

## COUNCIL ASSESSMENT REPORT

Panel Reference	PPSSTH-2
DA Number	2019.208
LGA	Bega Valley Shire Council
Proposed Development	Construction of a 154 berth marina comprising three floating pontoon arms restrained by piles, a fixed wave attenuator, minor refurbishment of the existing wharf, landside car park comprising 97 spaces plus 3 loading/unloading spaces, temporary building to house administration and toilets and relocation of 24 swing moorings.
Street Address	Cattle Bay Road Eden 2551
Applicant/Owner	Eden Cattle Bay Marina Pty Ltd
Date of DA lodgement	13/06/2019
Number of Submissions	Six (6) submissions received
Recommendation	Approval subject to conditions
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011	The proposal has been referred to the Southern Regional Planning Panel as the consent authority under Clause 4.5(b) of the Environmental Planning and Assessment Act 1979 as the development is for the purposes of: “(b) marinas or other related land and water shoreline facilities, which meet the requirements for designated development under clause 23 of Schedule 3 to the Environmental Planning and Assessment Regulation 2000”
List of all relevant s4.15(1)(a) matters	<p>List of relevant Acts of Legislation</p> <ul style="list-style-type: none"> <li>• Environment Protection and Biodiversity Conservation Act 1999</li> <li>• Protection of the Environment Operations Act 1997</li> <li>• Fisheries Management Act 1994</li> <li>• Biodiversity Conservation Act 2016</li> <li>• National Parks and Wildlife Act 1974</li> </ul> <p>List of all of the relevant environmental planning instruments under S4.15 (1)(a)(1) –</p> <p>State Environmental Planning Policies</p> <ul style="list-style-type: none"> <li>• State Environmental Planning Policy (Coastal Management) 2018</li> <li>• State Environmental Planning Policy (State and Regional Development) 2011</li> <li>• State Environmental Planning Policy (Infrastructure) 2007</li> <li>• State Environmental Planning Policy (Primary Production and Rural Development) 2019</li> <li>• State Environmental Planning Policy No 33 – Hazardous and Offensive Development</li> <li>• State Environmental Planning Policy No. 44 – Koala Habitat Protection</li> <li>• State Environmental Planning Policy No. 55 – Remediation of Land</li> <li>• State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</li> </ul> <p>Local Environmental Plan</p> <ul style="list-style-type: none"> <li>• Bega Valley Local Environmental Plan (BVLEP) 2013</li> </ul> <p>Other policies</p> <ul style="list-style-type: none"> <li>• Bega Valley Section 94 and 94A Contribution Plan 2014</li> </ul> <p>List any proposed instrument that is or has been the subject of public consultation under the Act and that has been notified to the consent authority</p>

	under S4.15(1)(a)(ii) <ul style="list-style-type: none"> <li>State Environmental Planning Policy No. 44 – Koala Habitat Protection</li> </ul> List any development control plan under S4.15(1)(a)(iii) <ul style="list-style-type: none"> <li>Bega Valley Development Control Plan (BVDCP) 2013</li> </ul> List any relevant regulations under S4.15(1)(a)(iv) eg Regs – <ul style="list-style-type: none"> <li>Nil</li> </ul>
<b>List all documents submitted with this report for the Panel's consideration</b>	Attachment 1: Deposited plans Attachment 2: Draft conditions of consent Attachment 3: Copy of submissions Attachment 4: Applicant response to public submissions Attachment 5: State Government Agencies submissions Attachment 6: Applicant response to State Government Agencies submissions
<b>Report prepared by</b>	<b>Mark Fowler – Senior Town Planner</b> <b>Keith Tull – Planning and Sustainability Manager</b>
<b>Report date</b>	<b>4 December 2019</b>

#### Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report? **Yes**

#### Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? **Yes**  
*e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*

#### Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report? **Not Applicable**

#### Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.24)? **Not Applicable**  
*Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions*

#### Conditions

Have draft conditions been provided to the applicant for comment? **Yes**  
*Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report*

## Executive summary

This report considers a Designated Development Application (DA) for the staged construction of a 154 berth marina comprising three floating pontoon arms restrained by piles, a fixed wave attenuator, minor refurbishment of the existing wharf, landside car park comprising 97 spaces plus 3 loading/unloading spaces, and two buildings to house administration and toilets.

The development is Integrated Development as a permit is required from NSW Primary Industries – Fisheries under the *Fisheries Management Act 1994* and a licence from the NSW Environment Protection Authority under the *Protection of the Environment Operations Act 1997* as a scheduled activity.

The proposal has been advertised in accordance with the Environmental Planning and Assessment Act and its Regulations. Following exhibition of the application and at time of writing of this report, 6 public submissions had been received. Further, the application has also been subject to internal and external referrals to relevant Council Staff and State Agencies.

This report provides an assessment of the application in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979. The consent authority must be satisfied in relation to the relevant provisions of environmental planning instruments applicable to the proposal before granting consent to the development.

The Development Application and Environmental Impact Statement (EIS) for the proposed marina development are accompanied by several documents which include a range of measures to mitigate and manage the potential environmental impacts of the marina and include:

- Operational Environmental Management Plan (OEMP);
- Construction Environmental Management Plan (CEMP); and
- Water Quality Management Plan (WQMP).

Based on a detailed assessment of the proposal against the applicable planning controls, it is considered that the proposal is an appropriate development, which will be of benefit to the local community and that is worthy of support.

Accordingly, it is recommended that the Southern Joint Regional Planning Panel, as determining authority, approve the application subject to the conditions detailed in the recommendation section of the report.

## **INTRODUCTION**

Eden Cattle Bay Marina Pty Ltd is the proponent for the proposed marina development. The marina development was the subject of a previous Development Consent (No. 2014.430) issued by the Southern Joint Regional Planning Panel (JRPP) on 1 December 2015.

That application was also subject to Section 4.55 applications to modify and appeal to the Land and Environment Court regarding upgrading works to Cattle Bay Road that were resolved through conciliation.

DA 2014.430 lapsed on 1 June 2018 as Council determined the deferred commencement condition in the consent had not been satisfied.

Eden Cattle Bay Marina Pty Ltd lodged this Development Application (DA) for the same marina development previously approved by the JRPP on 1 December 2015.

The application applied for and received Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an EIS on 11 December 2018.

This application and accompanying EIS has been prepared in accordance with Schedule 2 of the Environmental Planning and Assessment (EP&A) Regulation 2000, and the environmental assessment requirements issued by the Secretary of the NSW Department of Planning and Environment are included as Appendix 1 of the EIS.

The development triggers the provisions of State Environmental Planning Policy (State and Regional Development) 2011 with the Southern Joint Regional Planning Panel the determining authority for this application.

## **DESCRIPTION OF THE SITE AND OWNERSHIP**

The site is located approximately 500 metres west of the Eden Town Centre on the NSW south coast. Both the land and water based components of the development are located within the Bega Valley Shire Local Government Area.



*Site context - Source: Environmental Impact Statement April 2019*

The site comprises land based components comprising remnants of the Heinz Cannery that previously operated from the land and the marine area comprising parts of Cattle Bay which encompasses the existing wharf structure.

The land based component owned by the Applicant has received a Major Concept Approval (05\_0032) for a mixed tourist and residential development issued in August 2008 from the Department of Planning.

The land component comprises Lot 2 and part Lot 4 DP1138056 (See Attachment 1 - Deposited Plan).

Lot 2 DP1138056 is owned by the Applicant and has a total area of 1.67 hectares. Approximately half of Lot 2 would accommodate the land based components of the marina, comprising vehicular access to the marina, car parking areas, offices, amenities and services.

Lot 2 retains a series of concrete slabs and service conduits being remnants of the previous cannery operations and fish processing from the site. The site retains service infrastructure associated with these past land uses.

There are no buildings or structures except for security fencing on the subject land. The site does retain existing stormwater drainage channel along the western side of the site to collect stormwater runoff that discharges into Cattle Bay.





*View internal to the site looking south east over subject site towards Cattle Bay - Source: Bega Valley Shire Council October 2019.*



*View internal to the site looking south towards to existing jetty – Source: Bega Valley Shire Council October 2019.*



*Internal view of the site looking east towards proposed buildings and carparking - Source: Bega Valley Shire Council October 2019.*

Lot 4 DP1138056 comprises a strip of foreshore land owned by Bega Valley Shire Council which was dedicated as a public reserve by Eden Resort Hotel Pty Ltd (being the same Directors of Eden Cattle Bay Marina Pty Ltd). It is proposed to create a 6 metre wide easement over Lot 4, totalling an area of approximately 210 sq.m, to provide access to the existing wharf.

Lot 4 comprises various concrete slabs, service conduits, pits, sumps, designated parking area, picnic tables and adjoins Cattle Bay Beach. A sea wall separates the various concrete slabs and Cattle Bay Beach.



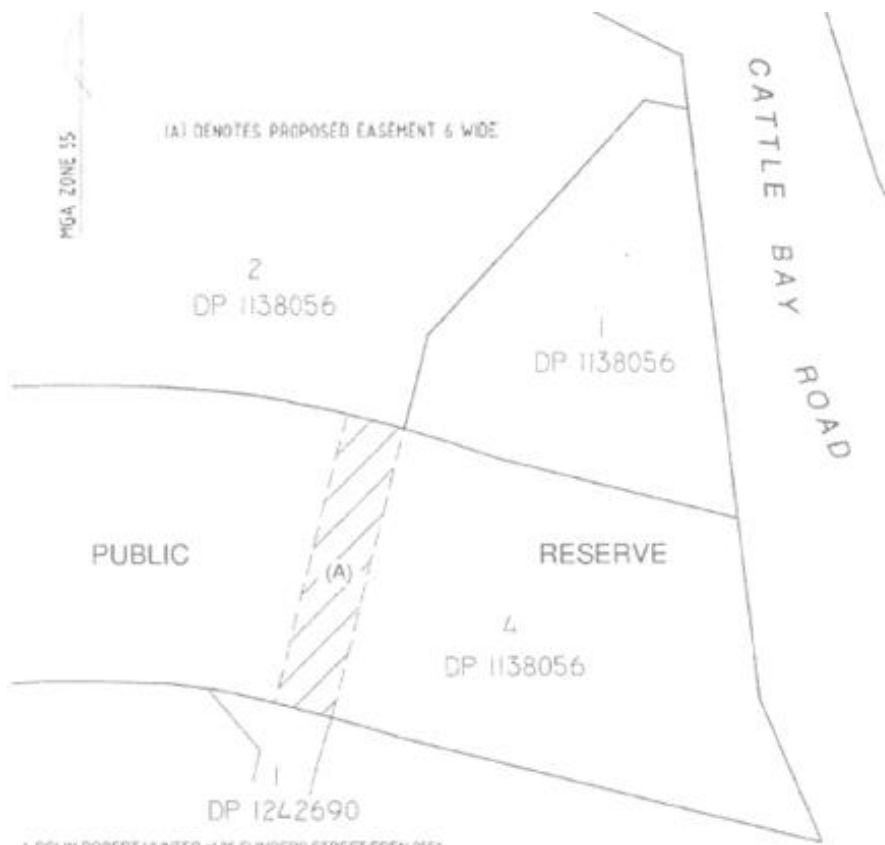


*View looking south over Council's foreshore public reserve area towards jetty and Cattle Bay – Source: Bega Valley Shire Council October 2019.*



*View looking south west from public access to jetty and along Cattle Bay foreshore area – Source: Bega Valley Shire Council October 2019.*

Bega Valley Shire Council has provided owners consent to the lodgement of the development application and a copy of transfer for granting the 6 metres wide easement is included below. With the exception of the proposed 6 metre wide access easement, no other part of Lot 4 is to be used in association with the proposed marina development.



*Source: Bega Valley Shire Council, October 2019 - Plan denoting 6 metre wide easement over Lot 4 DP1138056.*

There is no significant vegetation or habitat on either allotment.

The water based component of the site, inclusive of the existing wharf, is Crown land. The area to be occupied is approximately 7.5 hectares (subject to survey and final design and footprint of the wave attenuator). The Department of Trade and Investment - Crown Lands has issued land owner's consent enabling the lodgement of the application.

Cattle Bay comprises a protected sandy beach contained between rocky headlands. The beach and the existing wharf offer public recreational opportunities and contribute to the amenity of surrounding residential development. Approximately 24 leased swing moorings are located within the proposed marina footprint area.

Cattle Bay's main aquatic habitats are described in the EIS as containing intertidal, subtidal and deeper water sandy and rocky habitats with patches of seagrass and invertebrate benthic fauna. The area also contains constructed habitat (wharf support piles, mooring tackle and pipelines).

Cattle Bay offers habitat opportunities to a diverse range of fish, polychaete worms, molluscs and crustacean species. Marine mammals (whales, dolphins and seals) make use of Twofold Bay, predominantly seasonal but also year round.





*View along existing wharf looking south east over the proposed water way area to the new jetty component of the marina – Source: Bega Valley Shire Council October 2019.*



*View looking east along Cattle Bay foreshore detailing sea wall – Source: Bega Valley Shire Council October 2019.*

## **Surrounding Development**

The site is surrounded by a corridor of vegetated elevated land to the north, east and west. The area above the vegetation corridor is predominantly low density residential development comprising a mix of one and two storey dwellings that are generally orientated towards Twofold Bay.

Cocora Beach and a commercial aquaculture (mussel) farm are located to the south west. Cocora Beach is a long, wide sandy beach which offers recreational opportunities and is separated from Cattle Bay by a rocky headland.

To the east of Cattle Bay is Eden Harbour. Eden Harbour provides a maritime boating environment that includes the Port of Eden cruise ship port extension; snug cove jetty; wharves and ramps utilised for both commercial and recreational vessels; swing moorings for



recreational vessels and the proposed Eden Safe Harbour Project wave attenuator and POEM marina.



*View looking north from the end of the existing wharf showing topography surrounding the site – Source: Bega Valley Shire Council October 2019.*



*View looking south west from the end of the existing wharf showing Cocora Beach profile, intervening rocky headland and swing moorings – Source: Bega Valley Shire Council October 2019.*



*View looking east towards Snug Cove and swing moorings – Source: Bega Valley Shire Council October 2019.*

## **DESCRIPTION OF PROPOSAL**

The application seeks approval for the staged construction of a marina development comprising both land and water based components.

Stage 1 comprising:

- Construction of the wave attenuator;
- Refurbishment of existing Cattle Bay jetty wharf;
- Marina main arm;
- Part marina berthing arms with 85 vessel berths; and
- Land based office, amenities, 50 car parking spaces and landscaping.

Stage 2 comprising:

- Completion of the marina berthing arms with additional 69 vessel berths; and
- 47 car parking spaces

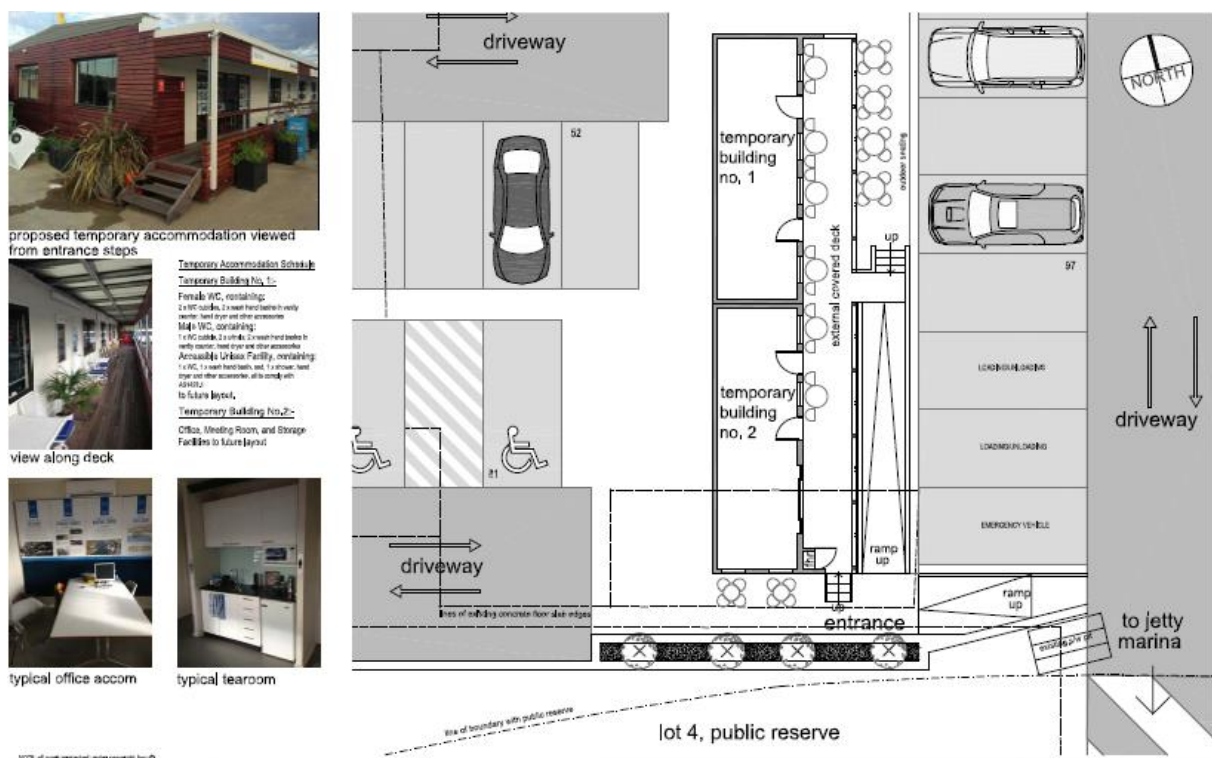
Once completed, the marina would comprise:

- A total of approximately 154 berths in three floating pontoon arms restrained by piles;
- A fixed cranked wave attenuator immediately adjacent the southern pontoon arm of the marina;
- Refurbishment of the existing wharf;
- A mix of berth sizes from 12 to 28 metres to cater for a range of watercraft from small local recreational vessels to occasional large international super yachts. The exact mix



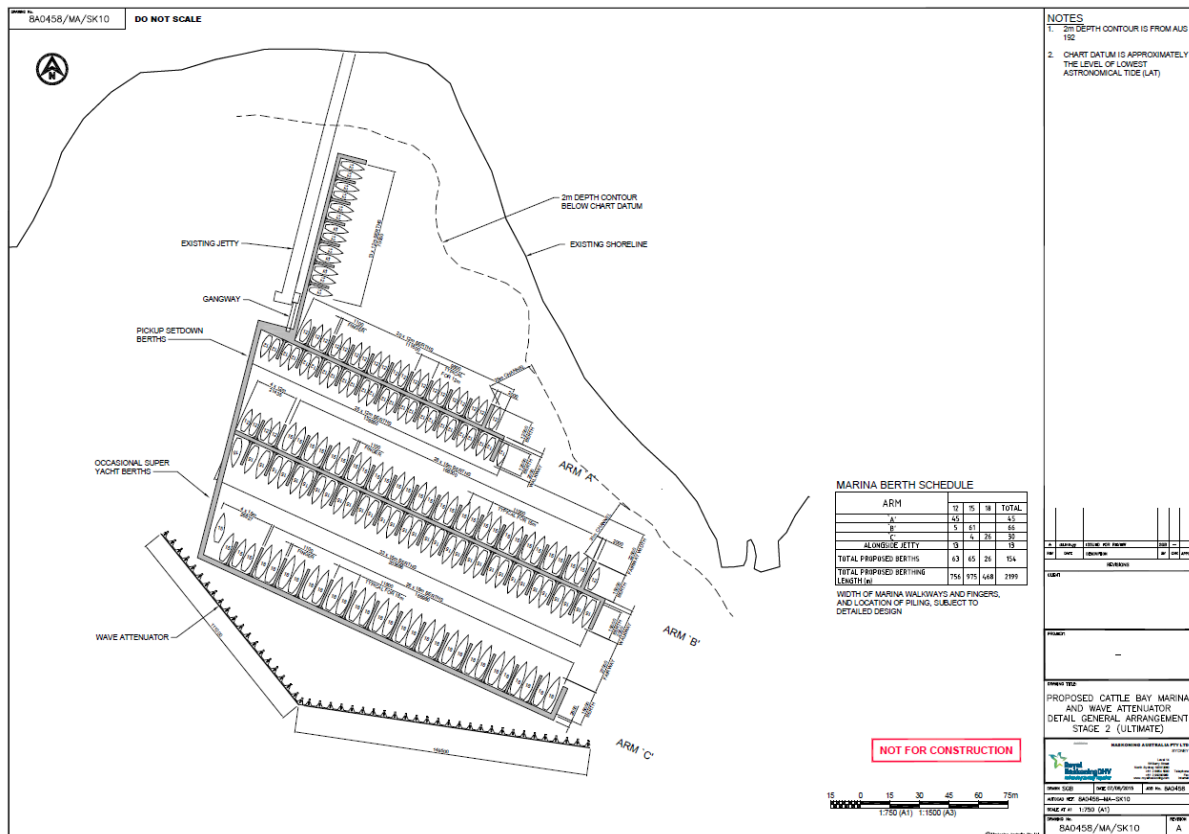
of berths are to be determined in the preparation of final construction plans for the project.

