Department of Primary Industries (Fisheries)
Department of Regional NSW

OUR REF: C23/190

11 April 2023

Nick Hearfield
Senior Planning Officer
DPE Planning
Via Major Projects Portal

Dear Mr Hearfield,

Re: DPI Fisheries advice on SEARs for the proposed Thrumster Wastewater Scheme (SSI-56980459), Port Macquarie-Hastings Council LGA.

I refer to your referral via the major Project Planning portal dated 31 March 2023 seeking comment on the preparation of a review of the Secretary's Environmental Assessment Requirements (SEARs) for the subject proposal.

DPI Fisheries is responsible for ensuring that fish stocks are conserved and that there is "no net loss" of key fish habitats upon which they depend. To achieve this, the Coastal Systems Unit assesses activities under Parts 4 and 5 of the *Environmental Planning and Assessment Act 1979* in accordance with the objectives of the *Fisheries Management Act 1994* (FM Act), the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the FM Act, and the *Policy and Guidelines for Fish Habitat Conservation and Management (2013 Update)* (DPI Fisheries P&G). In addition, DPI Fisheries is responsible for ensuring the sustainable management of commercial fishing and aquaculture, quality recreational fishing and the continuation of Aboriginal cultural fishing within NSW.

It is understood that the proposal will include the installation of a new wastewater treatment plant (WWTP), associated pipelines and infrastructure that includes a water recycling plant at Thrumster.

Lot 14 DP 1139180, the subject site for the proposed WWTP, contains important key fish habitat, specifically, Partridge Creek and mapped Coastal Wetlands. Key fish habitat also exists within several other localities associated with proposed pipeline routes (including creeks and mapped Coastal Wetlands) and at the environmental discharge point being within the Hastings River. In addition, waters upstream and downstream of the environmental discharge point include Priority Oyster Aquaculture Areas (POAAs) which rely on specific water quality conditions as set out within the NSW Oyster Industry Sustainable Aquaculture Strategy (August 2021) (OISAS). Accordingly, DPI Fisheries' interests in this project are in ensuring that the project is designed, constructed and operated in a way that avoids and minimises direct and indirect impacts to key fish habitat and adjacent oyster aquaculture operations. Key considerations to ensuring the above will include:

- Ensuring the WWTP avoids impacts on key fish habitat and mapped Coastal Wetlands, a highly sensitive key fish habitat;
- Ensuring all aspects of the proposal avoid harming marine vegetation and are constructed and operated in accordance with best practice construction methods such as horizontal directional drilling below creeks and Coastal Wetlands;
- Ensuring all impacts to marine vegetation and Coastal Wetlands are offset in accordance with the DPI Fisheries P&G; and
- Ensuring water quality and oyster aquaculture operations within the Hastings River are not negatively affected by construction or operation of the scheme, and that the water quality objectives and guidance set out within the NSW OISAS and the NSW Healthy Estuaries for Healthy Oysters guidelines are met and acknowledged.

Information requirements that may be of assistance in the preparation of an environmental assessment for this proposal are listed in Attachment 1. In particular, this proposal should include:

- An assessment of potential impacts on key fish habitat including marine vegetation and Coastal Wetlands, and a description of the construction works and the mitigation measures to be used during construction to mitigate potential impacts on key fish habitat; and
- An assessment of potential impacts on water quality and adjacent POAAs.

If harming of marine vegetation cannot be avoided, a permit to harm marine vegetation under the FM Act will be required for these works prior to construction.

Should a License from Crown Lands be required for any works within key fish habitat that meet the definition of dredging and reclamation works specified within s198A of the FM Act, then Crown Lands must notify DPI Fisheries of these works under s199 of the FM Act prior to authorising these works. If a Crown lands license is not required, then these works would require a permit for dredging and reclamation under the FM Act.

If you have any queries, please contact me on 02 6626 1375 or jonathan.yantsch@dpi.nsw.gov.au.

Yours sincerely

Jonathan Yantsch
Senior Fisheries Manager, Coastal Systems (North Coast)
Marine Estate Management, Primary Industries NSW

Attachment 1

DPI Fisheries' environmental assessment requirements for the proposed Thrumster Wastewater Scheme (SSI-56980459), Port Macquarie-Hastings Council LGA:

Note: DPI Fisheries recommends that development proposals comply with the *Policy and Guidelines for Fish Habitat Conservation and Management (2013)* (referred to hereafter as the DPI Fisheries P&G). A list of general information requirements for developments and standard precautions and mitigation measures are outlined in Section 3.1 of this document. See: *Policy and guidelines for fish habitat conservation and management (update 2013)* (nsw.gov.au).

