGTON MARINA PROCEED

Approval is subject to 17 recommendations.

The 2-man panel, appointed by the then state Labor government, met most of February and into March 2011. It has had some 6 weeks to report.

Some of the recommendations will require the Mornington Boathaven Ltd to redesign the main wave screen, remove swing moorings and plan the Harbour to allow the tall ships to berth alongside the pier. It is likely that a re-modelling (probably by University of NSW and their wave tanks) to work out the effects of such changes on the water, pier and local beaches would be required under the Coastal Management Act.

The Panel report is on the Mornington Shire's web page: www.mornpen.vic.gov.au and interested individuals may request a hard copy from the Shire's office in Mornington.

A letter to those who submitted back in mid 2010 has been sent out by Frank Mangan, the Shire's Team Leader Strategic Projects and planning. It states that the Panel report is not a decision but advice to Council. Council officers have to report to Council on the Panel report before Councillors vote on whether or not to allow a re-zoning of the Harbour to allow a private development in public space. The Planning Minister must also assess the Environmental Effects Statement and then form an opinion on the Panel's recommendations. The Environment Minister also has to form an opinion. At this time, the government has yet to respond.

Meanwhile, David Morris, MP for Mornington has stated he will not support the use of the harbour by a small elite group. The Coalition will not put further money into the project either. It is faced with having to find further funds to continue the repairs to the Pier, a separate project managed by Parks Victoria.

MEA will be informed when the proposal will be considered by Council. This is unlikely before August 2011. Discussion of the main recommendations can be found in the News-sheet.

MORNINGTON PIER STILL BEING REPAIRED

Though Parks Victoria announced that the renovated Pier will be opened in July 2011, the new middle section still has to be joined to the ramp of the seaward end of the pier, and the railings installed. Waves have been breaking over the new section during northerly and north-westerly winds in June. Most boats are now stored in the yard though the hardy coota boats are still bobbing around on their moorings. Parks are aware that the seaward end needs urgent repairs as over a quarter of the piles are not actually meeting the pier.

[News sheet June 2011](#)

Update 01/05/11 _____

MARINA PANEL INQUIRY

The report from the 2-member Panel was due at Easter, some 6 weeks after the close of the Inquiry in Mornington. The Panel is expected to make recommendations about the proposal, and the re-zoning application by the proponent, Mornington Boathaven Ltd.

The report will go to the Minister for Planning, the state government and the Shire. It may not be made public for a month or so. Councillors of the Shire will eventually vote on the recommendations and on the re-zoning proposal. Following an announcement by David Morris, MP for Mornington, that the Coalition would not support the proposal by providing funding, it would seem that the Yacht Club and its commercial company would have to find the whole of the \$19 million or so to build the wave screen, new jetty, and associated infrastructure for the proposed marina.

MORNINGTON PIER REPAIRS

Meanwhile, the repairs to the central part of the Pier are on going. The pier is expected to be re-opened by Parks Victoria in July 2011. However, due to lack of funds, the pier wave screens, and the platform and steps up from the harbour will not be undertaken at this stage. Parks are aware that the end of the pier apparently requires urgent restoration with at least one quarter of the piles not meeting the pier platform.

DREDGING IN THE HARBOUR

The dredging from in front of the Yacht Club and at the public boat ramp (managed by the Shire) was completed during the summer. The spoil was dumped onto Mothers Beach through a long pipe, despite calls by MEA and the Mornington Foreshore Advisory Group to remove the spoil to a landfill site. Mothers Beach was closed for several weeks during this process.

**MEA's EXPERT WITNESS STATEMENTS FOR THE PLANNING PANEL
COMMENCING 1 FEBRUARY 2011 IN MORNINGTON.**

[MEA Submission to Planning Panel July 2010](#)

[Mr Matthew McFall \(Landscape Assessment\)](#)

[Dr Eric Bird \(Coastal Morphology\) Page 1](#)

[Dr Eric Bird \(Coastal Morphology\) Page 2](#)

[Dr David Provis \(Coastal Geomorphology\)](#)

[Dr Matt Edmunds \(Marine Ecology\)](#)

Press release updates Below - 20/01/11 -----

[Mothers Beach Covered In Black Smelly Mud](#)

[Community Supports Anti Marina Proposal](#)

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Say NO MARINA





5th July 2010

Planning Panels Victoria – Mornington Marina Project
Level 1, 8 Nicholson Street
EAST MELBOURNE VIC 3002

Dear Sir/Madam,

**RE: Mornington Boat Haven Limited – Marina Proposal
EES, Amendment C107 Mornington Peninsula Planning Scheme, Permit Application
No. CP09/005**

We write on behalf of the Mornington Environmental Association (“MEA”). MEA was formed more than twenty years ago in 1988. Our aim is “to work for the protection and enhancement of the environment of the Mornington area, and for the preservation of the essential character of Mornington”.

MEA has focussed on providing a community awareness program in relation to Mornington Boat Haven Limited (MBHL)’s proposals. This has been achieved during the statutory consultation period through:

- a street stall 3 days a week providing information about the proposals to passers by;
- a stall at the monthly Growers Market;
- continuous display and staffing at the pier;
- media releases;
- letter box dropping of thousands of leaflets;
- distribution of stickers;
- providing thousands of the Council’s official submission forms to the public where requested;
- a public meeting held on 3rd July on Mothers Beach to provide a final opportunity for the public to respond;
- seeking the environmental opinions of relevant experts; and
- meetings with the local Member of Parliament, David Morris, and the leaders of several user groups.

In summary, MEA has serious concerns with the Mornington Marina proposals put forward by MBHL. Details of these concerns are set out below and relate to the likely significant environmental impacts of the proposals, and the inconsistency of the proposals with strategic planning objectives.

The main objection MEA has to the proposals, however, is that they will turn a much loved and well used public open space enjoyed by both the Mornington Peninsula community and visitors into a privatised marina facility for the benefit of the privileged few who own boats.

1 INCORRECT DESCRIPTION OF PROPOSALS:

.1 MBHL's permit application describes the nature of the proposals as “use and development of land (including the sea bed) for a pleasure boat facility (safe harbour)”. Having regard to MBHL’s full documentation, MEA considers that the description of the proposals as a “pleasure boat facility” is incorrect having regard to the land use terms in Clause 74 of the Planning Scheme. A more accurate description of the proposals would be the following:

“Use and development of unalienated and reserved Crown Land comprising:

- (a) a restricted recreation facility comprising a marina (with 170 floating berths arranged as marina pens; 8 'fore and aft' moorings; 12 swing moorings; 10 public berths; and 10 emergency and police berths) with associated sewage and refuelling facilities, travel lift, wash down facilities, and minor building works to the existing Mornington Yacht Club (MYC) building;
- (b) a new public jetty to provide access to the marina; and
- (c) two wave screen structures

as detailed in the Concept Layout Plan – Proposed Works (S013) and Typical Sections (SO14)”.

.2 That is, the main purpose of the proposals is a use that is restricted to members of a club or group, members' guest, or to the public on payment of a fee. This is in contrast to the existing use of the harbour where the dominant use falls within the clause 74 definition for “informal outdoor recreation”. That is, the land is open to the public and used by non-paying persons for leisure and recreation.

.3 It is understood that in 2009 Council officers requested MBHL to provide a plan as part of its' application documentation delineating those areas of the subject land that would be publicly accessible, and those areas that would only be accessible to members of the marina facility. It appears, however, that this plan was never provided. It can be drawn from this that the MBHL do not intend that any of the area the subject of the proposal should continue to be publicly accessible.

2 EXISTING USE, ZONING AND OWNERSHIP OF SUBJECT LAND:

.1 The MYC club house, car parking areas adjacent to the club house and beach, car parking areas along Schnapper Point Drive and Flinders Drive, the public reserve bounded by Schnapper Point Drive and Flinders Drive, the cliff tops, and Mothers Beach, Scout Beach and Shire Hall Beach are currently reserved Crown Land under the *Crown Land (Reserves) Act 1978*. The Mornington Peninsula Shire Council is the public land manager for the purposes of that Act and the Committee of Management is made up of a range of stakeholders representing the users of the area.

.2 Parks Victoria are the public land manager for the purposes of the *Crown Land (Reserves) Act 1978* in relation to the historically significant Mornington Pier and the waters in front of the MYC Clubhouse.

.3 The rest of the waters the subject of the MBHL's proposals are unalienated Crown Land governed by the provisions of the Lands Act 1958. DSE is currently responsible for the management of this unalienated Crown Land.

.4 The zoning of the subject land currently prohibits the proposals. Paragraph 4 of the resolution made by Council at its' meeting held on 21 December 2009 makes it clear that the Council has not made a decision to support or not support the proposals and the planning scheme amendment. The reason the Council has requested the Minister to place the planning scheme

amendment and permit application on exhibition is primarily to enable community involvement in assessment of the proposals.

MEA considers that the existing zoning and overlays applying to the subject land optimise the protection of existing uses of this much loved community public open space because it prioritises the conservation and protection of the natural environment which is what attract existing users and visitors to the area (including people fishing, scuba divers, scout clubs, swimmers, snorkelers, sunbathers, yachters, artists, wedding parties, and people picnicking on the beach).

In contrast, if the zoning was changed to a Public Parks and Recreation Zone, this would enable a restricted recreation facility for use by the privileged few boat users who can afford to pay for the use of the marina facilities to be assessed against planning recreation objectives which do not prioritise the conservation of the environment.

3 BOATING CAP & VICTORIAN COASTAL STRATEGY

.1 Whilst the Boating CAP (March 2007) and the Victorian Coastal Strategy identify Mornington as a Regional Boating Facility, it is also recognised by these strategic policy documents that it is important to ensure that the natural environment is not adversely affected by any development. Given the likely adverse impacts that the proposals would have on local beaches, and existing public users and visitors by prioritising boating activity within the harbour, MEA consider that the appropriate balance to be struck between existing and proposed uses are boating facilities of a significantly smaller scale that support the existing local community users of the harbour.

.2 MEA also considers that it is important to distinguish the creation of a safe boating facility from the creation of a commercial marina facility which is what is proposed by MBHL. The reality is that a safe boating facility could be achieved by proposals of a significantly lesser scale or purely by a travel lift. MBHL's proposals are primarily a commercial venture for the benefit of the privileged few rather than of any real public benefit.

4 “OUR BAYS VISION – MARITIME AND COASTAL INITIATIVE” (JULY 2009)

.1 MEA is surprised that MBHL's proposals appear in Environment Minister Gavin Jennings' Coastal Initiative given that when the document was written the proposals had not been the subject of consultation with the local community nor an EES process. The message conveyed by the document is that a marina proposal at Mornington Harbour is a 'done political deal' and that any engagement with the community and panel/inquiry and EES process is really a sham. MEA sincerely hopes that this is not the case given the importance of the Mornington Harbour to the local community as an iconic public recreation area.

5 ENVIRONMENTAL EFFECTS:

i) Social Impacts:

MBHL's socio-economic report concludes that the proposals would have a positive social impact. However, the assessment fails to highlight the following **adverse** impacts:

(a) Whilst the proposed travel lift would enable boats to be removed from the water expeditiously during unsafe weather conditions, the increase in the number of berths in the water and the space required to install travel lift facilities would mean less space would be available for other water users. It is impossible to accurately define the area that would still be available for public users of the water given that the application drawing S013 is indicative only.

- (b) Those who are likely to be able to afford to keep their boats at the marina facility (which is unlikely to include many of the boats which are moored in the harbour now) would likely have large pleasure boats. In order to ensure the safety of swimmers and other water users within the area, Parks Victoria/ Marine Safety Victoria as waterways managers would, in the interests of public safety and to avoid potential conflicts, have to prohibit or severely restrict the use of the waters by other recreational users (e.g. swimmers, divers, canoeists). Mornington Sea Scouts (who have operated from Scouts Beach for over 70 years) in addition to losing their safe beach, have been advised that their little boats will have to sail outside the pier – impossible for safety reasons, due to the proposed marina infrastructure within the Harbour
- (c) Given the proposed expansion of boating facilities and evidence of the impacts that similar marina facilities have on public beaches (e.g. Sandringham and Brighton), it is likely that water quality and the general health of the marine environment will deteriorate and the area will no longer attract the wide range of community users and visitors that it currently does.
- (d) There are already significant safe harbour facilities provided at Martha Cove which is operating at less than half capacity. During storms, many of the boats which are moored in Mornington can be found in Martha Cove's safe refuge, and there are many marina berths in Martha Cove available for purchase/ lease. Given that it is reasonable to assume that the proposed marina berths would be offered to boat owners at market prices (see page 79 of Social Economic Report), it is likely that the increase in supply would adversely impact on the already struggling viability of Martha Cove. In addition, the increase in supply would prioritise boat users over other public users in Mornington's most popular and accessible beaches.
- (e) The proposed wave screens are designed and shown on Typical Section S014 to the sea floor. Fishers expressed concern when surveyed by Parks Victoria (reported in the "Mornington Pier Reconstruction and Access Planning Study" (2007)) that this would be detrimental to fishing. Sunbathers, snorkelers and swimmers that were surveyed expressed concern that it may affect sand movements in the area and be detrimental to Mothers Beach. The use of the area under the Pier by divers would also be prevented.

(ii) A Safe Harbour and the impacts of Climate Change

- .1 Mornington faces a long fetch to the north. North and north west winds cause major waves. Sand moves along the beaches north in summer and south in winter.
- .2 Proposals for marina facilities within Mornington Harbour have a long history dating back to 1988. The proposals have been rejected on previous occasions for compelling environmental and planning reasons which have not changed in the last 22 years. What has changed, however, is the climate. It is common knowledge that there the extremities of weather patterns mean rapid increases in the rise of sea level, and more wave and storm activity. These forces are beyond our control.
- .3 Apart from these forces of nature which are beyond our control, there are also other projects in Port Phillip Bay which are likely to have an impact on the environmental conditions within Mornington Harbour and along the adjacent coastline; for example, channel dredging. The EES prepared by MBHL has little regard to these factors.
- .4 In relation to climate change and the sea level rise of 0.8m by 2100 referred to in clause 15.08 of the Planning Scheme and in the Victorian Coastal Strategy 2008, MBHL's response to this issue has been to place a 50 year time limit on the life of their development given that the design of the proposals is based on a sea level rise of 0.4 metres.

.5 In summary, given the physical characteristics of Mornington Harbour, it is not by its nature a 'safe harbour.' The proposals put forward by MBHL would not remedy this situation. The only aspect of MBHL's proposal which would promote Mornington Harbour as a safe refuge is the installation of a travel lift which would improve the efficiency of removing boats from the water during storm activity.

.6 The report of Mr Reidel commissioned by the Mornington Peninsula Council in 2009 (*Mornington Harbour Coastal Engineering Advice*) also confirms that the proposals as put forward by MBHL would not secure a safe harbour within Mornington Harbour.

.7 MBHL demonstrate the need for a safe harbour by reference to photos of damaged boats washed up on the beach within the Harbour during a severe storm surge. The fact is, however, that if boats moored in the Harbour had been responsibly moored, and those moorings had been checked and maintained, then the damage could have been avoided. In addition, it is well recognised that many boats use Martha Cove, merely 11 km down the coast and available as a safe haven when storms are forecast. In addition, most boats in Mornington harbour are taken out of the water during winter. This demonstrates that members can and do take reasonable steps to protect their boats and that it is unnecessary to build marina berths to secure the safe storage of boats. Furthermore, forecasts are easily available so boat owners can act accordingly. It is therefore questioned why the Mornington community should lose its loved and well used harbour merely to protect a few irresponsible boat owners.

(iii) No Need for More Marina Berths

.1 MBHL's assessment of their proposals fails to demonstrate that there is any real need for additional marina facilities within the region. The facilities proposed would have a similar pricing structure to those already provided at Martha Cove and therefore attract a similar market of boat owners. Unlike Mornington Harbour, Martha Cove also provides a safe refuge for boats in stormy weather, and enjoys excellent access to the freeway system and car parking facilities. There is a large supply of berths currently available at Martha Cove but there would appear to be a lack of demand. It is noted that these facilities were used by many of the boat users at Mornington for the purpose of seeking safe refuge during the last significant storm activity. It would appear to be sensible economic policy to avoid increasing the supply of marina berths further when there is clearly an existing over-supply of berths on the market. In addition, Martha Cove provides excellent access, boat maintenance and parking facilities which cannot be provided at Mornington Harbour.

(iv) Loss of Amenity and Adverse Impacts on Character

.1 The current character of Mornington Harbour is that which you would find in a sleepy seaside village but animated by the activity of a range of local community users and visitors on the weekends. The historic pier is enjoyed for promenading by visitors visiting the area and it is well used by local fishermen. The views of the Harbour from the cliff top can be described as similar to those found in the Italian Riviera. It is a unique asset of the Mornington community which should be protected from yet another commercial marina development which prioritises private boat users over the wider Mornington community. The harbour and its cliff top recreational reserve is the main public space in Mornington providing a focus for the community. Mornington harbour should remain as it is – a much loved public-used space, with access, shelter for families with children, with clean water and sand and without a semi-industrial boat maintenance facility.

.2 MBHL's proposals will clearly have an adverse impact on this character. The 4 metre high solid wave screens and structured pen berths will replace the current swing moorings and wide range of users found within the Harbour with a predominance of boating activity. The ambience of

Mornington, with its Main Street leading to the Mornington Park and then the harbour will be totally altered.

(v) Impacts on the Beaches

.1 MEA considers that Mothers Beach will no longer be a safe or pleasant swimming beach due to changes in sand accumulation that would be caused by the proposals. It is recognised by MBHL that the impacts on the coastal system are unknown. The proposal to provide an artificial reef off Scout Beach are indicative only and there are no details provided of the specific sand replenishment scheme that would be required to maintain the local beaches, including Mills Beach to the north, which hardly gets a mention.

.2 It is also not clear where the sand for replenishment would come from and who would commit to the cost of the necessary sand replenishment program. Indeed if the sand was not carefully selected and a foreign source was used, this could lead to further adverse impacts on the beaches and waters of the Harbour at large through the introduction of matter which is not natural to the local environment.

.3 The experience of the impact the Blairgowrie marina has had on the coastal system should not be repeated at Mornington. The Blairgowrie proposals have resulted in major sand accumulation which requires remedying by expensive and on-going dredging. This maintenance program has relied on public money.

.4 At page 64 of the EES prepared by MBHL, it states that that as a result of the proposed Safe Harbour it is expected that the wave climate along the coastline will change, resulting in the movement of approximately 1,000m³ of sand from Shire Hall Beach to Scout Beach each winter (Water Technology, 2008). It is noted that this amount is far less than that modelled in 1987 when the proposed marina development was smaller and had different alignment of the rock walls. In addition, MBHL's EES concludes at page 177 that the construction of the proposed wave screens at the Harbour would have little or no effect on coastal processes at the beaches to the south or east of the Harbour. However, it was modelled by GHD in 1987 that some 10,000-27,000m³ of sand would be transported into the proposed marina area (a much smaller proposal) and this amount would have been eroded from Scout Beach, Shire Hall Beach and the southern end of Mills Beach (where the Life Saving Club is located). This variation in modelling questions the credibility of the conclusions reached by MBHL as to the environmental impacts of its proposals.

(vi) Environmental Impacts on Water Quality from additional boating activity

.1 MBHL's proposal will result in an increase in the number of motor powered boats using the Harbour. Regardless of the intentions of responsible boat users, it is inevitable that the increase in motor boat traffic will lead to a diminution in water quality. Accumulations of polluted sediments in the water are also likely to be washed up on the local beaches leading to deterioration in the quality of coastal vegetation and the sand. There would appear to be no real assessment in the EES of the likely increase in oil pollution resulting from the increased motor boat activity in the Harbour that would result from the proposals.

.2 In addition, the proposed wave screens will inevitably result in the accumulation of fine sediments and muds in the Harbour. Whilst the hydrodynamic modelling carried out by MBHL indicates that harbour water flushing will be adequate to maintain reasonable water quality, the mobilization of the sediments and fine particulates within the Harbour will be altered. These sediments flow through the local Tanti, Manmangur, and Cararr Creeks, and the stormwater drains of Cook, Drake, and Blake Streets, Esplanade and around Mornington Park. With the obstruction to wave energy caused by the wave screens, accumulations of unpleasant smelling materials will form. The EES has not addressed the impact of reduced wave energy and its impact on beach quality and

local waterways. Similarly, the long term environmental effects of anaerobic sediments and fines caused by the proposals have not been assessed.

.3 At page 168 of MBHL's EES, it states that all boat repairs and maintenance that have the potential to generate pollution should be undertaken in designated work areas and that maintenance work should occur inside buildings or under cover to reduce contamination to stormwater. In addition, it is provided that maintenance should be undertaken in areas over impermeable surfaces that are properly drained to a collection pit, and that abrasive blast cleaning should be performed in suitable enclosures to contain the spread of residues. MEA questions the ability of MBHL to keep residues, leaks and spills out of the Harbour given its' past track record. For example, during the summer of 2009-10, oil wastes from a large dredge entered the water on Mothers beach. When the dredge was removed and stored in the Harbour boat yard, heavy oil continued to leak onto the ground. The clean up strategy invoked by MYC's members (ie MBHL) was to sprinkle sand over the oil, then allow rain to wash residues across the pavement and down the drain pipe leading directly into the Harbour. If the MYC cannot hold wastes generated on site now, what chance is there when large scale maintenance and repairs go on in the yard?

(vii) Proposed changes to pier by Parks Victoria

.1 MEA notes that Parks Victoria (PV) were granted a planning permit in January 2009 for the construction of a wave screen along the historic Mornington Pier which is subject to a Heritage Overlay. The approved details of the wave screen are the same details which now form the elevations and cross-sections submitted by MBHL with their application.

.2 It is understood, however, from PV senior officers who met with MEA on 23 June 2010 that PV are now reviewing their design and that significant variations requiring an amendment to the existing planning permit have been lodged with the Council for consideration. The new PV proposal is for two wave screens, one on either side of the pier, with different footings. PV could not confirm the impacts the new proposals would have on water flows and water quality within the Harbour. MEA has been advised by Council officers that MBHL's consultants, SKM, state that the changes proposed by PV do not affect the assessment carried out by Water Technology in relation to the MBHL proposals. It is difficult to understand how this can be the case given that the design of the wave screens proposed by PV have significantly changed and it is reasonable to assume that this will have a significant impact on the hydrodynamics of the Harbour. It is also queried whether MBHL now propose to change the design of their wave screens so they are the same as PVs given that MBHL's current application drawings are actually those that were endorsed in relation to PV's permit granted in January 2009 which is now the subject of revision.

.3 MEA submit that given the above circumstances, it would be erroneous for the Panel to rely on the assessment carried out by Water Technology without further modelling taking into account the impacts of PV's new proposals on MBHL's proposals, and clarification as to whether MBHL will be adopting the same wave screen design as that which is now proposed by PV.

(viii) Inadequacy of Field Monitoring underpinning the EES

.1 The field monitoring of the marine environment carried out for the purpose of the EES was undertaken on 4 days between November 2007 and January 2008 (ie in summer). Seasonal sand movement is north in summer, whilst it is southward drifting in winter. Locals who fish and swim in the harbour note that marine organisms alter during the seasons as does the amount of sediment. Given the very restricted studies of marine ecosystems in the Harbour, it is considered that the results of the assessment of the impacts of the MBHL proposals on the marine environment must be treated with caution.

(ix) Other inadequacies in the assessment set out in the EES:

.1 Apart from the uncertainty surrounding the actual design of the wave screens given PV's current proposals to change the design which is the subject of MBHL's application, it is considered that the EES is also deficient in the following respects:

- lack of assessment of the effects of blocking wave energy on the finer particles in the water column and on the seabed;
- no assessment of the need for such a large marina;
- lack of assessment of alternative solutions for delivering a safe harbour in the region or acknowledgement that this is already achieved at Martha Cove;
- no assessment of long term effects of dredging;
- no assessment of the effects of MBHL's proposals on the Selwyn fault;
- no assessment of the social and environmental effects on Mills Beach to the north of the proposed marina.

6. INADEQUATE PARKING:

.1 It is well recognised that parking at the harbour and around Schnapper Point is already at full capacity for most of the year and particularly in summer months, is subject to significant congestion. Families are frequently unable to find a suitable spot even to unload people and picnics due to trailers and cars and boats using existing spaces.

.2 MBHL's response to the car parking problem is a proposal to provide a shuttle bus; however, this proposal is clearly undeveloped. For example, the application documentation fails to provide any certainty as to:

- (a) who will pay for this shuttle bus service;
- (b) where the alternative car parking will be provided for pick up by the shuttle bus; and
- (c) the frequency of the service and whether it would be available to members of the public.

Clearly the existing car parking within the vicinity of the Harbour and surrounding Main Street lacks the capacity to accommodate the marina proposals.

7 SUMMARY:

For the reasons set out above, MEA strongly argues that the MBHL proposals should be refused and that the existing zoning of the Mornington Harbour should be retained so that it can remain as a loved and heavily utilised public open space by the Mornington community and its regular weekend and holiday visitors. Mornington Harbour should not be transformed into a restricted recreation facility for the privileged few.

Yours faithfully,

Janet Oliver,
President, **MORNINGTON ENVIRONMENT ASSOCIATION Inc**



Proposed Mornington Marina Landscape Analysis

December 2010

memla
landscape architects

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1. Introduction

This report is an analysis of the landscape of Mornington Harbour and an investigation into its character, its 'Sense of Place' so as to provide a foundation for a critique of the proposed boat parking facility and other associated changes advanced by Mornington Boat Haven Pty Ltd.

2. Existing situation

The Mornington harbour landscape in its current form is an evolutionary amalgam of natural environmental processes and significant modifications following white settlement. The landform can be compared in form to a large 'hook'. The eye comprises a headland at the northern end which grades down to a west facing crescent of sandy beach (Mothers Beach). This forms the beginning of an almost 180° 'hook' which wraps around to the south and west and is terminated by an area of reclaimed land. On this, a bleak, utilitarian car park and boat storage facility are located. A cluster of interesting buildings house the club, restaurant, and take away food kiosk provide a destination and landmark for the harbour which is tied back to Mothers beach via a pedestrian promenade. Finally a rocky peninsula and another smaller headland and pier complete the 'hook'.

The entire southern part of this arc is contained by a steep cliff (Schnapper Point) which overlooks the bay. The sedimentary rock cliffs date from the Miocene epoch (23 - 5 million years ago). These originally would have been covered with Coastal Banksia and Drooping She Oak Woodland however they are now mostly weed infested with Box Thorn being the major woody weed. The foreshore behind Mothers Beach now has some introduced exotic pine and cypress species, and some remnants of indigenous coastal vegetation. 60 floating swing boat moorings are sprinkled to the east of the pier. Three finger jetties and 2 boat ramps are the final elements of the Harbour.