- Portable buildings to be located on the site to house the marina administration and toilet facilities. Access will meet disability standards.
- Provision of power, lighting, water, firefighting equipment, two sewage pump out carts and security access controls to the pontoons and berths;
- Connection to existing potable water, sewer and power supplies to service proposed portable buildings and fire fighting;
- Refurbishment and temporary use of existing stormwater drainage system incorporating the provision of a new gross pollutant trap;
- On-site carparking for 97 vehicles and 3 loading/unloading spaces. The carparking spaces would be located on, and use, the existing concrete slabs and stormwater drainage system remnant to the old cannery;
- Access to the site would be provided from Cattle Bay Road over the existing entry/exit driveway;
- A suitable pedestrian and service vehicle access 6 metres wide is to be constructed over the existing public reserve corridor which is located immediately adjacent the foreshore. The access is required to provide linkage between the land and water based components of the marina development.
- Modification to an underwater rock pinnacle within the marina footprint to ensure safe navigation.
- Relocation of 24 swing moorings outside the marina area in locations to be confirmed with the RMS and the Eden Port Authority.



Source: Proposed Cattle Bay Marina portable buildings – EIS April 2019





Source: Proposed Cattle Bay Marina Development and Wave Attenuator – EIS April 2019

## Design and construction approach

### Buildings and on-site carparking

Access to the site would be provided from Cattle Bay Road over an existing access driveway. Existing concrete slab surfaces would be restored as necessary to facilitate the effective use of the area for on-site carparking and associated driveways. All driveways would be compliant with the Building Code of Australia and AS 2890.6 2009 Parking Facilities – Off-street parking for people with disabilities.

The proposed marina administration and facilities buildings would be located on an approximate building line 40 metres south of the existing Cattle Bay Road entrance into the site. The buildings would be located on the existing slab area and in close proximity to the proposed access corridor linking the land and water-based components of the development.

The building would comprise two separate portable buildings, structurally connected by an external covered deck. Access to the building is proposed to be in accordance with AS 1428.1 2009 – Design for Access and Mobility.

The buildings would be connected to the existing potable water, sewerage and power services present in the area that served the previous cannery use.

### Public Access

A pedestrian and service vehicle access 6 metres wide is to be constructed over the existing public reserve (Lot 4 DP1138056) to provide a linkage between the land and water-based components of the marina development.

Access across all elements of the marina are proposed to be designed and constructed in accordance with the Building Code of Australia and relevant Australian Standards. Public access over Council's public reserve (Lot 4 DP 1138056) and foreshore area to Cattle Bay would be maintained.

It is proposed that the marina will be made available to the public during marina opening hours (summer, Daylight saving 7am – 6pm, winter, Non-daylight saving 7am – 5pm). An access control gate will be located at the head of the access gangway leading to the floating marina berths which will be locked at night so as to provide a level of security particularly against vandalism, property damage and theft. A key card system would operate the security gates at night, available to boat owners and marina staff.

### **Jetty and Marina berths**

The existing jetty wharf will be retained and refurbished as part of the proposed marina development. A statement on the Refurbishment and Maintenance Works for the Existing Jetty has been prepared by Royal Haskoning DHV and is included in Appendix 6 of the EIS.

The extent of the work required to refurbish the existing wharf would become more apparent following a detailed structural investigation. Timber piles to be removed would be extracted in a controlled manner. A turbidity control barrier would be deployed and maintained until removal is complete.

Materials recovered may be suitable for re-cycling off-site, while unsuitable materials would be removed and transported to an authorised waste disposal facility. Work would most likely to be carried out by barge mounted crane, transport barge, work boats and hand-held power tools.

Ongoing maintenance of the wharf would be undertaken as required and in accordance with any subsequent lease agreement with NSW Trade and Investment – Crown Lands.

The proposed marina and wave attenuator are to be designed and located in accordance with Australia Standard AS 3962-2001 'Guidelines for Design of Marinas' and AS 4997 – 2005 'Guidelines for the Design of Maritime Structures'. The AS 3962-2001 sets out guidelines for the design of marinas for vessels up to 50 metres in length. It applies to fixed berth and floating pontoon marina systems, single pontoon and floating wave attenuators.

The application proposes a floating marina design with the position and layout influenced by a range of factors:

- Available natural water depth (avoidance of dredging);
- Connection to existing wharf (for access from shore);
- Incident wave climate at the site (wave height, period and direction);
- Existing navigation channel and swing basin associated with the use of Eden Harbour by commercial vessels;
- The location of the Snug Cove wave attenuator and proposed POEM marina;
- Minimum dimensions for marina berths, channels and fairways set out in the Australian Standard AS3962-2001.

The berth schedule proposed at the site is set out below:

Berth length	Number of berths
12m	63
15m	65
18m	26
Total	154

*Source: Environmental Impact Statement April 2019*

The marina berths would comprise a floating system of walkways, with finger units at right angles to the walkway to create the berthing pens and provide access alongside the vessel.

The design of walkways and berths would provide for lighting, portable water, power and communications.

The floating berths would be secured in place by piled or pitted vertical piles into the sea bed. The piles would comprise either circular reinforced hollow spun concrete piles with possibly a number of composite piles at locations where increased water depth or where loading conditions dictate.

Intermediate mooring piles may be provided between the outer (southern most) double berths for ease of berthing and additional mooring security. The additional piles required would aid vessel manoeuvrability and mooring security in the event of wind generated waves or boat wake, exceeding 300mm in height.

All piles would be delivered to the site by barge and installed from the water using a piling barge. A turbidity control barrier would be deployed and maintained during the process.

The main north south walkway is proposed to have a width in the range of 2.5m to 3.0m with remaining walkways typically 2m wide. The fingers leading from the walkways will range from 1.0m up to 2.0m in width. The final widths of walkways and fingers will be dependent on the final floatation system adopted for the marina, however the dimensions are unlikely to change significantly from those nominated.

The outer southern end of the main north-south walkway would be available for occasional super yacht berthing. A nominal length of 100 metres would be provided which would cater for two to three vessels depending on vessel size.

The pontoon units would be manufactured off-site and transported to the site by road, then launched from the Eden harbour by crane and towed and guided into their correct position using GPS technology.

The proposed marina has been positioned to ensure that adequate natural water depths comply with Australia Standard AS 3962-2001 'Guidelines for Design of Marinas'.

Dredging is not proposed. However, an underwater rock pinnacle within the marina footprint will need be to lowered/removed to ensure safe navigation. The pinnacle is proposed to be lowered to a minimum depth of -4 m CD for safe berthing and navigation. The application details that the lowering of rock pinnacle would be by non-explosive method either by barge mounted excavator or non-explosive rock splitting expansive agent.

### **Service Infrastructure**

Subject to design and construction, all required public utility services will be available to both the land and water-based components of the proposed marina development.

The supply of fuel would not be available at the marina. Vessel re-fuelling facilities are available from existing suppliers in Eden Harbour.

### **Lighting, Potable Water, Power and Communications**

These services would be provided to both the land and water-based components of the marina in accordance with the requirements of the relevant authorities. Services would be extended from the land-based component, along the wharf and out to individual berths.

Services would be made available to individual marina berths by low height (approximately 900mm) service pedestals. The service pedestals would be strategically located along the floating arms of the marina.



## Fire Fighting

Fire-fighting equipment would be provided in accordance with Australia Standard AS 3962-2001 'Guidelines for Design of Marinas' and to the requirements of relevant authorities. The equipment would include fire hose reels, hydrants and extinguishers.

The fire hose reels will be connected to the domestic water supply. A fire hydrant would be installed at the end of the existing wharf at its junction with the new floating marina component. The hydrant would have its own water supply service from Council's reticulated water main infrastructure in Cattle Bay Road.

## Sewage Pump Out

Sewage is proposed to be removed from the holding tanks of vessels at the marina berth and disposed of to an on-land sewerage system by means of two 90 litre mobile sewage pump out trolley (Muck Trucks).

The operation of the Muck Trucks involves:

- The trolley is wheeled to the required point adjacent to the vessel on the floating marina and the flexible discharge hose is attached to the holding tank on the vessel.
- The unit is attached to the power available on the marina at the service pedestal. The unit is also fitted with a battery in the event power is not available on the marina for any reason.
- The pump discharges the sewage from the holding tank on the vessel into the tank within the mobile unit. The tank within the unit has a capacity of 90 litres which would accommodate the majority of vessels permanently berthed at the marina. Should the holding tank on the vessel exceed the size of the tank on the mobile unit, the mobile unit can be used a number of times.
- The mobile unit is wheeled to the portable buildings sewerage connection and disposed into the local sewerage system.

The use of a mobile sewage pump out system has the benefit of taking the pump out system to the vessel rather than relying on the vessel owner to bring the vessel to a dedicated pump out facility. It enables the marina operator to be more proactive in satisfying its commitments under an Environment Protection Licence (EPL) and Operational Environmental Management Plan.



*Example of Muck Truck – Source: Environmental Impact Statement 2019 Appendix 9 - Operation Environmental Management Plan*

### **Bilge Water Pump Out**

All marina berth tenants would be inducted in the use of and supplied with, a bilge water absorbing pad as part of rules and regulations of the marina. The pad(s) will absorb any oil from the bilges. The bilge water will then be disposed of via a certified collection agent.

The direct discharge of bilge water within the berthing area would be prohibited under the marina's operational standards. A floating boom would be maintained at the site to contain any surface pollutants in the event of an accidental leakage of bilge water. Appropriate signage would be displayed at the marina.

### **Wave Attenuator**

The primary purpose of the wave attenuator is to moderate ocean swells and local wind waves generated by strong winds generally from the south/south-west. The need for the wave attenuator is to provide safe mooring facilities within the marina in accordance with Australia Standard AS 3962-2001 'Guidelines for Design of Marinas'.

The wave attenuator will be approximately 230m long and will be generally aligned perpendicular to a direction in the range 190-200 degrees True North (oTN). The final alignment will be selected during detailed design. However, it will involve a 'cranking' or bend in the alignment to ensure no significant impact on wave climate and alignment of Cocora Beach. The attenuator will be situated in water depths of -6 to -8m Chart Datum (CD).

The construction of the wave attenuator will comprise a series of vertical and raked piles (or possibly two vertical piles) with an insitu or precast concrete cap, supporting precast concrete panels that span between the pile caps and extend a sufficient distance below the water level to provide the required wave attenuation performance.

The top of the wave attenuator will be set at a level similar to the deck level of the Cattle Bay Jetty, which is situated at a level of approximately 2m AHD or 2.9m CD. As noted above, the panels must extend a sufficient distance below the water level to provide the required wave attenuation performance. The level proposed for the bottom of the wave attenuator is approximately -2m CD (2.2m below MLLW). As the wave attenuator will be placed in water depths of -6 to -8 CD, the clearance below the wave attenuator to the seabed will be in the range 4 to 6 metres subject to detailed design and position along the structure.

The attenuator can be readily designed to survive the severe wave conditions experienced in Cattle Bay due to ocean storms and strong winds from the south/south-south-west.



Photo A: Construction of fixed panel wave attenuator – showing fixed panel being lifted into place by floating crane.



Photo B: Construction of fixed panel wave attenuator – showing fixed panel being positioned onto pile caps



Photo C: View along pile caps showing fixed panels in place.



Photo D: View of completed wave attenuator and floating marina.

*Example of fixed wave attenuator construction – Source: Additional information provided by applicant October 2019*

### **Swing Mooring Relocation**

There are approximately 40 swing moorings located within Cattle Bay and Snug Cove. Approximately 24 of these moorings will need to be relocated in order to accommodate the proposed marina and wave attenuator. The application includes a Swing Mooring Relocation Strategy prepared by Royal Haskoning DHV and is included as Appendix 8 of the EIS.

There are options available to relocate the affected moorings which will need to be fully investigated in consultation with affected licence holders, the proponent and relevant State Agencies.

Currently, existing moorings are under licence issued by Roads and Maritime Services. The removal and relocation of swing moorings would be undertaken by a commercial mooring contractor licensed by the RMS (Maritime). All works would be undertaken in consultation with the RMS.

### **Site Preparation and Construction Overview**

Construction activities would involve a variety of different types of construction methods and equipment. The principle activities would comprise:



- the erection of temporary building;
- refurbishment of the existing wharf;
- removal and relocation of swing moorings;
- installation of piling and pontoons units; and
- installation of services and access gangways.

A preliminary construction program totalling approximately 16 weeks is proposed with piling taking place over an 8 week period.

Construction hours detailed in the EIS would be restricted to:

- Monday to Friday 7.30am to 5.00pm
- Saturday 7.30am to 1.00pm
- No work on Sundays or Public Holidays
- With Piling restricted from 8am to 5pm Monday to Friday

### **OTHER MARINA DEVELOPMENT CONSIDERATIONS**

There are currently no marina developments located within Eden or Twofold Bay. However, there are two planned marinas which have reached different stages in design and development being the Boydtown Marina Development and the Port of Eden Marina proposal (POEM).

The Boydtown Marina proposal, eight kilometres to the south west of Eden. The marina proposal is linked to the development of a residential estate at Boydtown. That proposal secured development approval from the Minister of Planning (DA 89.1440) in November 1990 and has been physically commenced to the satisfaction of the Department of Planning.

In summary it comprises:

- The construction of break walls to form an artificial harbour;
- Timber jetty;
- Sheltered water harbour mooring – 40 vessels;
- 250 wet berths;
- Fuelling berths, sewerage and bilge pump out facilities and firefighting facilities;
- Repair and maintenance facilities;
- Dry storage facilities – 100 vessels;
- Boat launching facilities and associated carparking;
- Marine village including general store, shops and offices.

The Port of Eden Marina (POEM) is proposed to be located immediately to the east of the Cattle Bay Marina Site.

The marina development is proposed by a consortium of local interest groups, Government Agencies and other stakeholders for the purpose of securing government funding for additional marina development in Eden. The application provides details of this proposed marina. There is no development application currently lodged for the proposed development.

## **STRATEGIC OVERVIEW**

The EIS has considered relevant State Government and Council strategies and policies that provide the strategic context for the development of the site. They comprise:

### **NSW State Plan 2021**

The NSW State Plan 2021 is the NSW Government's strategic business plan setting priorities for action and guiding resource allocation. The applicant's review of the Plan is included as Appendix 12 of the EIS and concludes that the proposed marina is consistent with many of the goals.

**Comment:** Staff have reviewed the plan and the applicants assessment and consider that the proposed marina development is consistent with the relevant goals and its stated priorities.

### **NSW Coastal Policy 1997**

The Policy is a comprehensive goals oriented policy, designed to guide coastal zone management and planning. The Policy embraces the Principles of Ecologically Sustainable Development and contains a number of key strategic objectives and actions designed to:

- Protect, rehabilitate and improve the natural environment;
- Recognise and accommodate natural processes and climate change;
- Protect and enhance the aesthetic qualities of the coastal zone;
- Protect and preserve cultural heritage;
- Promote ecologically sustainable development and use of resources;
- Provide for ecologically sustainable human resources;
- Provide appropriate public access and use;
- Provide information to enable effective management; and
- Provide for integrated planning and management.

**Comment:** The applicants review of the Policy is included as Appendix 12 of the EIS and indicates that the proposed marina development is consistent with key strategic objectives and actions. Staff consider that the proposed marina development would not be inconsistent with the strategic role of the Policy and its stated objectives and actions as relevant.

### **South East and Tablelands Regional Plan 2016**

The Plan is the NSW Government's strategic blue print for sustainable growth reflecting community and stakeholder aspirations and opportunities whilst acknowledging and protecting the Region's diverse natural environment in which the Port of Eden figures prominently as a global gateway and hub for cruise ships and marine activity.

The Plan outlines a number of strategic goals and directions for the purpose of providing an overarching framework to guide more detailed land use plans, development proposals and infrastructure funding decisions.

**Comment:** Staff have reviewed the Plan and consider that the proposed marina development is consistent with several Directions of the Plan, in particular by providing a development that would enhance tourism development at the Port of Eden, maintain the existing mussel farm industry through management of potential impacts and protection of the natural environment.

### **The South Coast Regional Strategy 2006-2031**

The South Coast Regional Strategy was prepared by the NSW Department of Planning to guide future development, infrastructure and natural resource protection requirements for the south coast region to 2031. The Strategy is specific to the Shoalhaven, Eurobodalla and Bega Valley Council areas.

The primary purpose of the Strategy is to ensure that adequate land is available and appropriately located to accommodate the projected future housing and employment needs of the region. The Strategy acknowledges that a balanced integrated approach is required and lists several key considerations to ensure sustainable growth within the region.

**Comment:** Staff consider that the proposed marina development would not be inconsistent with the strategic role of the Policy and its stated outcomes and actions.

### **Coastal Design Guidelines**

The Guidelines consider the NSW coast in terms of a hierarchy of settlements and provides a framework for analysing and understanding the importance of relationships between

settlements, natural areas and reserves. Under the Guidelines, Eden would be classed as a 'Coastal Town'.

**Comment:** Staff consider that the proposed marina development would not be inconsistent with the strategic role of the Guidelines on the basis that:

- It would be integrated into a mixed tourist and residential development endorsed by a Major Project Concept Approval (05\_0032).
- The maritime nature and scope of the development and its presence would be in keeping with the natural and manmade environs and Eden's maritime heritage.
- Its ecological footprint would be manageable and sustainable.
- Cultural heritage and significance would be acknowledged and respected.
- It would not contribute to coastal sprawl, being located within Eden's established township and complementary to the Port of Eden and its role as a working port.
- Public access across the foreshore (inclusive of the existing wharf) would be maintained and improved.

#### **Twofold Bay and Hinterland Strategy 2004**

The Strategy was prepared by the Department of Infrastructure, Planning and Natural Resources and identified a series of objectives and actions for implementation for the purpose of ensuring:

- The provision of infrastructure to meet the social, educational, employment and cultural needs of the community and tourists alike;
- A healthy environment that is biologically diverse, maintains ecological processes and is resilient in the interest of the local community and tourists alike;
- A community which is fully informed and committed to the decision making and management process; and
- A viable community that enjoys a quality of life based on a lasting balance between environmental, social and economic influences.

**Comment:** The Strategy, in part, identifies an action to investigate the construction of boating facilities at Quarantine Bay, Cattle Bay, Ross Bay and Boydtown. Staff consider that the proposed marina development would not be inconsistent with the strategic role of the Policy and its objectives.

#### **The Eden Structure Plan Report 2006**

The Plan stems from the findings of the Twofold Bay and Hinterland Strategy 2004. The Plan is Council's response to those Strategies as relevant to land use planning initiatives and outcomes for Eden. The Plan was adopted in the formulation of Council's current Bega Valley Local Environmental Plan 2013.

**Comment:** Staff consider that the proposed marina development is not inconsistent with the objectives and actions contained within the Plan as the marina would:

- Be consistent with the desired future character direction for Eden as a harbour town;
- Complement existing marine activities and tourism opportunities;
- Be in keeping with the environmental integrity and natural scenic qualities of Twofold Bay given its coastal environment and maritime heritage.
- Contribute to the economic fabric of Eden whilst acknowledging the social, cultural and environmental expectations of the local community.
- Be complementary to the built form of foreshore development in the immediate area.

#### **Snug Cove and Environs Master Plan 2005 (as amended 2014)**

The area identified in the Master Plan specifically excludes Cattle Bay from any site specific investigation. However, the Plan acknowledges the presence of Cattle Bay in the Snug Cove environs and its potential to contribute to the importance of Snug Cove as a working port facility. On that basis, Cattle Bay has been identified under the Plan as a "Future marine use investigation area".



