



**Notification of
REFERRAL DECISION – not controlled action if undertaken in a particular manner**

Marine Farming Expansion, Macquarie Harbour, Tasmania (EPBC 2012/6406)

This decision is made under sections 75 and 77A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Proposed action

person named in the referral	1. Huon Aquaculture Group Pty Ltd (ABN: 79 114 456 781) 2. Petuna Aquaculture Pty Ltd (ABN: 62 009 485 581); and 3. Tassal Operations Pty Ltd (ABN: 38 106 324 127).
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proposed action	The expansion of marine farming operations in Macquarie Harbour, on the west coast of Tasmania [as described in EPBC Act referral 2012/6406].
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Referral decision: Not a controlled action if undertaken in a particular manner

status of proposed action	The proposed action is not a controlled action provided it is undertaken in the manner set out in this decision.
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Person authorised to make decision

Name and position	The Hon Tony Burke MP Minister for Sustainability, Environment, Water, Population and Communities
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signature

date of decision

3.10.12

manner in which proposed action must be taken

The following measures must be taken to avoid significant impacts on:

- World Heritage properties (sections 12 and 15A);
- National Heritage places (sections 15B and 15C); and
- Listed threatened species and communities (sections 18 and 18A).

To ensure there are no significant impacts to the **Maugean Skate** or to the **Tasmanian Wilderness World Heritage Area**, the person taking the action must undertake the action in accordance with the **Macquarie Harbour Marine Farming Development Plan October 2005**. In particular, the person taking the action must undertake the following measures:

1. To ensure there are no significant impacts to the **Maugean Skate** as a result of changes to the benthic environment, the person taking the action must:
 - a. Take measures to prevent **substantial benthic visual, physio-chemical or biological changes** attributable to marine farming operations at, or extending beyond 35 metres from the boundary of any **lease area**;
 - b. Undertake a baseline environmental survey of all new **lease areas** and **compliance sites** prior to commencement of marine farming operations;
 - c. Undertake a **benthic video assessment** of **lease areas** and **compliance sites** in accordance with **marine farming licence conditions**;
 - d. If a **substantial benthic visual, physio-chemical or biological impact** is detected as a result of **benthic video assessment**, **targeted management responses** must be implemented within 10 weeks of the assessment;
 - e. Following any **targeted management responses** undertaken in accordance with 1(d) relating to a **substantial benthic visual impact** within a **lease area**, a follow up **benthic video assessment** must be undertaken at the **lease areas** prior to restocking;
 - f. Following any **targeted management responses** undertaken in accordance with 1(d) relating to a **substantial benthic visual, physio-chemical or biological impact** at a **compliance site**, a follow up **benthic video assessment** must be undertaken at the **compliance site** to monitor benthic recovery within four months of the **targeted management response**; and
 - g. 1(e) and 1(f) must be undertaken until the **benthic video assessment** identifies that a **substantial benthic visual, physio-chemical or biological impact** is no longer occurring.

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2. To ensure there are no significant impacts on the **Tasmanian Wilderness World Heritage Area** and the **Maugean Skate** as a result of water quality changes, the person taking the action must:
- a. Undertake a water quality monitoring program for the assessment of the water quality indicators ammonia, nitrate and dissolved oxygen at the **monitoring sites** in accordance with **marine farming licence conditions**. Monitoring must occur at these **monitoring sites** on a monthly basis until 30 June 2013, when the number and location of monitoring sites will be reviewed;
 - b. Take measures to prevent the **rolling annual median value** of quarterly water quality indicator values for ammonia, nitrate and dissolved oxygen, as recorded within the **compliance region**, from exceeding the identified **limit levels**;
 - c. If the water quality monitoring program identifies that the **rolling annual median value** for any of the water quality indicators ammonia, nitrate and dissolved oxygen, within the **compliance region**, exceed the identified **limit levels** and that this is attributable to marine farming operations, **targeted management responses** must be implemented within 10 weeks of the most recent quarterly monitoring report;
 - d. Following any **targeted management responses** undertaken in accordance with 2(c), a follow up monitoring assessment of the water quality indicators ammonia, nitrate and dissolved oxygen must be undertaken at the **monitoring sites** to monitor water quality recovery within four months of the **targeted management response**;
 - e. 2(c) and 2(d) must be undertaken until the monitoring assessment of the water quality indicators ammonia, nitrate and dissolved oxygen identifies that the identified **limit levels** are not being exceeded; and
 - f. The total biomass held across all **lease areas** must not exceed 52.5 percent of the modelled **maximum sustainable biomass** until limit levels are reviewed in mid 2013, and must not exceed any such altered levels as may be identified thereafter by the **Tasmanian Government**.