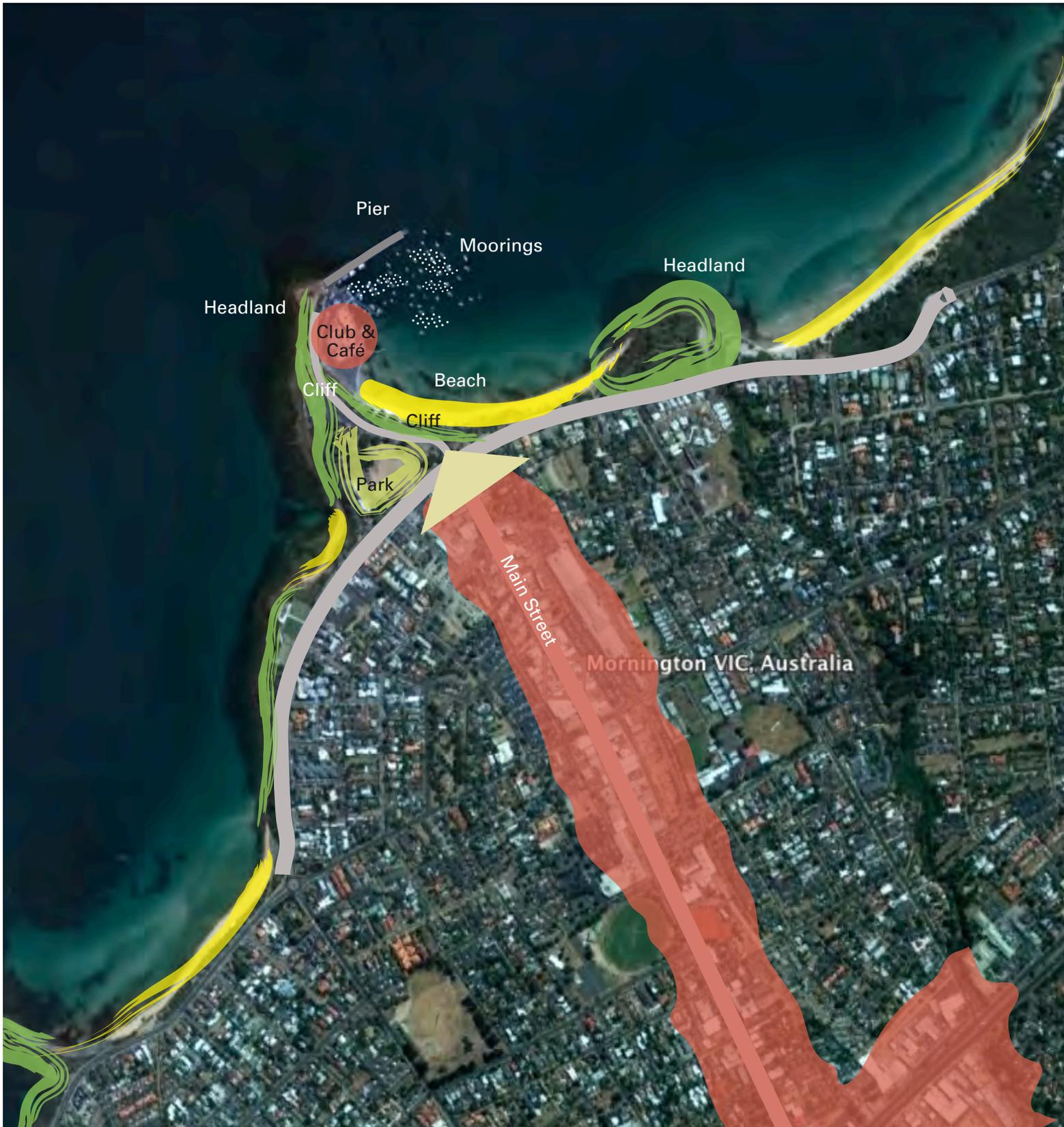
Main Street Mornington, the cultural and shopping heart of the town, is aligned south east to north west and terminates in the north west above the harbour and continues down to the harbour car park.

The above description is therefore one of a bay enclosed on 3 1/2 sides with some reclamation, a pier attachment and a 'sprinkling' of swing moorings clustered in the north west quadrant. Land and water are still the dominant elements of the harbour; Natural processes created the harbour, these have been added to and extended however the harbour it is still defined by its landform and the expanse of water within.

3. Proposed situation

Sinclair Knight Merz have submitted a proposal for a 170 berth floating marina, 8 fore and aft moorings, 12 swing moorings, 10 public berths and 10 emergency berths for the waterscape of Mornington Harbour. Only minor works are proposed for the land itself as no further space is available unless extensive intrusive, disruptive and expensive reclamation works are undertaken (which is a major problem with this proposal as there is no additional parking area).

This marina is typical of its type consisting of floating pontoons as berths connected back to land via floating walkways. A new pier and wave screen extending out into the harbour to the east completes the development.



Mornington Harbour and its relationship to Main Street (existing).



Mothers beach and northern headland.



Rockfaced harbour wall, car park and cliff.



Club house and restaurant.



Pedestrian promenade in front of MYC.



Boat trailer park and boat storage facility of MYC (right).



View from southern headland.

Existing photos of Mornington Harbour

3.1 SKM Visual Assessment

As part of the documentation for the proposed development, a professional and thorough visual assessment was undertaken by SKM. It uses a methodology which incorporates both quantitative and qualitative assessment techniques applied to a series of defined surveyed photo locations, to compare and assess the before and after. The process is clear, logical and undertaken in a systematic way.

The photography used for the assessment is shot at a focal length of 7.8. This is referred to as 'wide angle'. It takes in more of the view but the view appears much further away than the eye sees it. The problem with this is that it creates a false representation. If these were the only images used for the assessment, it could have been affected.

One of the criteria used by SKM for the visual impact, was the logical observation that the further away something is the less impact it has. A lower impact, and therefore rating, may have been attributed to all images due to the inherent distance error. If these images were assessed at the distance the eye sees it, the impact rating could have been higher.

For comparative purposes, a series of general panoramas were taken by this author in approximately the same locations as each of the photos in the SKM document¹. The immediate reaction when comparing the two is 'are these shot in the same locations'? They are. The impact is far greater due to the reduction in distance and the increase in size of the objects being assessed.

Whereas in the SKM photos the proposed marina (modelled with a large percentage of the berths not occupied) looks a long way away, in the existing eye zoom panoramas (with approximately 40 boats on moorings) the harbour looks and feels very close.

3.2 Compatibility and Character

The marina proposal is not compatible with the character of Mornington Harbour. It is an entirely utilitarian, engineering driven project to create a safe storage facility for boats. It totally disregards the 'Genus Loci' of Mornington harbour, introducing an intrusively large, dominant and completely alien man made element that would completely change the character of the harbour forever.

This is an extremely important concept as it goes to the heart of what makes Mornington special. This large natural 'hook' combined with the deep water (not shallow reef) is one of the closest examples the Bay has to some of the traditional, intimate 'old world' harbours of the UK and Europe. These are highly valued places at which people can come and experience a harbour atmosphere.

Boats coming and going from a wharf, views are across a harbour of moored boats, cafés and other shops as a back drop. These places are the 'piazzas' or town squares. People promenade up and down along the edge of the water and take in the ever changing view. Mornington has these elements. An interesting group of buildings; a defined edge between water and land; a pedestrian promenade; and there is no solid wall of boats to remove the water experience. We should be seeking to place a high value on this 'harbour village' and 'manipulate within the tolerances'² rather than overpower.

Placing a marina in the middle of the harbour overpowers the experience and alters the character. One of the key components of the traditional harbour would be removed; the open water of boats with the pier and wharf as the main focus. It would be replaced with a large, geometric, man made

1 These are not professionally surveyed photos and are used here to for comparative purposes only.

2 Gordon Cullen, Townscape Architectural Press, London. 1961

object. The marina would dominate, become the focus and block the view across the harbour.

The SKM report cites compatibility as one of the methods by which to judge the impact of the proposal i.e, increasing the size of an existing activity is more compatible to a site than introducing a completely new one. However a marina doesn't exist, swing moorings currently do. The marina would be a completely new element.

The landscape of the harbour is the natural amphitheatre and the water within. The existing swing moorings are a dynamic part of this. They move with the tide and winds and due to the required spacing, provide plenty of open water between them. What the marina proposal does would be to place a static, large block element which has no current precedent, in the middle of the harbour. The use (boating) would be the same however the form, density and static nature and character are all completely alien. The natural harbour would become a man made marina.

Not only does the proposal introduce a large, foreign element into the harbour. It also has other associated impacts in the increased industrialisation of the harbour precinct, generation of greater congestion, traffic, and the altering of the crescent of beach which as discussed, is one of the key elements which defines Mornington Harbour.

The SKM visual assessment study states that:

There would be minor changes in the beach alignment...This would include some loss of sand from the eastern beach areas and a build up of sand to the west behind reef areas... This.. 'would be managed by relocations strategies..' Further it goes onto state.. 'Should other measures be required, an offshore reef may be constructed'.

The above admission will change the shape of the bay. What is at present one long, continuous crescent of beach will be split in two and will need to be monitored and managed for sand movement. It will change the character of the bay.

A view that has not been considered is that from the water. Upon approaching Mornington Harbour from the north, the current views to the crescent of sand (comprising Mothers, Scouts and Shire Hall beaches) and general harbour setting could be completely blocked. The existing spacing between the moorings enabling views through the boats would be replaced with a solid wave screen and a wall of boats, locked in the one position.

The proposed 40 tonne hydraulic lift is a large and new industrial element introduced to the harbour, further altering the character.

The increase in vehicle activity associated with 200+ boats, also impacts on the character. The potential congestion and the associated frustrations it brings to the users could also change the harbour from one that can be busy but thus far manageable and generally pleasant to one that feels intense and uncomfortable.

4. Conclusion

The proposed marina development in Mornington Harbour is of a scale and intensity that would change the innate character of the harbour forever. The visual effects are significant. It is out of scale, context and is not visually integrated.

The marina would be clearly seen from all vantage points and is of a scale which dominates the harbour setting. The existing waterscape scattered with boats becomes a concentrated utilitarian facility for storing and launching boats. The harbour would become a marina. Views to the general harbour and beaches would be blocked.

The two headlands, at the northern end (Red Bluff) connected by a single crescent of sand would become split into two. These new beaches would require regular attention to prevent silting up. Both the water and land would be man made and managed.

With this marina proposal, Mornington harbour would become defined and dominated by one private user group rather than the community. The waterscape would be privatised and the beach would be managed. The character would be changed. It would be totally at variance with what Mornington has evolved to be, and should continue to be, which is a natural harbour for all.

A handwritten signature in black ink, appearing to read 'M. McFall', with a stylized, wavy line extending to the right.

Matthew. E. McFall. B.App.Sci Plg. M.L.Arch. Registered Landscape Architect

1. NAME AND ADDRESS

Matthew. E. McFall
Landscape Architect Planner Urban Designer
526 Hawthorn Road
Caulfield South, Vic 3162

2 PROFESSIONAL QUALIFICATIONS

Bachelor of Applied Science in Planning (RMIT)
Masters in Landscape Architecture (Melbourne University)
Member AILA.
Registered Landscape Architect. 1999

Professional Experience

1985 Landscape Architect, Green, Dale & Wright, Landscape Architects, Melbourne 1989
1991 Associate, Green & Dale Associates
Senior Associate, Green & Dale Associates
1997-2007 Principal Matthew. E. McFall landscape Architects, Planners Urban Designer
2007- present Director MEMLA Pty Ltd Landscape Architects

3 AREAS OF EXPERTISE

For more than 20 years, I have studied, designed and implemented landscape architecture in a range of projects: commercial, civic and community, infrastructure, environmental, industrial, educational, retirement, institutional, sub divisional, corporate, infrastructure, streetscapes, residential (private, medium and high density), and planning appeals.

4 EXPERTISE TO PREPARE REPORT

I consider that my training and experience qualifies me to prepare a landscape statement on aspects of the proposal related to: landscape design, character and visual setting.

5 INSTRUCTIONS WHICH DEFINED SCOPE OF REPORT

I received instructions from the MORNINGTON ENVIRONMENT ASSOCIATION Inc, to comment on the SKM proposal for a marina development in Mornington Harbour.

6 FACTS, MATTERS AND ASSUMPTIONS RELIED UPON

Inspection of the subject site and its environs,
SKM EES report.
Council report October 2010
R. Coleman report (submission 234).

7 DOCUMENTS TAKEN INTO ACCOUNT

Refer to item 6 above.

8 IDENTITY OF PERSONS UNDERTAKING WORK

The author of the report

9 SUMMARY OF OPINIONS

Refer to report

10 PROVISIONAL OPINIONS

I do not consider any of my opinions to be provisional.

11 LIMITATIONS OF EXPERTISE AND ANY INCOMPLETE OR INACCURATE ASPECTS

I consider that the subject matter of my report falls within my area of expertise, and that the relevant issues are adequately illustrated on the landscape character and described in the report.

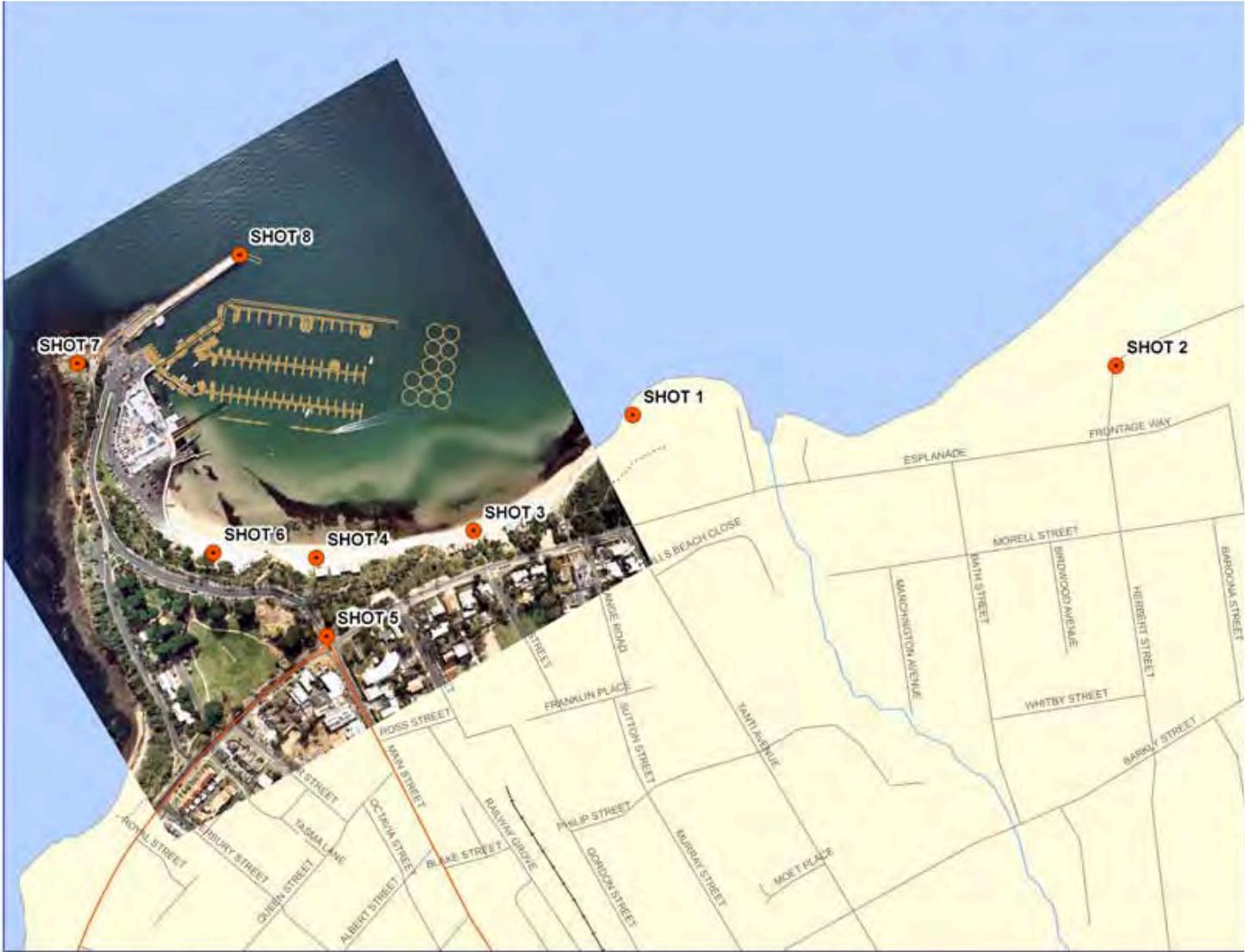
I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance which I regard as relevant have, to my knowledge, been withheld from the Tribunal.

Matthew McFall B.App.Sci. Plg. M.L.Arch

A handwritten signature in black ink, appearing to read 'MAM', with a stylized, wavy line extending to the right.

Registered Landscape Architect

17/12/10



SKM photomontage locations (from SKM Visual Assessment Study).



Existing panorama from position 1 (Scouts Beach Lookout) using approximate zoom as the eye sees it.



Existing panorama from position 1 by SKM. Notice how far away the club house is. This is a good landmark by which to ascertain the relative distance. The difference in distance to the photo taken above can be clearly seen.



Proposed panorama from position 1 by SKM.



Existing panorama from position 2 using approximate zoom as the eye sees it.



Existing panorama from position 2 by SKM.



Proposed panorama from position 2 by SKM.



Existing panorama from position 3 using approximate zoom as the eye sees it.



Existing panorama from position 3 by SKM.



Proposed panorama from position 3 by SKM.



Existing panorama from position 4 using approximate zoom as the eye sees it.



Existing panorama from position 4 by SKM.



Proposed panorama from position 4 by SKM.



Existing panorama from position 6 using approximate zoom as the eye sees it.



Existing panorama from position 6 by SKM.



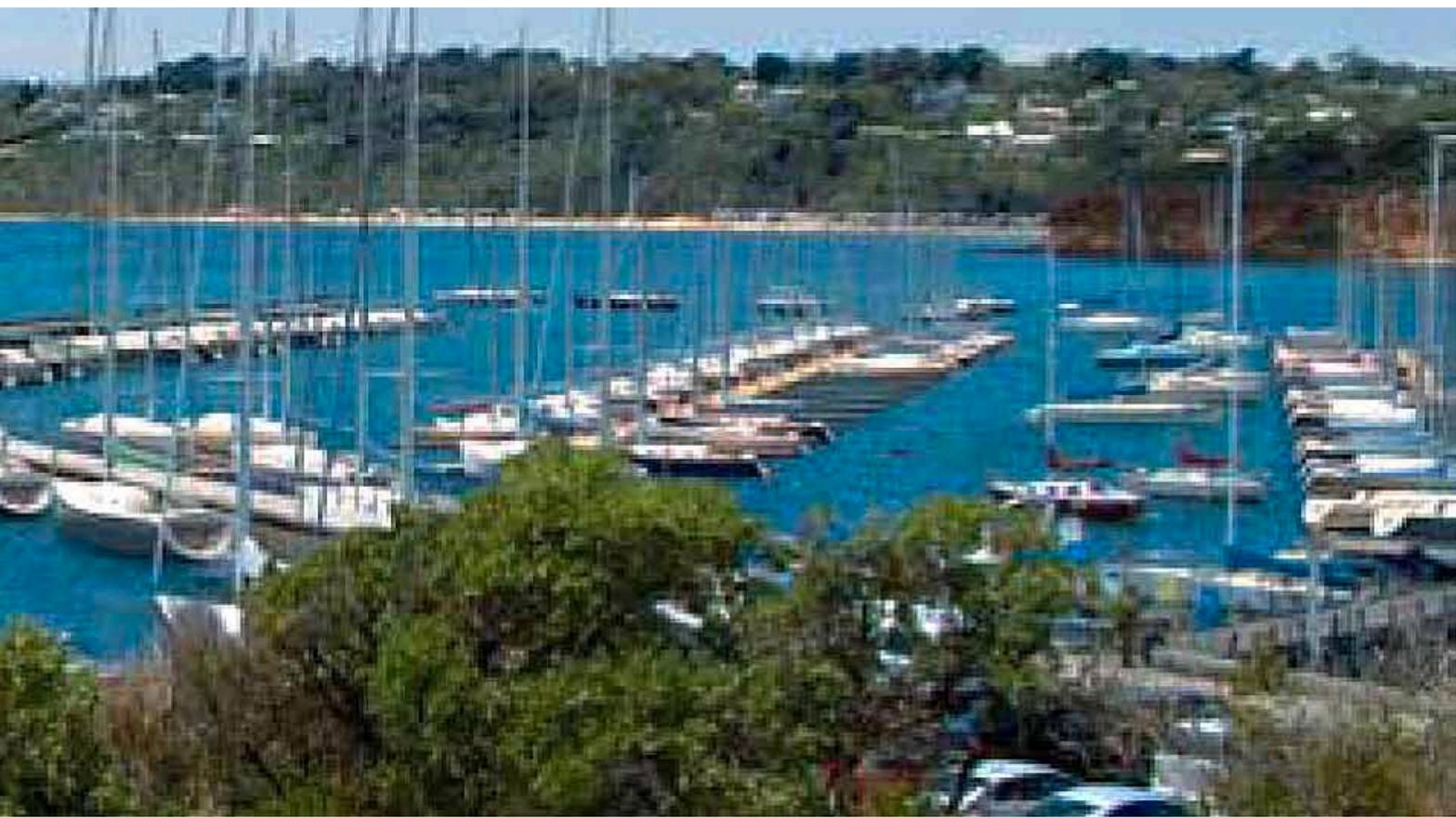
Proposed panorama from position 6 by SKM.



Existing panorama from position 7 using approximate zoom as the eye sees it.



Proposed panorama from position 6 by SKM digitally enlarged to approximately the same zoom distance. Though image is of poor quality (enlarged from the pdf document not the original image) the impact can be clearly seen.



the



Existing photo from position 8 by SKM. Open views between moored boats to the harbour.



SKM photo from first floor restaurant. Open views across a harbour.



Proposed photo from position 8 by SKM. A solid wave screen and wall of boats. The character has completely changed



A marina development illustrating the wall of boats effect (New Bern, USA).



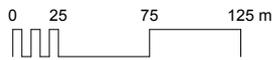
Existing situation of Mornington Harbour.

Legend

- Beach
- Headland/Escarpment
- Parkland
- Boat activity zone (swing moorings)
- Roads and parking
- Piers
- Commercial Activity
- Pedestrian links



Proposed marina development.



Geomorphological impacts of the Mornington Harbour proposal

by Dr Eric Bird

1. The suggested changes to Mornington harbour, including the insertion of a concrete wave screen and the extension of moorings, would have major geomorphological impacts on the coastal environment of Mornington, notably on Mothers Beach, Scout Beach and Shire Hall Beach and the sea floor east and south-east of Mornington Pier.
2. Existing structural works, including Mornington Pier, which has been partly made into a solid structure, and the reclamation and development of land to the south, have already resulted in sand accretion within Mornington harbour and the widening of Mothers Beach (Report by J.B. Hinwood and E.C.F. Bird, 1994). The changes now suggested will lead to further movement of sand from Shire Hall Beach, Scout Beach and the adjacent sea floor into the harbour and on to Mothers Beach.
3. It should be understood that sand movement on beaches in the Mornington area is due to wave action and not to tidal or wind-driven currents, although these may move sand on the sea floor. Any structure designed to reduce wave action (such as a concrete wave screen) will lead to modifications in the wave regime on Mothers Beach, and will create a trap for further sand accretion in the harbour, particularly during the winter half-year (May to October), when northerly and north-easterly winds generate waves that move sand from Shire Hall Beach and Scout Beach on to Mothers Beach. These waves and associated currents also move sand from the sea floor on to Mothers Beach.
4. At present westerly wave action, particularly in the summer half-year (November to April), and including waves refracted round Schnapper Point and beneath and around Mornington Pier, sweep sand back from Mothers Beach to Scout Beach and Shire Hall Beach. The proposed additional structures will reduce westerly wave action reaching Mothers Beach and so increase the retention of sand delivered here from Shire Hall Beach and Scout Beach, and from the adjacent sea floor by northerly and north-easterly waves and associated currents. The situation is similar to that at Sandringham, where the original harbour has been greatly reduced in depth and area by sand accretion from the north, following exclusion of westerly wave action by a solid breakwater.

5. It is acknowledged that sand will gradually fill the harbour and widen Mothers Beach if the proposed changes are made. The suggestion that this sand can be removed and relocated at intervals, possibly by the use of an excavator and truck, should be examined carefully. Such "maintenance" is expensive, and a regular financial allocation would be required and sustained indefinitely. Experience with other harbours and marinas on the Victorian coast is not encouraging: such long-term "maintenance" projects are not guaranteed by government and state agencies, or even if the developers enter into agreements to pay for them.

5. The problems posed by the suggestion of building a concrete wave screen and extending moorings in Mornington harbour can be avoided if a new harbour were constructed at Schapper Point, west of Mornington Pier. This would provide marina facilities for Mornington Yacht Club without further damaging the scenic and recreational environment of the coast north of Mornington.

September 2010

Mornington Safe Harbour

Expert Witness Statement of Dr David Goldie Provis

December 2010

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APPENDICES

APPENDIX A Curriculum Vitae of Dr. D. G. Provis

1. INTRODUCTION

1.1 Name and Address

Dr David Goldie Provis

Cardno

150 Oxford Street

Collingwood VIC 3066

1.2 Qualifications and Experience

Academic Qualifications

BSc (1st Hons), Flinders University of SA, 1972

PhD University of Essex (UK), 1975

Grad Dip Business Admin Swinburne University of Technology 1992

Professional Associations

Australian Marine Sciences Association

Australian Meteorological & Oceanographic Society

American Geophysical Union

American Meteorological Society

Comp IE Aust

Senior Principal, Cardno Group

Member, National Committee on Coastal and Ocean Engineering, Engineers Australia

1.3 Statement of Professional Expertise

Design and execution of oceanographic field work.

Development of instrumentation for measurements in the ocean, including coastal processes.

Oceanographic instrumentation, including selection, deployment, mooring, design and ship-board operations.

Coastal oceanography.

Analysis and presentation of oceanographic data including tidal analysis.

Use of numerical models in oceanography.

Development of criteria for marine operations and design.

Familiarity with dredging operations and monitoring of environmental impacts.

Development of techniques for the assessment of coastal vulnerability to climate change.

Other Significant Contributors to the Report

There are no other significant contributors to the report.

A copy of my Curriculum Vitae is provided in Appendix A.

1.4 Instructions and Information

I was commissioned by Jan Oliver, President of Mornington Environment Association Inc. to comment on the Mornington Safe Harbour proposal.

1.5 Facts, matter and assumptions

I have reviewed the documents supporting the EES which are relevant to my field of expertise, these are referenced below where referred to. Other material is referenced as required in my statement.

2. BACKGROUND

In assessing the proposal, I have read the documents provided with the Environment Effects Statement (EES) which are relevant to my field of expertise and make comment on these.

I have visited the site and am familiar with the location.

3. HYDRODYNAMICS

I have reviewed “Morrington Harbour Hydrodynamics Investigation” by Water Technology, October 2008 (Appendix O of the EES) and make the following comments:

- No calibration or validation of hydrodynamics model. Model is stated as being calibrated, but no evidence of reference is presented other than the tide level at Williamstown. This does not demonstrate model performance on the small-scale nested model of the project area.
- Inclusion of 0.4 m for climate change, based on 50 year life span, is considered reasonable and consistent with Victorian Coastal Strategy 2008.
- No mention of the “typical wind conditions” used to create figure 4-3 and 4-4.
- No mention of three-dimensional effects in flushing. While unlikely to change the conclusions markedly, these effects should be acknowledged.