The Plan outlines a “future character statement” for Cattle Bay as follows:

*“The protection and management of vegetation, water quality and coastal processes require particular consideration as part of the future development of the site at Cattle Bay. Visual impacts associated with developing the cattle bay site also require consideration due to its prominence when viewed from Twofold Bay.*

*The Former cannery site is potentially suitable for a range of future uses, including tourism, residential, commercial and marine-related industrial development. Due to its proximity to Eden’s commercial centre, Snug Cove and Imlay Street a principal outcome of future development at this site should be that it promotes employment generation. When the site is developed, a new public park adjacent to Cattle Bay beach should be established to allow enjoyment of and access to the foreshores. Informal pathways between beaches and streets may be developed but only where they do not require significant vegetation clearance or land forming, otherwise pathways should be located adjacent to existing streets. A new pathway between Imlay street and Cattle Bay Road will provide easy pedestrian access to the site and foreshore park.”*

**Comment:** Staff consider that the proposed marina development would be a compatible use that satisfies the desired future character statement for Cattle Bay through:

- The maritime nature and scope of the development and its presence within the natural and manmade environs;
- Compatibility with Eden’s maritime heritage;
- The provision, improvement and maintenance of public access to the Cattle Bay foreshore;
- Its compatibility with and potential contribution to Snug Cove as a working port;
- Its potential short and long term social and economic benefits to the Town of Eden and Bega Valley.

### **Bega Valley Shire Land Use Planning Strategy 2008**

The Strategy was prepared as a summary of the planning research and background to the formulation and eventual adoption of the Bega Valley Local Environmental Plan 2013 and the Bega Valley Development Control Plan 2013.

As it related to Eden, the Strategy notes its emerging tourist focus and the importance of its Port and harbour facilities, aquaculture and related industries. The Strategy also recognises that Eden has economic challenges in replacing lost unskilled and semi-skilled employment opportunities.

**Comment:** Staff consider that the proposed marina development is generally supportive of the expectations and directions of the Strategy in that:

- As a major new development, it is located within the Eden Township and has access to necessary service and community infrastructure.
- It would have important social and economic benefits for the town;
- The nature and extent of the marina development impacts on environmental integrity would be managed through construction and operation management practices;
- It would be compatible with Eden’s maritime heritage whilst acknowledging and respecting local Aboriginal cultural heritage.

## **OTHER ACTS OF LEGISLATION**

### **Protection of the Environmental Operations Act 1997**

The proposed marina requires a licence from the NSW Environment Protection Authority (EPA) under the Protection of the Environment Operations Act 1997 in which marinas with capacity to store more than 80 vessels are listed under Schedule 1 as a scheduled activity.

**Comment:** General Terms of Approval have been issued by the NSW EPA and are detailed in Attachment 4.

#### **Fisheries Management Act 1994**

The proposed marina requires a permit from NSW Primary Industries - Fisheries under the Fisheries Management Act 1994 as it involves impact to marine vegetation in the construction of the marina from piling.

**Comment:** General Terms of Approval have been issued by the NSW Department of Primary Industries (Fisheries) and are detailed in Attachment 4.

#### **Biodiversity Conservation (BC) Act 2016**

Section 1.7 of the EP&A Act 1979 provides that the Act has effect subject to the provisions of Part 7 of the BC Act. The purpose of the BC Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

The provisions of the BC Act 2016 are addressed in the Marine Ecology Report in Appendix 16 of the EIS. Further information was submitted by the applicant addressing the BC Act concluding that the proposal does not exceed the Biodiversity Offsets Scheme threshold as set out in Section 7.4 of the BC Act.

**Comment:** Council's Environmental Management Officer has reviewed the application and considered the proposal satisfactory with regards to the requirements of the BC Act.

#### **Environmental Protection and Biodiversity Conservation Act 1999**

The Environmental Protection and Biodiversity Conservation Act 1999 (Cwth) (EPBC Act) provides an assessment and approval process for actions likely to cause a significant impact on Matters of National Environmental Significance (MNES). The nine MNES are:

- World Heritage properties.
- National Heritage places.
- Wetlands of international importance (listed under the Ramsar Convention).
- Listed threatened species and ecological communities.
- Migratory species protected under international agreements.
- Nuclear actions (including uranium mines).
- Commonwealth marine areas.
- The Great Barrier Reef Marine Park.
- A water resource, in relation to coal seam gas development and large coal mining development.

**Comment:** The EIS has addressed the provisions of this legislation through the Marine Ecology Report in Appendix 16 of the EIS. The report detailed that referral to the Minister (for marine ecological matters) is not required as no significant impacts on any ecological MNES under the EPBC Act 1999 are expected to occur.

## **SECTION 4.15 ASSESSMENT ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979**

#### **Environmental Planning and Assessment Act 1979**

Pursuant to Section 4.10 of the EP&A Act and Schedule 3 of the Environmental Planning and Assessment Regulations 2000, the proposed marina development constitutes designated development as it falls within the scope of:

“Marinas or other related land or water shoreline facilities that moor, park or store vessels (excluding rowing boats, dinghies or other small craft) at fixed or floating berths, at freestanding moorings, alongside jetties or pontoons, within dry storage stacks or on cradles on hardstand areas—:  
(c) that have an intended capacity of 80 or more vessels of any size.”

Pursuant to Section 4.46 of the Act, the application constitutes “integrated development” with relevant approvals required from NSW EPA under the Protection of the Environment Operations Act 1997 and NSW Fisheries under the Fisheries Management Act 1994. Their comments and General Terms of Approval have been provided and are included in Attachment 4.

In determining a development application, a consent authority is to take into consideration matters referred to in Section 4.15(1) of the Act as are of relevance to the development the subject of the application.

## **Environmental Planning Instruments - Section 4.15(1)(a)(i)**

### **State Environmental Planning Policy (State and Regional Development) 2011**

In accordance with the provisions of Part 4 of the SEPP, the proposed development is specified in Schedule 7, being “Designated development”. The development is classed as Regionally Significant Development. Under Part 4, Division 4.2, Section 4.5(b) of the Act, the Southern Region Joint Regional Planning Panel is designated as the determining authority.

### **State Environmental Planning Policy 33 (Hazardous and Offensive Developments) 1992**

This SEPP is an enabling instrument that aims to ensure the merits of a proposal are properly assessed prior to determination. The Policy identifies potentially hazardous and offensive development and provides for risk threshold screening and preliminary hazard analysis to determine site suitability and potential impacts.

On the assessment of the application, Council staff have concluded that both the land and water-based components of the proposed marina development would not comprise any hazardous or potentially hazardous land use activity as defined by the Policy.

### **State Environmental Planning Policy 44 (Koala Habitat Protection) 1995**

SEPP 44 applies to the whole of the State and applies to land having an area more than 1 hectare or has, together with any adjoining land in the same ownership, an area of more than 1 hectare.

The land-based component of the marina development has an area of 1.66 hectares. With the exception of small pockets of native vegetation adjacent to the north western and south western boundaries of the land, the site is void of any vegetation of worth. The remaining pockets of native vegetation have not been identified as ‘potential Koala habitat’ as defined by the Policy.

### **State Environmental Planning Policy 55 (Remediation of Land) 1998**

The Policy applies to the whole of the State. Clause 7 details when contamination and remediation are to be considered in the determination of a development application.

The EIS has acknowledged that the potential for site contamination was extensively investigated and reported on in the assessment and determination of the Major Project Concept Approval (05\_0032).

That Concept Approval identified that some site remediation would be necessary in accordance with the recommendations contained within the Site Exit Audit and Environmental Site Assessment report prepared by Aargus dated June 2007 (included as Appendix 14 of the EIS).

Council is satisfied with the conclusions of the Site Exit Audit and Environmental Site Assessment report prepared by Aargus.



The current application does not involve the residential development of the land and only minimum site disturbance is proposed with the erection of the proposed portable buildings, renovation of concrete slabs (carpark area) and provision of service infrastructure.

Notwithstanding, a condition of consent is proposed requiring a preliminary contamination report prior to the issue of a construction certificate and a validation report prior to the occupation of the site be provided to ensure that any asbestos contamination has been remediated.

#### **State Environmental Planning Policy (Primary Production and Rural Development) 2008**

Part 5 of the SEPP provides provisions for sustainable aquaculture. Division 4 requires the consideration of effects of proposed development on oyster aquaculture. A review of priority oyster aquaculture areas within the Bega Valley Shire Area identified none within Twofold Bay or within estuaries entering the Bay. The nearest areas are located at Pambula and Wonboyn Lakes. Based on the location of the development, it is considered that there would be no impact on any priority oyster aquaculture areas.

The site is located in close proximity to marine aquaculture development (mussel growing areas) and the potential impacts on this aquaculture industry is detailed further in this assessment report.

#### **State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007**

Clause 13 of the policy requires the determining authority to consider the compatibility of proposed development with mining, petroleum production or extractive industries. A review of Council records indicate that there are no extractive industries in the vicinity of the site and therefore this Clause Policy does not apply.

#### **State Environmental Planning Policy (Coastal Management) 2018**

The Policy applies to the land and the development has been assessed having regard to the relevant sections of the policy. The clauses of the Policy relevant to the assessment of the proposed development are outlined and discussed below.

##### **Division 1 – Coastal wetlands and littoral rainforests area**

##### **Clause 10 Development on certain land within coastal wetlands and littoral rainforests area**

There are no coastal wetlands or littoral rainforest areas located within the development site.

##### **Clause 11 Development on land in proximity to coastal wetlands or littoral rainforest**

There are no coastal wetlands or littoral rainforest areas located within the vicinity of the development site.

##### **Division 2 – Coastal vulnerability area**

##### **Clause 12 Development on land within the coastal vulnerability area**

The subject land is not included on the Coastal Vulnerability Area Map under State Environmental Planning Policy (Coastal Management) 2018 (CM SEPP). Matters relating to coastal hazards have been addressed in accordance with Clause 6.4 of BVLEP 2013 below.

##### **Division 3 – Coastal environment area**

##### **Clause 13 Development on land within the coastal environment area**



Is the proposed development likely to cause an adverse impact on the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment?

The construction and operation of the proposed marina would have potential impacts on water quality.

The EIS is supported by a Water Quality Management Plan. The Plan has quantified potential impacts associated with:

- Sediment plumes caused by pile driving activities or by the anchoring or movement of construction vessels.
- Spills of fuel and other harmful substances from construction vessels.
- Pollution of the waterway with general waste.
- Toxic impacts of fuel and substance spills on waterways and nearby aquaculture enterprises.
- Stormwater runoff from hard surfaces such as carparks.
- Washing of vessels
- Illegal discharge from vessel holding tanks
- Accidental spillage of bilge water, sewage and grey water
- Increased copper in water column from anti-foul ablation.
- Pollution of the waterway by general waste.

In recognition of the above, the Plan makes specific recommendations in relation to water quality management and/or mitigation measures to be employed in the construction and operation of the proposed marina.

It is considered that the Plan's form and content are acceptable and environmentally responsible. Compliance with those measures are considered reasonable and would mitigate any adverse impact on the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment of Cattle Bay and wider Twofold Bay. The EIS and attached wave modelling report has detailed that the proposed wave attenuator would mitigate wave impacts but have the potential to generate wave refraction and influence natural coastal processes. The report identified that Cattle Bay would be impacted with the resultant potential for beach alignment change.

Is proposed development likely to cause an adverse impact on the coastal environmental values and natural coastal processes?

The potential re-alignment has been considered by Council's Environmental Services. It is concluded that the change would not cause an adverse impact on Cattle Bay or surrounding area.

Is proposed development likely to cause an adverse impact on the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1?	The site does not fall within nor is located in proximity to a marine estate or sensitive coastal lakes.
Is proposed development likely to cause an adverse impact on the marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms?	<p>The EIS has provided an assessment on the potential impacts on marine vegetation, native vegetation and fauna that inhabit Cattle Bay and surrounding Twofold Bay area. It was identified that a submerged rock pinnacle would need to be lowered to ensure safe boat movement within the Marina.</p> <p>Important areas of sea grasses, marine invertebrates, mussels and marine mammals have been identified and the design and proposed operations have been developed to mitigate impacts.</p> <p>It is considered that the design and proposed operational management of the marina would not cause an adverse impact.</p>
Is proposed development likely to cause an adverse impact on the existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability?	<p>No impacts are envisaged on the existing public foreshore under the control of Bega Valley Shire Council or along Cattle Bay Beach, or access to and along Cattle Bay Jetty.</p> <p>Access and facilities along Cattle Bay have improved over the past several years with the provision of additional carparking and services.</p> <p>Additional on-site carparking and refurbishment of the Jetty will only improve access, including persons with a disability.</p>
Is proposed development likely to cause an adverse impact on Aboriginal cultural heritage, practices and place?	<p>The EIS process relies on past investigations undertaken by the proponent's consultants South East Archaeology in 2008 in support of the mixed tourist and residential development endorsed under the Major Project Concept Approval (05_0032). No additional investigations have been undertaken to supplement the earlier reporting.</p> <p>The EIS has acknowledged past comments received from the Eden Local Aboriginal Land Council relating to the importance of the Bundian Way. It is considered that the development would not cause an adverse impact on Aboriginal cultural heritage, practices and place.</p>
Is proposed development likely to cause an adverse impact on the use of the surf zone?	<p>The design of the Wave Attenuator is to minimise waves and therefore would moderate surf onto Cattle Bay beach. The report also identified that Cattle Bay would be impacted with beach alignment change over time. The moderating of waves could improve beach use as a protected beach area and it is not considered that the development is not likely to cause an adverse impact on the use of the surf zone at Cattle Bay or Cocora Beaches</p>



Is the proposed development designed, sited and managed to avoid an adverse impact referred to above?

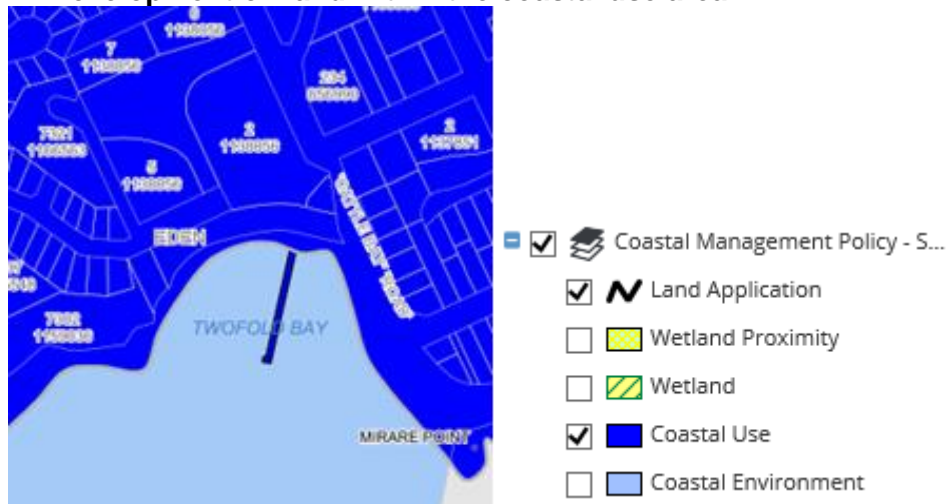
The EIS has detailed that the marina has been designed, sited and managed to avoid impacts. These include;

- Cranking of the wave attenuator to mitigate wave refraction towards Cocora Beach;
- Development of Operational Environmental Management Plan (OEMP); Construction Environmental Management Plan (CEMP); and Water Quality Management Plan (WQMP) to protect the aquatic environment of Cattle Bay and surrounding areas;
- Refurbishing the existing Jetty and not undertaking works within the coastal foreshore to maintain and improve public accessibility to Cattle Bay.

These measures have been reviewed and considered by several state government agencies who are satisfied with the proposed measures to mitigate impacts.

#### Division 4 – Coastal use area

##### 14 Development on land within the coastal use area



Is the proposed development likely to cause an adverse impact on the existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability?

The proposed development would refurbish the existing jetty and therefore improve access out over the water and provide additional access over the water to boat berthing areas. No structures are proposed to be erected within the foreshore area or beach to restrict accessibility for the public.

Is the proposed development likely to cause an adverse impact on overshadowing, wind funnelling and the loss of views from public places to foreshores?

The proposed development would be visible from both public and private locations along the coast from within and around Snug Cove and wider Twofold Bay. The visual amenity of Cattle Bay and adjoining foreshore areas would change with the construction and operation of the proposed marina. However, it is considered that a marina would not be out of character with the marine environment and/or foreshore development currently located within the locality.

The location of two portable buildings and associated car parking areas would not have an adverse impact on overshadowing, wind funnelling or loss of views from public places to the foreshore due to their setback to Council's reserve, height and positioning within the site.

<p>Is the proposed development likely to cause an adverse impact on the visual amenity and scenic qualities of the coast, including coastal headlands?</p>	<p>The land-based component of the Marina sits within a natural amphitheatre with bushland and residential uses located upslope. The two portable buildings and carparking would not cause an adverse impact on the visual amenity and scenic qualities of the coast, including coastal headlands when viewed from areas upslope of the site.</p> <p>The water component would be located between two headlands within Twofold Bay being Mirara Point and a small headland that separates Cattle Bay and Cocora Beach.</p> <p>The Marina would add visual references into the landscape with the provision of the wave attenuator, floating pontoons and an increase in the number of boats currently moored within the area. The addition of these items would generally sit low within the visual catchment and be an addition to the Cattle Bay Wharf and existing swing moorings.</p> <p>Council concurs with the visual impact of the development detailed in the Potential Visual Impacts assessment by Inspire Planning and Urban Design and that the development would not cause an adverse impact on the visual amenity and scenic qualities of Cattle Bay including adjoining coastal headlands.</p>
<p>Is the proposed development likely to cause an adverse impact on Aboriginal cultural heritage, practices and places?</p>	<p>The EIS details that limited site works are proposed for the land-based component of the development that would limit ground disturbance.</p> <p>The development application has identified that the site is near the Bundian Way being a State Heritage Item. The provision of the Marina would alter the landscape when viewed from the Bundian Way, however, it is considered that the changes are not inconsistent with the existing marine environment of Cattle Bay and the wider Snug Cove maritime precinct that include swing moorings and the Cattle Bay Jetty.</p>
<p>Is the proposed development likely to cause an adverse impact on the cultural and built environment heritage?</p>	<p>There are no European Heritage items located within the site. The Marina would not impact on heritage items located in the vicinity, namely Thompson's Point Baths.</p>
<p>Are you satisfied that the development is designed, sited and will be managed to avoid an adverse impact referred to above?</p>	<p>The design of the Marina including the wave attenuator provides suitable setbacks to rocky headlands and the built environment. The design provides for structures that would sit at or below the existing Cattle Bay Wharf. Views out over Twofold Bay from public vantage points would be maintained. Proposed minimal construction on land-based parts of the site help mitigate possible impact on Aboriginal archaeology and limit overshadowing on public reserves.</p>
<p>Have you considered the surrounding coastal and built environment, and the bulk, scale and size of the proposed development?</p>	<p>The proposed Marina development would increase the number of structures and boats that currently exist within Cattle Bay inlet. It is considered that the existing landscape can absorb the additional structures and boats proposed.</p>

**15 Development in coastal zone generally—development not to increase risk of coastal hazards**

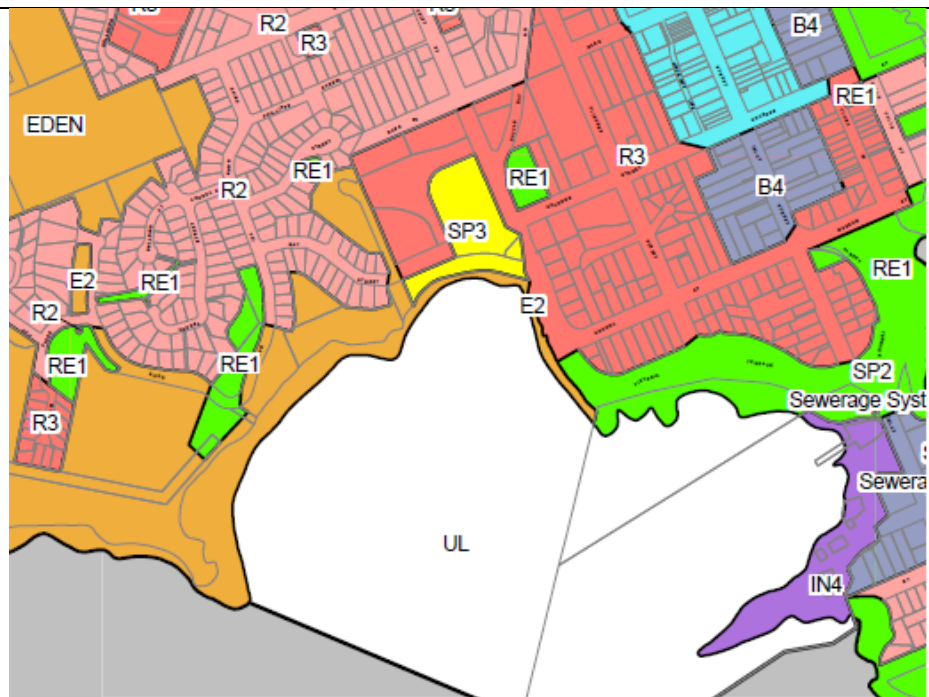
The EIS, namely through the Wave Modelling Report has detailed that the marina, and in particular the wave attenuator, would cause Cattle Bay beach to realign over time. Council does not consider that this realignment as an increase in coastal hazard at Cattle Bay beach as it would be retained, only realigned.