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3. To ensure there are no significant impacts on the **Tasmanian Wilderness World Heritage Area**, including as a result of changes to viewfields, the person taking the action must:
- a. Undertake marine farming debris cleanup activities within Macquarie Harbour at regular intervals of every 12 months at a minimum. Marine debris cleanup activities must also occur on an as needs basis when members of the public or other stakeholders notify the person taking the action of areas, within Macquarie Harbour, requiring particular attention. These activities must be conducted in accordance with any applicable biosecurity control requirements and regulations, including relevant management guidelines relating to *Phytophthora cinnamomi* and Chytrid fungus (*Batrachochytrium dendrobatidis*), to prevent the spread of weeds or pathogens into the **Tasmanian Wilderness World Heritage Area**; and
 - b. Ensure that all fish cages, buoys, netting and other floating marine structures and equipment, other than that required for navigational purposes, are grey to black in colour, or as otherwise specified in the **marine farming licence conditions**.

Definitions

Benthic video assessment must be undertaken in accordance with the video assessment specifications as prescribed in marine farming licence conditions.

Compliance sites means a location 35 metres outside of any **lease areas** used for monitoring purposes. At least one compliance site must be identified and monitored for each of the **lease areas**.

Compliance region means monitoring sites 4, 6, 8, 9 and 10 identified in Attachment 1, or any other group of sites as prescribed in marine farming licence conditions.

Lease area means marine farming leases granted under the provisions of the *Marine Farming Planning Act (Tas) 1995* within the area defined in the **Macquarie Harbour Marine Farming Development Plan October 2005**.

Limit levels for water quality indicators are set at the following interim levels:

- Ammonia (at 2 metres depth) = 0.033 mg/L
- Ammonia (at 20 metres depth) = 0.024 mg/L
- Nitrate (at 2 metres depth) = 0.053 mg/L
- Oxygen (at 2 metres depth) = 6.82 mg/L

Interim limit levels will be reviewed in mid 2013. Subsequent modifications to limit levels as a result of future reviews must be prescribed in marine farming licence conditions.

Marine farming licence conditions means conditions prescribed in marine farming licences issued pursuant to the *Living Marine Resources Management Act (Tas) 1995* relating to lease areas.

Macquarie Harbour Marine Farming Development Plan October 2005 means the plan approved under the *Marine Farming Planning Act (Tas) 1995* and includes Amendment No.1 to the **Macquarie Harbour Marine Farming Development Plan October 2005** and future amendments.

Maugean Skate means *Zearaja maugeana*, listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999*.

Maximum sustainable biomass is currently modelled to be 29,500 tonnes.

Monitoring sites means the 11 water quality monitoring sites identified in Attachment 1.

Rolling annual median value is the median of the quarterly values from sites within the **compliance region**, updated quarterly, or as otherwise prescribed in **marine farming licence conditions**.

Secretary means the Secretary of the department administering the *Marine Farming Planning Act (Tas) 1995* and the *Living Marine Resources Management Act (Tas) 1995*.

Substantial benthic visual impact at a compliance site may include:

- the presence of fish feed pellets on sediment surface;
- the presence of bacterial mats (e.g. *Beggiatoa spp.*) on sediment surface;
- the presence of gas bubbling arising from the sediment, either with or without disturbance of the sediment;
- the presence of numerous opportunistic polychaetes (e.g. *Capitella spp.*, *Dorvilleid spp.*) on the sediment surface.

Or as otherwise prescribed in marine farming licence conditions.

Substantial benthic visual impact within a lease area may include:

- Excessive feed dumping;
- extensive bacterial mats (e.g. *Beggiatoa* spp.) on the sediment surface prior to restocking;
- spontaneous gas bubbling from the sediment.

Or as otherwise prescribed in marine farming licence conditions.

Substantial benthic physio-chemical impact at a compliance site may include:

- a corrected redox value which differs by more than 10 percent from the reference site(s) and baseline conditions or is < 0mV at a depth of 3 cm within a core sample;
- a corrected sulphide level which differs by more than 10 percent from the reference site(s) and baseline conditions or is >250 µM at a depth of 3 cm within a core sample.

Or as otherwise prescribed in marine farming licence conditions.