The lack of validation of the model means that the results have to be judged on “what might be expected”. This reduces the value of applying modelling technology, since the only option for assessing the value of the modelled outcomes is professional judgement.

Assuming the validity of the model, the conclusions are reasonable and there do not appear to be any significant issues with the proposal from the hydrodynamics point of view.

4. WAVES

I have reviewed “Morrington Harbour Wave Investigation” by Water Technology, October 2008 (Appendix N of the EES) and make the following comments:

- There is no calibration or validation of wave models. There is no validation of the wave generation model and resulting wave climate. There is a statement that the Boussinesq model has been validated against a physical model, but no reference is provided.
- The water surface elevation is set at 0 m AHD (page 20). This is not conservative and appears to contradict comments made earlier in the report (section 3.2). It does not even account for tides, and certainly does not include storm surge. Wave penetration into the harbour and for coastal processes will be affected by sea level and investigations should include higher sea-levels.
- Reflected waves appear to be an issue in terms of safe refuge. The normal entry to the boat ramp can become hazardous. This issue is discussed further below.

The lack of model validation results in a level of uncertainty in the model results. The most serious outcome of errors in the wave model results would be in the design criteria for the wave screens and associated structures. It is not clear how uncertainty is taken into account in the design process. Table 4-2 in the Wave Investigation report presents design wave conditions to three significant figures without any mention of uncertainty. This level of precision is unwarranted and provides a false sense of the accuracy of the calculations. Allowance for uncertainty may be included in design computations, but these have not been seen by the author. The uncertainty will apply to the wind data used to drive the model, the wave model itself and the sea level used in the wave model to compute the design values (set to 0.0 m AHD, page 20). I would have expected the wave modelling for this type of investigation to have at least explored

the sensitivity of the results to sea level and to have included, as a minimum, cases with Mean Higher High Water and the One Year Design Water Level.

5. COASTAL PROCESSES

I have reviewed “Morrington Harbour Coastal Processes Investigation” by Water Technology, October 2008 (Appendix R of the EES) and make the following comments:

- The Boussinesq wave modelling used a sea level of 0.0 m AHD and this seems to have been continued in the coastal process modelling. Higher sea-levels must be included in the modelling of both the present day conditions and with an allowance for sea-level rise.
- It is not clear on what basis the beach profiles in figure 4-5 have been selected, which part of the beach they are taken as normal to. This has impact on the wave climate which, according to the sentence immediately above this figure, is set at the offshore end of the profile. These wave climates appear to become increasingly more offset from the line of the wave energy affecting the shorewards end of the profile, particularly in the developed case for profiles 1 and 2.
- Results in table 6-3 appear too neat to be real and do not provide confidence in the numbers. There appears to have been significant rounding or adjusting of the numbers.
- The LITPAK analysis appears to be compromised by the locations selected for the wave climate. However the conclusions appear valid in a qualitative sense.
- Figure 6-20 and 6-23 do not include consideration of any retreat of the shoreline to the west of the groyne or artificial reef.

I agree with general conclusions of the report. It must to be recognised that 12 months of monitoring may not be sufficient time to fully assess the beach response. Regardless of whether the offshore artificial reef or groynes are used to limit sand movement on the beaches, there will be an on-going requirement to artificially move sand from the west to the east due to the removal of the eastward transport by waves behind the wave screens. The costs and management of such transport needs to be addressed.

The report contains no discussion of response to sea-level rise and modelling appears to have been carried out at a sea level of 0.0 m AHD. The response of the beaches to climate change, both for the existing conditions and in the developed case is not discussed. This is a serious omission. There is also no discussion of the effect of a large storm, where high waves are combined with a large storm-tide resulting in erosion of the beach and movement of material offshore, so-called “storm-bite”. The impact of the project on this process and the subsequent recovery is not addressed.

The report and analysis deals with uncertainty by recommending monitoring and responding to the results of the monitoring. There is significant uncertainty in the model results, due to the uncertainty in the sediment transport models themselves, as well as the uncertainty in the inputs, including the wave climate. The levels of uncertainty have not been defined and therefore it is not possible to rule out significant changes to the beaches. The sensitivity of the model results to the selection of the profile locations and hence the wave climate applied to each profile is one factor.

6. DISCUSSION

The proposal is to provide a “safe harbour”. Boating Coastal Action Plan 2007 (Central Coastal Board), policy 3.1 states that (emphasis added)

“Safe harbourswill be:

- *Strategically located and promoted at key locations around Port Phillip and Western Port, having regard to reasonable boat travel times;*
- *Designed and developed to provide haven and safe launch and retrieval facilities from the weather conditions that are most severe at that particular location; and*
- *A priority for investment in upgrade works”.*

The second of these dot points, is particularly relevant. The wave modelling demonstrates that the proposal will provide a safe place to moor boats. However, there is also a requirement for “safe launch and retrieval facilities” under adverse conditions. The wave screens are very good reflectors of wave energy. The wave conditions shown in the wave modelling suggest very hazardous conditions may exist on the path into the harbour under conditions when a vessel may need to seek shelter. The Wave Investigations Report shows significant wave heights in excess of 2.6 m (and this is the highest value plotted) on or adjacent to the path into the boat ramp. For a vessel approaching from the west, there are significant areas of what is likely to be a very confused and violent sea-state with wave heights which may reach over 5 m maximum wave height immediately off the entrance to the safe harbour.

The potential impacts of climate change depend on the time-scale under consideration. The most likely impacts are an increase in overtopping of the wave screens and the decks of jetties. The effect on the beaches is more complex, but increased erosion of the back of the beaches is likely.

I have also reviewed the report by Coastal Engineering Solutions “Morningside Harbour Coastal Engineering Advice” August 2009. In general I agree with the comments and conclusions in that report.

I have also read a letter from Dr. E.C.F. Bird to Jan Oliver, President, Morningside Environment Association dated 5 September 2010 and agree with his comments on the patterns of sand movement and the difficulties of long-term beach management.

7. CONCLUSIONS

7.1 Conclusions

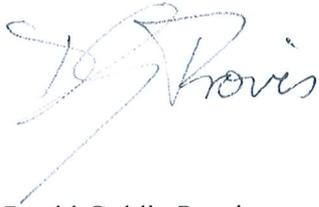
- There is no validation quoted for the numerical models for hydrodynamics, wave generation or Boussinesq wave model. The models are recognised commercially available systems, but the implementation in this application has not been validated.
- Wave modelling has been carried out with a sea level of 0.0 m AHD, close to mean sea-level in 1990. This does not allow for storm tide or sea-level rise and does not explore the sensitivity of the wave modelling results to variation in sea level.
- The wave screens are very close to perfect reflectors of wave energy and the modelling indicates that this will result in large increases in wave height in the areas in front of the screens potentially creating dangerous conditions for vessels seeking access to the safe harbour under storm conditions.

- The discussion of coastal processes identifies significant changes in long-term average conditions but does not address the short-term impact of a large storm with high waves and storm tide. There is also no discussion of the likely response of the coastal processes under climate-change scenarios.

7.2 Declaration

I formally adopt these conclusions and the information and reasoning I have presented in support.

I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.

A handwritten signature in black ink, appearing to read 'D. Provis', with a long, sweeping underline that extends to the left and then curves back under the name.

David Goldie Provis

20 December 2010

Appendices

APPENDIX A Curriculum Vitae of Dr. D. G. Provis

David Provis



Current Position

Senior Principal
Oceanographer
Manager Melbourne

Years' Experience: 30

Joined Cardno

January 1995

Profession

Oceanographer

Qualifications

BSc(1st Hons), PhD, Grad
Dip Business Admin

Affiliations

AMSA, AMOS, AGU, AMS,
IEAust

Publications

Author or co-author of more
than 20 publications

Summary of Experience/ Expertise

David is a Senior Principal of the company. He has more than 30 years experience in coastal oceanography including the design and execution of oceanographic field work, data analysis and numerical modelling. He is a member of the National Committee on Coastal and Ocean Engineering, Engineers Australia.

David leads the Cardno Melbourne-based team in Coast, Ocean and Environment. His experience includes aspects of marine meteorology and the application of measured data in operational situations as well as in numerical modelling. He has expertise in the analysis and interpretation of sea-level and tides. His diverse experience across a range of specialty areas includes;

- Oceanographic instrumentation including selection, deployment, mooring, design and ship - board operations;
- Analysis and presentation of oceanographic data including tide and sea level analysis;
- Use of numerical models in oceanography;
- Use of oceanographic data and models in support of port operations, including dredging;
- Preparation of input for environmental assessments on marine and related topics;
- Appearance as an expert witness and peer reviewer on coastal and marine issues;
- Development criteria for marine operations and design.

Significant Projects

- Port of Melbourne Corporation Channel Deepening Project
- Port of Geelong Channel Improvement Program
- Bass Strait Bream B Pipeline Project
- Manila Bay Land Reclamation Project
- Impact of Sea-Level Rise on the Gippsland Lakes
- Lonsdale Bight Coastal Processes Study
- Tasmania Natural Gas Pipeline Project
- Lakes Entrance Coastal Processes Study
- Under-Keel Clearance - Current and Wave Measurements
- Clifton Springs beach resoration
- Victorian Desalination Project

Professional History

Jan 1995 - Current

Senior Principal Oceanographer Manager, Melbourne

- Project manager and principal investigator for the Hydrodynamics, Sediment Transport and Water Quality Modelling and Coastal Engineering for the Channel Deepening Project, Port of Melbourne Corporation
- Measurement and analysis of waves generated by vessels in Port Phillip
- Carried out an investigation into the coastal processes of the northern coast of the Bellarine Peninsula Port Phillip Bay, City of Greater Geelong
- Responsible for development of design criteria for an offshore platform in Bass Strait and subsea pipeline to Victoria for the BassGas project, Origin Energy Resources Limited
- Provided input into environmental impact assessment for the BassGas project in marine and coastal matters and in surface water
- Responsible for feasibility studies into hydraulics, sedimentation and coastal engineering for the Channel Deepening Project in Port Phillip Bay
- Responsible for development of oceanographic design criteria, including shore crossings, for Tasmania Natural Gas Project pipeline from Victoria to Tasmania, Duke Energy International
- Project Manager, directional wave measurement programme, Lakes Entrance, also expert comments on coastal processes and sand movements at Lakes Entrance and modelling of the behaviour of the entrance during and after dredging
- Manager of scientific and technical monitoring for environmental impact of dredging in the Port of Geelong Channel Improvement Program
- Monitoring of turbidity during a trial dredging exercise for the East Coast Armaments Complex, Point Wilson, Victoria
- Team leader for oceanographic and dispersion modelling for Victorian Desalination Project including functional design of the diffusers
- Development of methodology for Coastal Hazard Vulnerability Assessment under climate change scenarios

Jan 1981 - Jan 1995

Oceanroutes Australia Pty Ltd - Oceanographic Measurements and Data Analysis

- Review of Oceanography and pollutant dispersion, Northern Spencer Gulf, South Australia
- Oceanographic measurements, Stony Point, South Australia for a proposed petrochemical plant.
- Oceanographic measurements for a proposed power station development, Wallaroo, South Australia.
- Oceanographic measurements and modelling for design criteria for pipeline crossing of Spencer Gulf, South Australia.
- Analysis of the hydrodynamics of tidal channels, Queenscliff, Victoria.
- Current measurements for comparison with dispersion modelling, Burnie, Tasmania.
- Determination of tidal datum and correction factors for hydrographic survey, Port Phillip Heads, Victoria.
- Sea level and tide height computations for design of a sea wall and breakwater as part of a boat launching facility Sorrento, Victoria.
- Analysis of measurements of internal solitons in the Andaman Sea and preparation of design currents for offshore oil drilling.
- Current measurement programme for Port Phillip Bay Environmental Study.
- Coastal processes for Frankston Coastline Management Study.

Jan 1981 - Jan 1995

Oceanroutes Australia Pty Ltd - Numerical Modelling

- Air quality modelling for Environmental Impact Statement for Multi Function Polis, Adelaide.
- Development of a numerical model for the prediction of oil-spill trajectories in Bass Strait.
- Development of an oil-spill model for contingency use in the Timor Sea.
- Review of oil-spill trajectory models for the Australian National Plan to Combat Pollution of the Sea by Oil.

Jan 1981 - Jan 1995

Oceanroutes Australia Pty Ltd - Real-Time Data Acquisition and Display Systems

- Design and installation of a real-time current measurement system, Port Stanvac, South Australia and subsequent upgrade and replacement of the system.
- Design and installation of a real-time current, tide and wind monitoring system, Hobart, Tasmania.
- System design, hardware and software specification and installation of a network of telemetering tide gauges in Port Phillip Bay.

Jan 1981 - Jan 1995

Oceanroutes Australia Pty Ltd - Instrumentation

- Supervision of the supply of 22 tide gauges to the ASEAN nations including the preparation of manuals and delivery of an instruction course for installation, operation and data processing. Preparation of data processing software package for IBM PC and compatible computers.
- Hardware design and project supervision of the development of an acoustic current meter for oceanographic use.
- Feasibility study and project design for sea-level monitoring in the Republic of the Maldives.

Jan 1976 - Jan 1981

Flinders University

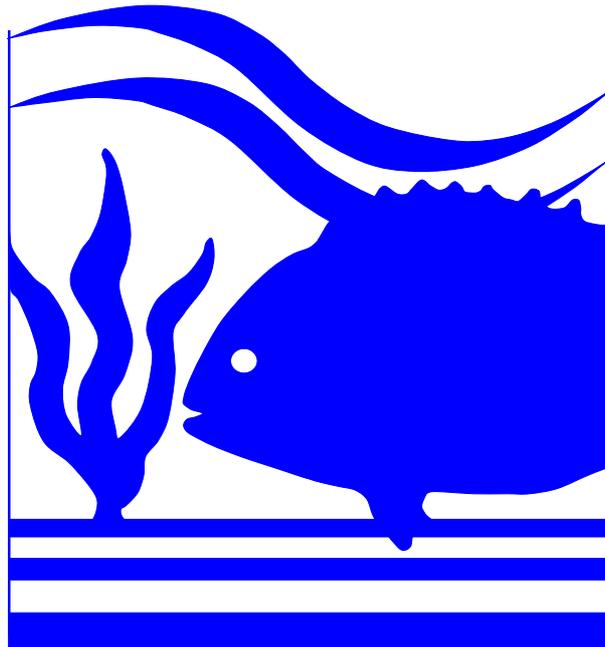
- Design, deployment and recovery of current meter and tide-gauge moorings in the South Australian gulfs and eastern Great Australian Bight.
- Processing and analysis of data from oceanographic instruments including detailed tidal analysis.
- Deployment of coastal tide-gauge and meteorological network.
- Design and development of instruments for measurements in the surf zone.

**Papers /
Presentations**

- Sep 2009 **Prediction of plume generation and movement from dredging operations in Port Phillip Bay, Melbourne**
Provis, D.G. and Aijaz, S. Proceedings, Coasts and Ports 2009 conference, Wellington, New Zealand.
- Sep 2007 **Understanding the waves at Port Phillip Heads, Melbourne, Australia**
Lesser, G., Turner, M., and Provis, D.G., Proceedings, Coasts and Ports 2007 conference, Melbourne, Vic. Australia.
- Sep 2005 **Hydrodynamics of Port Phillip Heads**
Provis, D.G. and S. Aijaz, 2005, Proceedings, 17th Australasian Coastal and Ocean Engineering Conference, Adelaide, SA, Australia.
- Sep 2003 **Modelling of the Bar System at Lakes Entrance, Victoria**
Provis, D.G., and Taylor, C.J. (2003). Proc. Coasts and Ports, Australasian Conference, 9-12 September 2003, Auckland, New Zealand.
- Jan 2003 **Calibration and Testing of a Hydrodynamic Model of the Gippsland Lakes**
McMaster, M.J., Provis, D.G., Grayson, R.G., and Bishop, W.A. (2003). MODSIM 2003, International Congress on Modelling and Simulation, 14-17 July 2003, Townsville, QLD, Australia.
- Jan 2002 **Representing Terrain Accurately for Flood Modelling in Large Coastal Lagoon**
Wealands, S.R., Grayson, R.B., McMaster, M.J., Tan K.S. and Provis, D.G. (2002). 27th Hydrology & Water Resources Symposium, 20-23 May 2002, Melbourne, VIC, Australia.
- Sep 2001 **Modelling of Lakes Entrance**
McMaster, M.J., Provis, D.G., Grayson R.G. and McCowan A.D. (2001). The 15th Australasian Coastal and Engineering Conference and the 8th Australasian Port and Harbour Conference, 25-28 September 2001, Gold Coast, QLD, Australia
- Jan 1999 **The Interaction of Waves and Currents at Port Phillip Heads**
Provis, D.G. and McCowan A.D. (1999). Proc. Australasian Conference on Coastal and Ocean Engineering, Perth, WA, Australia. Vol. 2, pp 544-549.
- Jan 1999 **Corio Bay Channel Improvement Program, Turbidity Monitoring**
Provis D.G. and Taylor, C.J. (1999). Proc. Australasian Conference on Coastal and Ocean Engineering, Perth, WA, Australia. Vol. 2, pp 550-554.
- Jan 1997 **Tides and Currents in 'The Rip' at the Entrance to Port Phillip Bay**
Provis, D.G. (1997). Proc. Australasian Conference on Coastal and Ocean Engineering, Christchurch, New

- Zealand. Vol. 1, pp 81-86.
- Jan 1995 **Port Phillip Bay Environmental Study - Hydrodynamic Data Collection**
 Provis, D.G. and Rice, R.A. (1995). Proc. Australasian Coastal and Ocean Engineering Conference, Melbourne, VIC, Australia. Institution of Engineers Australia pp 251-255.
- Jan 1993 **Telemetry Tide Gauges for the Port of Melbourne**
 Provis, D.G. and Street, N. (1993). Proc. Australasian Conference on Coastal and Ocean Engineering, Townsville, QLD, Australia. Institute of Engineers Australia pp 709-710.
- Jan 1988 **Real-Time Data Gathering and Telemetry for Port and Harbour Operations**
 Provis, D.G. (1988). Proc. Australasian Port, Harbour and Offshore Engineering Conference, Brisbane, QLD, Australia. Institute of Engineers Australia pp 105-107.
- Jan 1985 **Wave Measurements in the Great Australian Bight**
 Provis, D.G. and Steedman, R.K. (1985). Proc. Australasian Conference on Coastal and Ocean Engineering, Christchurch, New Zealand. Vol. II, pp 51-60.
- Jan 1984 **A Shallow Water Directional Wave Recorder**
 Buchan, S.J. Steedman, R.K., Stroud, S.A. and Provis D.G. (1984). Proc. 19th International Conference on Coastal Engineering, September 2-7, 1984, Houston, Texas. pp 287-303.
- Jan 1983 **Eddy Viscosity and Tidal Cycles in a Shallow Sea**
 Provis, D.G., and Lennon, G.W. (1983). Estuarine, Coastal and Shelf Science, 16, pp 351-361.
- Jan 1983 **Experiments on Wave Trapping by a Submerged Cylindrical Island**
 Barnard, B.J.S., Pritchard, W.G. and Provis, D.G. (1983). Geophysical Astrophysics Fluid Dynamics, 24, pp 23-48.
- Jan 1981 **Some Oceanographic Measurements in the Great Australian Bight**
 Provis, D.G. and Lennon, G.W. (1981). Proc. 5th Australasian Conference on Coastal and Ocean Engineering. Institute of Engineers Australia, pp 272-277.
- Jan 1979 **Sea-level Oscillations Along the Australian Coast**
 Provis, D.G. and Radok, R. (1979). Australian Journal of Marine and Freshwater Research, 30, pp 295-301.
- Jan 1978 **Equipment for Measurements in the Nearshore Zone**
 Provis, D.G. (1978). Proc. 4th Australasian Conference and Ocean Engineering. Institute of Engineers Australia, pp 241-242.
- Jan 1977 **Experimental Studies of Wave Refraction in Waves on Water of Variable Depth**
 Provis, D.G. and Radok, R. (eds) (1977). Springer-Verlag Lecture Notes in Physics, Vol. 64.

**Expert Witness Statement
Mornington Safe Harbour EES
Marine Ecology Review**



M. Edmunds

Report No. 462

December 2010

Expert Witness Statement Mornington Safe Harbour EES Marine Ecology Review

Document Control Sheet

Abstract

Expert witness statement for Mornington Environment Association pertaining to the Mornington Safe Harbour EES.

Keywords

Port Phillip Bay, Mornington, EES harbour, marina, development.

Citation

Edmunds M (2010) *Expert Witness Statement. Mornington Safe Harbour EES. Marine Ecology Review.* Report to Mornington Environment Association Inc. Australian Marine Ecology Report 462, Melbourne.

Amendments

No	Section	Date	Amendment Details
1.0	All	19-12-10	First version
1.1	Summary	19-12-10	Added summary
1.2	All	19-12-10	Editing and typographical corrections

Distribution

Copy	Holder	Section/Organisation
1	Library	Australian Marine Ecology
2	Ms Jan Oliver	Mornington Environment Association

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1 Background

1.1 Name and Address

Dr Matt Edmunds
Australian Marine Ecology Pty Ltd
82 Parsons St
Kensington
VIC 3031

1.2 Qualifications and Experience

1.2.1 Qualifications

Bachelor of Science (Honours), First Class, (Marine, Freshwater and Antarctic Biology)
Doctor of Philosophy (Zoology)
ADAS Australian Commercial Diver Part 1
ADAS Certificate IV Occupational Diving Dive Supervisor
CMAS International Certificate for Scientific Research Diving
DAN Level II First Aid
DAN Oxygen Provider
Radio Operators Certificate of Proficiency
Coxswains Limited (Tasmania)
Coxswain (Victoria)

1.2.2 Experience

I have been working in various fields of marine ecological research for 23 years. I have substantial experience in marine impact assessments, particularly discharges and physical disturbances to the marine environment. These impact assessments include wastewater, seismic survey, dredging, desalination plants and subsea cable/pipe installations. I have been involved in several major marine impact assessments in southern Australia, including for the PoMC Channel Deepening Project, Gunns Pulp Mill, RPDC Bruny Bioregion Marine Protected Areas Inquiry and Walker Corporation Lauderdale Quay.

I have considerable first-hand experience of the marine habitats and ecosystems of Victoria and Port Phillip Bay. I have been a principal researcher of seagrass, shallow reef, deep reef and sediment bed communities throughout Port Phillip Bay. This work includes research for the Port Phillip Bay Environment Study, long term monitoring of biodiversity within marine protected areas and investigation of dredging and other impacts near shipping channels and other infrastructure.

A *curriculum vitae* is provided in the Appendix.

1.3 Relevant Expertise

My area of expertise is in coastal marine ecology, particularly population and community ecology pertaining to conservation, fisheries and environmental management. I have considerable knowledge of Port Phillip Bay and other ecosystems through long-term monitoring and a variety of other studies in the past 15 years. My ecological expertise and experience also encompasses:

- biodiversity of sediment invertebrate infauna, sediment epibiota, seagrass beds, seaweed beds and other communities within shallow embayments in southern Australia;
- light climate monitoring and modelling;
- photosynthesis, primary production and plant biomass measurement and modelling, including seaweeds, seagrass and sediment microalgae; and
- population and community biology, dynamics and ecological relationships.

My expertise and experience in conservation biology includes assessment of natural values and conservation status, including for threatened species, threatened communities and marine protected areas. I was a member of committees or panels for the Scientific Advisory Committee for the Flora and Fauna Guarantee Act, Fisheries Co-Management Council and the Tasmanian RPDC Bruny Bioregion Inquiry.

I have considerable experience in marine ecological impact assessments, including prediction and monitoring of responses to disturbances, such as from dredging, wastewater outfalls, pollution, aquaculture, introduced marine pests and pathogens. I have been involved in the development of professional standards for ecological impact assessment with the Environment Institute of Australia and New Zealand.

1.4 Contributors to this Statement

There were no other significant contributors to this report.

1.5 Instructions

I was engaged by Mornington Environment Association Inc. to provide a scientific review and expert opinion of marine ecological aspects of the Mornington Safe Harbour Environmental Effects Statement (EES). The review was to include environmental effects on local beaches, water quality, marine life, including *Syngnathidae* and feral Northern Pacific Seastars (common and likely to increase), marine habitats, and larger marine life including dolphins, penguins, whales and seabirds.

1.6 Supporting Tests or Experiments

This report does not rely on any specific tests or experiments.

2 Approach

2.1 Documents Reviewed

The review of the marine ecological impact assessment used the following EES documents:

- Mornington Safe Harbour Environment Effect Statement Volume 1 Main Report.
- Mornington Safe Harbour Environment Effect Statement Volume 2 Technical Reports.
 - Appendix A – Wave Climate
 - Appendix B – Hydrodynamic Assessment
 - Appendix C – Coastal Processes Assessment
 - Appendix D – Water Quality and Sediment Assessment
 - Appendix E – Marine Ecology Assessment
 - Appendix L – Stormwater Assessment

2.2 Review Approach

The review assessed the validity and reliability of information in the EES documents within a framework of criteria for best practice ecological impact assessment.

Well regarded texts establishing best practice for ecological impact assessment (EcIA) are those of Westman (1985) *Ecology, Impact Assessment and Environmental Planning* and Treweek (1999) *Ecological Impact Assessment*. The principles and processes detailed by these authors are also applied by the International Institute for Impact Assessment in conjunction with the Institute of Ecology and Environmental Management UK (IAIA 1998), as well as the Institute of Ecology and Environmental Management UK (IEEM 2006, 2008). The IEEM and IAIA guidelines are accepted as world best practices and are widely referenced. Australia presently does not have a set of accepted practitioner's standards or guidelines, although the Environmental Institute of Australia and New Zealand has prepared a draft set of EcIA guidelines as a precursor to developing best practices for these countries. The guidelines were drafted in concordance with the Treweek (1999), IAIA (1999, 2005) and IEEM (2006, 2008) guidelines.

A key tenet of best practices is adherence to the scientific method and provide an objective and transparent determination (IEEM 2006). This is also reflected in principles detailed by the IAIA (1999), including:

- Rigorous** The process should apply ‘best practicable’ science, employing methodologies and techniques appropriate to address the problems being investigated.
- Credible** The process should be done with professionalism, rigor, fairness, objectivity, impartiality and balance and be subject to independent checks and verification.
- Systematic** The process should result in full consideration of all relevant information on the affected environment, of proposed alternatives and their impacts, and of the measures necessary to monitor and investigate residual effects.

The generic structure of best practice ecological impact assessment includes the following:

1. identification of potential sources of ecological stress or disturbance by the proposal;
2. description of ecological receptors in the environment and valued ecosystem components;
3. impact predictions, including nature and magnitude of changes against the baseline;
4. impact mitigation to redress significant adverse effects;
5. impact evaluation to determine the significance and importance of predicted residual ecological impacts;
6. ecological monitoring to strengthen the knowledge base, provide opportunities for corrective management action in the light of unforeseen outcomes and ensure compliance.