**Bega Valley Local Environmental Plan 2013 (BVLEP 2013)**

The development application has been assessed in accordance with the relevant sections of BVLEP 2013 detailed below;

Standard	Comment
<b>Clause 1.2 - Aims of Plan</b>	<p>The proposed development would contribute to the Eden's economic base by expanding tourism and employment opportunities.</p> <p>It would contribute to lifestyle choice by providing additional recreational benefits to the local community and Shire generally.</p> <p>Its visual prominence would be in keeping with the natural environment and scenic qualities of Snug Cove and its associated maritime heritage.</p> <p>The proposed development has been designed for integration into the approved mixed tourist and residential development concept endorsed by a Major Project Concept Approval (05_0032).</p> <p>The impact on cultural heritage (Aboriginal and European) has been acknowledged and respected.</p> <p>The proposed development would not be adversely affected by natural coastal hazards nor is it likely to impact on coastal processes.</p> <p>The proposed development would have manageable impacts on water quality.</p> <p>Generally, the development supports the Principles of Ecologically Sustainable Development (ESD) albeit limited given its characteristics and scope.</p> <p>Given the above, it is considered that the proposed marina development would be consistent with the objectives of the Plan.</p>
<b>Clause 2.3 - Zone objectives and Land Use Table</b>	<p>The land component of the marina development is zoned SP3 – Tourist and E2 – Environmental Conservation with the water component Unzoned Land (UL).</p> <p>Council's foreshore public reserve (Lot 4 DP 1138056) is located within the SP3 – Tourist zoning.</p>





Zoning Map Extract - Source: Bega Valley Local Environmental Plan October 2019

The development of the site for the purpose of a marina is permitted with consent within the SP 3 - Tourist zone. Under the provisions of the BVLEP 2013 a **“marina”** is defined as:

*“a permanent boat storage facility (whether located wholly on the land, wholly on a waterway or partly on land and partly on a waterway), and includes any of the following associated facilities:*

- a) any facility for constructing, repairing, maintenance, storage, sale or hire of boats,*
- b) any facility for providing fuelling, sewage pump-out or other services for boats,*
- c) any facility for launching or landing boats, such as slipways or hoists,*
- d) any carparking or commercial, tourist or recreational or club facility that is ancillary to the boat storage facility,*
- e) any, berthing or mooring facility.”*


The existing wharf (which is to be integrated into the design of the proposed marina development) spans that section of the foreshore which is zoned E2 – Environmental Conservation.

Under the provisions of the BVLEP 2013 a **“jetty”** is permitted with consent in the E2 – Environmental Conservation zone. Under the provisions of the BVLEP 2013 a **“jetty”** is defined as:

*“a horizontal decked walkway providing access from the shore to the waterway and is generally constructed on a piered or piled foundation.”*

It is considered that the land-based component of the proposed marina and upgrade to the jetty are consistent with the SP 3 – Tourist and E2 – Environmental Conservation zone objectives as the development would be providing an additional use that is complimentary to the approved tourist development and would protect the existing ecological, cultural and aesthetic values of the site.

<p><b>Clause 2.4 - Unzoned land</b></p>	<p>The water-based component of the proposed development is Unzoned Land (UL). Development may be carried out on UL only with development consent. Before granting development consent, the consent authority must:</p> <ul style="list-style-type: none"> <li>(a) consider whether the development will impact on adjoining zoned land and, if so, consider the objectives for development in the zones of the adjoining land, and</li> <li>(b) must be satisfied that the development is appropriate and is compatible with permissible land uses in any such adjoining land.</li> </ul> <p>As detailed above, the land-based component of the marina is located within the SP3 Tourist and E2 Environmental Conservation zones.</p> <p>The objective of the SP3 Tourist Zone is:  <i>“To provide for a variety of tourist-orientated development and related uses.”</i></p> <p>The objectives of the E2 – Environmental Conservation Zone are:  <i>“To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.”</i>  <i>“To prevent development that could destroy, damage or otherwise have an adverse effect on those values”</i></p> <p>It is considered that the proposed marina development will not impact on adjoining zoned land and is consistent with the objectives of those zones on the basis that:</p> <ul style="list-style-type: none"> <li>• The proposed marina development has been designed for integration into a mixed tourist and residential development which has been endorsed by a Major Project Concept Approval (05_0032).</li> <li>• The EIS and assessment process has identified and addressed the potential impacts of the proposed marina development on environmental integrity and the processes to protect that integrity.</li> <li>• The proposed marina development would be consistent with the natural environment and scenic qualities of Twofold Bay and its associated maritime heritage.</li> <li>• The proposed marina development would be complementary to the built form of foreshore development in the immediate area, more specifically the Port of Eden and Snug Cove areas.</li> <li>• Cultural heritage has been addressed and measures provided to protect it.</li> </ul>
<p><b>Clause 4.3 - Height of buildings</b></p>	<p>The maximum height for a building on the land is 10 metres on the Height of Building map. The proposed portable buildings would have a height of approximately 3 metres.</p>
<p><b>Clause 5.5 - Development within the coastal zone</b></p>	<p>(Repealed)</p>
<p><b>Clause 5.7 - Development below mean high water mark</b></p>	<p>The application is accompanied by an EIS that provides appropriate environmental assessment for that part of the marina to be carried out below mean high water mark.</p>

<p><b>Clause 5.10 - Heritage Conservation</b></p>	<p>The land does not contain European heritage items and is not within a heritage conservation area identified under Schedule 5 of BVLEP 2013.</p> <p>The nearest heritage item located in the vicinity of the site is Thompsons Point Baths located approximately 240 metres to the east of the proposed marina (See plan below). There is suitable setback and intervening topography that would mitigate any visual impact to the Baths.</p>  <p>The Bundian Way was recorded and gazetted in January 2013 on the State Heritage Register. It is not listed under Schedule 5 Environmental Heritage of BVLEP 2013.</p>
<p><b>Clause 6.1 - Acid Sulfate Soils</b></p>	<p>The site is not mapped as containing Acid Sulfate Soils under the provisions of BVLEP 2013. The EIS addressed the potential for Acid Sulfate Soils in Section 10. It is identified that the proposed development on the land base does not involve the physical removal of any soil with potential for Acid Sulfate Soils. Staff considered that the potential for Acid Sulfate Soils have been adequately addressed with no impact envisaged.</p>
<p><b>Clause 6.3 – Flood planning</b></p>	<p>Whilst the site is periodically affected by localised flooding during major storm events, it is not mapped as flood liable under the provisions of BVLEP 2013. The EIS recommends the preparation, adoption and implementation of a ‘flood emergency response plan’. The preparation of a flood emergency response plan is considered justified and reasonable given the circumstances of the case.</p>
<p><b>Clause 6.4 – Coastal risk planning</b></p>	<p>The EIS has examined the coastal processes affecting the site, in particular through the Wave Modelling Report. The impacts of these processes on the development and the surrounding environment are considered appropriate. The design has taken into consideration how to avoid significant adverse impacts from coastal hazards, namely waves and storms and is compatible with the risks presented by coastal hazards.</p>
<p><b>Clause 6.5 - Terrestrial biodiversity</b></p>	<p>Part of the subject land is mapped as containing terrestrial biodiversity (map extract provided below) and as such, the provisions of the Clause have relevance.</p>



The periphery of the old cannery site contains remnant vegetation that had not been removed as part of the old Cannery operations. The proposed development would not require the removal of any remnant vegetation. The area of the proposed car parking and portable buildings retain low height grasses and weeds that have grown between concrete slabs.

No significant vegetation exists within this site. Removal of vegetation for the land-based component of the Marina would not impact on any habitat or diminish the biodiversity structure on surrounding lands.

**Clause 6.6 –  
Riparian land and  
watercourses**

Part of the subject land is mapped as containing riparian land and watercourses (map extract provided below) and as such, the provisions of the Clause have relevance.



The site is traversed by 2 defined gully systems which discharge to Twofold Bay. The subject land forms part of a much larger stormwater catchment which generally extends to the north.

As previously indicated, the site has been extensively disturbed by past cannery operations. The water courses have been piped and are located below the existing concrete slab area. The piped stormwater at the present time discharges through a primitive gross pollutant trap adjacent the existing seawall before discharging directly into Twofold Bay.

Refurbishment and temporary use of existing stormwater drainage



	<p>system incorporating the provision of a new gross pollutant trap is proposed for the purpose of accommodating the development. The provisioning of portable buildings and refurbishment of carparking areas would not generate any additional runoff.</p> <p>It is considered that the development would not have an adverse impact on the existing water quality and flows within the watercourses. The provisioning of a new gross pollutant trap and the development of the OEMP and CEMP provide appropriate measures to avoid, minimise and mitigate the impacts of the development at the site and Twofold Bay.</p>
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## **LIST OF ANY DRAFT INSTRUMENTS Section 4.15(1)(a)(ii)**

### **State Environmental Planning Policy No. 44 – Koala Habitat Protection**

The proposed changes of the SEPP have been considered and they do not alter the existing assessment considerations required under the SEPP 44 assessment detailed earlier in this assessment report.

## **BEGA VALLEY DEVELOPMENT CONTROL PLAN 2013 Section 4.15(1)(a)(iii)**

The proposed development has been assessed under the relevant provisions of the Bega Valley Development Control Plan (BVDCP 2013).

### **Clause 5.3 Access and Mobility**

The EIS has acknowledged that the proposed marina development must be design compliant. However, detailed design plans have not been submitted. Access across the land and water-based components of the proposed marina must be compliant with the Building Code of Australia, Australian Standard 1428 – Design for Access and Mobility and AS 3962-2001 – Guidelines for the Design of Marinas.

Details demonstrating compliance would be submitted to the Principal Certifying Authority with any subsequent application for the issue of a construction certificate. Staff consider that appropriate access and mobility can be achieved for the proposed development. It is recommended a condition of consent be applied requiring this detail.

### **Clause 5.4 Social and Economic Impacts**

The EIS has identified the qualitative social and economic impacts (positive and negative) of the proposed marina development. The positive impacts being:

- An increase in the supply of locally based employment opportunities within Eden to meet the needs of residents, enhancing income, prosperity and quality of life.
- Access to short term employment opportunities and the provision and injection of additional wages and investment/expenditure within the community and local economy during construction;
- The effective use of a large underutilised parcel of land within the Eden Township having good access to complementary and support activities and infrastructure.
- Enhanced passive and active recreational opportunities through the creation of lawful public access to the Cattle Bay foreshore inclusive of the adjoining public reserve, beach area and existing wharf.
- The provision of new tourist facilities which would enhance the attractiveness of the Town and Region thereby having economic benefit.

The negative impacts being:

- Disruption associated with the relocation of existing swing moorings.
- Potential impacts on the surrounding marine environment.

The EIS concludes that the proposal would deliver a modern boating facility which would attract additional investment and expenditure in tourism and marine related industries through its construction and operation and would contribute to recreation and lifestyle opportunities for the local community and Shire generally.

Staff consider that the social and economic impacts of the proposed marina development have been adequately addressed by the EIS and would generally be beneficial for Eden and the wider community.

## **Clause 5.5 Sustainable Design Principles**

### **The Precautionary Principle**

It is considered that the potential impacts associated with the proposed marina development have been identified and quantified with an adequate degree of certainty. Those impacts have identified mitigation measures and their adoption and implementation through the construction and operation of the marina.

In this regard, the EIS is supported by draft construction and operational environmental management plans which acknowledge potential impacts and cite appropriate mitigation measures. Staff consider that the application has evaluated options to avoid wherever practicable, serious or irreversible damage to the environment, and consequences of various mitigations measures to prevent impacts.

### **Intergenerational Equity**

It is considered that the proposed marina development aims to provide boat storage facilities and services to meet demand whilst ensuring environmental integrity through best practice controls and management consistent with social and intergenerational equity.

In this regard, the EIS is supported by draft construction and operational environmental management plans which acknowledge potential impacts and cite appropriate mitigation measures.

### **Conservation of Biological Diversity and Ecological Integrity**

It is considered that potential impacts associated with the proposed marina development on biodiversity have been more than adequately addressed through the EIS and evaluation process.

On review, the proposed marina development would not have an adverse impact on biodiversity diversity and ecological integrity and would embellish environmental quality and habitat opportunity.

In this regard, the EIS is supported by draft construction and operational environmental management plans which acknowledge potential impacts and cite appropriate mitigation measures.

### **Improved Valuation, Pricing and Incentive Mechanisms**

The EIS concludes that the value of environmental resources affected by the proposed marina development has been acknowledged and provided for through the examination of environmental consequences and the identification of appropriate mitigation measures needed to address potential impacts, including any short-term construction impacts.

In this regard, the EIS is supported by draft construction and operational environmental management plans which acknowledge potential impacts and cite appropriate mitigation measures.

In addressing ESD principles, consideration has also been given to:

## **Energy**

There is little opportunity to adopt measures to incorporate ESD principles into the design, construction and operation of the proposed marina due to the limited scope of works and operational activities.

The ongoing operation of the marina can adopt a number of measures that reduce its environmental footprint such as recycling and reduction in water and energy consumption. However, any influence would rely on the awareness and commitment of the marina operator and patrons.

**Comment:** The preparation, adoption and implementation of a water, waste and energy plan would help achieve a reasonable level of sustainability. Such a plan could form part of any subsequent construction or operational environmental management plan. It is recommended that a draft condition be included to ensure that identified sustainable design matters are undertaken.

## **Water Resources**

The EIS is supported by a Water Quality Management plan prepared by Ocean Environmental Consulting entitled 'Cattle Bay Marina Water Quality Management Plan #2' dated June 2015.

The Plan quantifies a number of potential impacts on marine ecology and aquaculture activities in Twofold Bay. In recognition, the Plan makes specific recommendations in relation to water quality management and/or mitigation measures to be employed in the construction and operation of the proposed marina.

**Comment:** It is considered that the Plan's form and content are acceptable and environmentally responsible. Accordingly, the Plan should be referenced in any subsequent construction environmental management plan and operational environmental management plan for implementation.

Draft conditions are recommended to ensure that identified management plans are undertaken.

## **Ecology**

The EIS and supplementary supporting documentation concluded that the biodiversity impacts have been adequately quantified and with appropriate mitigation measures (as detailed in the submitted Construction and Operational Environmental Management Plans), the land and water-based components of the proposed marina development would not have a significant impact on biodiversity.

The position is supported by Council staff as well as the relevant State Agencies.

## **Stormwater Management**

The land-based component of the proposed marina development comprises the erection of a temporary building, service infrastructure and the renovation of the concrete slabs to facilitate the on-site provision of carparking.

Refurbishment and temporary use of existing stormwater drainage system incorporating the provision of a new gross pollutant trap is proposed for the purpose of accommodating the development. The upgrade is supported by Council.

## **Transport**

The marina development would be accessible by walking and/or cycling. However, the development would be remote from public bus routes in and around the Eden Township. There is a local taxi service.

Given the above, the proposed marina development would be mostly car dependent which is not uncommon to marina developments given their operational characteristics.

### **Waste Management**

The EIS detailed that the proposed marina will have suitable waste management measures in place in accordance with the draft OEMP and CEMP. Waste from the marina office, marina activities, bilge water and oil absorbing pads will be collected by commercial waste contractor for disposal to licenced waste facility. Waste water from vessels in the marina is to be collected by way of mobile pump out carts and disposed into sewer pipes on site connecting to the Council sewer system in Cattle Bay Road. Waste water from the office amenities on the land base is to be disposed directly into sewer pipes on site connecting to the Council sewer system in Cattle Bay Road.

Waste from the marina construction will be managed by the marina builders and will include a skip bin on site, and removal by either a commercial waste contractor directly from the site or removal by barge for collection by commercial waste contractor off site for disposal to a licenced waste disposal facility.

Given the siting and design characteristics of the proposed buildings and structures and documented construction techniques and standards, the volume of waste generated during construction would not be significant.

It is to be noted that construction would not involve land modification or dredging.

Conditions are recommended to ensure compliance with Construction and Operational Environmental Management Plans be amended to address the management (inclusive of storage, resource recovery and spill prevention/mitigation) of solid, liquid and hazardous waste during the construction stage and over the long term whilst the marina is operating.

### **Clause 5.6 Trees and Vegetation**

The land-based components of the proposed marina are all on existing disturbed areas containing concrete slabs remnant from past industrial use, and do not involve removal of any tree or significant terrestrial vegetation.

### **Clause 5.8 Planning for Hazards**

#### **Flood Planning**

The site is not identified as being exposed to flooding. It is acknowledged that the buildings associated with the land-based component of the marina may be intermittently exposed to minor flooding during major storm events.

Works to address the issue would be cost prohibitive given the nature and extent of any inundation and the level of development proposed (portable buildings and open-air carpark).

The Construction Environmental Management Plan in the EIS recommends the preparation, adoption and implementation of a 'flood emergency response plan'. Such a plan could involve the monitoring of flood events, actions for evacuation of staff and visitors and recommendations relating to the provision of fencing, signage, power, lighting and mitigating the risk associated with debris impact to buildings. The preparation, adoption and implementation of a flood emergency response plan is considered appropriate as previously discussed and would not be inconsistent with the Objectives of the Plan.

Staff support the provision of a flood emergency response plan and recommend a condition requiring its provision in the Construction Environmental Management Plan.

### **Coastal Hazards**

The proposed marina development would be exposed to and would influence coastal processes. In response, the EIS quantifies the potential impacts associated with:

- Wave climate (local wind generated waves and ocean swells).



- Elevated water levels (climate change).
- Water movement patterns.
- Sediment movement and shoreline stability.

It is considered that the EIS has adequately identified and addressed potential impacts and responded through the siting and design of the proposed marina development. Accordingly, the Objectives of the Plan have been satisfied.

### **Contaminated Land**

The EIS has acknowledged that extensive site investigation and reporting was undertaken to address potential site contamination in the assessment and determination of the Major Project Concept Approved (05\_0032). The assessment of contamination has been suitably addressed under SEPP 55 consideration earlier in this assessment report.

### **Clause 5.9 Off-street Car and Bicycle Parking**

The Plan does not specifically nominate the carparking requirements for marina development. However, in the absence of any nominated requirements, the Plan references the Roads and Traffic Authority publication 'Guide to Traffic Generating Developments' 2002.

The Guide recommends the provision of an on-site carparking requirement based on:

- 0.6 spaces per wet berth.
- 0.5 spaces per marina employee.

This equates to the need to provide 97 onsite carparking spaces. The application identifies the provision of the required 97 spaces as well as an additional 3 loading/unloading spaces. The EIS is supported by a detailed traffic impact study prepared by Transport and Traffic Planning Associates entitled "Proposed Marina Development Cattle Bay Eden – Assessment of Traffic and Parking Implications" dated February 2019.

The report identifies that:

*"Whilst the RMS Development Guidelines have criteria for the provision of carparking for marina developments these are based on the same 1978 survey data which is refuted in the Hallam assessment. Hallam's review of surveys of weekend and public holiday use over a 7-month period was that the 85th percentile boat usage was only 10% of all boats moored/berthed. Therefore, the RMS criteria for 60% of wet berths is clearly errant.*

*Hallam's assessed parking provision is some 0.2234 cars per boat which for 154 berths equates to 35 parking spaces. It is proposed to provide 97 parking spaces with the development which is significantly more than any potential super peak demand. It is proposed to incorporate 2 disabled driver spaces in compliance with AS2890.6."*

The carparking spaces are proposed to be located on the existing concrete slabs and stormwater drainage system remnant to the old cannery site. The applicant has detailed that they will remain in place until such time as the approved mixed tourist/residential concept development is constructed. At that time, the required on-site carparking and servicing arrangements for the marina would be incorporated into the design and construction of the land-based development.

