

# State code 17: Aquaculture

## Purpose statement

The purpose of this code is to ensure **aquaculture** industry development and practices are ecologically sustainable. The code ensures that development:

1. maintains the health and productivity of **fisheries resources, fish habitat** and the natural environment;
2. maintains commercial, recreational, and indigenous **fishing** access
3. manages the health and productivity of **aquaculture fisheries resources**.

### Using this code

The assessment benchmarks for this code comprise:

- a purpose statement which identifies the overall intent of the code;
- performance outcomes which set benchmarks to achieve the purpose statement of the code;
- acceptable outcomes which identify one way to achieve the relevant performance outcome.

Development complies with the code where:

- it complies with the acceptable outcomes for the performance outcome; or
- it complies with all the performance outcomes, where not complying with the acceptable outcomes; or
- development does not meet relevant performance outcome(s) and SARA determines, on balance, that the development complies with the purpose statement.

This code also includes the glossary of terms for definitions relevant to this code and reference documents; including the guideline **State Development Assessment Provisions Guideline – State code 17: Aquaculture**, which provides direction on how to address this code.

## Performance outcomes and acceptable outcomes

Table 17.1: Material change of use

Performance outcomes	Acceptable outcomes
<b>Location</b>	
<b>PO1</b> Development is suitably designed, constructed and maintained for the type and scale of <b>aquaculture</b> activity proposed.	No acceptable outcome is prescribed.
<b>PO2</b> Development is designed, constructed and maintained to minimise adverse impacts on <ol style="list-style-type: none"> <li>1. <b>fisheries resources</b>;</li> <li>2. <b>fish habitat</b>;</li> <li>3. the natural environment.</li> </ol>	<b>AO2.1</b> Development is designed, constructed and maintained to avoid adverse impacts on <b>fisheries resources, fish habitat</b> and the natural environment.
<b>PO3</b> Structures that hold and contain <b>aquaculture fisheries resources</b> are designed, constructed and maintained to prevent the escape or release of <b>aquaculture fisheries resources</b> under the full range of conditions that could be expected at the site.	No acceptable outcome is prescribed.
<b>Access</b>	
<b>PO4</b> Development does not adversely impact on community access to <b>fisheries resources</b> and <b>fish habitat</b> including recreational and indigenous <b>fishing</b> access.	<b>AO4.1</b> Development does not alter existing access infrastructure or existing community access arrangements to <b>fisheries resources</b> and <b>fish habitat</b> .
<b>PO5</b> Development does not adversely impact on commercial <b>fishing</b> access.	No acceptable outcome is prescribed.
<b>PO6</b> Development does not adversely impact on existing linkages associated with a commercial <b>fishery</b> and infrastructure, services, and facilities.	No acceptable outcome is prescribed.

<b>Health and productivity</b>	
<b>PO7</b> Development is designed, constructed and maintained to prevent the risk of mortality, <b>disease</b> , injury, or compromise the health and productivity of, <b>fisheries resources</b> .	No acceptable outcome is prescribed.
<b>PO8</b> Development likely to cause drainage or disturbance to acid sulfate soils prevents the release of contaminants and impacts on <b>fisheries resources</b> and <b>fish habitat</b> .	No acceptable outcome is prescribed.
<b>PO9</b> Development is designed, constructed and maintained: 1. for the <b>aquaculture</b> of local endemic species; or 2. to eliminate the hazards and risks associated with non-endemic <b>aquaculture</b> species.	No acceptable outcome is prescribed.
<b>PO10</b> Development is designed, constructed and maintained to provide for the management of <b>disease</b> .	No acceptable outcome is prescribed.
<b>Land-based aquaculture development</b>	
<b>PO11 Ponds, tanks, containers</b> , aquaria and drainage systems are designed, constructed and maintained to avoid leakage.	No acceptable outcome is prescribed.
<b>PO12</b> Development is designed, constructed and maintained to mitigate <b>biosecurity</b> and <b>disease</b> risks to the natural environment.	<p><b>AO12.1</b> Development is designed, constructed and maintained to prevent impacts on <b>waterways</b> and wetlands by:</p> <ol style="list-style-type: none"> <li>1. being located away from important natural features such as <b>waterways</b> and wetlands: <ol style="list-style-type: none"> <li>a. for tidal habitats: <ol style="list-style-type: none"> <li>i. 100 metres from <b>highest astronomical tide</b> outside an urban area; or</li> <li>ii. 50 metres from <b>highest astronomical tide</b> within an urban area;</li> </ol> </li> <li>b. for non-tidal habitats: <ol style="list-style-type: none"> <li>i. 50 metres from bankfull width outside an urban area; and</li> <li>ii. 25 metres from bankfull width within an urban area;</li> </ol> </li> </ol> </li> <li>2. constructing all <b>ponds</b> above the <b>highest astronomical tide</b>;</li> <li>3. for <b>land-based</b> freshwater <b>aquaculture</b>, not allowing <b>discharge</b> from <b>ponds</b> and <b>tanks</b> to enter Queensland waters.</li> </ol> <p>AND</p> <p><b>AO12.2</b> For <b>land-based</b> development, the design of the <b>aquaculture</b> facility controls the containment and release of water from all <b>ponds, tanks</b> and drainage systems within the approved <b>aquaculture</b> area.</p>
<b>PO13 Ponds, tanks, containers</b> , aquaria and drainage systems are designed, constructed and maintained to ensure immunity from flooding and inundation.	<p><i>For the cultivation of exotic aquaculture fisheries resources:</i></p> <p><b>AO13.1 Ponds, tanks, containers</b> and aquaria used to cultivate exotic <b>aquaculture fisheries resources</b> are constructed on <b>land</b> that is situated above the Q100 flood level (1% AEP), or no lower than the highest known or recorded flood level if Q100 (1% AEP) is unavailable.</p>