3 Effects and Stressors

3.1 Effects

The EES provides a description of works, which provides some indication of construction effects, and notes on environmental management, which provides some indications of operation effects. Nevertheless, the EES does not systematically define and predict the nature of all potential effects and ecological stressors.

The Main Report and Technical Appendices lists stressors as:

- noise from pile driving;
- turbidity from pile driving;
- contamination from sediment resuspension by dredging;
- contamination from antifouling;
- contamination from vessel cleaning and maintenance;
- liquid discharges from vessels: oily bilge, sewage and grey water;
- fuel and oil spills;
- solid wastes and litter;
- changed wave climate;
- changed currents and water exchange;
- changed sand movement dynamics – changed beach morphology and smothering by sand;
- optional artificial reef; and
- mechanical relocation of accumulated sand.

There were some important effects that were not considered by the EES, that may have significant effects on local ecosystem. These include:

- shading and reduced light climate – the additional artificial structures and moored vessels would cause increased shading, potentially changing marine communities and reducing levels of primary production;
- similarly, the increased footprint of artificial structures into the bay would cause reduced area of open or unimpeded water and sea surface habitat;
- the substantially changed wave climate in the bay would result in changed sediment dynamics, possibly including increased fine sediments and deposition of organic matter, and cause changed sediment structure and biogeochemistry;
- the movement of vessels greatly increases the risk of marine pest translocation, including pests from the harbour to elsewhere, or from elsewhere to the harbour;
- the increased area of artificial structures, including the marina and optional artificial reef for sand transport management, provides of novel habitats for establishment of marine pests.

- synergistic effects, for example the translocation of Japanese kelp *Undaria pinnatifida* and establishment in the marina is likely to lead to organic overloading of sediments and hypoxia, as occurs at Princes and Station Piers.

3.2 Predicted Effect Levels

Predictions of the magnitude of effects were provided for some stressors but not others. Explicit prediction were provided for:

- copper contamination from antifouling;
- changes in wave climate; and
- changes in currents and flushing.

Although the level of noise from pile driving was explicitly stated, the frequency and duration of noise, sediment suspension by pile driving and sediment disturbance by dredging were not considered. The level of sediment disturbances from pile driving was stated as “... any increase in turbidity is likely to be extremely localised and transitory in nature and unlikely to affect resident marine communities along the Pier” (Appendix E, page 22). Even if disturbances are localised and transitory, continual or frequent disturbances over the 18 month construction time may lead to significant impacts. It is later stated that the level of turbidity plumes generated by pile driving is unknown and would be determined once the project commences (Appendix E, page 26).

No effect predictions, including time of year, duration, frequency or magnitudes, were provided for dredging, including suspended sediments (turbidity) and release of contaminants. It should be noted the effects from dredging are highly related to the technology and work method used, however these were largely undescribed.

Although changed wave climate was explicitly predicted, there was little consideration of the implications for changes to sediment habitats. The decreased wave energy area is likely to lead to larger areas with finer sediments and potentially greater organic loadings and different biogeochemistry – this was not considered in the EES.

The area and level of sand smothering over inshore reefs and changes to beach profiles is vague. This is made more uncertain by the potential option for installing an artificial reef, with little indication of the probability that this would occur. The artificial reef is likely to cause inundation of some of the inshore natural reef but may “minimise the spread of sand across the entire inshore reef”.

3.3 Area of Consideration for Impact Assessment

Figure 1-2 of the EES Main Report (page 15) defines the area subject to the EES as essentially the whole bay area southward of the outer pier. This is confirmed by the footprint of the proposed development and modelled changes in waves and currents.

The wave and current modelling also indicated influences to seaward and further along the coast and these wider areas should also be considered in the ecological impact assessment.

It was noted many maps lacked scales, or had scales that were not legible.

3.4 Summary

The EES does not systematically define the potential ecological stressors and provide predictions on the magnitude, duration, frequency and time of year of disturbances – information important for a well considered impact assessment. Some important ecological stressors were not considered by the EES, including: the nature of sediment habitat changes in the reduced wave climate area; the increased area of shading and artificial structures; and the translocation and colonisation of marine pests.

4 Existing Conditions

4.1 Habitats and Species

The EES provides brief descriptions of habitats and species in the bay area, including:

- beaches;
- rocky intertidal;
- soft seabed;
- inshore subtidal reef;
- seagrass; and
- artificial structures.

The distributions of habitats is provided in Appendix E (Figure 5, page 12), however it is noted only “seagrass” habitat is mapped. The two types of seagrass present, *Halophila australis* and *Zostera nigricaulis*, are very different habitat types with different ecological implications. It was noted that the mapped habitats overlay an aerial photographs which has seabed structures not indicated on the habitat map. There appears to be a darker fringe on the seaward side of the inshore sandy banks which could be seagrass or *Pyura* bed habitat. This fringe area would be at risk from sand inundation from the project.

The species and community descriptions for each habitat are very brief, with only one or two common species mentioned without relative abundances. This sparse information makes it difficult to establish similarities and differences of the biota with other places and determine ecological values.

It was noted that many species names in Appendix E were wrong or misspelt:

- seastar *Coscinasterias calamaria* should be *Coscinasterias muricata*;
- mussel *Mytilus planulatus* should have been *Mytilus edulis planulatus* or *Mytilus galloprovincialis planulatus* (see below);
- southern goatfish *Upeineichthys proosus* should be *Upeineichthys vlamingii*;
- kelp *Ecklonia radiate* should be *Ecklonia radiata*;
- *Caulocystis* sp should be *Caulocystis cephalornithos*; and
- *Hippocampus abdominalis* should be *Hippocampus bleekeri* .

Subsequent name changes are *Mytilus edulis* to *Mytilus galloprovincialis* and *Heterozostera nigricaulis* to *Zostera nigricaulis*.

4.2 Ecosystem Processes

The EES makes no attempt to identify any ecosystem processes or functions that may be subject to stressors. Examples of processes that should have been considered include:

- primary production, including by seagrass, drift algae, phytoplankton and sediment microalgae;
- secondary production, including water column mixing zones and biological aggregation areas; and
- sediment ecosystem functions, including organic sinks and denitrification.

4.3 Ecosystem Values

Appendix E contained a section on Environmental Values (Section 5, page 20), however this section only considers listed species. Other ecological and environmental values that should have been considered include:

- presence of unique communities or aspects of biogeographical importance;
- areas of high biodiversity;
- aggregations, high biomass or density;
- areas important as nurseries, feeding areas and home ranges; and
- important ecosystem functions and key functional species and habitats.

Apart from the consideration of listed species, the Main Report (page 27) and Appendix E (page 19) dismiss any values of the species and habitats present and claim they are typical of equivalent environments elsewhere in Port Phillip Bay. The EES does not provide any evidence to validate this claim, such as the location of any equivalent environments or references to other data. There is no explicit analysis to compare species, communities or habitats between Mornington and other locations to establish the uniqueness, importance, representativeness of the Mornington biota.

There are few areas of seagrass on the east coast of Port Phillip Bay so its presence at Mornington may be of significance. Similarly, subtidal reefs to the north, such as at Ricketts Point and Red Bluff, do not have large abalone populations so the abalone on the nearshore reefs at Mornington may also be of significance.

Appendix E notes the presence of *Sargassum* and *Caulocystis cephalornithos* on the nearshore reefs (page 19) – this is potentially suitable habitat for the shortheaded seahorse *Hippocampus breviceps*. The seagrass *Zostera nigricaulis* is potentially habitat for other syngnathids, such as pipefishes. *Hippocampus whitei* was mentioned in the text – this seahorse species is unlikely to be present at Mornington.

The sandy habitats are likely to play an important role in supporting primary production by sediment microalgae and the biogeochemistry of the finer sediments is likely to play a role in water quality.

The open bay waters are likely to be used by a wide variety of transient species, such as sharks, seals, fishes and seabirds. The importance of the open bay area depends on the degree of visitation and usage by each species and cannot be assumed to be insignificant.

The EES claims that the common dolphin *Delphinus delphis* is likely to be only a casual visitor to the area (Appendix E, page 20). In fact, the case is the opposite, with Mornington likely to be a very important area for an unusual group of *D. delphis*. There is a resident breeding population of approximately 30 dolphins. This group has a small home range from approximately Dromana to Olivers Hill, with the highest frequency (70-90 %) of occurrence at Mornington, in or near the bay. The group are likely to have been present from before 2006 (when records began) and the Mornington area is likely to be an important feeding and residence area (Sue Mason and David Donnelly, *pers. comm.*, Dolphin Research Institute).

A colony of the pot-bellied seahorse *Hippocampus bleekeri* is present at the development site and the short-headed seahorse *H. breviceps* may be present on the inshore reefs. These species are listed marine species on the EPBC Act. The resident population of common dolphins *Delphinus delphis* is a listed cetacean. An EPBC Act referral is therefore warranted.

4.4 Summary

The EES provided only basic descriptions of habitats and species. The EES neglected to consider ecosystem processes. The EES concluded that the Mornington habitats and species were typical other areas in Port Phillip Bay without providing adequate evidence or rationale. The EES consideration of values was constrained to listed species. Of these, it failed to note the importance of Mornington and the proposed development area to the common dolphin *Delphinus delphis*.

For a comprehensive impact assessment, further information is required on:

- potentially important ecosystem processes, such as sediment chemistry and sediment microalgal production; and
- systematic assessment of potentially important ecological values, including a biogeographical comparison of species and assemblages with other areas of Port Phillip Bay to establish uniqueness and representativeness.

5 Impact Predictions

It was noted by Treweek (1999) that impact prediction is at the heart of ecological impact assessment but is often the weakest component. There are three complimentary sets of information required for impact prediction:

- the definition or prediction of the stressors, including the magnitude, spatial extent, frequency and duration of exposures;
- the understanding of ecosystem function that accounts for observed baseline states, distributions and variability (existing conditions); and
- identification of ecosystem processes that will drive change in response to levels of the environmental stressors.

From this a model can be used to predict ecological outcomes relative to baseline, taking into account frequency range, magnitude and severity,

As noted in previous sections, the EES provides only cursory descriptions of stressors. There is also little information provided on biological and ecological responses to the stressors. The EES makes little attempt to predict biological or ecological changes resulting from the proposed marina development.

Some of the more concerning, potential adverse ecological impacts may include:

- excessive noise from pile driving over an extended period of up to 18 months causing aversion reactions of the resident dolphins away from feeding areas and subsequent impact on breeding success, leading to population decline;
- persistent turbidity during pile driving and dredging, reducing light levels and biomass of plants and primary productivity, with reductions in secondary productivity;
- loss of seagrass and sediment microalgae habitats through extensive seabed shading by the marina structures and vessels;
- change in sediment biodiversity throughout whole of the bay through changes in sediment structure and chemistry in more sheltered waters;
- changed seabed habitats outside the marina through increased wave exposure through waves reflected off the wave screen;
- translocation and infestation of marine pests (such as the Japanese kelp *Undaria pinnatifida* in the north of Port Phillip Bay) to the harbour, artificial reef or scoured reefs via boat traffic;
- translocation of marine pests from Mornington to other places via boat traffic, causing major ecological changes elsewhere;

- infestation of hulls and marina structures with kelp *Undaria pinnatifida*, which has a seasonal die-off leading to a high organic loading of sediments underneath and causing anoxic sediments and loss of sediment biota (as occurs at Station Pier and Princes Pier);
- pollution of water column and seabed from discharges of solid and liquid wastes, including oils, sewage and litter;
- change in water quality in more sheltered areas through changed ecosystem functioning of sediments, organic loading and pollution;
- sand inundation of inshore reefs and loss of seaweed biodiversity as well as what may be important abalone and short-headed seahorse habitat;
- reduction of open water habitat, excluding critical foraging habitat by resident dolphins and potentially other animals, such as fishes, seabirds, seals and penguins; and
- fouling of the seabed under and around the marina with litter and debris.

Although some of the above scenarios are quite speculative, most of these types of impacts have been observed in other marinas and harbours.

There is some concern about impacts of toxicants on marine biota. Two identified sources include release of copper and other toxicants from anti fouling and the resuspension of toxicants from contaminated sediments. In both instances, some mitigation was proposed as dilution (particularly for the antifouling leachate). In this case, the local concentrations may be kept under the ANZECC guidelines but dilution means a wider area is being impacted at a lower contaminant level.

The EES provides modelling of flushing and residence times, however this information is not extended in terms of biological impacts. It appears the EES assumes that a few extra days of residence time is ecologically inconsequential. Further consideration should be given to the consequences of reduced mixing in terms of ecological consequences.

The changed circulation patterns may result in increased seaweed and litter accumulations on the beach or within the bay in general. This may lead to organic loading of sediments and other ecological issues for beach and subtidal issues (as well as social issues, such as the need for beach cleaning).

In summary, the EES provides no predictions of ecological states arising from the proposed marina development. There are, however, a variety of ecological impacts that could occur and require mitigation and evaluation.

6 Impact Mitigation

Appendix E provides indications of potential impact mitigation measures that may be used, however there is no indication of the level of commitment to these suggestions. There is also no indication of the desired or required degree of mitigation. For example, it is suggested that silt curtains are used “if necessary”; however there is no detail of acceptable exposure levels for turbidity to indicate when a silt curtain should be deployed. Similarly, there are no acceptable levels or targets defined for any of the other threatening processes, with the predominant wording being to “minimise” impacts.

The EES does not contain an environmental management plan with explicit management objectives, targets and environmental limits. The Main Report provides an environmental framework with mitigation measures that may be applied (Tables 8.1, 8.2). This information is too vague to enable prediction of residual impacts after the mitigation measures are applied. For management of some stressors, the EES defaults to documents such as the EPA Best Practice Guidelines for Dredging and the SEPP – these have generic properties and do not guarantee protection of local ecological values. For example, the EPA Best Practice Guidelines for Dredging provides a method for protecting the survival of seagrass, but does not provide guidance on maintaining seagrass at biomass levels suitable for conserving habitat and associated biodiversity.

The lack of an EMP greatly hampers the assessment of increased vessels in the harbour affecting water quality. Although the EES indicates the EMP will address water quality issues, the detail of the EMP is quite important. Levels of pollution may or may not be kept low depending on how strict the controls in the EMP, and its enforcement, are. For example, the issue of release of copper and other toxicants from antifouling may be greatly reduced by forcing boats to use much less toxic (but more expensive) silicon based antifouling. Similarly, the detail of the EMP could make a large difference to suspended sediment levels and resuspension of toxicant, depending on the technology and work method proscribed.

The mitigation of the most serious potential impacts can only be done at design phase, such as:

- the area and arrangement of the marina footprint to reduce space constraints on feeding areas, such as by dolphins;
- the design of the wave screen and flushing to minimise formation of anoxic sediments and accumulation of toxicants; and
- design of the artificial reef to limit sediment smothering on inshore reefs.

There was no apparent optimisation of the proposed marina design with respect to mitigating potentially major ecological impacts.

The management of marine pest translocation is a considerable omission, this being a well known problem of marinas and harbours and having major to catastrophic ecological consequences.

In summary, the EES describes general mitigation measures, but does not define clear objectives or limits to ensure significant ecological impacts do not occur. Some ecological impacts can only be mitigated by design while others will need to be addressed in an Environment Management Plan, which was not provided in the EES.

7 Impact Evaluation

As stated above, it is not possible to robustly predict residual ecological impacts from the information provided in the EES. As noted in Section 5 Impact Prediction, there is potential for substantially changed ecosystem throughout bay at Mornington. Impacts that would be considered ecologically significant include:

- disturbance to the population dynamics of the resident dolphin *Delphinus delphis* group;
- loss of inshore reef habitat if it is habitat for important abalone populations, short-headed seahorse *Hippocampus breviceps* or other species restricted in range within Port Phillip Bay;
- changes to the sediment chemistry, nutrient cycling and biodiversity, especially with accumulation of finer sediments with higher organic loading;
- infestation of new marine pests, with Japanese kelp *Undaria pinnatifida* being an immediate threat that would have synergistic effects on sediment and water quality;
- reduced primary and secondary productivity outside the natural level of variation.

Further investigations on effects, existing conditions and impacts are required before it can be determined if or what significant and important ecological impacts would occur. Some of the greatest uncertainties include:

- changes to sediment habitats and consequences for nutrient cycling;
- shading and changes to light climate and plant communities;
- space limitations to more mobile animals through intrusion of marina structures (including for the resident dolphins);
- significance of species on the inshore reefs; and
- translocation and infestation of marine pests.

In summary: the proposed Mornington marina development has the potential to cause impacts of considerable significance and importance, however there is presently a paucity of information to make a proper evaluation.

8 Summary and Conclusions

8.1 Summary

The Mornington Safe Harbour EES marine ecology impact assessment lists some of the ecological stressors that may arise from the construction and operation of the project, however it does not systematically define all stressors and effects. Some effects have considerable attention, such as changes in wave climate, currents and flushing. There were major effects that received no attention at all, including: changed sediment habitat conditions; increased area of shading by artificial structures and vessels; the translocation and infestation of marine pests and the reduction in open water space in the bay.

The description of existing biological and ecological conditions was cursory, essentially being a listing of habitats and the most readily identified species. There was no consideration of ecosystem processes or functions in the study areas. As such, the EES excluded consideration of potentially important processes such as primary production (seagrass, phytoplankton and sediment microalgae), sediment nutrient cycling and aggregations of biota in the water column.

The determination of ecosystem values was largely limited to listed species that may occur in the area. The EES analysis wrongly concluded that the area was not important to the common dolphin *Delphinus delphis*. Monitoring and research by the Dolphin Research Institute since 2006 indicates there is a resident breeding population with a small home range centred on Mornington. They have a high frequency of occurrence in the proposed project area and it is likely to be important habitat for them. The EES did not systematically assess whether there were other important environmental or ecosystem values. Criteria for importance include presence of communities of biogeographical importance, high biodiversity, aggregations or high biomass, nurseries, feeding areas and ecosystem processes important for system functioning and ecosystem services to humans. The EES dismisses any value of the Mornington species and habitats in a single statement which claims they are typical of equivalent environments elsewhere in Port Phillip Bay. There is insufficient data, rationale or other evidence to support this claim and this statement should not be accepted without supporting analysis. For example, the inshore reefs could be important habitat for the short-headed seahorse *Hippocampus breviceps* and the blacklip abalone *Haliotis rubra* on these reefs may be important for meta-population dynamics.

The EES provides no predictions of changes in biota and ecosystem states and functioning resulting from the development – it steps straight from listings of effects

and existing conditions to mitigation measures. There are potentially major ecological impacts that should be identified and considered as part of the decision making process (see Section 5).

The EES describes some mitigation measures, for some stressors. There were no clear commitments to implement these, with no Environmental Management Plan with clear objectives, actions and targets or limits. The mitigation of impacts by project design, particularly shading and footprint area aspects, do not appear to have been considered.

There is essentially no impact evaluation in the EES, although the unsubstantiated statement that the habitats and species are represented elsewhere implies that any impact would be considered of no ecological significance. The EES does not provide sufficient information to establish whether there would be residual impacts of ecological significance. There is, however, potential for significant residual impacts to occur. These include:

- changes in the population dynamics of the resident dolphin *Delphinus delphis* group;
- loss of inshore reef habitat if it is habitat for important abalone populations, short-headed seahorse *Hippocampus breviceps* or other species restricted in range within Port Phillip Bay;
- changes to the sediment chemistry, nutrient cycling and biodiversity, especially with accumulation of finer sediments with higher organic loading;
- infestation of new marine pests, with Japanese kelp *Undaria pinnatifida* being an immediate threat that would have synergistic effects on sediment and water quality;
- reduced primary and secondary productivity outside the natural level of variation.

8.2 Conclusions

- The Mornington Safe Harbour EES does not provide a rigorous and systematic marine ecological impact assessment.
- The prediction of project effects is lacking in detail and omits some processes, including sediment habitat changes and translocation of marine pests.
- The description of existing conditions is cursory, ignores potentially important ecosystem functions and excluded the presence of a resident dolphin population;
- The EES statement that the habitats and species are represented elsewhere in Port Phillip Bay was unsubstantiated and should not be accepted until there is scientific evidence and rationale to support this. It may be implied from the EES that the biota at Mornington are inconsequential or ‘disposable’. There is no evidence to support such an inference and the EES omits considerations that Mornington may in fact be important ecologically.
- The EES does not describe any ecological impact states or scenarios and the information provided in the EES on effects and mitigation lacks the level of consistency and detail to properly predict residual impacts of construction and operation.
- The Mornington Safe Harbour proposal has the potential to cause substantial and lasting ecosystem impacts throughout the bay area and impact on valued natural assets, including dolphins, primary production, sediment nutrient cycling and water quality. These risks should be further assessed in a systematic, rational manner if they are to be properly incorporated in the decision making process.

9 Declaration

I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.



19 December 2010

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10 References

- IAIA (1999) Principles of Environmental Impact Assessment Best Practice. International Association for Impact Assessment and Institute of Environmental Assessment UK, Fargo, USA.
- IAIA (2005) Biodiversity in Impact Assessment. International Association for Impact Assessment Special Publication Series No. 3, Fargo, USA.
- IEEM (2006) Guidelines for Ecological Impact Assessment in the United Kingdom. Institute of Ecology and Environmental Management.
- IEEM (2008) Guidelines for Ecological Impact Assessment in Britain and Ireland. Marine and Coastal. Institute of Ecology and Environmental Management, United Kingdom.
- Treweek J (1999) Ecological Impact Assessment. Second Edition. Wiley-Blackwell, Oxford.
- Westman WE (1985) *Ecology, Impact Assessment and Environmental Planning*. Wiley, Los Angeles.

11 Appendix A – Curriculum Vitae – Matt Edmunds

Dr Matt Edmunds Principal Marine Ecologist

Education

- 1987-1990 Bachelor of Science (Honours), First Class
Marine, Freshwater and Antarctic Biology
University of Tasmania, Hobart
Thesis: *The Community Ecology of Fishes on Tasmanian Rocky Reefs.*
- 1991-1995 Doctor of Philosophy, Zoology
University of Tasmania, Hobart
Thesis: *The Ecology of the Juvenile Southern Rock Lobster, Jasus edwardsii (Hutton 1875) (Palinuridae).*

Certificates

Drivers licence
Tasmanian Motor Boat Licence
Coxswains (limited), Tasmanian Navigation and Survey
Coxswains Certificate, Marine Safety Victoria with Port Phillip Heads Endorsement
Radio Operators Certificate of Proficiency
NASDS Master Diver
ADAS Australian Commercial Diver Part 1
ADAS Certificate IV Occupational Diving Dive Supervisor
CMAS International Certificate for Scientific Research Diving
DAN First Aid and Oxygen Provider

Awards

- 1990 Ralston Trust Honours Prize, University of Tasmania
2000 Royal Humane Society of Australasia Bronze Medal
2007 Australian open 50 m surface fin swimming record

Employment

1999-present	Director, Australian Marine Ecology Pty Ltd
1990-1999	Marine Biologist, Consulting Environmental Engineers Pty Ltd
1990-1995	Teaching, Department of Zoology, University of Tasmania
1990-1991	Technical Officer, Tasmanian Division of Sea Fisheries
1989-1990	Technical Officer, CSIRO Division of Fisheries
1988-1989	Research Assistant, University of Cambridge

Memberships and Committees

- Rock Lobster and Giant Crab Committee, Victorian Fisheries Co-Management Council – member for conservation expertise (2002-2007).
- Ministerial Scientific Advisory Committee for the Victorian Flora and Fauna Guarantee Act – member for marine expertise (2003-2008)
- Panel Member, Inquiry into Establishment of Marine Protected Areas in the Bruny Bioregion, Tasmanian Resource and Planning Development Commission (2006-2008).
- Australian Marine Sciences Association – ordinary member
- Environment Institute of Australia and New Zealand – ordinary member
- Ozfin Inc. – Committee member.

Background

Dr Edmunds is a director of Australian Marine Ecology Pty Ltd. He has specialist expertise in coastal ecological investigations and he has been designing and implementing research and monitoring programs for 22 years. His work encompasses a broad range of ecological aspects, including community-environment relationships, taxonomy, population dynamics and environmental impact assessment.

Dr Edmunds has substantial experience in experimental/sampling design and analysis, in addition to a strong practical background in underwater sampling techniques. His field experience includes thousands of research dives in cold and difficult conditions, predominantly involved with quantitative underwater visual censusing. He has been at the forefront in establishing quantitative deepwater visual censuses using drop-video, towed video and ROV technology.

His work in environmental consulting has focussed on the ecological assessment of wastewater discharges, dredging and other disturbances, as well as the assessment of natural spatial and temporal variations in fished populations and reef communities. These assessments include: multivariate comparisons of subtidal and intertidal reef benthic biota, infauna and intertidal communities near pulp-mill and sewage discharges;

before-after-control-impact type analyses of population abundances and community assemblages; power analysis of monitoring programs; and assessment and implementation of a variety of methods for habitat mapping and environmental monitoring.

Experience and Expertise

Experimental Design and Analysis

Dr Edmunds has substantial experience in the design, implementation and analysis of ecological investigations, particularly for marine populations and communities, and for environmental impact assessments. He is familiar with most biostatistical analyses, including: ANOVA models, multivariate analyses of community structure (including MANOVA, RDA, CVA, CCA, ANOSIM and MDS), diversity indices, dominance curves, univariate and multivariate tests of hypotheses and before-after/control-impact (BACI) analyses. Much of this work goes beyond merely testing for impacts or responses, but describing the nature, magnitude and spatial extents – information critical for environmental management. He is also familiar with regression analyses (linear and non-linear), power and cost-benefits analyses, cluster analysis, analysis of spatial patterns, as well as population and fishery assessment statistics (including CMR models from tagging studies). Dr Edmunds has been involved with teaching statistics to undergraduate students at the University of Tasmania, and is able to communicate the principles and interpretation of biostatistical analyses in a clear and concise manner, in both written and oral form.

Dr Edmunds has experience with a variety of underwater sampling methods for epibenthic biota and infauna. These include diving visual census techniques, ROV census techniques, underwater photography, video, baited video stations, stereo video applications and 3D measurements, sediment sampling and biological collections. His strong practical and analytical skills ensure his work is both efficient and effective.

Fisheries and Population Biology

Dr Edmunds has a strong background in fishery science, particularly coastal fisheries, through research and consulting with Tasmanian Division of Sea Fisheries, CSIRO Division of Fisheries, University of Tasmania, South Australian Research and Development Institute and Australian Marine Ecology. He has ongoing involvement with scientists, management and fishers. Pertinent experience includes the Southern Rock Lobster Research Group, fishery assessment and modelling workshops, Abalone Management Plan Steering Committee and Commercial Rock Lobster Fisheries Committee. Through his population dynamics investigations, he has an understanding of the implementation and implications of fishery management options, for both the fishers and the fishery stocks.

Scientific experience includes:

- Taxonomic revision of the *Squalus* (dog shark) genus in Australasian waters.
- Coastal reef fish stock assessment.
- Spatial and size variations in fecundity and maturity of the southern rock lobster *Jasus edwardsii*.
- The population ecology of juvenile *Jasus edwardsii*.
- Standing stocks of the seaweed *Undaria pinnatifida*.
- Population biology and gonad quality of the sea urchin *Heliocidaris erythrogramma*.
- Density and size structure of abalone, rock lobster, sea urchin, periwinkle and wrasse (Labridae) stocks on Victorian reefs.
- Independent stock assessment of abalone in Victoria.
- Independent stock assessment of rock lobsters in Victoria.