The existing concrete slabs would require renovation to ensure their effective use and maintenance for the purpose of carparking and vehicular movements.

No detail (apart from brief comment in the EIS and notation on the submitted 'Site Development and Stormwater Plan') has been submitted as part of the current application which outlines the actual extent of the works involved.

Also, no detail has been submitted in relation to the provision of landscaping within the carparking area to help reduce its potential visual impact when viewed from adjoining and adjacent lands and waterway.

The fact that the area has been subject to a Major Project Concept Approval (05\_0032) for a mixed tourist and residential development should not limit the scope of the land based component of the proposed marina development in terms of providing a carparking area which is compliant with relevant design standards and which contributes to the scenic quality of the area.

Should the mixed tourist and residential development proceed to the preparation and lodgement of a development application, it will need to address the loss of on-site carparking associated with the marina development and public availability at that time.

In light of the above, it is considered that the proposed carparking and driveway areas should be subject to the preparation and endorsement of engineering design plans which also provides for the establishment of suitable landscaped areas within the carpark. The works would need to be completed in accordance with the approved plans prior to the issue of any subsequent occupation certificate.

There is ample opportunity within the development site for the provision of bicycle parking for both staff and patrons of the marina and general public.

Suitable conditions are recommended detailing the provisioning of the on-site carparking, landscaping and provisioning of bicycle spaces.

#### **Clause 5.11 Signage and Advertising**

No details have been submitted as part of the current application. As such, it is considered that a suitable condition should be imposed on any subsequent consent requiring the submission of a detailed development application for the erection of any commercial signage and/or advertising associated with the marina development except otherwise permitted as exempt development.

### **BEGA VALLEY SECTION 94 AND 94A CONTRIBUTIONS PLAN 2014**

#### **Section 4.15(1)(a)(iii)**

A Section 7.12 contribution levied at the rate of 1% of the estimated cost of the development is payable. The estimated project value (including land) as shown on the application is \$6.435 million. Based on the above criteria, a contribution of \$64,350 would be applicable. A condition is proposed to address payment of the S7.12 contribution.

#### **Any Regulations applying to the Development Section 4.15(1)(a)(iv)**

Nil Regulations apply to the development.

#### **Section 4.15(1)(a)(v)**

Repealed.

### **Assessment of Likely Impacts of the Development Section**

#### **4.15(1)(b)**

Council staff and State Agencies have assessed and reviewed the EIS and accompanying information having regard to the likely impacts of the development. The key impacts are highlighted below followed by staff comments.

## **Justification and alternatives considered**

The issue of justifying the need for the development of a marina has been addressed in Section 3.2 of the EIS. The EIS is supported in Appendix 4 by a report prepared by Coriolis Marine entitled “Eden Marina Project Report” dated March 2019.

The Report focuses on a number of key elements being:

- Boating Supply and demand analysis in relation to the proposed Eden marina;
- Suggested berth mix and staging options. Berth mix to include potential Superyacht, Fishing Fresh Catch and temporary Food and Beverage / Shopping berths;
- Suggested pricing point for sale and renting of marina berths;
- Design considerations in reference to land/water interfaces;
- Possible management model and fee structure for mobilisation and ongoing management of the facility; and
- Indicative price for construction of the marina and operating budget.

The Report concludes that:

- Like most marina projects, the capital investment required to create a marina basin is significant and if this is looked at as a cost of the marina only, it can make the business case unviable. Most regional developments similar to Eden rely on Government support to assist in the capital costs of the long-term core infrastructure such as wave protection or creation of the marina basin
- The proposed development provides for significant community benefit in the form of public access, infrastructure, employment and recreational opportunities
- It is considered that the most likely markets for the marina exist within the 100km Eden catchment area and Canberra making it a significant regional development providing short and long-term employment and investment in to the greater community

**Comment:** The EIS acknowledges that the proposed marina development would deliver a modern boating facility which would have manageable environmental impact whilst contributing to the social and economic fabric of the local Eden community, the Shire and the Region generally.

The EIS concludes that there are sufficient grounds to justify the proposed marina development, which is supported by Council staff. As detailed earlier in this report, there are two other marinas that have been approved within Twofold Bay being the Eden Safe Harbour Project and that in Boydtown.

It is considered that the justifications and alternatives have been adequately addressed by the Applicant. The location of the proposed marina would complement the existing State Government concept approval for a tourist/accommodation development at the site.

## **Navigation and Safety**

The EIS nominates two main water transport related issues, being impact on navigation and impact on swing moorings.

The EIS concludes that the impact of the proposed wave attenuator and floating components to the marina are unlikely to impact on navigation given:

- The proposed wave attenuator is to provide for a safe wave environment for boat navigation within the proposed marina;
- The footprint of the proposed development does not impact on the approach channel and swing basin for commercial operations in Eden Harbour;
- The footprint of the proposed marina and attenuator do not impact on the location of the Eden Safe Harbour wave attenuator;
- The footprint of the marina is currently used by swing moorings with vessels currently navigating in and out of it;
- The footprint of the proposed development would not restrict navigation to any future POEM marina proposal off Thompsons Point as this navigation is proposed to be

achieved via an opening retained between the Eden Safe Harbour wave attenuator and the Multi- Purpose Jetty;

- Access around the foreshore and existing Cattle Bay jetty wharf for small craft such as kayaks and canoes would continue to be available, although it would be restricted to outside the marina arms and berths.

The EIS has acknowledged that the proposed marina and wave attenuator would be designed in accordance with the following Standards to ensure their structural integrity and safe operation at all times and include:

- Australia Standard AS 3962-2001 'Guidelines for Design of Marinas';
- Australian Standard AS4997 – 2005 'Guidelines for the Design of Maritime Structures'; and
- NSW Maritime Authority Guidance Note 8.3.02

The EIS acknowledges that a number of swing moorings affected by the proposed marina footprint will need to be re-located in consultation with key stakeholders and Roads and Maritime Services.

**Comment:** The EIS has adequately addressed the issues associated with the existing and proposed maritime operations located at the site and wider Snug Cove maritime precinct. The relocation of the swing moorings is a matter between Crown Lands, Roads and Maritime Services and the lease holders. The relocation will require those sites are required to be safe and comply with similar safe navigation requirements to the proposed marina.

Comments were received from Port Authority of NSW and NSW Transport (Maritime) regarding the Navigation and Safety aspects of the development (See attachment 4). NSW Transport (Maritime) had no objection subject to conditions being applied that would address aids to navigation, and suitable timing for the relocation of the swing moorings. These are included in the draft consent.

The Port Authority of NSW identified additional issues that the EIS did not address, namely;

- Cumulative Impacts having regard to cruise operations at the Eden Breakwater Wharf extension and the Eden Safe Harbour Project wave attenuator;
- Potential impact of prop wash that can be generated by cruise ships and tugs on vessels moored at the marina; and
- The need for First Point of Entry requirements.

The applicant responded to these concerns with additional information dated 25 September 2019 (See Attachment 5). The following comments from Royal Haskoning addressed the Port Authorities comments;

***"Cumulative Impact***

*This particular matter was the subject of discussions held with Mr Andrew Dooley of the then Department of Industry (Dol) back in March 2019 and again on 21 August 2019. The outcome of these discussions were;*

- *the published position of the Eden Safe Harbour Project wave attenuator remains that shown in the AREF, ie Option 21, and includes the approximately 30m wide gap to the proposed Cattle Bay Marina wave attenuator;*
- *consideration is being given to alternative alignments for the Eden Safe Harbour Project wave attenuator, however those currently under consideration would not encroach closer to the Cattle Bay Marina wave attenuator than Option 21;*
- *it is the intention that any finalised alignment for the Eden Safe Harbour Project wave attenuator would allow for safe navigation to the proposed Cattle Bay Marina.*

*It is considered that consultation with the proponent of the Eden Safe Harbour Project wave attenuator has currently been taken as far as practicable and has re-confirmed that the two wave attenuator projects can be undertaken compatibly.*



### **Prop Wash**

*The above comment by PANSW is likely to be due to the fact that my letter of 29 March 2019 would not appear to have been included in the EIS. In any case, the following points can be made in regard to the potential hazard to vessels moored at the proposed Cattle Bay Marina due to prop wash generated by cruise ships and tugs:*

- the prop wash from cruise ships and tugs can potentially be an issue for vessels moored at a marina, subject mainly to the separation distance between the cruise ship or tug and the marina, all other things being equal, eg. orientation of the propeller jet and applied power;*
- the existence of a wave attenuator assists in the attenuation of propeller wash;*
- the Cattle Bay Marina wave attenuator would be located a minimum of 150m from the edge of the cruise ship channel compared to 30m in the case of the proposed Eden Safe Harbour Project wave attenuator, ie. there is 5 times more separation distance to the Cattle Bay Marina wave attenuator from the source of the wash<sup>2</sup>;*
- the proposed Eden Safe Harbour Project wave attenuator and proposed Cattle Bay Marina wave attenuator are of similar design;*
- extensive assessments of propeller wash impacts on the Eden Safe Harbour Project wave attenuator have been undertaken on behalf of government including ship simulation studies, two dimensional and three dimensional computational fluid dynamics (CFD) modelling of propeller wash, and a risk analysis in consultation with PANSW (Morgan et al, 2019). It is also well known that it is proposed to develop a marina behind this attenuator;*
- the government has committed to development of the Eden Safe Harbour Project wave attenuator having considered the prop wash risk to the attenuator, and to future marina vessels behind it, associated with cruise ship and tug operations;*
- it should be self evident that the hazard to the Cattle Bay Marina project due to prop wash is substantially less than that associated with the government's Eden Safe Harbour Project.*

*In my opinion, the Cattle Bay Marina project could be satisfactorily designed so as not to be adversely affected by cruise ship and tug prop wash, mainly by virtue of the separation distance between the project and the source of the wash.*

### **First Port of Entry**

*The applicant detailed that such an application could be made in the event it is required."*

This additional information was provided to Port Authority of NSW for further comment. They identified that the earlier comments have been addressed, however, the First Port of Entry is expected, and the requirements be further reviewed by the applicant.

Given that the EIS namely the Eden Marina Project Report prepared by Corolius Marine, detailed that cruising boat's (interstate and overseas) would comprise 5% of the annual occupancy attributed to such vessels, then it is anticipated that that they would be possibly seeking berths at the site. Without any additional information provided by the applicant, it is recommended that a condition of consent addressing First Port of Entry requirements be applied to ensure these provisions are met if the marina was to accommodate such vessels.

Staff consider that navigation and safety issues associated with the marina have been adequately addressed by the applicant including issues associated with the wider Snug Cove maritime precinct. As there are currently no detailed engineering or navigational designs for the proposed development, it is considered appropriate to impose conditions ensuring the construction complies with the relevant Australian Standards.

### **Biodiversity Assessment**

The very nature of the proposed marina development has the potential to adversely impact on the aquatic ecology of Cattle Bay and wider Twofold Bay through its construction and operation. In recognition, the EIS process has acknowledged these potential impacts resulting in the preparation and submission of a number of specialist reports, namely through

the Marine Ecology Report, but also relying on other reports detailing the mitigating measures in the construction and operation environmental management plans.

The Marine ecology report identified the following potential construction and operational impacts that need to be considered. Those being:

### **Construction Impacts**

- seabed and habitat disturbance associated with remediation works to the existing wharf;
- piling associated with new marina structures on displacement of benthic habitat and associated benthic epifauna and infauna;
- anchoring of floating plant during construction and remediation works on seagrass beds;
- works associated with the relocation of existing swing moorings;
- noise and lighting;
- cable strike, propeller wash on bottom sediments; and
- water pollution including liquid and solid material spills.

### **Operational Impacts**

- shading from structures and vessels on sea grasses;
- entanglement/ingestion of marine debris;
- decrease in water quality from possible accidental spillages from bilge water, sewage and grey water, discharge of vessel holding tanks, runoff from tenants washing topsides of their boats, spills of fuels and other substances and general wastes;
- vessel strike;
- increased settlement of introduced marine species;
- stormwater runoff from hardstand areas;
- impacts from marina noise and lighting;
- consequences of marina breakup – fire, vessel collision and structural failure, and
- cumulative impacts.

The marine ecology report addresses the aquatic environment of Cattle Bay, but also utilises other recent reports that have been prepared for the Eden Breakwater Wharf Extension Project and the Eden Safe Harbour Project to address the potential cumulative impacts this development could have on the wider Twofold Bay area.

The report established the presence of marine vegetation including sea grasses that exist within the development site and provided means to mitigate impacts.

The marine ecology report established that Cattle Bay does not support permanent populations or individual fish or shark species or threatened marine mammals, reptiles, shore and wading birds listed under the aforementioned Acts. However, the reports indicate that individuals of listed threatened species could be expected to utilise the habitat opportunities offered by Cattle Bay and more broadly Twofold Bay from time to time and established that protected species such as seahorses, sea-dragons and pipe fish are expected to reside in the habitat opportunities offered by Cattle Bay and that species such as dolphins, little penguins and a variety of sea birds utilise Cattle Bay and foreshore for feeding and roosting.

It was also acknowledged that the terrestrial habitat may also be utilised by marine/migratory bird species. In this regard, the report detailed that the land-based component of the site is highly disturbed with some regrowth and exotic vegetation and that the surrounding headlands are well represented vegetation communities in the region. Accordingly, it is not expected that the land-based component of the marina development would provide any significant breeding, shelter or feeding opportunities for protected or migratory bird species.

The Report detailed that a Species Impact Statement will not be required as no significant impacts on any threatened species with the potential to occur in the study area are expected

and that referral to the Minister (for marine ecological matters) is not required as no significant impacts on any ecological Matters of National Environmental Significance under the EPBC Act 1999 are expected to occur.

The Ecology Report finally concluded that while there is the potential for many threatened fauna listed under State and Commonwealth legislation to occur in the study area, it is not expected that the proposed marine construction or operation will have any significant impacts on these species if the mitigation/management measures outlined in this report are implemented.

The applicant provided additional information on the 25<sup>th</sup> September 2019 that provided further assessment on the ecology of the land based component of the marina having regard to the provisions of the BC Act 2016. That additional information identified that the proposal does not exceed the Biodiversity Offsets Scheme thresholds as set out in Section 7.4 of the BC Act.

**Comment:** The Marine Ecology Report and additional information submitted to Council on 25<sup>th</sup> September 2019 has been evaluated by relevant Council Staff and State Agencies. The ecology report has identified all potential flora and fauna to inhabit or visit the site and evaluated all relevant impacts associated with the proposed development on that flora and fauna.

The report detailed numerous mitigation measures for inclusion in the construction and operational environmental management plans and also specific conditions of consent relating to piling.

The Construction and Operational Management Plans submitted as part of the EIS generally addresses those recommendations of the ecology report, however, further clarity in those documents need to be provided to ensure that all identified impacts by the development on flora and fauna are mitigated. This includes specific conditions detailing that no construction works associated with the piling is undertaken in the highest risk months for mother/calf pods (October/November) and where possible be undertaken between December and March to avoid peak whale visitation season.

The application has received concurrence from both the NSW DPI Fisheries and the NSW EPA. Their General Terms of Approval are included in the draft conditions of consent and include conditions to mitigate impacts on the marine ecology.

### **Geotechnical Considerations in Construction**

A geotechnical statement has been prepared by Royal Haskoning DHV and is included as Appendix 15 of the EIS. An appraisal of geotechnical conditions has been based on recent information by NSW Trade & Investment Crown Lands who completed geotechnical investigations throughout Snug Cove (including Cattle Bay) during January-March 2015 as part of the studies for the Breakwater Wharf Extension Project and the evaluation of options to provide safe boating facilities in Eden Harbour.

Three boreholes were carried out in the area of the proposed Cattle Bay Marina wave attenuator; namely, BHT7, BHT8 and BHT11. The geotechnical conditions encountered at each of these borehole locations confirm verbal advice of Mr Dooley NSW Trade & Investment Crown Lands that the geotechnical conditions in the area of the proposed Cattle Bay Marina wave attenuator comprise less than 10m of overburden (sands, clayey silts and silty clays) overlying weathered rock. The rock is sandstone and rhyolite (a fine-grained volcanic rock).

Royal Haskoning DHV concluded that:

- There is nothing in the available geotechnical information, which now includes recent information available from the January-March 2015 investigations by NSW Trade & Investment Crown Lands, to suggest that a wave attenuator could not be designed in the

location and configuration proposed, with structural integrity. Piles could be readily driven through the overburden and into weathered rock. The thickness of the weathered rock will determine if pile driving may need to be accompanied by other common methods such as chiselling of harder rock.

- The wave attenuator would be designed in accordance with Australian Standard AS4997 'Guidelines for the Design of Maritime Structures'. The design wave conditions are likely to correspond to a 200 year Average Recurrence Interval (ARI) storm.
- It is significant that a large number of maritime structures have been satisfactorily constructed at Eden in similar geotechnical conditions to those described above including the Breakwater Wharf, Mooring Jetty, Multi Purpose Jetty, Cattle Bay Jetty and most recently the extension to the Breakwater Wharf and dolphin structures to accommodate cruise ships.

**Comment:** In review of the information provided in the EIS, there is no detailed engineering construction plans submitted to confirm the exact location of the attenuator. The attached reports indicate that there is no impediment to the construction of the wave attenuator and proposed piling for proposed floating walkways and berths.

The final design of the attenuator should be consistent with the modelled design in the Wave Modelling Report prepared by Cardno and Wave Impact Supplementary Statement prepared by Royal Haskoning DHV and detailed engineering plans submitted for final approval.

Conditions are recommended to ensure that detailed siting and engineering design plans for the wave attenuator are submitted to the Principal Certifying Authority for endorsement and their works are completed in accordance with the certified siting and engineering design plans.

### **Coastal Processes**

The proposed marina development would be exposed to and would influence coastal processes in and around Cattle Bay. For the purposes of evaluating the extent of these processes, the EIS is supported by a Wave Modelling Report prepared by Cardno and Wave Impact Supplementary Statement prepared by Royal Haskoning DHV.

In assessing the impacts associated with Coastal processes, the investigations and findings in the Report and Statement quantified potential impacts associated with:

- Wave climate (local wind generated waves and ocean swells);
- Elevated water levels (Climate change);
- Water movement patterns;
- Sediment movement and shore line stability; and
- Flooding

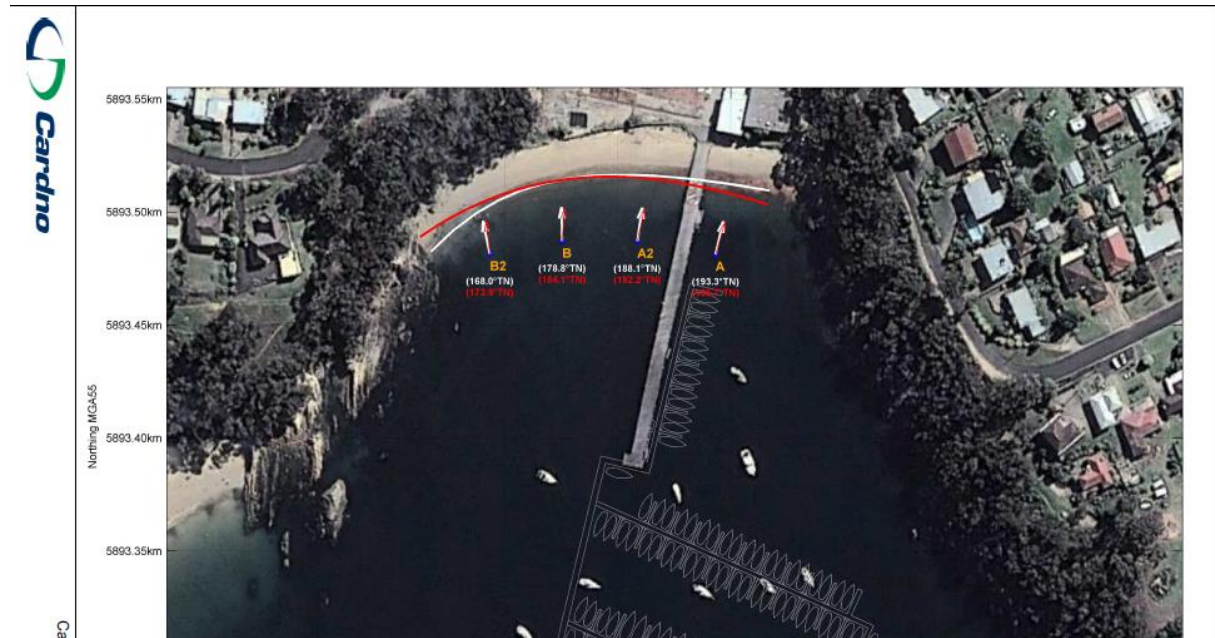
The investigations identified the potential effects of waves and their reflection from the proposed wave attenuator on Cattle Bay Beach, Cocora Beach and addresses potential impacts on nearby mussel farm operations.

