

Department of Primary Industries and Regional Development - Fisheries

Karthika Krishna Pillai

Sent via email to

8<sup>th</sup> November 2024

Dear Karthika,

We refer to your letter dated 22 October 2024. We have reviewed the letter and discussed its contents with our Planner GSA, Marina Designer IMC and our Marine Ecologist Marine Pollution Research. Please find below some comments which address the items raised in your letter:

## <u>ltem 1</u>

- The proposed berths on the western arm would occupy an area already approved for 4 x 10m yachts with deep keels (see Figure 1), the proposed berths are further offset away from the zostera seagrass bed and only 3 x 9m vessels are proposed instead of the existing 4 x10. These berths are angled away from the seagrass bed (see Figure 2). The impact of these berths can be further reduced by the proposed condition #1 below.
- The proposed berths on the eastern arm have been designed so the access to those berths does not require any travel across the adjoining seagrass bed. The impact of these berths can be further reduced by the proposed condition below #2.
- **Proposed Condition #1:** The 9m berth closest to shore on the western arm must not be used by a sailing boat or a boat with a fixed propeller of any kind. It must only be used by a boat with an adjustable outboard motor.
- **Proposed Condition #2:** The proposed 10m and 12m berths closest to shore on the eastern arm will be berthed with the bow of the boat entering the berth first meaning that the propellers are further away from the seagrass beds closer to shore.
- Application of Mitigation Hierarchy:
  - Avoid Impact: The number, location and angled design of the berths on the eastern arm have been setback further from the seagrass beds to reduce the current impact.
  - *Minimise Impact:* The proposed consent conditions will minimise any possible impact created by the current design including the restriction on the type of boat and orientation within specific berths.
  - *Mitigate Impact:* The design and proposed consent conditions avoid and minimise the impact of the proposal and therefore we believe no further mitigation is required.
- We believe that the proposed design and the proposed conditions avoid and minimise the potential impacts on the Type 1 Highly Sensitive Fish Habitats.







Figure 1: Existing approval including 4 x 10m sailing boats on western arm





**Figure 2:** Proposed new berths including 3 x 9m boats in angled berths on western arm (increased offset from seagrass bed – see purple hatched area)

## ltem 2:

As part of the normal operations at all our marinas we check the draft of any new vessel entering the marina and ensure that the vessel is suitable for the proposed berth by referencing our depth contour maps and Australian Standard 3692-2001 Guidelines for design of marinas (AS3692).

The 3 x 9m berths on the western arm have a berth depths of -1.25m, -1.5m and -2m Zero Fort Denison Tide Guage (Z.F.D.T.G). These depths do not make these berths acceptable for sailing vessels which they are currently approved for. These berths have been designed at an angle to follow the depth contours to ensure sufficient depth in the fairway accessing the berth.





Given this we suggest the Proposed Condition 1 above be updated as follows:

**Proposed Condition #1 (Updated):** The 9m berth closest to shore on the western arm must not be used by a sailing boat or a boat with a fixed propeller of any kind, it must only be used by a boat with an adjustable outboard motor. In addition to maintain sufficient under keel clearance of greater than 300mm as per Australian Standard 3692 the 3 x 9m berths on the western arm are to be limited to 0.75m, 1m and 1.5m draft vessels (south to north). This condition will enable 500mm minimum clearance at 0m Z.F.D.T.G which is greater than the Australian Standard requires.

The 10m and 12m berths on the eastern arm have berth depths of -1.5m and -2m Z.F.D.T.G.

Given this we suggest the Proposed Condition 2 above be updated as follows:

**Proposed Condition #2 (Updated):** The proposed 10m and 12m berths closest to shore on the eastern arm will be berthed with the bow of the boat entering the berth first meaning that the propellers are further away from the seagrass beds closer to shore. In addition to maintain sufficient under keel clearance of greater than 300mm as per Australian Standard 3692 the 10m berth is to be limited to a 1m draft vessel and the 12m boat be limited to a 1.5m draft vessel. This condition will enable 500mm minimum clearance at 0m Z.F.D.T.G which is greater than the Australian Standard requires.

With these proposed conditions the proposal is fully compliant with the berth depth and fairway depth requirements in AS3692.

Please see link below of vessels likely to use these berths and their respective drafts.

9m vessel example with 0.6m draft: https://itboat.com/models/16512-chris-craft-catalina-28

10m vessel example with 0.9m draft: https://itboat.com/models/10676-chris-craft-launch-31-gt

12m vessel example with 1m draft: https://itboat.com/models/6142-chris-craft-launch-38

We confirm that there is no dredging proposed as part of this proposal and no future maintenance dredging will be required.

## Item 3:

The new pontoons proposed have a minimum under clearance of 0.9m at the lowest astronomical tide which is complaint with P&G clause section 5.1.7. a) this is measured at the pontoon closest to shore on the western arm which will be 400mm deep in approx. 1.3m of water at its western end.

## Item 4:

The Aquatic Ecological Assessment did not specifically look at water quality, but Marine Pollution Research have provided the following comment:





Our assessment focused primarily on the aquatic ecology impact of the proposal and not specifically on water quality as we were advised by the new marina owner that the slipways, whilst functional, had been closed pending the outcome of this application. As we understand it, the closure of the slipway facilities would be a significant benefit for the locality as the facility is still totally tidal with no bunding or waste capture facilities as far as we have noted.

As slipway activities were on hold at the time of our aquatic biology sampling, water quality sampling at that time would have been redundant, given the exposure of the site to ample water current mixing from wind and storm wave plus tidal movement.

The marina berthing proposed will have negligible impact on the water quality because there will be no change to the overall boat storage or introduction of a new element which could create a water quality issue. We note that the proposed berths are similar in size to the boats currently on swing moorings which will be relinquished, and we observe that the marina maintains best practise environmental management plans and procedures which help manage any potential operational impacts on water quality.

or

If you require any additional information, please do not hesitate to contact me to discuss on via email

Regards,

Director