Population and Community Ecology

Dr Edmunds has substantial experience and expertise in ecological investigations in a wide range of coastal marine habitats. Major projects include:

- The behavioural ecology of the seahorses *Hippocampus abdominalis* in Tasmania and *H. breviceps* in Victoria.
- Fish assemblage-habitat relationships on Tasmanian rocky reefs.
- Ecology of the introduced Japanese seaweed *Undaria* in Tasmanian waters.
- Ecology of juvenile southern rock lobster *Jasus edwardsii*.
- Review of the Westernport marine environment, with contributions on seagrass, fish and invertebrate communities.
- Assessment of acoustic methods for mapping the standing stocks of epibenthic flora and fauna.
- Benthic marine habitat and biological assemblage mapping in Tasmania and Victoria.
- Investigation of the composition, standing crop and nutrient content of macrophyte assemblages in Port Phillip Bay.
- Investigation of biological-environmental relationships in Victorian subtidal reef communities.
- Implementation of a long-term monitoring program for Victorian reef flora and fauna.
- Investigations in temporal and spatial variations in Victorian reef communities.
- Project design for monitoring lobster populations within marine reserves in Tasmania.
- Reef assemblage structures and distribution for oil spill atlas.
- Biogeography of Victorian reefs including identification of bioregions and description of reef community types.
- Biological assessment of marine protected area proposals for eastern Victoria.
- Modelling of seagrass, diatom and seaweed production and population dynamics.
- Sponge community structures, community-habitat relationships and temporal variations on Victorian deep reefs.

Environmental Impact Assessment and Monitoring

Qualitative and quantitative environmental assessment projects include:

- Impact assessment and monitoring of wastewater discharges on benthic organisms at George Town, Devonport, Wesley Vale, Burnie and Hobart in Tasmania.
- Impact assessment and monitoring of wastewater discharges at Baxters Beach, Phillip Island, Altona, Venus Bay and Boags Rocks in Victoria.
- Impact assessment and monitoring of wastewater discharges at Wollongong and Boambee Head, Corambirra Point and Woolgoolga in New South Wales.
- Pilot studies and biological monitoring designs for Baxters Beach and Boags Rocks outfalls, Victoria, as well as Coffs Harbour EIS, NSW.
- Temporal and spatial comparisons of infaunal community structure and diversity at Wesley Vale.
- Recruitment and community succession on artificial substrata near paper mill effluent outfalls.
- Water quality assessment and monitoring near paper mill outfalls.
- Measurement and modelling of winds, currents and plume dispersal.
- Analysis of metals bioaccumulation in oysters, northern Tasmania.
- Habitat and biological assemblage mapping for dredging and beach restoration at Hampton, Port Phillip Bay.
- Impact assessment and monitoring of dredging at Hampton, Port Phillip Bay.
- Investigation of dredging effects in the Maribyrnong River
- Investigation of impacts of sewage overflows in the Illawarra region.
- Review of marine biological impacts of Sydney ocean outfalls for Cronulla STP EIS.
- Odour modelling for industrial and rural developments.
- Modelling clarifier performance for paper mill wastewater treatment plant.
- Co-development of Ausbeach water quality model for predicting beach exposure to coliform bacteria from outfall discharges.
- Design and implementation of monitoring programs for performance assessment of Victorian marine protected areas.
- Assessment of ecological status of the Victorian marine protected areas.
- Impact assessment of previous and proposed dredging in Port Phillip Bay, including biological modelling and risk assessments.
- Modelling of reductions in primary production by seaweed, kelp and microalgae exposed to suspended sediment plumes caused by dredging.
- Rock fall modelling from dredging and impact assessment on sponge garden communities.
- Impact and recovery monitoring programs investigating rockfall impacts on sponge gardens.
- Measurement and mapping of dredge impacts on water quality.
- Monitoring of light climate and dredge impacts on seagrass beds.

Scientific Review

- Peer reviewer, *Bulletin of Marine Science*, population dynamics of spiny lobsters.
- Peer reviewer, C. P. Norman, habitat use of early benthic phase lobsters.
- Peer reviewer, *Marine Ecology Progress Series*, juvenile lobster populations and artificial habitats.
- Review and editing, Andrew N. 1999. *Under Southern Seas: The Ecology of Australia's Rocky Reefs*. UNSW Press, Sydney.
- Review and editing, Department of Natural Resources and Environment reports.
- Review of mapping projects for CSIRO Environmental Project Office, Melbourne.
- Scientific review of marine ecology components of Gunn's Pulp Mill IIS for Beca AMEC, lead consultant to Tasmanian Resource Planning and Development Commission, Hobart.
- Panel member, inquiry into establishment of marine protected areas in the Bruny Bioregion, Hobart.
- Committee member, Scientific Advisory Committee for implementation of the Flora and Fauna Guarantee Act, Victoria.
- Scientific review of reports associated with channel deepening for the Australian Conservation Foundation, Melbourne.
- Review of marine natural values of the Kimberley region for WWF Australia.
- Scientific review of the marine environmental aspects of the Victorian Desalination Project EES for AquaSure, Melbourne.
- Review of marine nature conservation in Victoria for Victorian National Parks Association, Melbourne.
- Scientific review of the Lauderdale Quay DIIS for Save Ralphs Bay Inc., Hobart.

Conferences, Workshops and Seminars

- Australian Marine Sciences Association Conference, Melbourne, July 1993. Paper: Shelter utilisation and availability for the southern rock lobster, *Jasus edwardsii*.
- CSIRO Seminar Series, Hobart, September 1993. Paper: Lobsters and the Mandelbrot Set: The implications of fractals on the population dynamics of the southern rock lobster, *Jasus edwardsii*.
- Rock Lobster Scientist Meeting, Wellington, April 1994. Discussion leader: Measuring juvenile abundance.
- Southern Rock Lobster Population Modelling Workshop, Adelaide, June 1994.
- Southern Rock Lobster TriState Conference, Victor Harbour, July 1994.
- Australian Society for Fish Biology, Canberra, August 1994. Paper: Ontogenetic shifts in diet of the southern rock lobster.
- University of Tasmania Workshop: Application of Fractals to Ecology, Hobart, February 1995. Co-convenor (with Belinda Robson) and discussion leader.

- Westernport Marine Environment Workshop, Melbourne, February 1995. Discussion leader: Fish and fisheries.
- Southern Rock Lobster Population Modelling Workshop, Adelaide, August 1995. Paper: Microtagging and the population dynamics of the juvenile southern rock lobster.
- Southern Rock Lobster Early Life History Workshop, Hobart, May 1996. Discussion leader: Density dependence in early benthic phase lobsters.
- Southern Rock Lobster Population Modelling Workshop, Adelaide, September 1996.
- Southern Rock Lobster Recruitment Workshop, Hobart-Adelaide, February 1999. Paper: Ecology of juvenile lobsters and recruitment limitations.
- Australian Marine Sciences Association Conference, Melbourne, July 1999. Paper: Impact assessment of reef biota near the Boags Rocks sewage discharge.
- Monitoring Marine Protected Areas, TAFI, Hobart, October 1999. Papers: Monitoring in Victoria and Census of rock lobster populations.
- Monitoring Marine Protected Areas, NRE, Melbourne, September 2001. Papers: Census Methods and Temporal Patterns.
- Primary production modelling for environmental management in Port Phillip Bay, Port of Melbourne Corporation, Melbourne, 2006.
- Deep reef habitat mapping in Port Phillip Bay, Port of Melbourne Corporation, Melbourne, 2006.

Expert Witness Appearances

Channel Deepening Project EES Planning Panel Inquiry, Melbourne 2005

- Dredging impacts on marine ecology and communities.
- Proof of concept primary production modelling.
- Monitoring and modelling system for environmental management of light regime to protect seagrass, kelp and microphytobenthos primary production and adaptive management.

Channel Deepening Project Supplementary EES Panel Hearing, Melbourne 2007

- Deep reef rockfall modelling and sponge garden impacts and recovery.

Lauderdale Quay DIIS Panel Hearing, Hobart 2009

- Marine and estuarine ecology.
- Quantitative modelling of sediment biota and wading bird energetics.

Project Experience

The following is a selection of on-going or completed projects with Australian Marine Ecology.

Reef Monitoring Design and Implementation, 1998-2001

NRE Parks Flora and Fauna

Relational Database Design and Maintenance 1998-2006

NRE Parks Flora and Fauna

Sub-tidal Reef Monitoring Program, 1998-2002

NRE Parks Flora and Fauna

Geospatial Analysis and GIS Support, 1999

Marine and Freshwater Resources Institute

Scientific Peer Reviews of NRE Environmental Inventory Reports, 1999

NRE Parks Flora and Fauna

Environmental Assessment of Proposed Aquaculture Intake Pipe, 1999

Deekna Pty Ltd

Ecological Status of the Bunurong Marine Park, 1999-2000

Marine and Freshwater Resources Institute

Biogeography of Victorian Reef Assemblages, 2000

NRE Parks Flora and Fauna

Kelp Habitat Atlas and Oil Spill Review, 2000

Australian Maritime Safety Authority

Abalone Stock Assessment Surveys 2000-2001

Marine and Freshwater Resources Institute

Bass Strait Hydroacoustic Surveys, 2000

AMOG Consulting

Biological Assessment of Marine Protected Areas in Eastern Victoria, 2001

Abalone Fishermen's Cooperative Ltd

Shallow Reef Monitoring Standard Operations Procedure, 2001

NRE Parks Flora and Fauna

Review of Underwater Visual Census Precision and Biases, 2001

NRE Parks Flora and Fauna

Stock Assessment of Rock Lobster – Discovery Bay, 2002-2004

Marine and Freshwater Resources Institute

Studies on Rock Lobster Climax Populations, 2002

NRE Parks Flora and Fauna

Community-Based Monitoring of Mud Islands Seagrass Beds, 2001-2002

Friends of Mud Island

Juvenile Rock Lobster Recruitment, 2002

Marine and Freshwater Resources Institute

Studies on Introduced Japanese Seaweed, 2001-2004

FPDSavills (VIC) Pty Ltd

Marine Parks and Sanctuaries Management Strategy, 2002

Parks Victoria

Deep Reef Survey, Wilsons Promontory Marine National Park, 2002

Parks Victoria

Port Phillip Bay Channel Deepening Project EES, 2003-2004

Parsons Brinckerhoff and Port of Melbourne Corporation

Environmental Assessment of Sub-Sea Optical Fibre Cables, 2002, 2004

Hydro Tasmania

Baseline monitoring for Port of Melbourne Channel Deepening Project, 2004-2006

Port of Melbourne Corporation

Trial Dredging Experiments for Port of Melbourne Channel Deepening Project, 2005-2006

Port of Melbourne Corporation

Deep Reef Survey, Twelve Apostles Marine National Park, 2006

Parks Victoria

Kirk Point Baseline Environmental Survey, 2006

Hollow Core Concrete Pty Ltd

Lorne Pier Marine Survey, February, 2006

Department of Sustainability and Environment

Apollo Bay Harbour Marine Survey, 2006

Department of Sustainability and Environment

Portland Trawler Wharf Marine Survey, 2006

Department of Sustainability and Environment

Port Phillip Bay Channel Deepening Project - Rock Fall Impact Assessment, 2006

Maunsell and Port of Melbourne Corporation

Gunns Pulp Mill Integrated Impact Statement review, 2006

Beca AMEC, on behalf of the Tasmanian RPDC

Port Phillip Bay Channel Deepening Project - Rock Fall Impact Prediction, 2006

Maunsell and Port of Melbourne Corporation

Health Monitoring of Abalone Wild Stock: Port Fairy, 2006-2007

Department of Primary Industries

Princes Pier Marine Environmental Survey, 2007

HLA-Envirosciences Pty Ltd

Lakes Entrance Sand Management Program: Marine Ecology Existing Conditions, 2007-2009

Gippsland Ports

Subtidal and Intertidal Reef Monitoring Program, (1998-2001) 2002-2007, 2009-2011

Parks Victoria

Channel Deepening Project – Deep Reef Impacts Witness Statement, 2007

Maunsell

Flinders Pier and Foreshore Coastal Management Plan: Marine Ecology Baseline Survey, 2007

URS Corporation

Lyalls Inlet Marine Environmental Survey, 2007

Ecology Australia

Tambo Bluff Estate: Marine Ecology Assessment, 2007

East Gippsland Shire Council

Review of Marine and Coastal Natural Values of the Kimberley, 2007

Applied Ecology Solutions on behalf of WWF Australia

Review of Litter Impacts, Sky Lucky Witness Statement, 2008

Victorian Environment Protection Authority

Port Phillip Bay Trial Dredging Program: Deep Reef Monitoring, 2006-2008

Boskalis and Port of Melbourne Corporation

Inquiry into Establishing Marine Protected Areas in the Bruny Bioregion 2006-2008

Resource Planning and Development Commission

Port Phillip Bay Channel Deepening Project: Rock Removal Assessment, 2008

Boskalis and Port of Melbourne Corporation

Quality Management System for Beach Water Quality Monitoring, 2008

Victorian Environment Protection Authority

Action Statements for FFG Act Listed Marine Species, 2008

Victorian Department of Sustainability and Environment

BayMonitor Scientific Monitoring Program, Port Phillip Bay, 2008

Australian Conservation Foundation

Victorian Desalination Plant – Marine Management Plans, 2008-present

AquaSure Consortium

Nature Conservation Review – Marine and Coastal Issues Paper, 2008-present

Victorian National Parks Association

Marine Habitat Mapping of Victorian Marine Protected Areas, 2009

Parks Victoria

Lauderdale Quay DIIS: Marine Ecological Review and Expert Witness, 2009

Save Ralphs Bay Inc., Birds Tasmania and Environmental Defenders Office, Tas

MPA Abalone Virus Impact Monitoring, 2009

Parks Victoria, Marine National Parks Research

Portland Existing Conditions: Benthic Substratum Survey, 2009

Professional Diving Services

Kan Tan IV Drilling Rig Marine Pest Inspection, 2009

Cawthron Institute New Zealand

Victorian Desalination Plant – Marine Monitoring, 2009-2011

Thiess-Degremont Joint Venture

Apollo Bay Introduced Japanese Seaweed Management, 2009-2010

Victorian Department of Sustainability and Environment

Barry Beach Marine Terminal and Channel Dredging, 2010

John Kowarsky and Associates and Esso Australia.

Publications and Reports

References in chronological order

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- Edmunds M (1995) *The Ecology of the Juvenile Southern Rock Lobster, (Jasus edwardsii Hutton 1875) (Palinuridae)*. Ph. D. Thesis. University of Tasmania.
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- May D & Stephens A (eds.) (1996) *The Westernport Marine Environment. Based on a Report to the Environment Protection Authority by Consulting Environmental Engineers*. State Government of Victoria Environment Protection Authority, **Publication 493**, Melbourne. [Chapters: Fish and Fisheries, Invertebrates]
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- Chidgey S S and Edmunds M (1997) Standing crop and nutrient content of macrophytes in Port Phillip Bay. *CSIRO Port Phillip Bay Environmental Study Technical Report 32*.
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- Edmunds M and Willcox S T (1999) *Marine Biological Impacts Study. Part I. Existing Discharges*. CEE Northern Australia report to Coffs Harbour City Council. Project Report No. **CHEIS R09**.
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Threatened Species Action Statements

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PRESS RELEASE 12 January 2012 DISAPPOINTMENT, OUTRAGE AND INCREDIBILITY FROM MEA AT PLANNING MINISTER'S REPORT ON THE MARINA PANEL

Mornington Environment Association (MEA) is shocked to see the Minister for Planning, Matthew Guy, has finally released his report on the Marina proposal for Mornington harbour and has supported all the recommendations of the Labor appointed Panel, even though our local MP, David Morris, has spoken passionately against it.

Many locals told David Morris, MP that they were against the marina.

Why has the new Coalition Minister ignored all our pleas?

"What we find very strange is that the report, supplied to the Shire on 4th January, 2012, is dated June 2011" said Jan Oliver, President of MEA.

"We are so disappointed that the Minister has ignored community requests and statements to the Panel that the marina is not wanted and not needed. The Minister has stated "Further refinement of the proposal..." is required to demonstrate "public benefit ...has been appropriately maximized... a necessary precursor to securing an agreement for an injection of public funds to enable a project to proceed on coastal Crown land." NO public benefit has yet been detailed. David Morris has strongly stated that none of his government's money will be spent on this \$19 million proposal because it is a private development of NO PUBLIC BENEFIT.

The Minister's assessment is a flabby whitewash, as was the Panel's Report. The Panel report acknowledges all the major concerns with the proposal and yet supports the proposal. By stating "It is my assessment that this recommendation be supported" the Minister endorses what amounts to a virtual redesign of the proposal including redesigning the wave screen to reduce reflected waves, reduce its height to minimize visual impact, redesign entrance to allow tall ships to enter harbour and then find non-available car spaces!

The Minister and his department think there will only be "relatively minor to moderate adverse environmental effects...which will be minimized through the detailed design..." (p 29). He ignored the expert witness advice that Mothers, Scout and Shire Hall Beaches will have major changes, that the waters of the harbour will lose their ability to support marine life and to cleanse the sands. He also ignored the community dislike of the loss of scenic views. It appears he has little understanding of the local Mornington scene.

As highlighted at the Panel, there is a clear distinction between building a marina and providing a safe haven in times of emergency. There is even less need for a marina now, since the installation of stronger moorings, plus better weather forecasting and more responsibility by boat users with more use of Martha Cove as a safe haven.

MEA supports an independent assessment of what should be done in the Harbour. The end of the pier is to be rebuilt at a cost of \$6 million: this provides an opportunity for better design.

Now the Shire Council has to meet and decide if it will change the zoning over the harbour. Councillors will have an opportunity to support the community. Does Council wish OUR public water to be used for a large PRIVATE venture? We are just so disappointed that this new Minister apparently cares nothing for us in Mornington.

The report is on the Shire's Web site with the link

<http://www.mornpen.vic.gov.au/Files/StrategicPlanning/C107Ministersassessment.pdf>

Jan Oliver
President MEA

PRESS RELEASE 20 January 2011 MOTHERS BEACH COVERED IN BLACK SMELLY SPOIL

Mothers Beach, Mornington, the beach normally crowded with families and children during the summer holidays, is currently closed while a contractor dredges filthy muck from in front of the Yacht Club and dumps it on the sand. The black water then runs back into the waters of the Harbour, causing suspended material to blacken the water.

Jan Oliver, President of Mornington Environment Association, and a member of the Mornington Foreshore Advisory Committee said today.

"I am shocked that this material can be dumped on to our main swimming beach and the beach itself closed. The dump truck from the contractor is trying to spread the black smelly material across and under the beach, with little success. The smell is sulphurous which indicates the material is anaerobic - ie. decaying without oxygen.

I am appalled that the Yacht Club, The EPA and the Shire would allow this material to be dumped on our Mothers Beach. We have complained already and received a reply from Alex Atkins, Director Sustainable Infrastructure who stated that testing of the material showed that Polycyclic aromatic hydrocarbons (associated with fuel leaks) were slightly elevated but acceptable to the Shire and EPA. But what else is in this dredged black muck? We see the pile of old chains, anchors, and blocks pulled up by the dredge. Apparently the Yacht Club wants a deeper entrance to their ramp for the boats racing in February. But what of the people trying to use the harbour? I talked to people fishing on the pier and jetty last night, and they were catching nothing.

The Club should have arranged for the dredged muck to be carted to a land disposal site. In February, the Shire starts dredging in front of the public ramp and good knows what that will bring!
It's bad enough to have half the pier closed off but this is ruining our Harbour in the middle of summer!"



Dredging 20 January 2011

Jan Oliver
President MEA

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PRESS RELEASE
COMMUNITY SUPPORTS THE ANTI MARINA CASE IN FEBURARY

Hundreds of objectors to the proposed marina in Mornington Harbour have rallied to support Mornington Environment Association in the campaign to prevent the third attempt by the Yacht Club to build a marina in Mornington Harbour. Jan Oliver, President of MEA said today "We are all thrilled at the support we have received from so many donors. Just on \$10 000 has been raised to pay for our expert advisers and cover presentation costs at the Panel. Thank you to everyone who has helped – both in kind with copying or with cash.

We contacted over 800 objectors to the proposal and this has been a marvelous response. The 3-man Panel hearing about the proposal and the required re-zoning of the Harbour commences on February 1st in the Shire Chambers in Mornington and the public can attend any time during February. The time table is on the Shire web page mornpen.vic.gov.au as are the statements of evidence from all the experts. The Shire has 8, the Boathaven Company (Yacht Club) 5 and MEA 4. MEA also has some lay-witnesses who represent various users of the Harbour.

It will all be an enormous effort – and expense – and we look forward to hearing the Panel report which has to be with the new Planning Minister within 6 weeks of the end of Panel hearings. Then the Shire Council has to vote, and a decision will finally be made."

Jan Oliver
MEA president

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Letter to the Editor, Mornington Leader, published Sept 2010

Dear Sir

How different it is to read the interview between Phillip Coombs and your reporter Teresa Murphy (Leader 9August) compared with how he behaved at the special Council meeting on 2nd August when he so rudely and arrogantly addressed Councillors.

These Councillors were making difficult decisions – should they allow rezoning of the harbour to allow a private, and yes it is a private development company, to take over Mornington harbour to make it supposedly safe? Following the vote, and Coombs' threats to go to the Planning Minister, we all have to go to a state appointed panel/inquiry and waste masses of time, energy and money in proving that Mornington doesn't need a marina, a 4 metre high concrete wall in the water, nor the likely long term effects on our beaches, water and our Mornington lifestyle.

Where is the business plan? The public benefit? The parking solutions? The money? Coombs did not answer the Councillors' questions nor provide more than a 2 page list of points as a submission on this vital issue. I ask, will he be using his own apparent wealth to fund BoatHaven in the Panel? We, the passionate community volunteers will be there. We will find the funds somehow, and we will see this issue "dead and buried" for ever.

Jan Oliver
President
Mornington Environment Association

PRESS RELEASE 4th July 2010 (Published by the Mail July 2010)
'No Marina' rally a red success!

Hundreds of people and their dogs –mostly wearing red – met at the rally, organized by MEA, on Mothers Beach on Saturday 3rd July to protest against the planning changes proposed for Mornington harbour and the proposed Marina. This was the only public rally during the time of the display of the proposals.

The meeting heard key speakers – Gidga Walker, renowned local environmental scientist who explained some of the environmental effects of changing coastal systems and the lack of assessment of the Harbour's marine habitats, and Alan Clark, master mariner who spoke about the physical characteristics of the Harbour and its sea floor which make it very difficult for any development to create a 'Safe harbour' . Jan Oliver, President of Mornington Environment Association, set the scene with a brief review of the proposal by Mornington Boat Haven Ltd. as the whole group faced into the harbour. Two Liberal politicians– David Morris, local MP, and Edward O'Donohue (Upper House member for E. Victoria) were constantly questioned by the crowd who wanted to know where they stood. Samantha Dunn, Greens candidate for E. Victoria spoke of the complex issues and planning decisions that have to be made and made the Greens position quite clear.

Jan Oliver, President of MEA, said today "It was clear that the people attending were against the marina proposal and constantly waved their signs "No marina". They were disappointed that neither of their local politicians was definitely prepared to say no to the proposal. Although invited, the Shire Planner did not attend, and Councillor Bev Colomb – who has to vote on the planning changes later, arrived right at the end.

We are most grateful to the Sea Scouts of Mornington 2nd Troop who held a sausage sizzle at short notice and one of their Leaders, Kylie Tate gave an impassioned plea to all, as the Scouts will not be able to sail around the harbour if the proposal goes ahead so she feared over 80 years of Scouting will go. This was a fitting conclusion to what was a demonstration from many locals who do not want to see their Harbour and local beaches ruined.

We collected over 140 submissions to the Panel, all objecting, and the meeting passed a unanimous resolution that the council must say no to rezoning the harbour to allow the Yacht Club to take over."

" Now", she concluded, "we have to wait for the Council to read the submissions, then see if a panel is appointed by the Minister Justin Madden, when the public again be able to make their views known. This is going to be a continuing fight".

Published end of May 2010

PRESS RELEASE :-Proposed marina will cause major environmental changes

It doesn't take much to realise that if you obstruct the flushing tidal movement within the Mornington Harbour with two wave screens – one along the pier and one at the proposed Marina, jutting out parallel to Scout Beach as solid concrete walls driven down into the seabed, then add a large number of power boats, the water quality will deteriorate.

As in most other marinas, the sailing yachts will largely be outnumbered by many large motor cruisers. Fuel spills are inevitable with the proposed re-fuelling and sewage pump out facility placed on a pontoon alongside the proposed new jetty just opposite where Scandia/Wild Thing normally has berthed.

If the daily flushing of the harbour is greatly reduced by the proposed pier and Marina development in front of Scout Beach, then our water will no longer be fit for swimmers, or fish life.Look at what has happened at Sandringham Marina.

Feral Pacific starfish – those five-legged orange ones, love calm water. If the harbour becomes a Marina, there will be

numerous places for these starfish to breed and collect together. They will eat the small shellfish which are normally food for the fish and squid that those patient people on the pier and Fishermans Jetty love to catch. Besides, since when do fish like dirty, oily water?

Seaweed at times builds up on beaches and can lie rotting if not flushed away and will generate nasty smells in addition to the fuel and exhaust smells of motor cruisers.

Sand build up in the harbour caused by reduced water circulation will increase. Increased dredging will be required. We have already seen the small dredge pumping out dark sand and seaweed onto Mothers Beach last summer. The earlier attempts to dredge with a big dredge stopped when it sank on New Year's Eve. It was placed in the Mornington Yacht Club's yard where it leaked oil, which was washed by rain across the pedestrian walkway and into the Inner Harbour. After much leakage and many approaches to Council, the Mornington Yacht Club, and the Environment Protection Authority the dredge was eventually removed.

With the proposed 170 berth Marina, more cars will try to park –many unsuccessfully trawling the precinct for a vacant car park, further affecting the atmosphere.

How will the Mornington Yacht Club ensure that their proposed Marina will not damage our harbour environment? Do we need a Marina and its pollution?

After all, Martha Cove Harbour is built and is two-thirds unoccupied.

If you don't want the Marina with its potential problems, have your say.

Simple submission forms are available at Mornington Peninsula Shire offices, and from the Council's website; - www.mornpen.vic.gov.au.

Submissions must be sent to reach Planning Panels Victoria by 5 July 2010.

Sent to papers on 13th of May

HERE WE GO AGAIN

Do we have to have a white elephant marina in Mornington?

Despite having failed twice before, Mornington Yacht Club, through its private company Mornington Boat Haven Ltd. is again trying to take over and privatize our public water and land in Mornington Harbour to build a private marina with very expensive berthing.

Planning Amendments are required to re-zone the waters so that a private pleasure boat facility can be built. This pleasure boat facility replaces the two so-called " Safe Harbours" of earlier applications, both rejected by previous governments.