As part of the investigations, the Supplementary Statement prepared by Royal Haskoning DHV addressed recently approved and completed developments within the surrounding Twofold Bay to consider potential changes to wave actions and the cumulative impacts in association with the proposed development. These developments included the dredging within Snug Cove associated with the Eden Breakwater Wharf Extension Project for cruise ships (now completed) and the wave attenuator proposed within Snug Cove associated with the Eden Safe Harbour Project.

The findings identified that the impacts associated with the Marina, namely the Wave attenuator, could be designed to ensure that the existing Cocora Beach environment and mussel farm operations would be protected.



The report detailed that the location of the wave attenuator would impact on the wave climate for Cattle Bay and would create a more settled wave action. The modified wave climate is identified as having an impact on the alignment of Cattle Bay beach through the clockwise beach plan-alignment rotation in the order of six to eight metres at the eastern end and western ends respectively. The report identified that in terms of wave energy, the beach will become more sheltered and fluctuate less in response to ocean storms and episodes of strong winds from the south/south-south-west, and this is not viewed as necessarily an adverse impact. The sandy beach would be retained (not lost) but it would be narrower at the western end and wider at the eastern end.



Source: Cardno Wave Modelling – Beach Alignment Change Cattle Bay Beach – EIS April 2019 Appendix 13, Figure 8.9

**Comment:** It is considered that the EIS and supporting reports have adequately evaluated and quantified the nature and extent of coastal processes which may have an influence on or may be influenced by, the siting, design and operation of the proposed marina development.

The EIS has also considered recent and proposed developments within the wider Snug Cove and the implications these developments could have in influencing wave actions in and around Cattle Bay.

The proposed design of the marina including the wave attenuator has been undertaken to not only meet the design parameters required to comply with Australian Standard AS3692.2001 'Guidelines for Design of Marinas', but to mitigate impacts on the surrounding coastal environment.

The development is considered appropriate based on the following outcomes of the design of the marina and wave attenuator:

- The wave attenuator and floating jetty would be resilient to sea level rise or can be readily adapted to accommodate sea level rise.
- The existing wharf would be well protected behind the wave attenuator and floating jetty component of the marina.
- The height of the existing wharf has been established at 2m AHD. Accordingly, it is unlikely that its height would need to be raised within the life of the floating marina.
- The potential impact of existing and proposed water-based structures on water movement patterns would be minor in context with the waterway area of Twofold Bay.

- Cattle Bay Beach would become more sheltered to wave action and sediment movement resulting in a narrowing of its western end over time. However, the 'sandy' beach character would not be lost over its length to the detriment of public access.
- There would be no significant change in the foreshore alignment or characteristics of Cocora Beach.
- The wave climate in the vicinity of the mussel farm before and after the installation of the proposed wave attenuator would only have a minimal effect on wave heights, wave direction and wave energy at the location of the mussel farm.

Based on the staff assessment of the detailed investigations and reporting, it is considered that the potential impacts associated with the function of the wave attenuator have been appropriately addressed.

### **Heritage and Archaeology**

The EIS has relied on detailed investigations and reporting by South East Archaeology in 2008 that supported the mixed tourist and residential development endorsed under the Major Project Concept Approval (05\_0032).

Those investigations identified an artefact scatter on the land (subject to the Concept Approval) and a moderate to high potential for further items of cultural heritage to exist elsewhere on the land.

At the time, the preparation of an Aboriginal Heritage Management Plan specifying policies, strategies and actions to mitigate and manage potential impacts in consultation with the Eden Local Aboriginal Land Council was recommended and subsequently embodied in the Concept Approval and associated Statement of Commitments.

The current application relies on these investigations and subsequent actions. No supplementary investigations and reporting have been submitted in support of the current application.

The known artefact scatter is located in a bushland corridor in the south west corner of the development site subject to the Concept Approval. It is well removed from the area of the site subject to the current application, more specifically, the area on which the temporary buildings and carpark areas would be located.

As previously documented, the land-based component of the subject site is in a significantly disturbed state stemming from its past development history as a cannery. The current marina proposal, in part, involves the erection of two temporary buildings and provision of on-site carparking utilising the existing concrete slab areas.

On that basis, the EIS concludes that the land-based component of the marina development is unlikely to impact on any known or unknown items of significance.

**Comment:** In assessing the current application due diligence must be exercised. The Bundian Way walking route follows the dedicated foreshore public reserve. The proposed marina development would not preclude public access to the foreshore reserve and as such, the creation and prominence of the Bundian Way would be respected and secured in perpetuity.

Given the findings of past investigation and reporting and that the existing concrete slab areas are likely to be disturbed in the provision of required service infrastructure and carpark renovation, it's not unreasonable to conclude that associated site works may have potential impact on unknown items of significance.

This position is supported by the NSW Biodiversity and Conservation (B&C) in its response to Council dated 5 August 2019.

Although it is identified that soil disturbance associated with the land based component of the marina is unlikely, conditions are recommended to ensure that prior to the commencement of any works associated with the renovation of the existing concrete slabs, the provision of service infrastructure and site landscaping, an Aboriginal Heritage Management Plan (AHMP) shall be prepared by a qualified archaeologist in consultation with the Office of

Environment and Heritage and submitted to Council for endorsement and appropriate reporting purposes are in place acknowledging the possibility of Aboriginal archaeology on-site.

### **Visual Amenity and Impact**

The EIS is supported by a visual impact assessment prepared by Inspire Urban Design and Planning entitled “Review and Assessment of Potential Visual Impacts – Proposed Marina and Wave Attenuator”. The report describes the site as;

*“Cattle Bay is a small, intimately scaled inlet on the northern side of Twofold Bay. It forms part of Snug Cove. It is bounded on all land sides by dense foreshore vegetation and becomes part of the waters of Twofold Bay to the south. The site is situated in an attractive landscape that is part of the character of both the town of Eden and the northern part of Twofold Bay.”*

The report identified that the fundamental issue is the proposed introduction of new marina facilities and transformation of the site to the new maritime uses with the consequential juxtaposition of a natural landscape with a marina one. The assessment considered impacts on the amenity of the foreshore; water users of Snug Cove; loss of views from public places and cumulative impacts. The assessment included existing maritime operations located in the area and proposed developments including the Port of Eden Marina project.

The assessment report identified and detailed that views to Twofold Bay, Snug Cove and Cattle Bay are extensive and common and are from public lands as well as from private properties. It was noted that vantage points yielded different information about the level of visibility of the site and distant, broader views have the potential to introduce issues of cumulative impact when viewed in concert with other neighbouring activities.

The report concludes that the addition of the marina at Cattle Bay in Snug Cove will result in a small change in the landscape and viewers affected by minor changes in views, or visible for a short duration, at an oblique angle, or which blends to an extent with the existing view. Thus, the magnitude in impact will be low, and in light of the low sensitivity to change, the assessment demonstrated that there will be negligible and acceptable visual impact.

**Comment:** The visual assessment undertaken by the applicant has been reviewed and assessed by Council staff. Inspections of the key vantage points identified in the Report by Inspire Urban Design and Planning were undertaken and are considered appropriate in the assessment and consideration of the visual impacts the proposed marina would have within Eden and waters around Cattle Bay.

It is considered that the Report by Inspire Urban Design and Planning has appropriately addressed the visual quality of the locality in terms of its nature, expanse and worth and the potential impact the proposed marina would have on those values. Council staff concur with the findings detailed in the report that the magnitude of impact will be low, and that there will be negligible and acceptable visual impact.

Although the overall development of the marina has been considered in respect to impact on visual amenity, the following matters still need to be addressed to ensure the visual amenity of the area is not further impacted based on detailed designs that would be required to be created for the proposed marina. They include:

- the design of the buildings, more specifically, the type of materials to be used in its construction and external finishes need to be provided to ensure they are consistent with the coastal/maritime elements consistent with Eden;
- details to be provided identifying specific site landscape treatments;
- details of final site illumination to mitigate light spills from access lighting and security floodlighting as to not impact on surrounding residences.

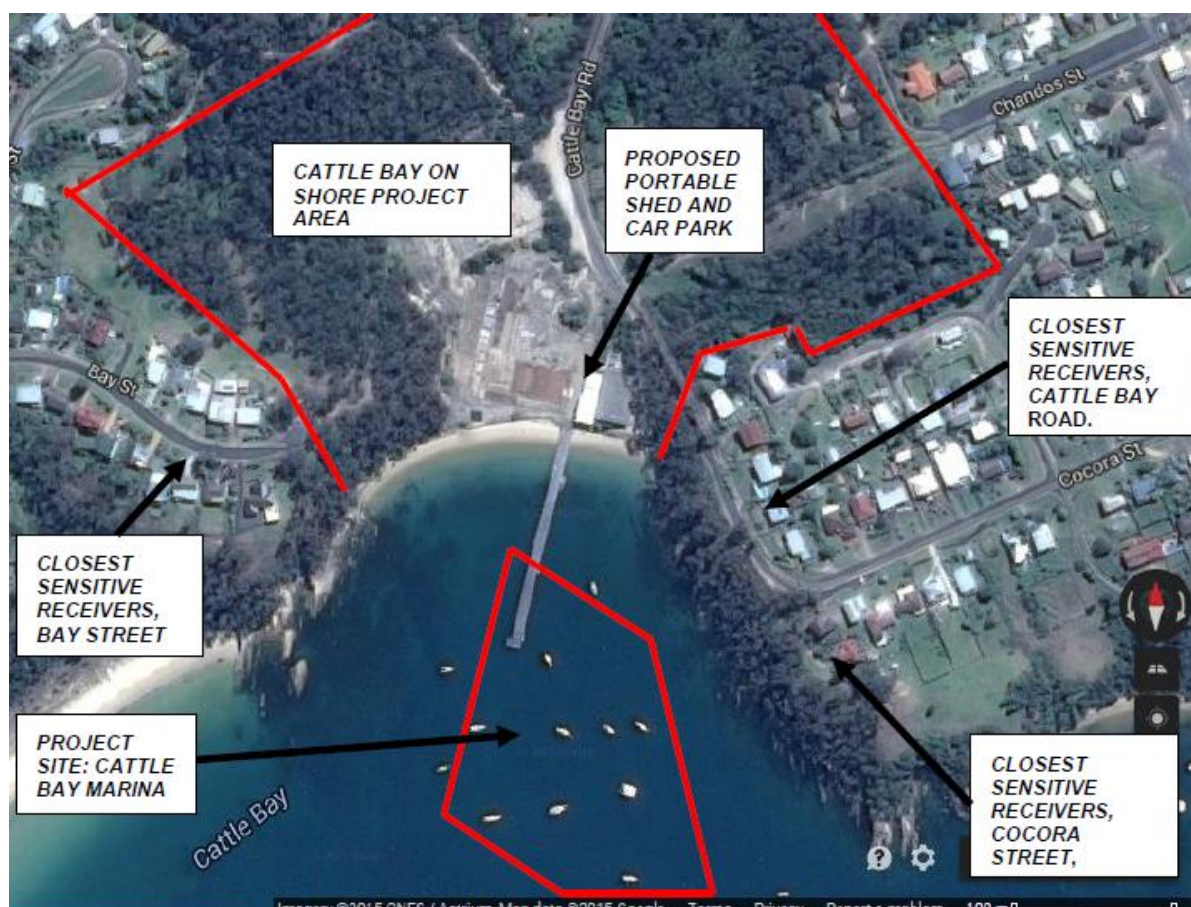
Conditions are recommended to be applied to address these matters.

## Air Quality Impacts

The EIS is supported by an air quality report prepared by West and Associates Pty Ltd entitled 'Cattle Bay Marina Development Application Air Quality Report Cattle Bay Eden' and included as Appendix 17.

The report identifies the closest sensitive receivers as being:

- the residential properties at 38 and 40 to 46 Cattle Bay Road which are separated from the marina pontoons by 100m to 150m and 90m to the proposed entry/exits channel on the north eastern side of the marina. These properties are slightly elevated above the foreshore and overlook the project site.
- the residential properties at 32 and 37 Cocora Street and 1 Victoria Terrace which are separated from the marina pontoons by 80m to 200m and 75m to the entry/exist channel on the north eastern side of the marina. These properties are slightly elevated above the foreshore and overlook the project site.
- the residential properties at 1 and 2 to 8 inclusive Bay Street which are separated from the designated super yacht/commercial berthing area to the marina 130m to 150m designated and 120m from the berthing channel. These properties are slightly elevated above the foreshore and overlook the project site.



Source: Cattle Bay Marina Development Air Quality Report: EIS 2019

The report identifies the current air quality is influenced by:

- exhaust from boat motors located on moorings in Cattle Bay at a distance from 80 to 150 metres to nearest sensitive receivers;
- exhaust from motor vehicles using Cattle Bay Road; and
- exhaust from private motor vehicle accessing their place of residence.

In assessing potential impacts, the report references:

- The Protection of the Environment Operations Act 1997;



- WorkSafe Australia - Workplace Exposure Standards for Airborne Contaminants December 2011; and
- specific sections of AS 1668.2 2012 – The use of ventilation and air conditioning in buildings – mechanical ventilation in Buildings;

The report nominates that the principal source of airborne contaminants associated with the proposed marina development to be exhaust emissions from petrol and diesel motors and that in all cases, their use would be in the open.

The report also concludes that any airborne contaminants and/or offensive odours (sewage pump-out cart operation) associated with the marina development would dilute over distance and as such would have no impact on nearby sensitive receivers.

**Comment:** The report by West and Associates has been reviewed by relevant Council staff and the NSW Environment Protection Authority and found to be acceptable in terms of its form and content and assessment of potential impacts.

### **Acoustic Impacts**

The EIS is supported by an acoustic report prepared by West and Associates Pty Ltd entitled 'Cattle Bay Marina Development Application Acoustic Report at Cattle Bay Road Eden' October 2014.

The report identifies the closest sensitive receivers as being:

- Location 1: The residential properties at 38 immediately joining number 40 and 46 Cattle Bay Road which are separated from the marina pontoons by 100 to 150 metres and 90 metres to the entry/exit channel on the north eastern side of the marina project site. These sites are elevated from the water's edge and overlook the project site
- Location 2: The residential properties at 32 and 37 Cocora Street with number 1 Victoria Terrace located behind 32 Cocora Street which are also separated from the marina pontoons by 80 to 200 metres and 75 metres to the entry/exit channel on the north eastern side of the marina project site. These sites are slightly elevated from the water's edge and overlook the project site
- Location 3: The residential properties at number 1 and 2 to 8 inclusive at Bay Street which are separated from the marina jetty by 130 to 150 metres where space has been allocated for commercial and super-yacht berthing, at ~120 metres from the berthing channel. These sites are slightly elevated from the water's edge and overlook the project site.

The Report identifies the current noise sources affecting residential receivers in the immediate area to be:

- Noise from Cattle Bay boat traffic from permanent boats on moorings as they arrive and leave their moorings at Cattle Bay in the same approximate location that will be occupied by the proposed project.
- Noise from Cattle Bay Road Traffic being from local and through traffic using Cattle Bay Road. This road loops behind the Eden Shopping Precinct and carries traffic serving the immediate area only.

In assessing potential impacts, the report references, the NSW EPA Noise Guide for Local Government 2010, NSW EPA Industrial Noise Policy 2000 and NSW EPA Interim Construction Noise Guidelines 2009. The report also draws reference from relevant sections and descriptions in the legal proceedings, site testing measurements and conclusions contained in the deliberations contested in Land and Environment Court relating to *Rose Bay Marina Pty Limited v Woollahra Council & Anr.[2013]*.

The report, based on the Rose Bay Marina development, nominates the principal noise source to be noise emission from boat movements including manoeuvring to the allocated berths, docking and departing. In addition, the report also identifies other potential noise sources to include:

- construction noise.
- marina patron road vehicle noise;
- security alarms;
- marina patron noise – domestic pet, on board meetings, music and shouting during manoeuvring;
- mechanical services – air conditioning plants (temporary building)
- marina portable sewage pump out cart operation;
- vessel maintenance noise; and
- marina maintenance.

The report identified that there would be a drop in wave noise at the closest sensitive receivers due the location and design of the wave attenuator. It notes that the wave attenuator would reduce the sound generated by waves given its distance is further away from sensitive receivers to when waves would otherwise be breaking at the shoreline.

**Comment:** The noise assessment report has been assessed by relevant Council Staff and the Environment Protection Authority and found to be suitable in terms of identifying the sensitive noise receivers, the potential noise impacts generated by the development and required mitigation measures.

The identified construction and operational noise management requirements in the noise assessment report have been referenced in the both the Draft Construction and Operational Environment Management Plans.

It is recommended that a condition be applied to ensure that the final Construction and Operational Environment Management Plans maintain the requirements identified in the Noise assessment report.

### **Vibration Impacts**

The EIS references German Standard DIN 4150 – 3 Structural Vibration – Effects of vibration on structures 1999.

**Comment:** The standard contains data for use in the determination and assessment of actions caused by vibrations on buildings which have been designed for predominantly stationary loading where data of this nature are not given in other standards or directives.

The EIS, drawing reference to the Standard, recommends a safety limit of 5mm/s for dwellings further than 20 metres from the construction site and acknowledges that the main sources of ground vibration would be associated with construction piling. The EIS also advises that vibration levels generated by construction plant are unlikely to exceed the “safe limit” of 5mm/sec nominated in the Standard.

The EIS concludes that in relation to dwellings, a “safe limit of 3mm/sec is expected to be satisfied at a distance of 30 metres from the piling activity. This is based on that the minimum distance between piling activities and existing dwellings would be greater than 30 metres and it is unlikely that construction piling would have an adverse impact.

The matter has been subject to review by relevant Council staff who have advised that due diligence should be exercised and that any subsequent consent should be suitably conditioned to ensure compliance with the Standard and to ensure the structural integrity of dwellings in the immediate locality.

Conditions are recommended to ensure that vibration associated with the construction works of the marina do not impact on residences.

### **Impacts on aquaculture operations**

A commercial mussel farm is located to the west of Cocora Point approximately 470 metres to the south west of the proposed marina development.

The EIS has addressed the potential impacts the construction and operation of the Marina could have on the existing operations of the mussel farm. The majority of potential impacts to the mussel farm include the generation of sediments from construction operations, potential effluent, hydrocarbon or other chemical spills entering the marine environment, generation of wastes and introduction of marine pests have been addressed in the Marine Ecology Report.

The EIS has detailed that the placement of the wave attenuator would not result in the mussel farm being impacted by additional wave movements mainly due to the distance separating the proposed structure to the farm.

The EIS identified specific mitigation measures needed to protect the mussel industry and included the proposed draft Construction Environmental Management Plan, Operational Environmental Management Plan and Water Quality Management Plan. The plans acknowledge the importance of water quality for the purpose of sustaining a viable aquaculture industry. Mitigation measures are proposed in the form of protocols for testing and reporting and incident management.

**Comment:** The potential impacts on mussel farm infrastructure resulting from the construction and operation of the proposed marina development have been adequately addressed as part of the assessment process.

In addition, the application was reviewed and commented on by Department of Primary Industries Fisheries NSW. The comments identified that the applicant should detail any biosecurity risk associated by the development on the marine environment including mussels.

Based on the information received with the application and the response of the Department of Primary Industries – Fisheries NSW, it is considered that the potential impacts on mussel farm infrastructure and the long-term viability of the leases would be minimal and manageable provided suitable mitigation measures are deployed during both the construction and operational phases of the proposed marina.

Conditions are recommended to ensure that the construction, operational and waste water management plans are appropriately completed and that review mechanisms are in place by Council and other relevant government agencies to ensure compliance into the future.