Substantial benthic biological impact at a compliance site may include:

- a 20 times increase in the total abundance of any individual taxonomic family relative to reference sites;
- an increase at any compliance site of greater than 50 times the total Annelid abundance at reference sites;
- a reduction in the number of families by 50% or more relative to reference sites complete absence of fauna.

Or as otherwise prescribed in marine farming licence conditions.

Targeted management responses may include a direction by the **Secretary** to undertake one or more of the following actions:

- reduction in biomass;
- reduction in nitrogen output;
- redistribution of biomass.

Tasmanian Government means the Tasmanian Agency responsible for administering and regulating the **Macquarie Harbour Marine Farming Development Plan October 2005**.

Tasmanian Wilderness World Heritage Area means the World Heritage listed property and National Heritage listed place.

Map 2: Water Quality Monitoring

Monitoring Sites

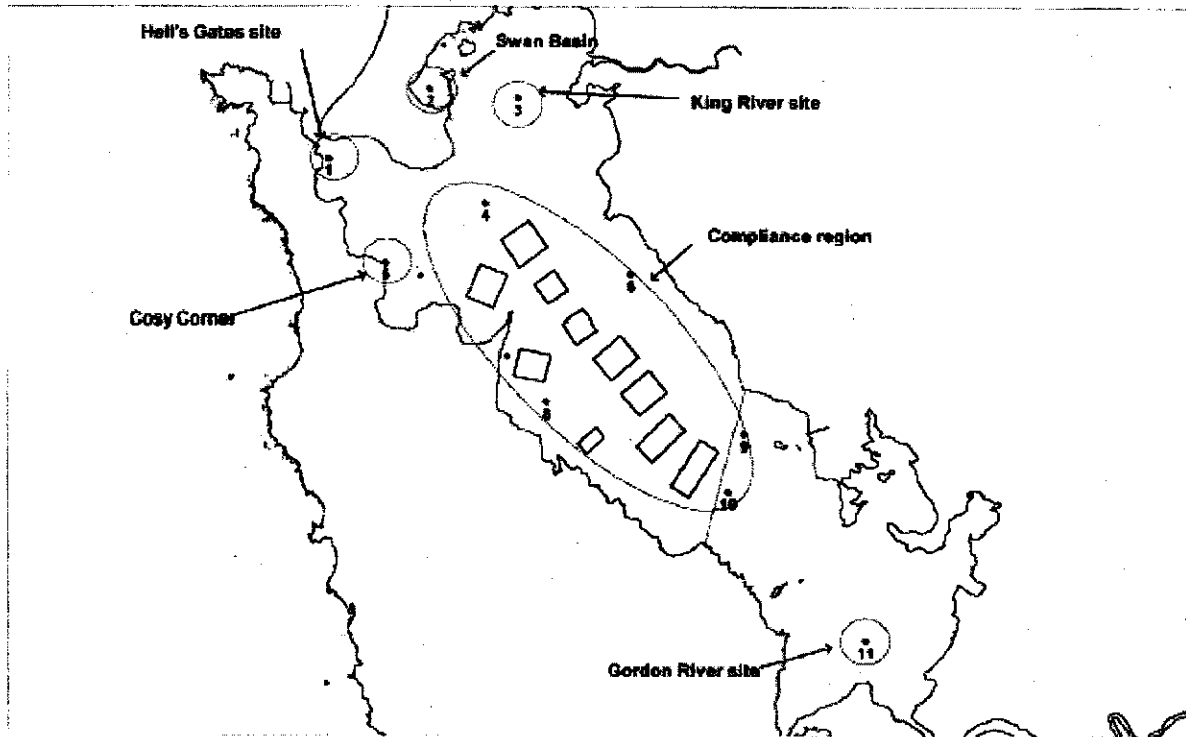


Table 1: Sample site descriptions. Coordinates are Map Grid of Australia 1994 (MGA94) Zone 55.

Site No	Type	Location	Easting	Northing
1	Water	Hell's Gates	353712	5323353
2	Water	Swan Basin	357871	5326207
3	Water	King River	361455	5325885
4	Water	Compliance Region	360144	5321607
5	Water	Cosy Channel	356107	5319158
6	Water	Compliance Region	366157	5318703
8	Water	Compliance Region	362734	5313569
9	Water	Compliance Region	370850	5312281
10	Water	Compliance Region	370224	5309960
11	Water	Gordon River	375845	5303913