President of Mornington Environment Association, Jan Oliver said today

"Someone must think they will benefit from putting an additional jetty, floating pontoons for 170 private berths. 12 swing moorings, 8 fore and aft moorings as well as berths for emergency and short term boats, two huge wave-screen concrete walls, diesel and petrol storage tanks, a floating re-fuelling and sewage pump-out facility and a large travel lift into our iconic, loved harbour area.

The community and tourists, the beach goers at Mothers Beach and other neighbouring beaches will certainly **not** benefit."

"Over the last two seasons, on average, only 40 swing moorings out of a total of 60 available swing moorings in Mornington Harbour have been occupied. So where are all the extra boats coming from to fill the expensive proposed marina? Will they be motor boats with more noise, more oil leaks and exhaust fumes?

It is inevitable that there will be increased pollution as water circulation will be restricted by the full depth massive concrete wave screens. Dredging of Mothers Beach and near the Yacht Club will have to be continuous, as sand eroded from Shire Hall Beach accumulates at Scout and Mothers Beaches.

We already have a huge marina at Martha Cove Harbour, with barely one third of the 352 available berths occupied, and apparently, that development is in deep financial trouble. Mornington yachts have previously used Martha Cove Harbour for safe haven in recent storms.

Do we need a huge white elephant ruining our Mornington water, views and beaches?

We urge everyone to view the displays at the Mornington Shire offices in Mornington, Hastings and Rosebud, and read on-line at www.nomarina.org.au . Submissions need to be completed by July 5th to Planning Panels Victoria – Mornington Safe Harbour Project, PGPO Box 2392 Melbourne 3001.

Inquiries Franz 0407 572089

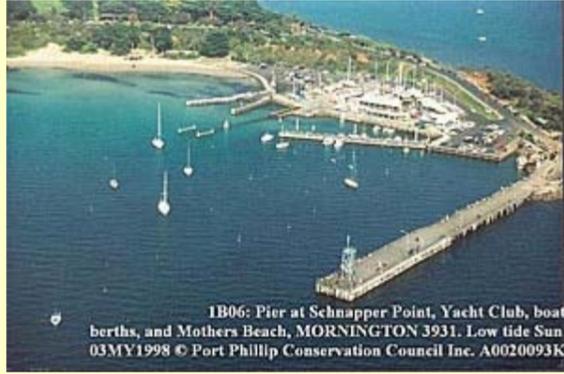
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Existing Harbour

[Click Image For An Enlarged View](#)



Proposed Marina

[Click Image For An Enlarged View](#)

The Mornington Yacht Club, through its private company- Mornington Boat Haven Ltd.- is proposing a large marina for 210 boats in Mornington Harbour. The proposal says it will include a 210m long concrete wave screen wall, rising 4m above high tide and buried at the base in the seabed.

A much loved community space will become a private restricted recreational facility for the benefit of a few.

THE LIKELY NEGATIVE IMPACTS include:

1. Loss of Amenity:

- Views obstructed and cluttered
- Visual surroundings and atmosphere totally altered
- Alteration to a Heritage Place – Mornington Pier.

2. Adverse Environmental Impacts:

- Sand migration (eg. as at Blairgowrie & Sandringham)
- Water quality – fuel/lubricants (marina will be used by motorboats)
- Restricted sea water currents contributing to seaweed and pollutants building up, and interference with marine life.

3. Degradation of Mothers Beach:

- Mothers Beach no longer a safe or pleasant swimming beach due to increased sand accumulation; increased number of boats; and increased water pollution
- Views of the Bay obstructed by the massive concrete wave screen wall.

4. Traffic / Parking Congestion will increase.

Who will Pay? We already have a huge, largely unoccupied marina at Martha Cove Harbour. Do we want a white elephant at Mornington? Will our taxes be used to maintain a failed marina?

Mornington Boat Haven Ltd. proposes:

1. Getting planning permission to re-zone the Mornington Harbour area.
2. Using the public water and land at the Harbour for a private Pleasure Boat Facility-that is , a Marina.
3. Building two wave screens and associated pens and infrastructure for a 170 berth marina.
4. Upgrade existing facilities at the Mornington Yacht Club.
5. Building a new jetty.
6. In association with Parks Victoria, extend the historic Mornington Pier.
7. Re-arranging the car parking to cater for the planned increase in motor cars.



The Arial Photograph Of The Marina With The Proposed Changes Shown In Colour

[Click Image For An Enlarged View](#)



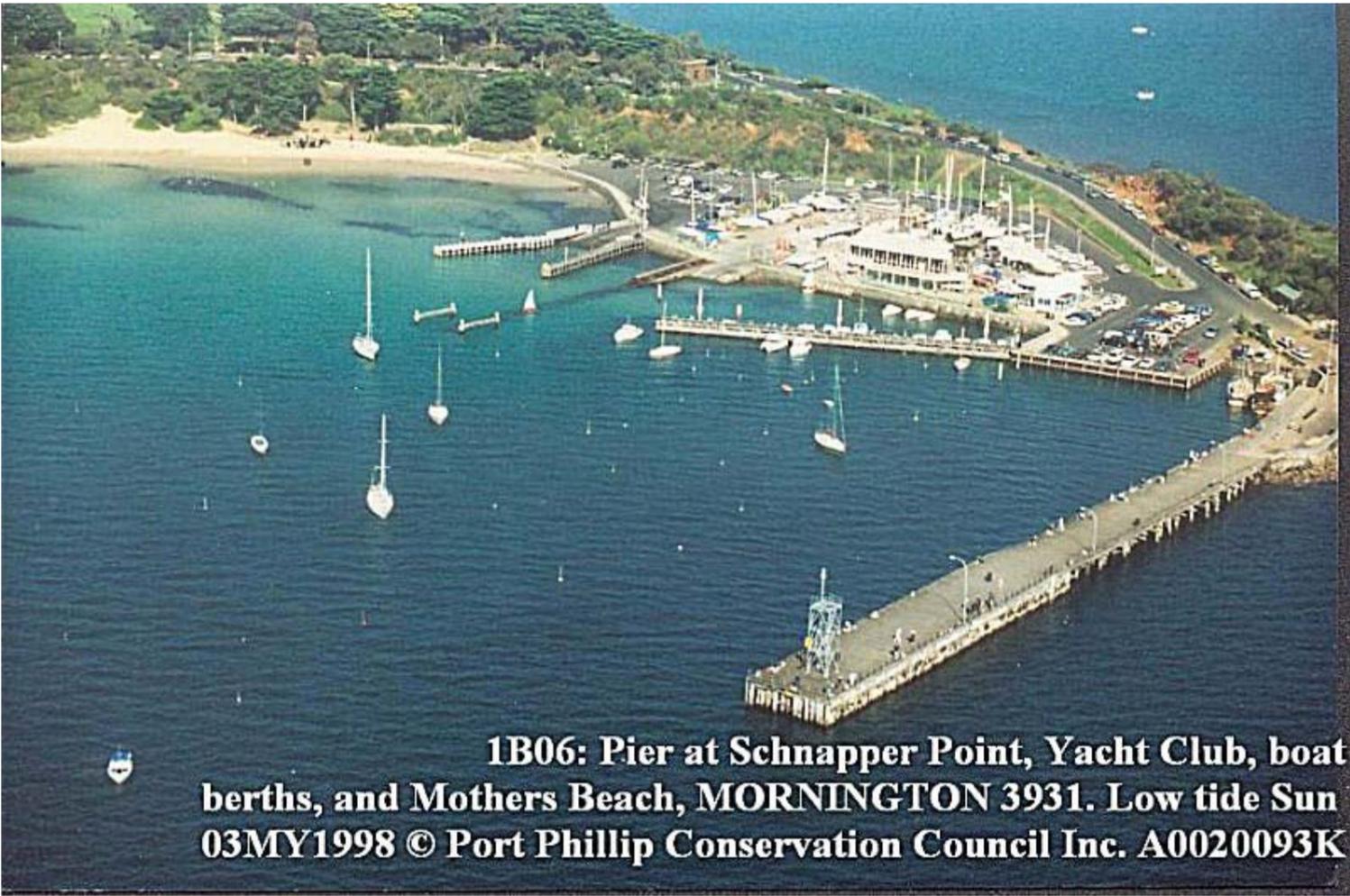
The Drawing Of The Marina Showing The Contours Of The Bay And Other Relevant Information

[Click Image For An Enlarged View](#)

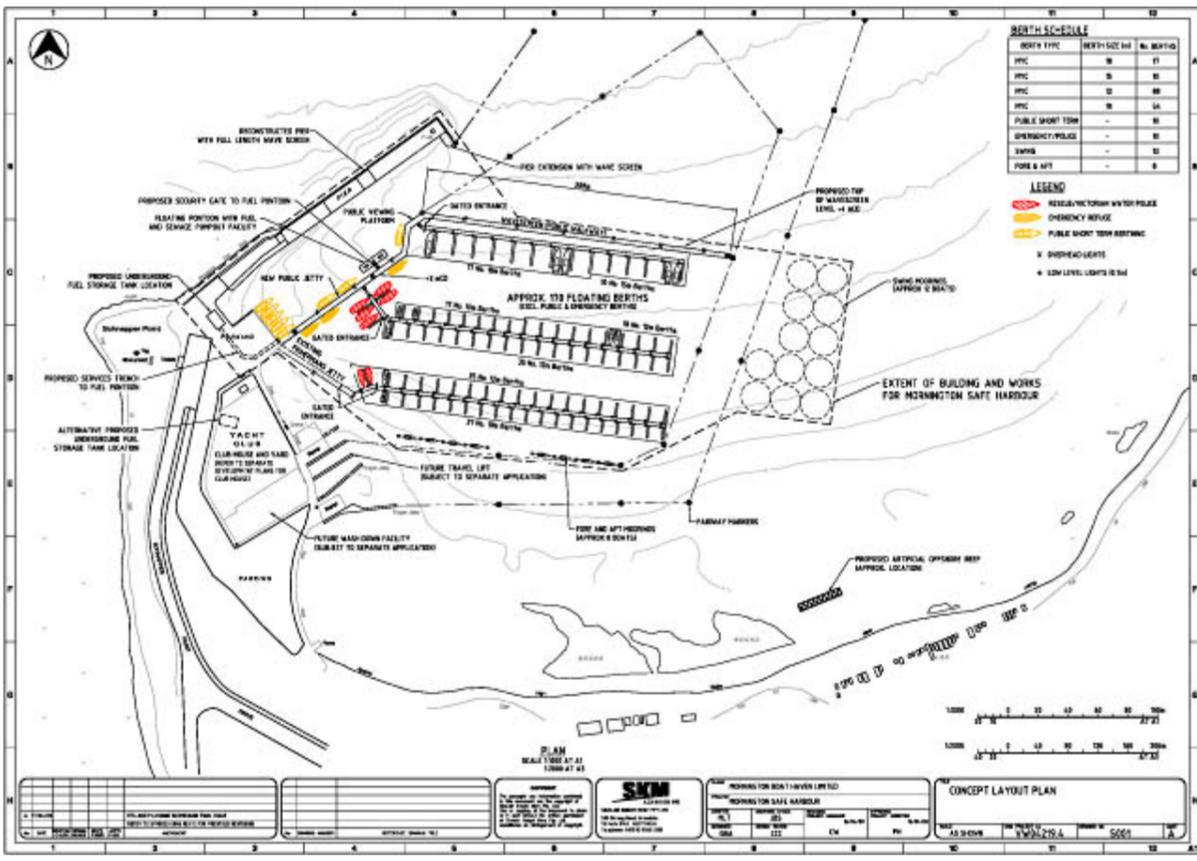
For details of the Proposal, Click on "Proposal" in Navigation bar above.

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1B06: Pier at Schnapper Point, Yacht Club, boat berths, and Mothers Beach, MORNINGTON 3931. Low tide Sun 03MY1998 © Port Phillip Conservation Council Inc. A0020093K





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Our main concerns:

The Mornington Yacht Club is proposing a large marina for 210 boats in Mornington Harbour. It will include a 210m long concrete wave screen wall, rising 4m above high tide and buried at the base in the seabed.

MORE DETAILS OF THE PROPOSAL are available at:

- Mornington Peninsula Shire display, Queen St. Office, Mornington
- http://www.mornpen.vic.gov.au/Page/page.asp?Page_Id=565&h=0
- www.nomarina.org.au
- Mornington Environment Association (MEA) stalls in Mornington Main St.

THE LIKELY NEGATIVE IMPACTS include:

1. Loss of Amenity:

- Views obstructed and cluttered
- Visual surroundings and atmosphere totally altered
- Alteration to a Heritage Place – Mornington Pier.

A much loved community space will become a private restricted recreational facility for the benefit of a few.

2. Adverse Environmental Impacts:

- Sand migration (eg.as at Blairgowrie & Sandringham)
- Water quality – fuel/lubricants (marina will be used by motorboats)
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3. Degradation of Mothers Beach:

- Mothers Beach no longer a safe or pleasant swimming beach due to increased sand accumulation; increased number of boats; and increased water pollution
- Views of the Bay obstructed by the massive concrete wave screen wall.

4. Traffic / Parking Congestion will increase.

Who will Pay? We already have a huge, largely unoccupied marina at Martha Cove Harbour. Do we want a white elephant at Mornington? Will our taxes be used to maintain a failed marina?

HAVE YOUR SAY BY WRITING before 5th July TO:

Planning Panels Vic – Mornington Safe Harbour Project, GPO Box 2392 Melbourne 3001.

You can also write to:

- Hon. Justin Madden – State Minister for Planning, Level 17, 8 Nicholson St, East Melbourne 3002
- Cr. Bev Colomb – Mornington Shire Council, Private Bag 1000 Rosebud 3939
- Mr. David Morris – State Member for Mornington, PO Box 2000, Mornington, 3931
- Dr Michael Kennedy – CEO Mornington Peninsula Shire, Private Bag 1000, Rosebud 3939

*A Marina has been twice rejected by previous State Governments.....
nothing has changed. Mornington Harbour is not the place for a Marina.*

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2. WHAT IS THERE NOW?

The Mornington Harbour covers 4.2 hectares flanked by the Foreshore and the Pier. The Harbour currently can accommodate about 60 swing moorings. On average, about 40 swing moorings have been in use the last couple of years. In addition, there are 35 berths available along Fisherman's Jetty and another 8 along the seawall outside the Mornington Yacht Club (MYC).

The Schnapper Point Precinct includes the Harbour, the historic Mornington Pier, Mornington Park, headlands of Schnapper Point and Red Bluff and the related foreshores extending up to the Esplanade.



Mothers Beach

This work was carried out to accommodate a large area to be leased to the Mornington Yacht Club near the Historic Pier, new twin public boat ramps, a public slipway, access roads leading to parking for 37 cars with boat trailers, as well as parking for the Volunteer Coast Guard/ Emergency Services, and also parking for 64 other vehicles, including 4 for the disabled and one loading zone. These works completely altered the original harbour precinct with its original 1850s jetties.

Mornington Yacht Club currently has 4 dedicated berths at Fishermans Jetty, and operates on the leased land with an office, club facilities, hard stand boat storage yard which incorporates the public slipway, a private ramp for launching and retrieving trailer boats, two electric cranes for lifting boats from the Inner Harbour onto trailers, a low-level platform with finger jetty for disabled sailing.



Electric Cranes For Lifting Boats



Private Ramp For Launching And Retrieving Trailer Boats



Public Slipway



Platform With Finger Jetty For Disabled Sailing

MYC now controls the 60 swing moorings potentially available in Mornington Harbour on behalf of Parks Victoria .

Development in 1965 /1966 entailed:

- a major re-development of the original harbour precinct which was driven by the Mornington Yacht Club since the mid-1950's. This culminated in the mid-1960's with approval for a plan which involved construction of a seawall extending from Mothers Beach to the Historic Pier,
- placing and levelling of fill behind this seawall and asphaltting of the whole area, including the land now leased by the Mornington Yacht Club,
- construction of twin public launching ramps for trailer boats,
- associated access roads and parking for 37 vehicles with boat trailers, and also another 64 motor vehicles,
- building Mornington Yacht Club clubhouse,
- public slipway and associated dolphins,
- private launching ramp.
- Since then two electric cranes have also been installed on the seawall to lift smaller keel-boats from the Inner Harbour onto trailers for storage in the yard,

The club building was refurbished in 2001, including a new control tower and development of 'The Rocks' restaurant as a separately leased business.

A platform and finger jetty to facilitate sailing by disabled people was also constructed later in the Inner Harbour, adjacent to the seawall outside the Mornington Yacht Club.

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4. HISTORY OF MARINA PROPOSALS

HOW OFTEN HAS THE MORNINGTON YACHT CLUB PROPOSED CHANGES TO THE PUBLIC HARBOUR?

Since 1965, Mornington Yacht Club has applied 3 times to alter the existing mooring arrangements in the Mornington Harbour. The two earlier proposals (1987 and 1990, as follows) were both rejected by the State government due to the potential issues of flushing, water quality and impacts on the local beaches.



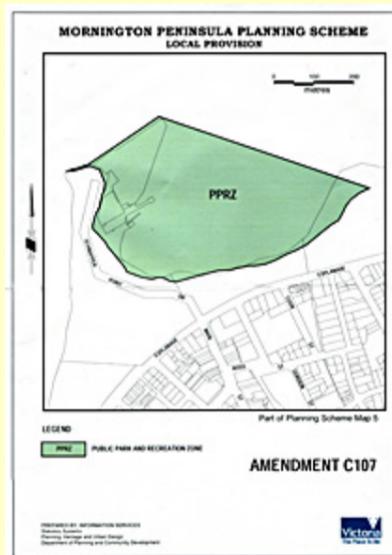
MorningtonYacht Club's Three Marina Proposals-1987, 1990 And Present Proposal (2004 Version). Photo From The Mornington Peninsula Leader-10 November 2004.

1. 1987. A feasibility Study identified the need for a 'safe boat haven', involving the development of a 300m long rock breakwater.

2. 1990. The Mornington Boating Facilities Study and Environment Effects Statement (EES) concluded that the Harbour was the most appropriate location for a 'safe boat harbour' – after considering various options, including a rock breakwater along the outside of the pier and at right angles to the Pier into the harbour. In 1993 an Independent Panel reviewed the 1990 documents and in principle supported a modified breakwater. But, in May 1994 the then Minister for Planning (Robert MacClellan) concluded, following further advice from experts, that a marina at Mornington harbour was not appropriate and that any proposed marina for Mornington should be located outside the harbour.

3. In November, 2004. Mornington Yacht Club lodged its third proposal for a marina in Mornington Harbour, after engineering consultants Sinclair Knight Mertz (SKM) completed a report on its Maritime Engineering Feasibility Study on behalf of the Mornington Safe Boat Haven Limited (MSBH), this time using wave screens – i.e. they proposed a marina – "**Just like the one at Blairgowrie**"- rather than a rock breakwater.

- In 2005 the Minister for Planning determined a limited EES was required for the proposed marina and issued preliminary EES Guidelines for public comment. Significantly more comprehensive and demanding Guidelines for the EES were subsequently issued by the Minister for Planning in May 2006. Consultants Sinclair Knight Mertz (SKM) prepared the EES Report including expert (technical) reports.
- In January 2009, the Mornington Peninsula Shire Council issued a Planning Permit to Parks Victoria for the reconstruction of the centre section of the historic Pier and the development of associated wave protection works for the Pier, as had been determined at public community meetings (including Mornington Yacht Club) in February 2002.
- At the end of 2009, Mornington Peninsula Shire Council voted to apply to the Minister for Planning for his authorisation to prepare for public exhibition and community comment, Planning Amendment C107, which would privatize the public waters of the Harbour for use as a private Marina, as listed above.

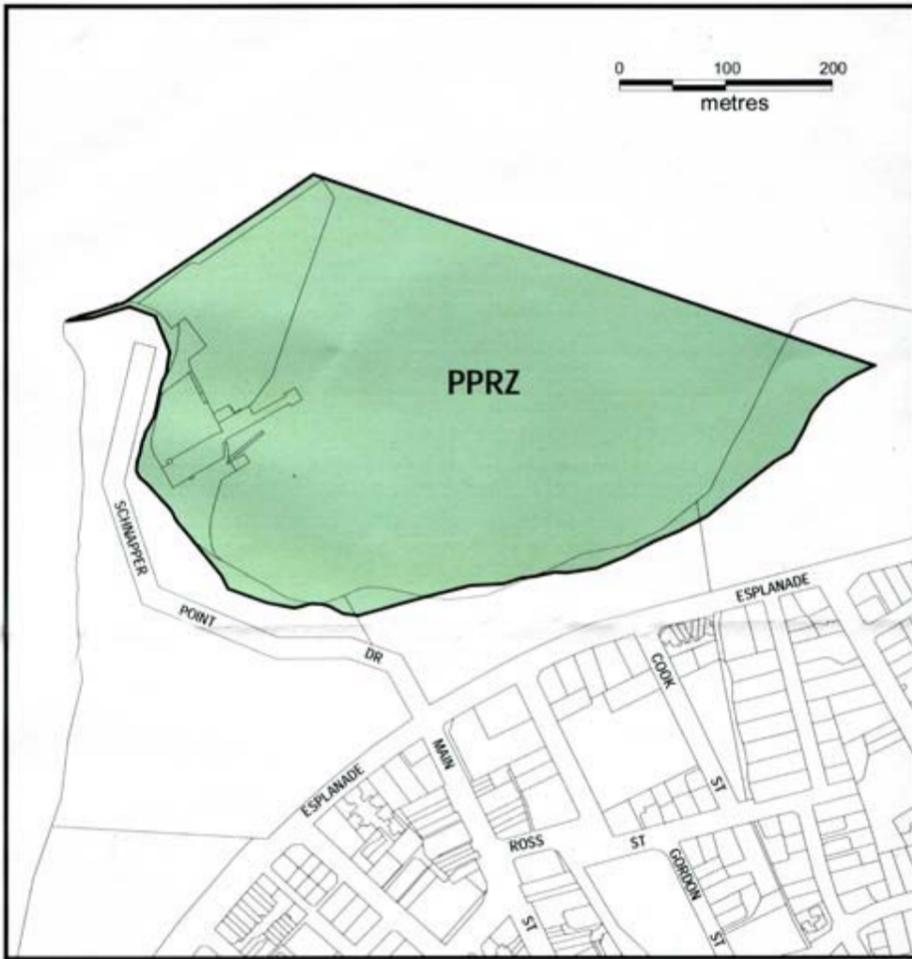
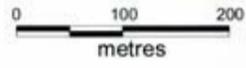


Amendment C107

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**MORNINGTON PENINSULA PLANNING SCHEME
LOCAL PROVISION**



Part of Planning Scheme Map 5

LEGEND

PPRZ PUBLIC PARK AND RECREATION ZONE

AMENDMENT C107

PREPARED BY: INFORMATION SERVICES
Statutory Systems
Planning, Heritage and Urban Design
Department of Planning and Community Development





Leads to 10/1/04



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9. WHAT IT WILL COST

Parks Victoria provided \$375, 000 of public money to assist the Mornington Yacht Club in the preparation of the EES. It is understood that Mornington Yacht Club members provided much of the rest of the fees. Total cost of the proposals as outlined below, has never been revealed. But.....

The cost of just one wave screen in 3.5 metres depth of water was estimated by *Coastal Engineering Solutions* in 2009, as \$1 million plus.

It appears likely therefore that the current proposals for Mornington Harbour will all together cost many millions of dollars.

In the 22 October 2004 "*Maritime Engineering Feasibility Study Report*", SKM presented indicative costs per berth for a Floating Marina and Wave screen (Table 5.2).

With a 250m long wave screen along the 7.0m depth contour and 200 berths the estimated cost was \$68,750 per berth, or a total of **\$13.75 MILLION** at May, 2004 rates- **not including** :

- Cost of the onshore works-e.g. travel lift and access jetty.
- Cost of the breakwater or wave screen along the seaward side of the Mornington Pier for its protection.
- Cost of additional length of wave screen to the end of the Pier and extension of the Pier for protection of the Marina.
- Cost of underground fuel storage tanks.
- Cost of floating pontoon sewage pump-out and refuelling facility, and pipelines to the floating pontoon for fuel supply and sewage disposal.
- Cost of the travel lift itself, cost of constructing the launch and retrieval basin for the travel lift, which is likely to require sheet-piling, as well as dredging and disposal of 1600 cubic metres of materials, and possibly on-going maintenance dredging, construction of suitably reinforced hard-stand area for the travel lift.
- Cost of future wash-down facility, and connections to a suitable disposal system- probably the pumped rising main sewer already taking waste water away from the harbour precinct. Careful sealing of all construction joints of the wash down area to ensure that contaminants washed by pressure hose from the boats will not enter the substrate, and hence contaminate the waters in the harbour.
- Cost of future clubhouse and yard re-development proposed by Mornington Yacht Club.
- Ongoing costs of maintenance of infrastructure, moorings, access ways and dredging of the beaches and harbour.

The sale of the individual berths within the marina will presumably have to cover the costs of building, ongoing maintenance and associated infrastructure works – berths are likely to cost at least \$10,000 to \$12,000 per metre length of berth (as at Blairgowrie Marina-2007).

This means for instance, that a berth for a 15m yacht may cost \$150,000 to \$180,000. In addition, there are likely to be annual body corporate charges and annual fees for maintenance, etc. as at other marinas.

For instance, for a 15m berth at Martha Cove Harbour the quoted commercial costs (June 2009) were \$198,000 (\$13,200/m length of berth) upfront for a 20 year lease with a one-off tunnel levy fee of \$1000 and annual fee of \$4093 for the first year's operating charges, and an administration fee of \$100. Another indication of likely costs of marina berths is the sale at auction of a 10m freehold berth at Martha Cove Harbour on 25 October 2008 for \$225,000.

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5. WHAT IS HAPPENING IN 2010?

In August 2010, Mornington Peninsula Shire Council requested the Minister for Planning, Justin Madden, to appoint a Panel to consider the submissions to Mornington Peninsula Planning Scheme Amendment C107 and Planning Permit Application CP09/005.

This amendment involves the rezoning of Mornington Harbour from:

The amendment would rezone the land from a Public Conservation and Resource Zone (PCRZ) to a Public Park and Recreation Zone (PPRZ).

The current zoning, PCRZ, is focused on conserving and protecting the natural environment and resources of the Harbour.

The Marina Proposal is prohibited under the PCRZ because the marina is a private one, which cannot use public water and space for a private facility owned, operated and used by members of a sailing club.

Therefore Amendment C107 must be approved for a marina to even be considered.

The Mornington Peninsula Shire Council, as the Public Land Manager for the Mornington Foreshore Reserve, also agreed to consider the Planning Permit Application for the Marina (CP05/005) concurrently with the preparation of Amendment C107.

Submissions were called about the Proposals in May 2010, and 2017 were received by Panels Victoria and the Shire, a record number for a project of this type. About half are in favour of the proposal and half are against. However, many of those expressing approval of a 'safe harbour' in Mornington were on form letters and did not provide details or reasons. Many of those 'against' the proposal for both the rezoning and the marina provided detailed arguments. They are available now for public inspection at the offices of the Mornington Peninsula Shire, Vancouver St, and Mornington.