### **Traffic impacts**

A Traffic Report, prepared by TTPA (February 2019 Rev B), focuses on the surrounding intersections as development constraints. The report extrapolates existing usage based on RMS data. The report predicts additional traffic generated by the Marina based on a publication titled the 'Hallam report', which was a traffic assessment based on the assessment and approval for the Sydney Super yacht marina on Roselle Bay in 2015. The 'Hallam report' seeks to supersede RMS guidance on the traffic generating potential of Marina's by using a broader data set than the RMS guidelines are based on. In reviewing the report Council's Development Engineer found that it is a thorough document.

The TTPA report then uses SIDRA analysis combined with existing traffic data and the traffic generation predictions to conclude that the intersections provide an acceptable level of service.

The development application was also accompanied by a road condition report prepared by Tasman Engineering Consultants examining the condition and carrying capacity of Cattle Bay Road from the intersection of Mitchell St to the proposed development.

The report references Council and Austroads specifications as well as the previous use of the site and concludes that the carrying capacity of Cattle Bay Road is sufficient for the proposed development. The report notes that some maintenance work is required on the road but suggests that Council should be responsible for that work.

It is considered that a condition requiring the upgrade to Cattle Bay Road be imposed to ensure an appropriate level of road upgrading works.

Additionally, to minimise impact on residential areas, suitable conditions of consent are recommended to achieve the following;

- Left turn only and no right turn signage to be installed at the exit of the development,
- Signage be installed on Mitchell St/ Imlay St (Princes Highway) to direct patrons to the Marina and,
- Local traffic only signage be installed on Cattle Bay Road at ~CH450m and ~CH657m.

It is anticipated that the development would generate some additional vehicle trips on the south end of Cattle Bay Road although it is considered that this number of trips would likely be small in comparison to the Mitchell St/ Cattle Bay Road Route. Upgrade of the south end of Cattle Bay Road is not warranted by this development.

## **SUBMISSIONS Section 4.15(1)(c)**

The application was advertised in accordance with the provisions of the EP&A Act 1979 and its Regulation 2000. The application was exhibited between 11 July 2019 until the 12 August 2019. Council received in total 6 submissions comprising:

- Two submissions supporting the development but raising concerns; and
- Four submissions objecting to the proposed development.

The public submission summary below details the issues raised. A full copy of submissions are provided as Attachment 3. The applicant responded to the issues raised in the submissions and those comments are provided as Attachment 4. It is considered that the issues raised in submissions have been reasonably addressed in the EIS, supporting documentation including the applicant's response to submissions and draft conditions of consent.

### **Submissions in Support - Concerns Raised**

In summary, whilst generally supporting the proposed marina development in principle, the submissions raised concern in regard to the following:

#### **Economic basis for the development**

Concerns were raised that the EIS provided no information to establish an economic basis for development of this scale and no need now or in the foreseeable future for a 154 berth marina. Another comment questioned the projections provided in the EIS regarding the demand of visiting yachts/cruisers to the marina.

**Comment:** Appendix 4 of the EIS provides a report prepared by Coriolia Marine that provides a business case for a potential marina development at Cattle Bay Eden. It is considered that the report has adequately addressed the justification of the proposal in terms of Supply & Demand and has provided guidance in the design and operational aspects of the development. The assessment details that a staged construction provides an orderly growth of the Marina when demand increases.



### **Impact of marina and wave attenuator**

Concern was raised that the marina and attenuator would restrict water circulation around the bay and contribute to algal blooms.

**Comment:** The marina would be floating and the fixed wave attenuator would be positioned at the top of the water column to attenuate near surface wave energy, not water circulation. The accompanying reports in the EIS have addressed issues in relation to water circulation and potential for algal blooms and concluded that the works would not restrict water circulation and lead to algal blooms. The specific concerns relating to algal blooms is attributed to potential effluent disposal and the mitigation measures to address this impact is discussed below.

### **Spillage of sewage into the bay**

Concern was raised that owners of boats would spill sewage into the bay.

**Comment:** The EIS has provided details on how sewage would be managed within the marina and mechanisms to mitigate sewage spills. The marina would be serviced by a minimum of two mobile sewage pump out units. The units would discharge to Council's land based reticulated town sewer system.

Mobile sewage pump out units are used in marina developments nationwide. They do not rely on the vessel's owner accessing a static dedicated berthing area and pump out facility at the marina. It enables the marina operator to be more proactive in compliance with operational standards of any subsequent environmental protection licence and operational environmental management plan.

The operational efficiency of the pump out units would be embodied in the Operational Environmental Management Plan and Marina Occupation Agreement between the marina owner and vessel owner/operator.

The proposed system of sewage management has been assessed by Council staff and State Agencies and is considered a suitable management system for the proposed marina to mitigate sewage spills in the bay.

### **Visual impact of the third pontoon arm and attenuator**

Concern was raised that the third pontoon and wave attenuator are an over development for the site and would spoil the natural beauty and amenity of the locality including Cocora Beach and its public use for recreation

**Comment:** As detailed above in this assessment, after considering the potential visual impacts of the proposed development, including comprehensive evaluation of impact from various public vantage points around Twofold Bay, it is considered that the Report by Inspire Urban Design and Planning has appropriately addressed the visual quality of the locality in terms of its nature, expanse and worth and the potential impact the proposed marina would have on those values.

### **Noise and pollution**

Comment was provided that a reduction to below 100 berths would reduce problems with noise and pollution.

**Comment:** The EIS and accompanying Acoustic Report has identified potential noise generation for the overall development. A reduction in berth numbers to below 100 would not alter the potential impacts of noise on the nearest affected receivers. It is considered that noise generated by the proposed marina has been suitably addressed and can be mitigated.

In regard to pollution, the identified draft construction and operational environmental management plans would mitigate impacts associated with pollution. The same mitigation measures would apply if the development was for either 100 berths or 154 berths.

### **Integration of the project with the surrounding infrastructure of Eden township**

Concern was raised with the proposal that it fails to consider integration with surrounding infrastructure of Eden township including pedestrian and road networks. Particular concern was identified that the access track from Bay Street to the west has eroded such as to be impassable and requires work to enable access to Cattle Bay.

**Comment:** The EIS has detailed the level of upgrade works required to accommodate the proposed Marina, including the widening of Cattle Bay Road. It is anticipated that the existing road network could accommodate the additional traffic that the proposed marina would generate.

The site has restricted pedestrian linkages as it is located below the surrounding residential areas that retain several informal pedestrian tracks that have formed over time. The applicant has detailed that the land between the end of Bay Street and Cattle Bay Beach is not owned or managed by the applicant. The land is under the control of Council and retains an informal track from the end of the bitumen seal of Bay Street and terminates at the site boundary. The development of the site for a marina is not anticipated to increase pedestrian traffic from residences along or near Bay Street to warrant an upgrade of the informal pedestrian access. Further review and investigation of the Bundian Way in the immediate area would also consider the appropriate pedestrian linkages along the foreshore areas of Cattle Bay.

### **No approval be granted until funding for a wave attenuator is secured**

**Comment:** The means of funding is not a matter for consideration in the assessment and determination of the application.

### **Submissions Objecting**

The submissions raised a number of concerns regarding the construction and operational characteristic of the proposed marina development. In summary, they are:

#### **Impact on swing moorings**

Objection was raised over the relocation of the moorings. The submission detailed that there should be no relocation of swing moorings until there is positive funding for the wave attenuator, and agreed, appropriate, secure, safe and convenient alternative locations for the 24 boats on swing moorings affected. They further detail that the intention to consult with swing moorings lessees/licenses about relocation of swing moorings prior to construction of the marina is too late. Additional moorings in Quarantine Bay outside the protection of the breakwater are proposed in the swing mooring relocation strategy. Quarantine Bay is less safe, less secure, less sheltered and less convenient, boats have been lost from Quarantine Bay.

**Comment:** The applicant agreed to the concern raised in the submission on relocation of swing moorings. The applicant detailed that the implementation of the swing mooring relocation strategy will be carried out in conjunction with NSW Roads and Maritime Services and the Port Authority of NSW, and in consultation with mooring lessees/licensees to ensure the new locations of swing moorings are safe and reasonable. As previously outlined in this report the matter of the relocation of the swing moorings is one between Crown Lands, Roads and Maritime Services and licence holders.

A condition of consent is proposed to ensure that the relocation of the swing moorings is undertaken prior to any construction certificate being issued for the development.

### **Funding**

An objection detailed that there is no government funding commitment for the proposed wave attenuator, Government funds should be spent on Snug Cove.

**Comment:** The means of funding is not a matter for consideration in the assessment and determination of the application.

### **Concern over temporary buildings**

One submission raised concern that the buildings on the land base will be there for the long term and become an eyesore.

**Comment:** The EIS provides minimal information in respect to the size and design of the proposed portable administration and facilities buildings. The proposed location of the buildings are generally screened from adjoining properties and would be visible from Cattle Bay Road and the public reserve along Cattle Bay.

It is recommended that a condition be applied requiring details of the structures be submitted to Council for approval prior to their placement on-site and for their maintenance while on-site.

### **Public and economic benefit/need for the marina**

One submission refutes suggestion of public benefit for more secure and protected berths while another raised whether there would be economic benefit detailing that figures used relies heavily on boat owners from Canberra and ignores that Eden is at the same driving time as the Hawkesbury River and Broken Bay from Canberra which provide the best recreational boating areas in Australia.

**Comment:** The justification of the marina has been considered in the development of the EIS and this included a review of relevant strategic plans and policies applying Eden. It is considered that the proposed development would be consistent with those relevant local and state strategic plans and policies for Eden, in particular by supporting and growing the tourism with the Port of Eden.

The EIS also addressed the location of other marinas located along the eastern seaboard from Sydney to Eden, the number of berths at those locations, and statistics to the growth of boat ownership in support of the findings. It is considered that the applicant has provided sufficient information to address the need for the proposed marina.

### **Potential Pollution Risk**

A submission detailed that one mobile sewer pump out cart is not adequate and who is to police pump-out compliance. Another detailed that the potential pollution of Cattle Bay and Twofold Bay including litter.

**Comment:** The marina would be serviced by a minimum of two mobile sewage pump out units. The units would discharge to Council's land based reticulated town sewer system. Mobile sewage pump out units are used in marina developments nationwide. They do not rely on the vessel's owner accessing a static dedicated berthing area and pump out facility at the marina. It enables the marina operator to be proactive in compliance with operational standards of any subsequent environmental protection licence and operational environmental management plan.

The operational efficiency of the pump out units are embodied in the Operational Environmental Management Plan and the Marine Craft Berthing, Storage and Mooring Agreement between the marina owner and vessel owner/operator that prohibits any forms of pollution, both of which are detailed in the EIS.

The proposed system of sewage management has been assessed by Council staff and State Agencies and is considered a suitable management system for the proposed marina.

Day to day litter control during the construction and operation of the marina would be the responsibility of the contractor in the first instance then the marina manager thereafter. Litter

control was identified in the Ecology Report which made recommendations that these be addressed in the Construction and Operational Environmental Management Plans for the marina.

The controls contained within the Environmental Management Plans included in the EIS have been reviewed by Council staff and are considered to be appropriate. Further the Environment Protection Authority has specifically addressed the matter in its General Terms of Approval.

### **Potential Site Contamination**

Concerns were detailed that there are anecdotal comments from locals is that there is debris and polluted silt next to the wharf and land base.

**Comment:** Potential for site contamination, including contamination within ocean sediments were addressed in the EIS though reports in Appendix 14 and 15 of the EIS. Sediment reviews adjacent to the jetty have not identified that they are contaminated.

It has been detailed that contamination has been adequately addressed through the Concept approval by the Department of Planning.

Conditions are proposed to ensure that preliminary assessment at Construction stage and validation report at occupation to ensure issues regarding asbestos from past uses of the site are addressed.

### **Potential Impact of dredging/piling during construction**

Concern was expressed that construction would have the potential to pollute the waterway through the displacement of sediments from dredging/piling during construction.

**Comment:** It needs to be noted that the application does not propose to undertake any dredging. Additional information provided by the applicant responding to comments from DPI (Fisheries) also confirmed that no dredging would be required to accommodate the possibility of super yachts berthing at the seaward half of the main north-south marina walkway.

The potential for sediment generation would be through piling into the sea floor for the marina and wave attenuator, the repair/replacement of piers to the existing jetty and reducing the height of the rock pinnacle.

The EIS and associated specialist reports have addressed and evaluated the potential impact of sediment generation during the construction of the proposed development. Collectively, they have concluded that the potential impact on water quality can be suitably mitigated through the construction processes and would be manageable through the implementation of the Construction and Operational Environmental Management Plans.

As previously detailed in this report, the Construction and Operational Environmental Management Plans that are part of the EIS have been reviewed by Council staff and relevant State Agencies and a number of amendments have been recommended throughout the content of this Report which if implemented, would strengthen the requirements of those Plans as they relate to water quality.

Given the above, it is considered that the potential for the proposed marina to impact on water quality from construction works has been adequately addressed and evaluated to enable an informed decision to be made on the appropriateness of the development in its environmental setting.

### **Impact on amenity**

One submission detailed that the Marina would impinge on the amenity particularly with boat movements at night, vehicle movements, voice carriage over water and normal industry of boat mooring and repair work.

**Comment:** Potential amenity impacts associated with the proposed marina development have been detailed in the EIS with the provision of the air quality and acoustic reports prepared by West and Associates Pty Ltd and review and assessment of Potential Visual Impacts prepared by Inspire Planning and Urban which considered matters that may affect the existing amenity of the surrounding area.

Further, the Construction and Operational Environmental Management Plans prepared and submitted in support of the EIS provide methods to mitigate impacts on the existing amenity of the area.

These reports and Construction and Operational Noise Management Plans have been assessed by relevant Council Staff and relevant state agencies and found to be suitable in terms of their form, content and required mitigation measures. It is considered that the implementation of the Plans would maintain the existing amenity of the locality and more specifically, those residential premises located closest to the proposed development.

### **Traffic**

One submission detailed that Cattle Bay Road is hazardous and has traffic safety issues.

**Comment:** The assessment on the likely impact of traffic has been duly considered by Council development engineers, especially in regard to the proposed traffic generated by the proposed development and the capacity of the existing road network to cater for that traffic.

Conditions are proposed for upgrading works to Cattle Bay Road to mitigate traffic safety issues.

### **Drainage of the land site will need to be managed**

Concern was raised in respect to the pollution generated from the land-based component of the development

**Comment:** The EIS has identified that the land-based component of the marina would need to be upgraded. This would include upgrades to the existing concrete platforms that would accommodate carparking and other hardstand areas. The EIS has noted that the existing stormwater system would need to be upgraded including the provision of gross pollutant traps. Council staff have considered stormwater management from the site and conditions are proposed to mitigate pollution from the site into Cattle Bay.

### **Marine Pests and algae**

Concern was raised regarding the potential marine pests and algae being introduced from overseas vessels.

**Comment:** The EIS, namely through the Marine Ecology Report, addressed potential impacts associated with Marine Pests and algae through both the construction and operation of the proposed development. The Report identified existing marine pests that occur within the study area and the wider Twofold Bay and provided detailed mitigation measures to inhibit existing and introduced pests at construction and operation of the marina.

These matters have been reviewed by NSW DPI who also sought further information on three known species to occur in the area. Additional information was provided by the applicant addressing these pests. NSW DPI have recommended that an introduced marine species (IMS) management plan for construction and operation be developed and referred to DPI Fisheries (Biosecurity Division) for comment and approval prior to commencement of any works. The provision of this IMS would address the concerns raised in the submission and those considered by NSW DPI.

The key matters in relation to the algal growth through pollution generated by the marina has also been considered including the potential impact on mussel farming in the area. This



impact is detailed in the Marine Ecology Report with mitigation measures developed through the construction and operation environmental management plans.

It is considered that potential impacts of introduced pests and algae has been adequately addressed. Conditions are recommended to be applied to ensure that those mitigation measures detailed above will be undertaken.

### **Reservations about effects of attenuator on aquaculture in the bay**

One submission raised concern on the effects of the proposed wave attenuator on the existing mussel farming in Twofold Bay.

**Comment:** The EIS has assessed the likely impacts of the development of the marina, especially the wave attenuator on the existing mussel farm. The wave modelling showed that there would be only minor effects attributed to wave heights by the wave attenuator and this is attributed mainly to the distance of 470 metres separation. The distance would provide reflected waves to disperse over the intervening and surrounding waters of Twofold Bay.

The application has provided detailed assessments of the potential impacts that the wave attenuator would have on the surrounding marine environment. Those assessments have included cumulative impacts from the proposed Eden Safe Harbour project and has demonstrated that wave action resulting from the both wave attenuators would not impact on aquaculture in the Bay. Council staff and NSW Fisheries have reviewed those assessments and support that the wave attenuator would not have an unacceptable impact on aquaculture in Twofold Bay.

### **Details of the proposed wave attenuator**

One submission detailed that photos of similar wave attenuators would assist in assessing its visual impact.

**Comment:** The applicant has provided photographic details of similar wave attenuators and this is provided earlier in this assessment report. The visual assessment of the marina including the wave attenuator is considered reasonable.

### **Intensive storms could damage the wave attenuator**

One submission raised concern of more intensive storms associated with a changing climate could damage the wave attenuator.

**Comment:** The attenuator is required to be designed and constructed to the relevant Australian Standards. The wave modelling report considered storm events to a 50 year ARI event. Further information provided by the applicant in response to NSW Biodiversity and Conservation Division who also requested further information on extreme coastal events detailed that;

*There is no reason to believe that implementation of the Cattle Bay wave attenuator and Eden Safe Harbour wave attenuator would introduce significant impacts to Cocora Beach for coastal events larger than 50 year ARI. This is because the extreme coastal storm waves that potentially impact on Cocora Beach emanate from the south east sector, the direction and energy of these waves as they enter Twofold Bay and Snug Cove and approach Cocora Beach are controlled by existing natural features (headlands and water depth) and man-made features (Eden Breakwater), and the particular alignment and positioning adopted for the two attenuators do not significantly affect wave energy and wave direction approaching Cocora Beach.*

*It is evident that the Eden Safe Harbour wave attenuator, which was modelled in combination with the Cattle Bay wave attenuator, and which was the subject of an AREF distributed to agencies by DoI for review, was subsequently approved based on consideration of wave modelling up to 50 year ARI only, which is considered reasonable.*

The NSW Biodiversity and Conservation Division reviewed the comments and advised that the information provided satisfied their request for further information. It is considered that the design of the wave attenuator has been undertaken having regard to the available information on wave action at the site and would be designed in accordance with the relevant Australian Standards design requirements for a marina.

### **Impact on existing Eden sewerage treatment plant**

Concern was expressed that necessary infrastructure required to support the development of a marina is inadequate and that the approval be delayed until adequate treatment of effluent from the Eden sewerage treatment plant has been achieved.

**Comment:** The adequacy of land-based Council infrastructure has been considered by Council's water and sewer services sections. No concerns are raised with the disposal of effluent. Conditions of consent are proposed to ensure appropriate disposal of effluent from the site.

### **Inadequate Support Infrastructure**

Concerns were raised that on-shore shower and laundry facilities are below what is thought suitable, in terms of number of amenities.

**Comment:** The provision of adequate on-site toilet/shower facilities has been reviewed by relevant Council staff and State Agencies. Council Staff consider the number proposed is acceptable, with expansion of the facilities for each stage of the Marina.

## **AGENCY SUBMISSIONS**

The application was referred to a number of State Agencies, for either concurrence or comment. A copy of public submissions were provided to the NSW EPA and NSW DPI Fisheries as Integrated Authorities required by Clause 61 of the EP&A Regulation 2000. A copy of all responses from State Agencies is included as Attachment 5.

Several agencies raised comments which required further clarification from the Applicant. The Applicant responded to those comments on the 25<sup>th</sup> September 2019, which are included as Attachment 6.

The following represents a summary of the State government submissions.

### **Trade and Investment Crown Lands**

The following comments were provided.

*It is noted the application is for the same marina development previously approved by the Joint Regional Planning Panel on 1 December 2015.*

*Crown Lands has assessed the potential impacts of this development on Crown land and offers the following comments for Council's consideration when determining the application.*

- On 20 December 2018 Crown Lands provided Landowner's Consent to the application. The matters outlined in that letter are still of relevance and we would request Council should consider these matters in its assessment of the application.*
- Section 2.4 of the Environmental Impact Statement states that the Department "has agreed to deal directly with the applicant on leasing the land for the proposed marina." The applicant holds a licence over the existing wharf. Approval has been given to directly negotiate the terms of a lease with Eden Resort Hotels, with the grant of a lease being subject to the determination of a Development Application for the marina development.*

- *Irrespective of any development consent, or any approval given by other public authorities, work or occupation of Crown land cannot commence without a current tenure from the NSW Department of Planning, Industry & Environment - Crown Lands, authorising such work or occupation.*

**Comment:** Whilst no specific conditions have been recommended by Crown Lands it is considered that a condition should be imposed on any subsequent consent to acknowledge the requirements of the Crown in relation to the lease of Crown Land.