A: General Requirements

- Site address and contact details.
- Property description (e.g. Lot and DP numbers).
- A clear description of the proposal including details of construction methods and materials.
- Map(s) of the development area and adjacent areas – this should include nearby waterways, adjacent infrastructure (such as jetties) and land use.
- Photographs of the site (at low and high tide in estuaries), including photographs of any riparian and aquatic vegetation present.
- A clear description of the physical and hydrological features of the development area (which may extend upstream and downstream of the development site in the case of flowing rivers or tidal waterways).
- A clear description of aquatic environments including: an aquatic and riparian vegetation survey map of the area which shows the location and/or coverage of saltmarsh, mangrove, seagrass, macroalgae, macrophytes, riparian vegetation and snags.
- Details of the nature, timing, magnitude and duration of the proposed disturbance to the aquatic environment.
- Assessments of predicted impacts upon any threatened species (fish and marine vegetation - https://www.dpi.nsw.gov.au/fishing/species-protection) (i.e. completion of an Assessment of Significance and/or species impact statement(s)) and other aquatic flora and fauna.
- Details of any mitigation measures to limit environmental impacts.
- Details of the general regional context, any protected areas, other developments in the area, and/or cumulative impacts.

Dredging and reclamation works

- Purpose of works.
- Type(s) and distribution of marine vegetation in the vicinity of the proposed works.
- Method of dredging/excavation to be used.
- Timing and duration of works.
- A discussion on options of lesser impact that were considered and why these were discounted.
- Dimensions of area of works including levels and volume of material to be extracted or placed as fill.

- Nature of sediment to be dredged, including Acid Sulphate Soil, contaminated soils etc.
- Method of marking area subject to works.
- Environmental safeguards to be used during and after works.
- Measures for minimising harm to key fish habitat.
- Soil type and source location for reclamation activities location and duration of spoil stockpiling, if planned.

Activities that damage marine vegetation

- Type and area of marine vegetation to be harmed.
- Map of density and distribution of marine vegetation.
- Reasons for harming marine vegetation.
- Methods of harming marine vegetation.
- Construction details.
- A discussion on options of lesser impact that were considered and why these were discounted.
- Duration of works/activities.
- Measures for avoiding or minimising harm to marine vegetation and details of compensatory works to offset unavoidable impacts to marine vegetation.

B. Aquatic habitat assessment

The aim of the aquatic habitat assessment should be to define the presence of 'key fish habitat' within the study site, adjacent areas (upstream and downstream), and the broader regional area. There may be a range of potential fish habitats that could be impacted by a particular activity. Some points to consider include:

- Is it mapped as key fish habitat? For key fish habitat mapping, see DPI Fisheries Spatial Data Portal on the web.
- Description of local wave and current regimes (in tidal areas).
- Description of the water quality (e.g. discoloration, sedimentation, turbidity, pH, dissolved oxygen, nutrients).
- Types of surrounding land use (e.g. agricultural, urban, aquaculture).
- Condition of riparian vegetation (i.e. present or absent. Are species native or exotic? Is the density of vegetation thick or sparse?).
- Condition of marine vegetation (i.e. information on type, species, shoot density and/or percentage cover. Is the vegetation continuous or sparse in coverage? What is the aerial extent? Is the vegetation healthy or degraded? Is wrack (dead seagrass or macroalgae) present?).
- Substrate type (e.g. rock, gravel, silt, sand).
- Presence of any listed threatened or protected aquatic species or 'critical habitat' under the FM Act and EPBC Act.

C. Assessment of likely impacts

- Indicate the location, nature and extent of habitat removal or modification (both direct and indirect) which may result from the proposed action.
- Indicate the potential impacts to water quality and adjacent POAAs associated with the operation of the scheme and what measures will be implemented to ensure that water quality is not negatively impacted by the scheme and that water quality will comply with the water quality objectives and guidance set out within the NSW OISAS and the NSW Healthy Estuaries for Healthy Oysters guidelines.
- Discuss the potential impact of the modification or removal of habitat (potential direct and indirect sources of impact are stated in the latter with this attachments).

Note: In defining the proposal area, discussion must be provided in regard to possible indirect effects of the proposal on species/habitats in the area surrounding the subject site: for example, through altered hydrological regimes, soil erosion or pollution.

D. Ameliorative measures

The environmental assessment should consider and provide detail on how the proposal has been or may be modified and managed to minimise impacts and conserve key fish habitat on the subject site and in the study area.