All of these are being read by the Panel members. 40 individuals or groups are timetabled to appear at the Panel Hearing in February 2011.

How did the public learn about the proposals for Mornington Harbour?

There was a **public exhibition** of these proposals at the Shire offices in Mornington, Rosebud and Hastings, from May 20 until July 5 2010. The documents included:

- An Environmental Effects Statement (EES) prepared by Sinclair Knight Mertz (SKM) for Mornington Boat Haven Ltd. (MBHL) and exhibited by the Minister for Planning.
- A rezoning of the harbour area (Planning Scheme Amendment C107) and a Planning Permit Application for a Pleasure Boat Facility (CP09/005) – exhibited by Mornington Peninsula Shire.
- A draft Planning Permit (CP09/005) - this is included as part of the exhibition by the Shire, to enable community input in potential planning permit conditions. Council run **information sessions** in Mornington and these were attended by the public, the proponent (Mornington Boathaven Ltd, and MEA representatives.

MEA and Boathaven both provided **information stalls** in the Main Street of Mornington for up to 6 weeks. MEA's stall operated during shopping hours for 3 days a week and representatives handed out brochures, explained the proposals and drew attention to the Display stand. The display included photographs of the proposal, and other marinas around Port Phillip Bay including Hampton, Sandringham and Blairgowrie. The previous application – refused by the state government in the early 1990 was also explained. In addition, the large marina at Martha Cove, 11 kms. down the coast was explained to provide an alternative to developing a marina in Mornington Harbour.

MEA also **letter boxed** the brochure to hundreds of residential properties between Mt Eliza and Mt Martha, and the leaflets and the Shire's Submission form (asking approval or refusal) were provided to several cooperative shop keepers in Mornington. Leaflets were also handed out and another display mounted at the Mornington Pier on 6 weekends during May-July.

MEA also obtained numerous technical documents to review and utilize in our **Submission** to the Panels. Our speakers have addressed service clubs, university students and responded to many individual requests for information. Media releases and media interviews were also important in getting our environmental concerns across to the community.

Banners and placards were placed in visible spots and local residential properties though some were illegally removed.



Two members of the public even climbed the Schnapper Point memorial to place a 'no marina' banner!

A public rally – the only public meeting – was held on Saturday July 3rd on Mothers Beach, Mornington. Chaired by Jenny Warfe, of Blue Wedge, this attracted hundreds of objectors and the media and raised awareness of the whole project. Speakers included Jan Oliver, President of MEA who outlined the project and its impact on the harbour and local beaches, Samantha Dunn, Greens Candidate, who spoke on the impacts and environmental consequences if the project went ahead, and two parliamentarians – local MP, David Morris, and local Upper House parliamentarian, Edward O'Donohue. Local ecologist Gidga Walker explained likely changes to the coastal systems. The rally concluded with an impassioned plea from the Sea Scouts – who would be unable to continue their 70 years of sailing and training in the Harbour if the marina was built. More submissions written at this rally were sent into the Panel.



Objectors, wearing red, considered the proposal at the rally, chaired by Jenny Warfe, of Blue Wedge.



Speakers on Mothers Beach included Samantha Dunn, Greens Candidate for Mornington, who explained the implications of changing the zoning.

Local MP (Liberal member for Mornington David Morris, sent out a questionnaire "Mornington Harbour Tell me what you think?" to every voter resident in the Mornington area. His analysis of the replies indicates that, of 773 replies to the Question "Do you support the Mornington Boat Haven Ltd proposal? " there were 548 'No' responses and yes 225 so local opinion was very against.

The Shire Council has not yet made a decision to support or not support Amendment C107 and Planning permit Application CP09/005 and can wait until the Panel is concluded. If Council eventually votes against the re-zoning (C107), then the marina cannot proceed. However, the Minister for Planning can make an individual decision, ignoring the advice of the Panel Inquiry, his department and the Department of Sustainability and Environment. Council officers are presenting further comments to the councillors in October, and MEA appeared in front of the Council in July 2010 to present the conservation case.

What is a Panel?

The panel consists of members, Chair Mr. Nicholas Wimbush, and Mr. Chris Harty and Mr Robert Johnson. Their role is to consider the submissions to the EES and advise the Minister for Planning of its potential environmental effects. A public hearing will be held, at which submitters appear; some parties will be legally represented. 40 submitters have asked to be heard, including the proponent (Mornington Boat Haven Ltd, the Shire Council, government departments and Mornington Environment association, representing many individuals and some other groups. Expert witnesses may be called – and can be cross-examined, and have to make preliminary statements available to the Panel. The Panel is also going to make site visits and view the Harbour from a boat (facing towards Mothers Beach). The Panel must report to the Minister for Planning in writing within 6 weeks of the last hearing date.

At a Directions Hearing in August, the Panel identified more than 20 matters they wish to hear details on – these include coastal processes and climate change and sea level rise; design issues such as traffic, parking, the link with Parks Victoria's restoration of the pier, water quality and turbidity, marine ecology, and facilities at other marinas.

What is the timetable for the Hearings?

Originally set down for November 2010, the hearings have now moved to a 3-week time slot commencing on February 1st 2011 in Mornington Council Chambers to allow the various parties to properly prepare their cases and address the issues the Panel has requested. Another Directions Hearing will be held on 12 November to finalise expert witnesses and arrangements.

Further details are available on the Department of Planning and Community Development's web site www.dpcd.vic.gov.au/planning (then go to the Environment Assessment link.)

What is MEA doing now?

MEA is assembling experts and lay witnesses to appear in front of the Panel Inquiry. MEA will also represent many of the individual protestors who made submissions. We are being assisted by two barristers who are working pro-bono (that is, without cost), but we have to pay consultancy fees to at least 2 of our experts.

We have commenced a fund raising campaign and will be very grateful for any support you can give. Go to the menu and utilize the "Like to donate" column.

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3. WHO OWNS THE HARBOUR?

We do! The water and land are currently Crown Land, which means we, the people own them. But, we need to remember that a number of authorities are involved in any consideration of the Harbour.

- **The historic Mornington Pier**, currently being upgraded and extended under a separate Planning change, as well as the smaller Fishermans Jetty, are administered by Parks Victoria.
- **The waters of the Harbour** and swing moorings are managed by Mornington Yacht Club under an agreement with Parks Victoria.
- Three of the 60 swing moorings in Mornington Harbour are leased by members of the public who are not members of the Yacht Club, the remaining 57 Swing moorings are leased by individual MYC members for their boats, which are predominantly sailing yachts.
- The annual fee for leasing a swing mooring in Mornington Harbour is \$66.
- The boat owners are individually responsible for the actual costs of purchasing and placing of anchors, chains, floats, and also ongoing maintenance costs etc. required to establish swing-, and fore-and-aft moorings in the Harbour.
- **The Mornington Yacht Club** leases the land for its boating facilities and 'The Rocks' restaurant, from the Mornington Peninsula Shire Council as managers of the Crown Land around the Harbour.
- **The Shire Council** manages the car parking and beach facilities at Mothers, Shire Hall and Scout Beaches.
- The Shire also owns the smaller finger jetties at the public boat ramp in the Harbour.
- Department of Sustainability and Environment owns the slipway and associated dolphins.
- The Environmental Protection Authority (Victorian Government) can intervene in matters affecting the waters of the Harbour, the foreshores, and beaches that are affected by pollution e.g. oil.

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6. THE MARINA PROPOSAL IN MORE DETAIL



The Aerial Photograph Of The Marina With The Proposed Changes Shown In Colour



The Drawing Of The Marina Showing The Contours Of The Bay And Other Relevant Information

Main details of the Proposal are outlined in the Sinclair Knight Mertz (SKM) EES Technical Papers and in documents provided to the Mornington Peninsula Shire Council.

- **Wave screens** – two wave screens, one for Marina protection and one for protection of the central portion of the Pier, as proposed by Parks Victoria. Mornington Yacht Club, through SKM is proposing to extend the pier wave screen to the end of the Pier with a twenty to thirty metre south-eastward extension of the Pier and a wavescreen to provide extra protection for the Marina.
- **The Harbour wave screen** for the Marina would be east of the Pier, approximately 210m long across the 7 metre depth contour, built to full depth – i.e. driven into the seabed. This will be an impermeable structure of reinforced concrete panels supported on tubular steel piles and concrete crossheads and will extend 4.0 metres ABOVE Chart Datum. It is proposed that it would incorporate a public walkway and viewing platform.

The Pier wave screen would be a north-west facing screen along the entire length of the outside (western side) of the Pier, with an extension of the Pier and wave screen at the end of the Pier extending approximately 20-30 m south east. The Pier wave screen will be a wave return wall with a curved reinforced concrete capping beam. The wave screen drawings from SKM don't give the height of the north-west facing wave screen along the last 57m of the Pier, nor the height of this, or the southeasterly extension of the Pier wavescreen.

- **A new public jetty** is to be built parallel to the existing pier for access to the locked floating pontoon berths.



Blairgowrie Marina- Is A Private Marina . Similar Locked Gates Are Proposed For The Mornington Yacht Club's Private Marina .

- 169 floating marina berths are to be built as pens in a north-south arrangement on the beach side of the wave screen.
- 12 swing moorings are to be located east of the marina (for public moorings) but unprotected by the wave screens or Pier extension.
- 8 fore - and - aft moorings will be provided to the south of the 3rd marina pontoon ie. facing Mothers Beach.

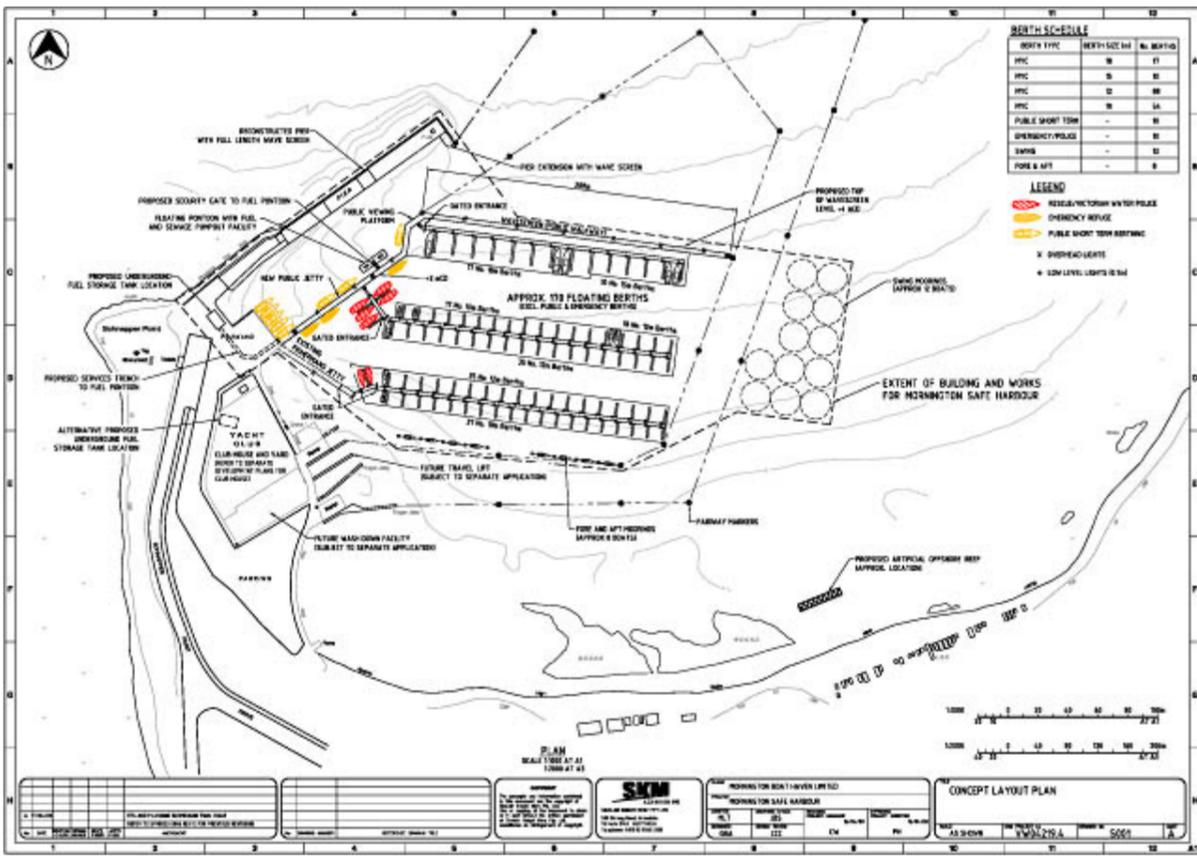


A travel- lift and new wash- down facility within the Mornington Yacht Club leased area will replace the existing public slipway and wash-down facility but no detailed plans are yet available..This is stated to require dredging of about 1600 cubic metres of materials to provide sufficiently deep access for larger boats.

- Mornington Yacht Club clubhouse and yard are to be upgraded and refurbished, but no detailed plans are yet available..
- A floating pontoon with public sewage pump out and refuelling facilities, which are eventually to be connected to the existing sewerage system, and proposed underground fuel storage tanks, respectively.
- Within Mornington Yacht Club's lease area, underground fuel storage is proposed for 30, 000 litres of fuel.
- An artificial offshore reef off Shire Hall Beach, may be constructed to reduce sand movement into the harbour.

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BERTH SCHEDULE

BERTH TYPE	BERTH SIZE (M)	NO. BERTHS
PRC	18	17
PRC	25	12
PRC	32	10
PRC	35	14
PUBLIC SHORT TERM	-	12
EMERGENCY POLICE	-	12
EMPS	-	12
POSS & APT	-	8

- LEGEND**
- REGULATORY WATER POLICE
 - EMERGENCY REFUGE
 - PUBLIC SHORT TERM BERTHING
 - X OVERHEAD LIGHTS
 - + LOW LEVEL LIGHTS

PLAN
SCALE 1:500 AT A3

CONCEPT LAYOUT PLAN

DATE: 12/11/13
DRAWN BY: [Name]
CHECKED BY: [Name]
APPROVED BY: [Name]









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7. WHO IS GOING TO BE AFFECTED BY THIS PROPOSED MARINA?

Existing users of the harbour precinct: -

- Those using the beaches and foreshore – family groups, dog walkers and picnickers using Mothers Beach, Shire Hall Beach and Scout Beach .
- Swimmers and paddlers needing pollution-free and safe water which is not being continually dredged or have boats sailing or motoring into it.
- Disabled sailors
- Divers using facilities in and around the Harbour and Pier;
- Recreational fisher people may not be able to access easy fishing spots and may have their favourite spots removed because of fences, gates and new jetty arrangements. Fish life may be disrupted.
- Those boat owners opting not to take up a very expensive berth within the proposed marina will only have the option of choosing between the 8 sheltered fore-and-aft moorings close to shore, and the 12 swing moorings which lie outside the protection of the pier and the proposed marina structures.
- Marine rescue and emergency vessels which are proposed to be located in the inner berths of the proposed marina may be obstructed by boats maneuvering in the proposed marina.
- Commercial fishing boats and dive boats requiring access and safe moorings will have restricted access to the safe parts of the Harbour.
- Visitors needing casual mooring of boats in the harbour – there will only be 10 public short-term berths.
- Boats entering the Harbour from southerly and westerly directions will no longer be able to round the end of the Pier and travel directly towards the public boat ramps, but will have to travel around the outside of the Marina, then on between the Marina and the shoreline. This will be extremely hazardous during stormy northerly to westerly weather as boats will be travelling broadside-on to waves approaching the beaches, with severe risk of being overturned.
- The residents with properties facing the Harbour and with views across the beaches and Harbour will be faced with views of a 4m. high concrete wall running across the Harbour, with massed boats in pens, rather than the picturesque scene of yachts swinging freely in unison on swing moorings, as above.
- Boat owners who cannot afford Marina costs and who will be forced to use the exposed swing moorings proposed to be provided east of the Marina, rather than have a choice of the less exposed swing moorings currently available;
- The boats berthed in pens alongside the pontoon nearest the Marina wave screen (the first to be built) may be subject to wave bashing from waves overtopping the wavescreen during severe northerly storms.
It is understood that refuelling pumps will be placed on the Pier side of the proposed new public jetty on a pontoon – which means many visiting motor boats as well as yachts from the Marina will fill up there and this could lead to increased risks of spills as well as increased fuel slicks and fumes.
Beachgoers needing shade and clean sand will be faced with walls of reinforced concrete rising up to 4m above sea-level, and a mass of moored boats blotting out their views to the north.

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Blairgowrie Wave Screen. Estimated To Be About One Metre Lower Than The Wave Screen Proposed For Mornington Yacht Club's Marina. The Public Walkway Proposed For Mornington's Wave Screen Would Appear To Be Located About Head Height On The People In This Photo.



Blairgowrie Marina . Back Of Wave Screen And Reinforced Concrete Crossheads On Which Mornington Yacht Club Proposes To Provide A Public Walkway. There Will Be Issues Of Public Safety, Duty Of Care And Public Liability, Particularly During Storms, If This Is Approved.

- If the proposed marina goes ahead, a much loved community space will be replaced by a restricted recreational facility for the benefit of a few.



Scuba Divers Kitting Up At Mornington Harbour.



Scuba Divers At Mornington Harbour- A Very Popular Dive Location.



Mornington Harbour With Scuba Divers, Commercial Fishing Boats, Anglers On The Seawall, Spectators, Visitors And Walkers.

2.0-ENVIRONMENTAL IMPACTS

2.1 SAND MOVEMENT

Natural movements see North winds push sand from Shire Hall Beach south towards Scout and Mothers Beaches in the winter and in the summer south-westerlies move the sand back north towards Shire Hall Beach. If the Marina goes ahead, this natural process will be interrupted and, predictably result in sand gradually accumulating inshore of the proposed concrete wave screen walls that will be driven into the sea bed, and thus reduce water circulation.

The consequences will be sand accretion at Mothers and Scout Beaches, with sand depletion at Shire Hall Beach. The profile of Mills Beach may well be affected too.

The examples of the Marinas at Blairgowrie, Sandringham and St. Kilda Harbour which show what can happen over time, must be heeded.



February 2008- Panoramic View Of Blairgowrie Marina- Accumulated Sand Has Invaded The Sheltered Waters, And Developed Into A Large Sand-Spit.



Sand Has Been Stripped Off Hampton Beach And Moved Along-Shore To Sandringham Marina, Where It Has Formed Large Tidal Flats, Replacing What Was Sandringham Beach And Moving The Shoreline Some 200 Meters Northwards Since About 1970.



Southern End Of Hampton Beach At Sandringham Showing Protective Rock Beaching To Control Erosion Of The Shoreline Caused By Development Of Sandringham Marina, Which Is Very Similar To Mornington Harbour In Shape And Size.



Brighton Marina With Rotting, Smelly Seaweed Deposited On Southern Flank Of The Sandspit Which Has Formed There Over The Years.



Brighton Marina- Large Seaweed-Covered Tidal Flats Formed Over The Years On The Northern Side Of The Sandspit By Sand Trapped Within The Marina Due To Reduced Water Circulation. Rock Beaching Has Been Placed Along The Shoreline To Protect Adjoining Properties From Erosion.



Aerial View Of Shore Line At Brighton Marina On Real Estate Bill-Board Showing Accumulated Sand Deposited To Form A Very Large And Intrusive Sand Spit.



Enormous Volumes Of Sand Have Accumulated Over The Years At St. Kilda Harbour After The Large Rock Breakwater Was Constructed In The 1950'S. Since That Time There Has Been A Constant Issue Of Seaweed Accumulating And Rotting, Stinking Seaweed. Below The Immediate Surface The Sand Is Dark Grey And Stinks Because Of The Anaerobic Conditions.

2.2 DREDGING

- During the mid-1960's a seawall was built at Mornington, extending from Mothers Beach to Fishermans Jetty to allow land filling for development of car-and-trailer parking at the new public boat ramps, as well as the Mornington Yacht Club's leased area containing club building, hard-stand yard, a public slip-way and wash-down area, etc.



Panoramic View Of Mornington Harbour -26 December 2009 Showing The Seawall Built Mid-1960'S From Mothers Beach To The Mornington Pier, Boat- And- Trailer Carpark, Mornington Yacht Club's Yard Filled By A Variety Of Boats On Trailers, Yacht Club Building, 'The Rocks' Restaurant And Control Tower, Public Launching Ramps, Inner Harbour, Fishermans Jetty And Historic Pier With Anglers And Sight-Seers. Also A Number Of Yachts In The Harbour On Their Swing Moorings.

- As a consequence, sand gradually accumulated at the southern end of Mothers Beach and off-shore to the extent that dredging was carried out about 8 years ago to ensure boats could continue using the boat ramps.
- Again, more sand has accumulated and a dredge arrived late in December 2009. It commenced dredging sand and seaweed from in front of the boat ramps onto the southern end of Mothers Beach between Christmas and New Year.



Dredge Set Up Off Public Boat Ramps At Mornington, 29/12/2009



Dredge Pipeline Set Up To Discharge Sand And Seaweed Onto Mothers Beach.



People Enjoying Mothers Beach, Wading, Swimming, Picnicking, Having A Game Of Beach Cricket. Their Enjoyment Spoiled To Some Degree By The Grey, Smelly Sand And Seaweed Dredged From The Harbour And Dumped Onshore- 30/12/2009.

- The dredge sank New Years Eve during wild weather. It was salvaged and stored in the Yacht Club's yard, near the pedestrian walkway and seawall. It was left there, continuously leaking oil for almost three weeks before it was finally

removed. The oil had by then run out of the yard and across the pedestrian walkway, before it was washed into the harbour by rain during the night of 18 January 2010. The dredge was removed shortly afterwards.



12/01/2010-7.36 A.M. - Replacement Dredge 'Lewinski' Tied Up Alongside The Slipway At Mornington

- A replacement dredge-the "Lewinski" was then brought in, but did little work.

Dredging in Sandringham and other marinas in Port Phillip Bay has certainly failed to control the problem of sand accumulation, which is already a demonstrable problem in Mornington Harbour- even before a marina has been built.

2.3 -WATER QUALITY

- Pollution and degradation of the seawater will result because of reduced water circulation caused by the proposed concrete wave-screen walls that will extend down into the sea bed.
- Accumulated sea weed rotting in the shallows will produce anaerobic conditions and a smelly environment.



Sand Has Been Stripped Off Hampton Beach And Moved Along-Shore To Sandringham Marina, Where It Has Formed Large Tidal Flats, Replacing What Was Sandringham Beach And Moving The Shoreline Some 200 Meters Northwards Since About 1970.

A high percentage of the proposed berths will likely be used for power boats- as is the case in most other marinas along the East coast of Port Phillip Bay. Normally only 2 or 3 motor vessels have been observed regularly moored on the swing moorings in Mornington Harbour.



Massed Motor Boats At Blairgowrie Marina With Wave Screen, Pontoon Walkway And Ramp Down From Locked Gateway In Background.



Massed Boats At Blairgowrie Marina Blocking View Of Coastline And Bay To The West.

Power boats leave fuel, exhaust and lubricant residues in the sea water.

- A pontoon is proposed for refuelling and sewage pump-out. Refuelling in itself will attract more power boats into Mornington Harbour, resulting in further water pollution. The risk of leaks and spills from fuel and sewage is unacceptable in such a small harbour, which is also used by so many of the public for many other activities.



Two Examples Of Large Power Boats Visiting Mornington Harbour .

- o Changes in fish population due to night lights and the wave-screens creating different aquatic conditions.
- o Increase in feral population of starfish and weeds due to the protected, reduced circulation of seawater within the marina.

3.0- AMENITY LOSS

- The visual surroundings and atmosphere of the Harbour Precinct will be totally altered.
- Views from the Pier, foreshore and beaches will be obstructed by the 4m high massive concrete wave-screen wall which will stretch across in front of Mothers and Scout Beaches.
- Mornington Harbour today is at the heart of Mornington's identity. Next year Mornington celebrates its 150th. Anniversary of being declared a township- Schnapper Point was Mornington's early name and the Harbour its focus. This unique historic and beautiful natural harbour would be dramatically altered if the proposed Marina should go ahead.



13/12/2009- Mornington Harbour- Kiosk Carpark Filled To Over-Flowing.



13/12/2009-Mornington Harbour- Acces Road To Boat Ramps Filled With Parked Cars. Note The Yacht Club's Storage Yard Is Filled With Various Trailer-Sailers In Dry Berths.

- Mothers Beach will no longer be a safe or pleasant swimming beach due to increased sand accumulation, rotting seaweed, increased number of boats, including many power boats, and increased water pollution.



1/5/2009-Panoramic View Of Blairgowrie Marina At Low Tide, Showing Development Of A Very Large Sandspit Encroaching On The Marina Since Its Completion In 2000. Original High Tide Shore Line Is The Strip Of Pale Sand Just Above The Tops Of The Shrubs In The Foreground. Note The Abundance Of Swing Moorings Available To Either Side Of The Marina- 350 Of Them !



016.JPG- Blairgowrie Marina- 1/5/2009-Washing Accumulated Sand Off The Slipway Rails.

4.0-TRAFFIC CONCERNS

- Already there is traffic and parking congestion in the Harbour Precinct.
- Sinclair Knight Mertz (SKM) estimates that 64 more car spaces are required for the proposed marina. This is a gross under-estimation of requirements, based on the Australian Standard for Design of Marinas, AS 3962-2001. However, they conclude that there is **no** possibility of increased parking availability.
 - Council is proposing 2 hour meter parking to help deal with this problem.
 - SKM proposes a shuttle bus be provided for Yacht Club members on Saturday yacht club race days. It is hard to believe that this is going to be an attractive option for people who want to spend the day on their boats.
 - It is to be noted that a shuttle bus was a condition of the planning permit granted to the Mornington Yacht Club for the development of the "Rocks" restaurant. The Yacht Club later appealed against this condition at V.C.A.T. and won. Hence there has never been a shuttle bus.

5.0 ONGOING MAINTENANCE



Martha Cove Harbour-3/5/2010- Less Than One-Third Of Its 352 Berths Leased. Some 30 Yachts Were Transferred Here From Swing Moorings At Mornington When Owners Heeded Bureau Of Meteorology's Warnings Of A Second Storm In 2008, After They Had Earlier Disregarded The Bureau's Storm Warnings Up To Three Days Prior To The 2 April 2008 Storm Which Dislodged, Smashed And Washed Ashore A Large Number Of Yachts.

If Mornington Boat Haven Ltd. went bust, who becomes responsible? It is understood that with the financial difficulties at the Martha Cove Development, including Martha Cove Harbour, there is the likelihood that the State Government will need to pay for, on a continuing basis, the dredging, pumping and cleaning out of the existing waterways and pens there at high cost to the taxpayer. So Mornington could possibly be faced with similar costs for the public.



042.JPG-2/4/2008-Mornington After The Storm.



040.JPG-2/4/2008-5.55p.M.-Mornington Harbour As The Storm Is Spent And Has Swung More Towards The South-West .Note There Are Still 27 Or 28 Boats Left Safely On Their Swing Moorings ! They Must Either Have Had Better Moorings, Been More Recently Overhauled, Or The Moorings May Have Been Better Laid .Who Knows?