	<p><i>For all other development:</i></p> <p><b>AO13.2 Ponds, tanks, containers</b> and aquaria used to cultivate <b>aquaculture fisheries resources</b> and for <b>bioremediation</b> are constructed with the lowest point of the top of wall at least the height of the Q100 flood level (1% AEP), or no lower than the highest known or recorded flood level if Q100 (1% AEP) is unavailable.</p> <p>AND</p> <p><b>AO13.3 Ponds, tanks, containers</b> and aquaria used solely for treatment and settlement (free of <b>aquaculture fisheries resources</b>) are constructed so that the lowest point on the top of wall is at least the height of the Q50 (2% AEP) flood level.</p> <p>AND</p> <p><b>AO13.4</b> All in-ground structures, including any structure or impoundment used for the collection or treatment of wastewater, are constructed to prevent the ingress of stormwater run-off e.g. by constructing a bund or levee wall around the structure or impoundment.</p>
<p><b>PO14 Aquaculture fisheries resources</b> are protected by excluding wild fauna through the design or structures on the site.</p> <p>Wild fauna (excepting zooplankton) is excluded from <b>land</b>-based aquaculture-development through:</p> <ol style="list-style-type: none"> <li>1. the design, construction, and operation preventing entry of fauna; and</li> <li>2. the screening of water introduced into the <b>aquaculture development</b>.</li> </ol>	<p>No acceptable outcome is prescribed.</p>
<p><b>Tidal aquaculture developments</b></p>	
<p><b>PO15 Aquaculture furniture</b> or other structures on <b>tidal land</b> are designed, constructed and maintained to prevent stranding or entanglement of native fauna, including, but not limited to:</p> <ol style="list-style-type: none"> <li>1. <b>fisheries resources</b>;</li> <li>2. birds;</li> <li>3. marine mammals;</li> <li>4. reptiles.</li> </ol>	<p>No acceptable outcome is prescribed.</p>
<p><b>PO16</b> The type of <b>aquaculture fisheries resource</b> selected minimises risks to, and avoid impacts on, wild <b>fisheries resources</b> and other indigenous flora and fauna specific to that area.</p>	<p><b>AO16.1 Aquaculture fisheries resources</b> are not released to, or placed in, Queensland waters unless they are free of <b>disease</b> and parasites, and are of the same species and the same genetic stock as the resident population of that area.</p> <p>AND</p> <p><b>AO16.2 Tidal aquaculture</b> is only of native Queensland <b>fish</b> species that are endemic to the location of the development.</p> <p>AND</p>