### **Environment Protection Authority**

The Authority provided their General Terms of Approval. In their response they detailed that;

*“the EPA had reviewed the information provided and has determined that it is able to issue a licence for the proposal, subject to a number of conditions. The applicant will need to make a separate application to EPA to obtain this licence. The general terms of approval for this proposal are provided at attachment A.*

*If Bega Valley Shire Council grants development consent for this proposal these conditions should be incorporated into the consent.*

*These general terms relate to the development as proposed in the documents and information currently provided to EPA. In the event that the development is modified either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it will be necessary to consult with EPA about the changes before the consent is issued. This will enable EPA to determine whether its general terms need to be modified in light of the changes.*

*In assessing the proposal EPA has also identified a number of environmental issues that Bega Valley Shire Council may wish to consider in its overall assessment of the application. Specifically, it is recommended that council:*

- 1. Require residents along streets fronting the proposed marina location to be appropriately notified of the time and duration of any piling works if they are to be impact piling*
- 2. Restrict repairs and/or maintenance works on the existing wharf to standard construction hours*
- 3. Require an appropriate Marina Occupation Agreement between marina owner and the owner/operator of any vessel berthing at the marina, as described in 8.2 of the EIS.”*

**Comment:** In regard to the additional comments provided by the EPA, Council staff have considered the potential impacts associated with construction works, in particular having regard the piling placements, hours of construction works for repairs and maintenance of the existing wharf, and the need for a Marina Occupation Agreement. It is recommended that these additional matters be included as conditions of consent.

### **Department of Primary Industries Fisheries (DPI) NSW**

Fisheries NSW in its initial response to Council dated 28 July 2019 confirmed that it would be prepared to issue a Part 7 Permit under the Fisheries Management Act 2013 to enable the construction of the proposed marina development and has no objection to Council to the issue of a development consent subject to specific General Terms of Approval being imposed. That initial response and a further response by them on 19<sup>th</sup> August 2019 detailed additional matters for Council's consideration.

*The Department detailed a number of amendments and inclusions be made to the construction environmental management plan dealing with soil and water management plans and water quality.*

*Aquaculture – DPI Fisheries have concerns in relation to the potential risk to human health associated with accidental or intentional unmonitored sewage discharge from vessels resulting in closure of mussel leases to shellfish harvest and if not identified promptly, could result in contaminated shellfish entering the market place resulting in potential life-threatening human health issues. Given the sensitivity of adjacent waters, the most critical issue for consideration in the proposed development is the potential for spill or process failure, causing human pathogenic viruses and bacteria to enter adjacent waters and potentially impact the water quality of adjacent mussel growing areas.*

DPI Fisheries detailed that appropriate conditions must be imposed to eliminate the risk of human pathogenic viruses and bacteria associated with sewage or sewage disposal systems affecting the sanitary water quality of the adjacent mussel growing areas. Of serious concern is the limited provision made for onshore toilets and showers for marina users. The Department questions the adequacy of 1 shower, 4 toilets, 2 urinals and no laundry facilities being able to service a fully occupied and operational 154 berth marina. The ready availability of onshore facilities would reduce the risk of clandestine discharges from vessels.

DPI Fisheries liaised with the NSW Food Authority regarding the referral, who assessed the development application and advised that their previous comments (provided by email 9 October 2017) would apply only if the storage tank component of the proposal was being pursued. As advised in the same email, 'the best outcome would be connection to the reticulated sewerage system and remove the effluent from the site'.

They noted that the current DA supports wastewater being discharged into the Council wastewater system and 'suggests transporting the wastewater from the development to the existing manhole DZ1'. They recommended that any private pump station installed as part of the development must be included on Council's inspection program as a high risk system.

In providing the above comments, the NSW DPI requested amendments and inclusions to the operational environmental management plan to address the above concerns raised in relation to water quality and protect existing mussel farms. These have been reviewed and are supported to be included as draft conditions of consent to address potential impacts on water quality.

Super Yacht Berthing – DPI Fisheries had concerns with the berthing of super-yachts situated in relatively shallow water (adjacent to and within the 5m depth contour). They detailed that the EIS provided states that no dredging of Cattle Bay or Twofold Bay is required or proposed associated with this DA and sought clarification that no dredging will be required in this location.

DPI Fisheries also had concerns about the capacity of the "muck truck" in relation to the sewage disposal requirements for "super yachts". The effectiveness of the "muck truck" as an effective sewage disposal method for "super yachts" or provision of alternative arrangements should be detailed.

Recreational Fishing – DPI Fisheries requested that the existing jetty be available for recreational fishing and supports the proposal "that the marina will be made available to the public during marina opening hours (summer, Daylight saving 7am – 6pm, winter, Non daylight saving 7am to 5pm)". We also support the commitment to retaining 24hour per day public access to the jetty.

Wave Attenuator – DPI Fisheries detailed that currently 2 separate wave attenuators are proposed for construction within Twofold Bay and that the proposal has not included any assessment of the interaction of the two structures and the ultimate impacts on wave action with possible redistribution of sediments that may smother marine habitats such as rocky reef and seagrass vegetation along with land based erosion. Further predictive studies analysing the combined impacts of both attenuators should be undertaken. A long term monitoring

program should also be established to ensure that any predictions made in the modelling are accurate.

Finally, DPI Fisheries recommended that the following conditions of consent be included to address ongoing operational issues:

1. Adequate onshore toilet, shower and laundry facilities are to be provided for the use of marina patrons.
2. An amended Operational Environmental Management Plan (OEMP) is to be developed and provided to DPI Fisheries for comment and approval prior to the commencement of operation.
3. An introduced marine species (IMS) management plan for construction and operation be developed and referred to DPI Fisheries (Biosecurity Division) for comment and approval prior to commencement of any works.
4. All relocated moorings are to be located outside of areas of rocky reef and seagrass.
5. All relocation moorings are replaced with sea-grass friendly moorings.
6. The finalised proposal(s) for the relocation of swing moorings be referred to DPI Fisheries for endorsement prior to commencement of any works.
7. The current 24hr per day public access to the existing jetty is not restricted or compromised by the operation of the marina.
8. The marina facility is made accessible to non-paying recreational users during marina opening hours as outlined in section 3.8 of the EIS.
9. The proponent is to keep detailed records in relation to the use and effectiveness of the "muck truck", including dates, times, name and berth of vessels using the machine, number of uses and volume and type of waste removed (sewage, grey water, bilge water).
10. Copies of the test reports produced from the operational water quality testing program be provided to DPI Fisheries.

**Comment:** The Department's response was conveyed to the proponent for comment. In response, the proponent provided additional information for consideration in relation to the all outstanding concerns from DPI Fisheries (See Attachment 5). That additional information was provided to DPI Fisheries who advised Council that the additional information addressed their earlier concerns subject to Council being satisfied that the required toilet and shower facilities are appropriate for the size of the proposed marina.

DPI (Fisheries) have provided their General Terms of Approval and those conditions are required to be included any draft conditions of consent. The matters of main concerns raised in their response have been addressed by the applicant. The proposed number of toilet and shower facilities in the amenities building have been considered by Council staff and identified that they would comply with Australian Standard 3962-2001 Guidelines for the design of marinas.

For this proposal, it is proposed at stage 1 the proponent would provide 2 male, 2 female and one unisex accessible toilets with shower and doubling this at stage 2. This represents in total, a doubling of the minimum standard and appears reasonable to Council. Council proposes to condition the consent to have additional showers provided and that the shore based sanitary facilities are to be open to the public during daylight hours and the unisex all hours.

No laundry is required on-site, noting that a coin operated laundry is located in the Eden retail district nearby.

It is not the applicant's intention to encourage live aboard use at the marina. It is proposed to condition the consent to specify that the marina must provide an allowance for live aboard accommodation in emergencies and for casual users limited to 6 nights continuously. Council has formed the view that subject to the proposed conditions of consent being implemented, the shore based sanitary facilities should be more than adequate.



It is recommended that all NSW Fisheries recommended conditions, above their General Terms of Approval conditions, be included in the draft conditions of consent.

### **Department of Planning, Industry and Environment (Biodiversity and Conservation Division)**

The following comments were provided. *In 2018, we provided comments on the SEARs for the proposed development. Our advice was that the proponent should consider issues relating to biodiversity, Aboriginal cultural heritage, flooding and potential effects of coastal hazards on the proposal and arising from the proposal.*

*The current 2019 EIS does not adequately assess the impacts of the proposal on Aboriginal cultural heritage or coastal processes. The EIS also does not meet the requirements of the Biodiversity Conservation Act 2017 for biodiversity assessment.*

The submission from Biodiversity and Conservation was referred to the applicant for consideration with their response included in Attachment 5.

That response was forwarded to Biodiversity and Conservation for further comment. They responded to the additional information advising;

- We have completed our assessment of the additional information for Cattle Bay Marina and we are satisfied that all our concerns relating to biodiversity, flooding and coastal processes have been satisfactorily addressed; and
- They have completed our assessment of the applicant response to the agency submission in relation to Aboriginal cultural heritage. The submission and issues raised have been adequately addressed by the response.

It should be noted that the Department supports the inclusion of an additional precautionary condition of consent requiring further Aboriginal archaeological heritage assessment should any earthwork occur under the existing concrete slab or outside existing services trenches.

**Comment:** The matters raised by the Department relating to biodiversity, Aboriginal cultural heritage, flooding and potential effects of coastal hazards have been adequately addressed by the applicant. Council considers that no additional impacts are required to be addressed and that previous detailed conditions relating to following Aboriginal archaeological heritage be applied.

### **NSW Maritime Division of Transport for NSW (Maritime)**

Maritime Services in its response to Council advised that they have no objections to this proposal, assessed on the grounds of impact to navigation, subject to the following conditions being adopted:

- *A network of Aids to Navigation be installed in compliance with System A of the International Association of Lighthouse Authorities (IALA), subject to the additional approval of Maritime.*  
*Reason: To provide for safe navigation of vessels. The documents provided by Council related to the proposed development do not include any details on any network of Aids to Navigation.*
- *Any licence or lease that will provide for the occupation of NSW waters by the proposed development will not take effect until the use of the waters is immediately required for the construction of the facility and related occupation of NSW waters.*
- *Maritime is provided with a minimum of 12 months notice on the intentions of the proponent to undertake activities that will require the displacement of Maritime mooring licenses.*  
*Reason: To allow Maritime to maintain use of the waters affected by the proposed development through administering mooring licenses to the public. Documents related to the development detail a staged approach to the construction of the facility (refer: Appendix 8), however, there is no detail on construction timelines,*

They also advised that the proponent should also be aware of activities associated with the Eden Safe Harbour project being managed by the NSW Department of Planning, Industry and Environment (Crown Land), as they note there is an absence of detail on this project in the documents supporting the development.

They noted that the proponent, or any entity or contractor acting on their behalf, are not exempt from the provisions of the Marine Safety Act 1998, or any other relevant legislation, and all parties must comply with any direction given by Roads and Maritime Services' officers with regard to safe navigation or the prevention of pollution.

**Comment:** The comments raised by Maritime were subsequently referred to the applicant for comment. The applicant responded detailing that the conditions proposed are agreed to. It is recommended that all conditions are considered reasonable and justified in the interest of maritime safety and are included in the draft conditions of consent.

### **Department of Defence**

Department of Defence have no objection to the Development Proposal.

### **Department of Communities and Justice**

Department of Justice does not have any objection to the Development Proposal.

### **Port Authority of New South Wales**

The Authority provided the following comments;

- Cumulative Impacts - Port Authority understands that the design of the proposed Eden Safe Harbour Project wave attenuator may change from what has been considered in the development application's EIS. Port Authority therefore recommends that the applicant consult further with Crown Lands and/or RMS as the proponent of the Safe Harbour Project.
- Marine Traffic, Navigation and Safety – Harbour Master approval under Section 67ZN of the Ports and Maritime Administration Regulation 2012 is required prior to any disturbance of the seabed from construction works.
- In addition, if the development application is approved, further consultation with the Harbour Master will be required in relation to marina construction and operation including, but not necessarily limited to:
  - the relocation of the swing moorings
  - the appropriate marking out and lighting of moored construction vessels and the delineation of construction areas
  - installation of the required aids to navigation, and
  - the development of appropriate information on safe navigation in the Port of Eden
- Hazards – Port Authority previously indicated that the assessment should consider the potential effects of the significant prop wash that can be generated by cruise ships and tugs on vessels moored at the marina. Port Authority did not see evidence in the assessment that this has been adequately assessed and considered.
- First Port of Entry Requirements – The Port of Eden currently holds a Biosecurity First Point of Entry Determination, but only in relation to the Breakwater Wharf at Snug Cove, and soon to be extended to the new Breakwater Wharf Extension (Eden Cruise wharf). The applicant may need to apply to the Department of Agriculture to extend this Determination to the proposed marina at Cattle Bay.

**Comment:** The above comments and concerns by Port Authority were referred to the applicant for consideration and comment. The applicant's response provided additional detail

(see attachment 6) and was forwarded to the Authority. In response, Port Authority advised that;

*“Port Authority has reviewed the responses provided by the Applicant. Port Authority’s only comment is regarding the First Point of Entry requirements, where it is stated that ‘Such an application could be made by the Applicant in the event it is required.’ Port Authority considers that an application would be required as it is expected the proposed marina would receive yacht arrivals from overseas ports. It is recommended that the First Point of Entry requirements be further reviewed by the Applicant.”*

The Authority in its responses did not require the imposition of specific conditions on any subsequent consent, however, it is considered that based on the Authority’s comments, a condition be imposed detailing that the requirements of First Point of Entry requirements be applied for and obtained prior to any overseas vessels being permitted at the marina.

### **INTERNAL COUNCIL REFERRALS**

The application was also subject to an internal Council referral process in accordance with Council Policy. Appropriate responses have been received from relevant Council section.

### **Water and Sewer**

No concerns were raised, with suitable conditions of consent recommended.

### **Engineering**

Engineering reviewed the application and associated traffic documents with a focus on the surrounding intersections and impacts on the existing Cattle Bay Road. As part of the review, further comments were received from Council’s Asset and Operations section who commented on the existing formation of Cattle Bay Road and the suitability of upgrading works to it.

Council’s Assets and Operations detailed that they are happy for the development to proceed with the plans developed for Cattle Bay Road North (on the basis they were a previously negotiated outcome) with the requirement still in place for safety improvements that were previously put forward and provision of better construction details for the shoulder widening transition (i.e. not a shear interface). They also detailed that as a minimum, have the surface resealed to the centre of the road in widened areas so as not to create an artificial water barrier along the interface edge where the new seal sits higher than the existing sealed road.

The engineering review references the previous DA and associated assessment of the Marina. The review identified the following matters for consideration with the current application;

- Cattle Bay Road from the intersection of Flinders Street to the site entrance be upgraded to the standard previously agreed to by the developer and Council as part of DA 2014.430 with some additions as detailed above,
- The developer is to erect signage prohibiting vehicles from using the southern end of Cattle Bay Road,
- The developer is to construct a heavy-duty concrete crossover to the entrance to the site,
- The developer is to provide details of the largest anticipated vehicle to service the site and show that it can achieve front in/front out access at the site,
- Conditions in the 2014 consent relating to stormwater management and stormwater easements are to be replicated on this consent.

The review and comments provided by Engineering support the application subject to conditions. It is recommended that all identified conditions be included in the draft conditions of consent.

## **Environmental**

Environmental Services recognized that the proposed marina development is the same as in the previous development consent (No.430.2014) that was approved in 2015.

Since the previous DA, additional projects within Twofold Bay have been proposed (Eden Safe Harbour Project – wave attenuator) and completed (Eden Breakwater Wharf Extension Project – dredging). Royal Haskoning DHV prepared a supplementary statement in relation to these changes (Feb 2019) clarifying that these projects are not likely to significantly alter wave conditions in Twofold Bay or the impact that the Cattle Bay development will have on Cattle Bay Beach, Cocora Beach or the Mussel infrastructure.

Since our last referral the Environmental Impact Assessment has been updated to include a Geotechnical Statement (March 2019) as requested by Council confirming the suitability of location, configuration and structural integrity of the wave attenuator. Council also support the ‘cranked’ wave attenuator as it was shown to have reduced impact on Cocora Beach in terms of wave refraction (Cattle Bay Marina, Eden – Wave Modelling’ (Cardno 28 July 2014). We note that the exact design and location of the wave attenuator is yet to be confirmed.

Our key concerns remain the impact of the construction and ongoing operation of the marina on water quality, seagrass and aquaculture. Sufficient compliance and reporting are also an important component during works and the ongoing operation of the marina.

As the development is largely unchanged, Environmental Services seeks to carry the conditions of approval (Part B) through from the previous Development Consent (no.430.2014) with a summary of our key requests being:

- Final CEMP and OEMP are provided to Council and other relevant agencies for final approval prior to commencement.
- All monitoring data and incident reports collected as part of the CEMP and OEMP should be made available to Council and other agencies upon request.
- Amendment to the CEMP to acknowledge the presence of the *Posidonia australis* seagrass bed to the east of the marina site and mark it as an exclusion zone during construction.
- Clearance certificate or similar, from Royal Haskoning DHV or Cardno for the final design of the wave attenuator to ensure the final design and placement is consistent with the modelled design. The clearance certificate must be submitted and approved by council prior to the issue of a construction certificate to ensure impact on Cocora Beach is known.

Council endorses the additional comments made by DPI Fisheries in regards to amendments to the CEMP and General Terms of Approvals as stated their referral letter dated 29<sup>th</sup> July 2019. Their comments address frequency of water quality monitoring, additional requirements to protect seagrass beds and lack of proposed amenities on site.

The recommended conditions are recommended for inclusion in the draft consent.

## **Health and Building**

Health and Building Services have recommended conditions for inclusion in any draft consent to ensure maritime safety and compliance with the Building Code of Australia and relevant Australian Standards. The recommended conditions have been reviewed and are considered reasonable and justified given the circumstances of the case. They have reviewed the adequacy of toilet and shower facilities proposed and consider that they would accommodate the needs for the proposed number of berths of the marina and staff.

## **Property**

They detailed that there is a Deed of Agreement in place over this land and 2 licence agreements. The Deed of Agreement provides for the provision of a 6 metre wide access over Lot 4 DP 1138056 and include the provisioning of services within that easement.

## **Public Interest Section 4.15(1)(e)**

The proposal is consistent with the relevant State and Local legislation applying to the land and its use as a marina. The impacts of the development have been assessed and are considered to address concerns raised by the public through the exhibition of the development application. The development is consistent with relevant local and state strategic plans and policies for Eden, in particular with the support and growth of tourism with the Port of Eden being a gateway and hub for cruise ships and marine activity.

The proposed marina will provide facilities for the residents and visitors to Eden and it is considered to be in the public interest to approve the development subject to conditions.

## **CONCLUSION**

The submitted development application (2019.208) has been assessed with regard to the relevant prescribed matters for consideration outlined in Section 4.15 of the Environmental Planning & Assessment Act 1979. The proposed development is permissible with consent and is reflective of the objectives of the SP3 Tourist and E2 Environmental Conservation zoned land.

The development is generally consistent with the applicable provisions of the relevant planning instruments including SEPP (Coastal Management) 2018, SEPP (Primary Production and Rural Development) 2019, SEPP 55 – Remediation of Land and Bega Valley LEP 2013.

The design of the development is appropriate with regard to the design requirements and controls outlined in the Bega Valley DCP 2013.

The NSW Primary Industries – Fisheries under the Fisheries Management Act 1994 have provided a permit and a licence from the NSW Environment Protection Authority under the Protection of the Environmental Operations Act 1979 as a scheduled activity has been provided.

It is considered that the proposed development is unlikely to result in adverse impacts on the character or amenity of the surrounding area, environment and adjoining development.

## **RECOMMENDATION**

Development Application 2019.208 be approved pursuant to Section 4.16(1) of the Environmental Planning & Assessment Act 1979 subject to the conditions provided in Attachment 1.