2/4/2008-3.50 P.M.-Martha Cove Harbour During The Peak Of The Storm—DEAD CALM, With An Abundance Of Vacant Berths Waiting To Be Filled !

6.0-DANGER BECAUSE OF MORNINGTON HARBOUR'S LOCATION

Mornington Harbour is located on the south-eastern coastline of Port Phillip Bay, on the up-thrown side of Selwyn Fault which extends from Bass Strait, crosses the lower Mornington Peninsula immediately west of Cape Schanck and then across the Southern Peninsula to enter Port Phillip Bay at McCrae and then it runs close to the east coast past Mt. Martha, Mornington and on to Olivers Hill at Frankston, and then inland in a north-easterly direction towards Hampton Park.

This means that the seabed drops off sharply to about the 8 to 12m depth contours just west of Schnapper Point before the seabed slope becomes more gentle, gradually extending to about 20m below sea level, several kilometres out.

The combination of a sharply rising seabed immediately west off Schnapper Point and the long distances for winds and waves across Port Phillip Bay (Known as the 'Fetch') cause very large waves to arrive at Mornington when strong winds and storms occur.

For instance, 43 km Fetch from Point Lonsdale, SW of Mornington, 30 km Fetch from St. Leonard, approximately W of Mornington, 43 km Fetch from Werribee, NW of Mornington, 46 km Fetch from Hobsons Bay, NNE of Mornington. Also, strong winds and storms arriving at Mornington push the seawater across Port Phillip Bay towards Mornington due to the friction between the wind and seawater, giving rise to storm 'Surges' which may cause sea levels to rise an additional 0.25 to 0.3m above normal tide levels at any one time. As a consequence, the deck of the platform for disabled sailing has several times recently been observed to be awash, and even inundated. This naturally means that Mornington Harbour will NEVER provide a 'Safe Harbour'.

7.0 – CLIMATE CHANGE

Climate change may alter the seawater levels, given the anticipated rise in the decade and longer, possibly requiring further construction to raise the tops of the wavescreens; climate change implications must be considered under State and Council laws and regulations. After all, marinas are not built just for the next ten or twenty years, but many will still

be there for the next fifty to one hundred years.

8.0 ALTERNATIVES

There has been no serious consideration of alternative options to the proposed marina inside Mornington Harbour, including:

- The option of doing nothing
- Leasing a permanent berth at Martha Cove Harbour (where only about one third of the 352 berths available for lease are occupied), whilst still retaining a relatively inexpensive swing mooring at Mornington



Photo Of Martha Cove Harbour

- Temporarily relocating boats to Martha Cove Harbour to one of the 22 already available " Safe Haven" berths there (as a condition of the Martha Cove planning permit) when adverse conditions are forecast by the Bureau of Meteorology. It is understood that Martha Cove Harbour even provided a 'Special Deal' for the Mornington Yacht Club yachts in 2008, for the storm which occurred after the disastrous storm in April 2008.

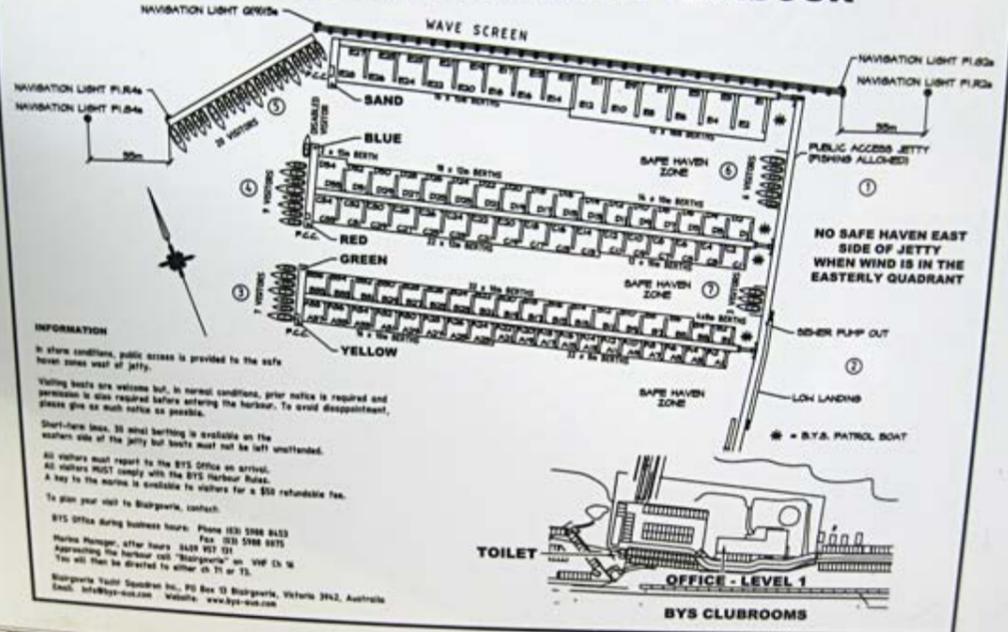
9.0- COUNCIL CONCERNS

- Mornington Shire Council has stated that it was **NOT** involved in the proposals to determine the most satisfactory solution to demands by Mornington Yacht Club- even though it is likely to cop much of the flak if the proposal goes ahead despite all of the anticipated problems. Parks Victoria also did **NOT** engage Council in discussions despite the fact that Council manages the Pier and Harbour waters.
In 2009, Council commissioned **Coastal Engineering Solutions PL**, an independent consultant, to carry out an assessment of some of the **technical aspects** of the Mornington Yacht Club's proposal. They undertook modelling and concluded that:
 - There is potential for siltation on the seaward side of the beaches in the lee of the wave screen walls such as has occurred for more than 50 years at St. Kilda Harbour and Brighton Marina
 - Without sand management, Mothers Beach will accumulate sand at the expense of Shire Hall Beach. Mothers Beach may become wider and the waters shallower, so that swimmers may be in danger of being forced into the path of boats using the public boat launching ramps.
Alternatives to the full marina development proposal were considered – and put to Mornington Peninsula Shire Council by Coastal Engineering Solutions P/L as follows:-
 - A short wavescreen along the Pier, purely for its protection, provides very limited benefit for protecting the public boat ramps. But there is negligible impact on local beaches.
 - A short wave screen improves protection midway between the public boat ramps and the Pier and at Fishermans Jetty, but for about " 10 % of the time" the wave conditions at the ramps will still exceed Australian Standards recommendations.
 - The full wave screen along the Pier improves the usability of the existing ramps, but does not meet Australian Standards. However, a long wave screen will impact on the beaches.
 - If the boat ramps are re-located as proposed, a full-length wave screen will result in reduced wave heights at these locations most of the time.
 - Offshore break structures will result in the same detrimental changes to the beaches, as will the current proposal.
 - A near-shore wave break or wave screen seaward of the boat ramps would need to be 100m long just to provide wave protection for the boat launching ramps and to meet Australian Standards Guidelines. The cost would be in excess of \$1 Million. Mothers Beach would also again be impacted.

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BLAIRGOWRIE SAFE BOAT HARBOUR



INFORMATION

In storm conditions, public access is provided to the safe haven zones west of jetty.

Visiting boats are welcome but, in normal conditions, prior notice is required and permission is also required before entering the harbour. To avoid disappointment, please give as much notice as possible.

Short-term (max. 30) short berthing is available on the eastern side of the jetty but boats must not be left unattended.

All visitors must report to the BYS Office on arrival.

All visitors MUST comply with the BYS Harbour Rules.

A key to the marina is available to visitors for a \$50 refundable fee.

To plan your visit to Blairgowrie, contact:

BYS Office during business hours: Phone (03) 5988 8453
 Marina Manager, after hours 0498 957 031
 Fax (03) 5988 8875

Approaching the harbour call "Blairgowrie" on VHF Ch 16
 You will then be directed to either Ch 11 or 13.

Blairgowrie Yacht Squadron Inc., PO Box 13 Blairgowrie, Victoria 3942, Australia
 Email: info@bys-act.com Website: www.bys-act.com

NO SAFE HAVEN EAST SIDE OF JETTY WHEN WIND IS IN THE EASTERLY QUADRANT

GENERATOR PUMP OUT
 LOCH LANDING
 * = B.Y.S. PATROL BOAT

TOILET
 OFFICE - LEVEL 1
 BYS CLUBROOMS



DIVE AND SWIM SAFELY

Scuba diving & swimming around the Blairgowrie Yacht Squadron

THE INCREASE IN POPULARITY OF SCUBA DIVING & SWIMMING WITHIN BOTH MARINAS & HARBOURS HAS INCREASED THE RISK OF POTENTIAL CONTACT BETWEEN SCUBA DIVERS, SWIMMERS & VESSELS THE BLAIRGOWRIE YACHT SQUADRON CONTAINS BERTHS FOR 170 VESSELS & MANAGES ANOTHER 350 SWING MOORINGS WITHIN THE IMMEDIATE AREA. CONSEQUENTLY THE AREA IN & AROUND THE YACHT SQUADRON EXPERIENCES A HIGH LEVEL OF BOATING TRAFFIC

THEREFORE:

TO ENSURE YOUR PERSONAL SAFETY INDIVIDUALS SHOULD REFRAIN FROM SCUBA DIVING OR SWIMMING IN OR AROUND THE BLAIRGOWRIE SAFE BOAT HARBOUR



Alternative Dive Sites:
Some alternative dive sites within the Local area
PORTSEA HOLE
POPES EYE
POINT NEPEAN
AND THE ROCKY COASTLINE
PORTSEA























17 May



**Last of the big blocks on 1064 sqmt
(11,400sqft) approx**

Literally meters to the beach, this impressive property with a frontage of 109 ft/33.3 mt (approx) offers a stunning opportunity

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WHAT CAN I DO?

You can read the submissions that have come into the Shire – and the State appointed Panel. The submissions are on view at the Mornington Shire office at Mornington on request.

You can approach the Councillors of the Shire and talk to them about the proposal and how you feel about the rezoning, the planned marina, the public benefit – or not, and ascertain how the Councillors will vote.

You can attend the public Council meeting on Monday 18th October at the Council chambers – check time, agenda and venue on the Shire's web page - <http://www.mornpen.vic.gov.au> and hear what the Council officers in the Planning department state about the proposals.

Check agenda the week before 18 October 2010

Special Purposes Committee 5:00 pm Council's Mornington Office. *(to be confirmed)*

Development Assessments Queen Street, Mornington Committee Meeting 7:30 pm. *(to be confirmed)*

You can assist the conservation case by helping us count the sailing boats in the harbour over summer, the numbers of cars parked around the harbour precinct and by keeping yourself informed. Contact us by writing to PO Box 580 Mornington 3931 or telephone 0417 986 077.

You can speak to the local Liberal parliamentarian, Mr David Morris and ensure that he knows your views. Ring 03 59754799 or email David.Morris@parliament.vic.gov.au

You can assist Mornington Environment Association with a donation to help pay for the technical experts we have to put up at the Panel Inquiry in February. Any donations will be very gratefully received. Please follow procedures under the "Like to donate?" menu.

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FRIENDS GROUPS

MEA has overall responsibility for 4 groups of "Friends" in the Mornington area. These include :-

Friends of Dava Drive

newly set up to work with the Mornington Peninsula Shire to implement/develop a garden in the Reserves along Dava Drive and to involve the community in beautifying the whole area. Contact Lucy through our letter box.

Friends of Fishermans Beach

weed, plant and maintain the foreshore area near Fishies on the last Sunday of each month. Contact Peter 59751080.

Friends of Mills Beach

is responsible for the restoration of the Banksia woodland along Mills Beach foreshore, Mornington. This project is funded by the Commonwealth Government and is undertaken with Shire assistance. Contractors clear the woody weeds, then volunteers plant understory shrubs and trees, water, mulch and weed, with working bees every third Sunday. Some of these Friends have also restored the vegetation above the cliff walk. Contact Jan 0417 986 077.

Tanti Creek Friends

has undertaken, with a Melbourne Water grant, major restoration of the banks along Tanti Creek estuary, off Esplanade at Mornington. Working bees are every fourth Sunday. The Friends are also working with Melbourne Water on the establishment of the retardation basins upstream in Mornington East. A small team does "Waterwatch" along Tanti Creek, testing the water every month to check its quality. Contact Peter 0408 897 221

All these groups need volunteer help so do contact us if you would like to help – or visit Tanti Creek and Mills Beach sites and check the information there.

MEA & PLANNING

MEA also assesses and comments on some of the more significant Planning changes to Mornington. If buildings are proposed to be demolished, or land cleared, or trees to be removed, MEA members may examine the plans and prepare submissions to the Shire to ensure that the proposals are in the community's interest and that the natural and built environments are preserved or enhanced.

Would you like to support us with a donation?

Running an education and awareness campaign, as well as possibly appearing in front of an Assessment panel costs lots of money. We can't easily compete with companies with shareholders or corporate support. If you would like to donate to our NoMarina fund, please help us by sending a cheque to: MEA, PO Box 580, Mornington 3931.

Or donate at our Main Street stall.

NETWORKING

MEA also contributes to other networks on the Peninsula and has members on the Devilbend Foundation, Mornington Foreshore Committee, Peninsula Exchange email network, and the Port Phillip Conservation Council. Write to us at PO Box 580 Mornington 3931, or ring 0407 572 089 (Secretary= Franz).

If you would like to join our Association, our membership fees are:

Family	\$15
Single	\$10
Concession	\$7 (Please provide proof of concession)

Please include your name, address, phone and email address to:

Mornington Environment Association Inc.
P.O.Box 580 Mornington 3931

We meet every second Thursday of each month at 7.30 pm in the meeting room of the Library, Vancouver Street, Mornington

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PRESS RELEASE 12 January 2012 DISAPPOINTMENT, OUTRAGE AND INCREDIBILITY FROM MEA AT PLANNING MINISTER'S REPORT ON THE MARINA PANEL

Mornington Environment Association (MEA) is shocked to see the Minister for Planning, Matthew Guy, has finally released his report on the Marina proposal for Mornington harbour and has supported all the recommendations of the Labor appointed Panel, even though our local MP, David Morris, has spoken passionately against it.

Many locals told David Morris, MP that they were against the marina.

Why has the new Coalition Minister ignored all our pleas?

"What we find very strange is that the report, supplied to the Shire on 4th January, 2012, is dated June 2011" said Jan Oliver, President of MEA.

"We are so disappointed that the Minister has ignored community requests and statements to the Panel that the marina is not wanted and not needed. The Minister has stated "Further refinement of the proposal..." is required to demonstrate "public benefit ...has been appropriately maximized... a necessary precursor to securing an agreement for an injection of public funds to enable a project to proceed on coastal Crown land." NO public benefit has yet been detailed. David Morris has strongly stated that none of his government's money will be spent on this \$19 million proposal because it is a private development of NO PUBLIC BENEFIT.

The Minister's assessment is a flabby whitewash, as was the Panel's Report. The Panel report acknowledges all the major concerns with the proposal and yet supports the proposal. By stating "It is my assessment that this recommendation be supported" the Minister endorses what amounts to a virtual redesign of the proposal including redesigning the wave screen to reduce reflected waves, reduce its height to minimize visual impact, redesign entrance to allow tall ships to enter harbour and then find non-available car spaces!

The Minister and his department think there will only be "relatively minor to moderate adverse environmental effects...which will be minimized through the detailed design..." (p 29). He ignored the expert witness advice that Mothers, Scout and Shire Hall Beaches will have major changes, that the waters of the harbour will lose their ability to support marine life and to cleanse the sands. He also ignored the community dislike of the loss of scenic views. It appears he has little understanding of the local Mornington scene.

As highlighted at the Panel, there is a clear distinction between building a marina and providing a safe haven in times of emergency. There is even less need for a marina now, since the installation of stronger moorings, plus better weather forecasting and more responsibility by boat users with more use of Martha Cove as a safe haven.

MEA supports an independent assessment of what should be done in the Harbour. The end of the pier is to be rebuilt at a cost of \$6 million: this provides an opportunity for better design.

Now the Shire Council has to meet and decide if it will change the zoning over the harbour. Councillors will have an opportunity to support the community. Does Council wish OUR public water to be used for a large PRIVATE venture? We are just so disappointed that this new Minister apparently cares nothing for us in Mornington.

The report is on the Shire's Web site with the link

<http://www.mornpen.vic.gov.au/Files/StrategicPlanning/C107Ministersassessment.pdf>

Jan Oliver
President MEA

PRESS RELEASE 20 January 2011 MOTHERS BEACH COVERED IN BLACK SMELLY SPOIL

Mothers Beach, Mornington, the beach normally crowded with families and children during the summer holidays, is currently closed while a contractor dredges filthy muck from in front of the Yacht Club and dumps it on the sand. The black water then runs back into the waters of the Harbour, causing suspended material to blacken the water.

Jan Oliver, President of Mornington Environment Association, and a member of the Mornington Foreshore Advisory Committee said today.

"I am shocked that this material can be dumped on to our main swimming beach and the beach itself closed. The dump truck from the contractor is trying to spread the black smelly material across and under the beach, with little success. The smell is sulphurous which indicates the material is anaerobic - ie. decaying without oxygen.

I am appalled that the Yacht Club, The EPA and the Shire would allow this material to be dumped on our Mothers Beach. We have complained already and received a reply from Alex Atkins, Director Sustainable Infrastructure who stated that testing of the material showed that Polycyclic aromatic hydrocarbons (associated with fuel leaks) were slightly elevated but acceptable to the Shire and EPA. But what else is in this dredged black muck? We see the pile of old chains, anchors, and blocks pulled up by the dredge. Apparently the Yacht Club wants a deeper entrance to their ramp for the boats racing in February. But what of the people trying to use the harbour? I talked to people fishing on the pier and jetty last night, and they were catching nothing.

The Club should have arranged for the dredged muck to be carted to a land disposal site. In February, the Shire starts dredging in front of the public ramp and good knows what that will bring!
It's bad enough to have half the pier closed off but this is ruining our Harbour in the middle of summer!"



Dredging 20 January 2011

Jan Oliver
President MEA

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PRESS RELEASE
COMMUNITY SUPPORTS THE ANTI MARINA CASE IN FEBURARY

Hundreds of objectors to the proposed marina in Mornington Harbour have rallied to support Mornington Environment Association in the campaign to prevent the third attempt by the Yacht Club to build a marina in Mornington Harbour. Jan Oliver, President of MEA said today "We are all thrilled at the support we have received from so many donors. Just on \$10 000 has been raised to pay for our expert advisers and cover presentation costs at the Panel. Thank you to everyone who has helped – both in kind with copying or with cash.

We contacted over 800 objectors to the proposal and this has been a marvelous response. The 3-man Panel hearing about the proposal and the required re-zoning of the Harbour commences on February 1st in the Shire Chambers in Mornington and the public can attend any time during February. The time table is on the Shire web page mornpen.vic.gov.au as are the statements of evidence from all the experts. The Shire has 8, the Boathaven Company (Yacht Club) 5 and MEA 4. MEA also has some lay-witnesses who represent various users of the Harbour.

It will all be an enormous effort – and expense – and we look forward to hearing the Panel report which has to be with the new Planning Minister within 6 weeks of the end of Panel hearings. Then the Shire Council has to vote, and a decision will finally be made."

Jan Oliver
MEA president

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Letter to the Editor, Mornington Leader, published Sept 2010

Dear Sir

How different it is to read the interview between Phillip Coombs and your reporter Teresa Murphy (Leader 9August) compared with how he behaved at the special Council meeting on 2nd August when he so rudely and arrogantly addressed Councillors.

These Councillors were making difficult decisions – should they allow rezoning of the harbour to allow a private, and yes it is a private development company, to take over Mornington harbour to make it supposedly safe? Following the vote, and Coombs' threats to go to the Planning Minister, we all have to go to a state appointed panel/inquiry and waste masses of time, energy and money in proving that Mornington doesn't need a marina, a 4 metre high concrete wall in the water, nor the likely long term effects on our beaches, water and our Mornington lifestyle.

Where is the business plan? The public benefit? The parking solutions? The money? Coombs did not answer the Councillors' questions nor provide more than a 2 page list of points as a submission on this vital issue. I ask, will he be using his own apparent wealth to fund BoatHaven in the Panel? We, the passionate community volunteers will be there. We will find the funds somehow, and we will see this issue "dead and buried" for ever.

Jan Oliver
President
Mornington Environment Association

PRESS RELEASE 4th July 2010 (Published by the Mail July 2010)
'No Marina' rally a red success!

Hundreds of people and their dogs –mostly wearing red – met at the rally, organized by MEA, on Mothers Beach on Saturday 3rd July to protest against the planning changes proposed for Mornington harbour and the proposed Marina. This was the only public rally during the time of the display of the proposals.

The meeting heard key speakers – Gidga Walker, renowned local environmental scientist who explained some of the environmental effects of changing coastal systems and the lack of assessment of the Harbour's marine habitats, and Alan Clark, master mariner who spoke about the physical characteristics of the Harbour and its sea floor which make it very difficult for any development to create a 'Safe harbour' . Jan Oliver, President of Mornington Environment Association, set the scene with a brief review of the proposal by Mornington Boat Haven Ltd. as the whole group faced into the harbour. Two Liberal politicians– David Morris, local MP, and Edward O'Donohue (Upper House member for E. Victoria) were constantly questioned by the crowd who wanted to know where they stood. Samantha Dunn, Greens candidate for E. Victoria spoke of the complex issues and planning decisions that have to be made and made the Greens position quite clear.

Jan Oliver, President of MEA, said today "It was clear that the people attending were against the marina proposal and constantly waved their signs "No marina". They were disappointed that neither of their local politicians was definitely prepared to say no to the proposal. Although invited, the Shire Planner did not attend, and Councillor Bev Colomb – who has to vote on the planning changes later, arrived right at the end.

We are most grateful to the Sea Scouts of Mornington 2nd Troop who held a sausage sizzle at short notice and one of their Leaders, Kylie Tate gave an impassioned plea to all, as the Scouts will not be able to sail around the harbour if the proposal goes ahead so she feared over 80 years of Scouting will go. This was a fitting conclusion to what was a demonstration from many locals who do not want to see their Harbour and local beaches ruined.

We collected over 140 submissions to the Panel, all objecting, and the meeting passed a unanimous resolution that the council must say no to rezoning the harbour to allow the Yacht Club to take over."

" Now", she concluded, "we have to wait for the Council to read the submissions, then see if a panel is appointed by the Minister Justin Madden, when the public again be able to make their views known. This is going to be a continuing fight".

Published end of May 2010

PRESS RELEASE :-Proposed marina will cause major environmental changes

It doesn't take much to realise that if you obstruct the flushing tidal movement within the Mornington Harbour with two wave screens – one along the pier and one at the proposed Marina, jutting out parallel to Scout Beach as solid concrete walls driven down into the seabed, then add a large number of power boats, the water quality will deteriorate.

As in most other marinas, the sailing yachts will largely be outnumbered by many large motor cruisers. Fuel spills are inevitable with the proposed re-fuelling and sewage pump out facility placed on a pontoon alongside the proposed new jetty just opposite where Scandia/Wild Thing normally has berthed.

If the daily flushing of the harbour is greatly reduced by the proposed pier and Marina development in front of Scout Beach, then our water will no longer be fit for swimmers, or fish life.Look at what has happened at Sandringham Marina.

Feral Pacific starfish – those five-legged orange ones, love calm water. If the harbour becomes a Marina, there will be

numerous places for these starfish to breed and collect together. They will eat the small shellfish which are normally food for the fish and squid that those patient people on the pier and Fishermans Jetty love to catch. Besides, since when do fish like dirty, oily water?

Seaweed at times builds up on beaches and can lie rotting if not flushed away and will generate nasty smells in addition to the fuel and exhaust smells of motor cruisers.

Sand build up in the harbour caused by reduced water circulation will increase. Increased dredging will be required. We have already seen the small dredge pumping out dark sand and seaweed onto Mothers Beach last summer. The earlier attempts to dredge with a big dredge stopped when it sank on New Year's Eve. It was placed in the Mornington Yacht Club's yard where it leaked oil, which was washed by rain across the pedestrian walkway and into the Inner Harbour. After much leakage and many approaches to Council, the Mornington Yacht Club, and the Environment Protection Authority the dredge was eventually removed.

With the proposed 170 berth Marina, more cars will try to park –many unsuccessfully trawling the precinct for a vacant car park, further affecting the atmosphere.

How will the Mornington Yacht Club ensure that their proposed Marina will not damage our harbour environment? Do we need a Marina and its pollution?

After all, Martha Cove Harbour is built and is two-thirds unoccupied.

If you don't want the Marina with its potential problems, have your say.

Simple submission forms are available at Mornington Peninsula Shire offices, and from the Council's website; - www.mornpen.vic.gov.au.

Submissions must be sent to reach Planning Panels Victoria by 5 July 2010.

Sent to papers on 13th of May

HERE WE GO AGAIN

Do we have to have a white elephant marina in Mornington?

Despite having failed twice before, Mornington Yacht Club, through its private company Mornington Boat Haven Ltd. is again trying to take over and privatize our public water and land in Mornington Harbour to build a private marina with very expensive berthing.

Planning Amendments are required to re-zone the waters so that a private pleasure boat facility can be built. This pleasure boat facility replaces the two so-called " Safe Harbours" of earlier applications, both rejected by previous governments.

President of Mornington Environment Association, Jan Oliver said today

"Someone must think they will benefit from putting an additional jetty, floating pontoons for 170 private berths. 12 swing moorings, 8 fore and aft moorings as well as berths for emergency and short term boats, two huge wave-screen concrete walls, diesel and petrol storage tanks, a floating re-fuelling and sewage pump-out facility and a large travel lift into our iconic, loved harbour area.

The community and tourists, the beach goers at Mothers Beach and other neighbouring beaches will certainly **not** benefit."

"Over the last two seasons, on average, only 40 swing moorings out of a total of 60 available swing moorings in Mornington Harbour have been occupied. So where are all the extra boats coming from to fill the expensive proposed marina? Will they be motor boats with more noise, more oil leaks and exhaust fumes?

It is inevitable that there will be increased pollution as water circulation will be restricted by the full depth massive concrete wave screens. Dredging of Mothers Beach and near the Yacht Club will have to be continuous, as sand eroded from Shire Hall Beach accumulates at Scout and Mothers Beaches.

We already have a huge marina at Martha Cove Harbour, with barely one third of the 352 available berths occupied, and apparently, that development is in deep financial trouble. Mornington yachts have previously used Martha Cove Harbour for safe haven in recent storms.

Do we need a huge white elephant ruining our Mornington water, views and beaches?

We urge everyone to view the displays at the Mornington Shire offices in Mornington, Hastings and Rosebud, and read on-line at www.nomarina.org.au . Submissions need to be completed by July 5th to Planning Panels Victoria – Mornington Safe Harbour Project, PGPO Box 2392 Melbourne 3001.

Inquiries Franz 0407 572089

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MEA, PO Box 580, Mornington 3931.
or donating at our Main Street stall

If you would like to join our Association, our membership fees are as follows:

Family \$15.00

Single \$10.00

Concession \$7 (please provide proof of concession card)

Please include your name, address, phone and email and send to:

Mornington Environment Association Inc
PO Box 580 Mornington 3931

We meet the second Thursday of each month at 7.30 pm in the meeting room of the Library, Vancouver St, Mornington.

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