	<p><b>AO16.3</b> The <b>aquaculture fisheries resource</b> can and will be produced from sufficient broodstock, sourced from the area to ensure appropriate genetic diversity to minimise risks to the natural environment.</p>
<p><b>PO17 Aquaculture furniture</b> and other infrastructure are designed, constructed and maintained to prevent movement of the structure from the intended point of placement, anchoring or mooring.</p>	<p>No acceptable outcome is prescribed.</p>
<p><b>PO18</b> The design, construction and maintenance of <b>aquaculture furniture</b> and other infrastructure does not result in adverse impacts to <b>fisheries resources</b>.</p>	<p><b>AO18.1 Aquaculture furniture</b> does not interfere with <b>fisheries resources</b>.</p> <p>AND</p> <p><b>AO18.2 Aquaculture furniture</b> and other infrastructure is designed, constructed and maintained to be removable.</p> <p>AND</p> <p><b>AO18.3</b> All materials used in the construction of <b>aquaculture furniture</b> are of a chemically inactive and non-hazardous nature.</p> <p>AND</p> <p><b>AO18.4</b> Other structures, including break walls, fences, boat ramps and jetties, are not constructed on areas allocated for <b>prescribed aquaculture</b>.</p> <p>AND</p> <p><b>AO18.5 Aquaculture furniture</b> and other infrastructure is designed and constructed to not include any fixed structures in the substrate (except for supporting posts).</p>
<p><b>PO19</b> Development in the Great Sandy Strait Marine Park:</p> <ol style="list-style-type: none"> <li>1. is within a designated <b>aquaculture</b> area identified in the Great Sandy Regional Marine Aquaculture Plan (GSRMAP);</li> <li>2. is consistent with the type of <b>aquaculture</b> approved for the designated area; and</li> <li>3. complies with the assessment criteria and conditions of the GSRMAP.</li> </ol>	<p>No acceptable outcome is prescribed.</p>
<p><b>High risk activities</b></p>	
<p><b>PO20</b> Development does not result in adverse impacts to fauna in inland catchments (west of the Great Dividing Range).</p>	<p><b>AO20.1</b> Development is designed to prevent the spread of <b>disease</b> or the introduction of barramundi into catchments where it does not naturally occur, through:</p> <ol style="list-style-type: none"> <li>1. ensuring no water or organisms originating from the <b>aquaculture</b> of barramundi and co-cultured species is permitted to reach Queensland waters without treatment/sterilisation appropriate to render nodavirus nonviable. This includes during the transportation of aquacultured product;</li> <li>2. aquacultured barramundi and co-cultured species must not be sold, traded, stocked into</li> </ol>

	<p>Queensland waters or given away for non-food purposes;</p> <p>3. all <b>containers</b> used to <b>aquaculture</b> barramundi are screened to exclude predators (for example birds) without causing injury to such predators.</p>
<p><b>PO21</b> No water or organisms originating from the <b>aquaculture</b> of <b>exotic fish</b> reaches Queensland waters with the exception of waters within constructed storage dams located above Q100 limits and used for the purposes of water storage and reuse only.</p>	<p><b>AO21.1</b> Culture of <b>exotic fish</b> does not occur in open or flow-through systems that <b>discharge</b> into <b>waterways</b>.</p> <p>AND</p> <p><b>AO21.2</b> All <b>containers</b> used to <b>aquaculture exotic fish</b> are screened to exclude predators (for example birds) without causing injury to such predators.</p>
<p><b>PO22</b> Development involving <b>fish</b> that are listed under international, Commonwealth or State legislation as 'near threatened', 'vulnerable', 'endangered', 'critically endangered' or 'extinct in the wild':</p> <ol style="list-style-type: none"> <li>1. provides a net benefit to management of the chosen species;</li> <li>2. avoids or acceptably minimises <b>biosecurity</b> risks;</li> <li>3. manages any risks to rare, threatened, or endangered <b>fish</b>.</li> </ol>	<p>No acceptable outcome is prescribed.</p>

## Reference documents

### Aquaculture policies and guidelines

Department of Agriculture and Fisheries, State Development Assessment Provisions guideline – State code 17: Aquaculture

Conservation Agreement between the Minister for Sustainability, Environment, Water, Population and Communities on behalf of the Commonwealth of Australia and the Minister for Agriculture, Food and Regional Economies and the Minister for Environment on behalf of the State of Queensland dated 7 September 2011 – Agreement in relation to aquaculture operations in the Great Sandy Marine Park as described in the Great Sandy regional marine aquaculture plan (Queensland Government, approved October 2010) and made under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) Department of Employment, Economic Development and Innovation 2011

Department of Employment, Economic Development and Innovation (Fisheries Queensland) 2011, Great Sandy regional marine aquaculture plan

Department of Employment, Economic Development and Innovation 2011, Implementation guide for the Great Sandy Regional Marine Aquaculture Plan

Queensland Primary Industries and Fisheries 2004, FAMOP001 – Management arrangements for potentially high risk activities in the context of ecologically sustainable development for aquaculture facilities

Queensland Primary Industries and Fisheries 2007, Guidelines for constructing and maintaining aquaculture containment structures

Queensland Primary Industries and Fisheries 2007, Policy for maximising rock oyster production: management of non-productive oyster areas

Department of Primary Industries and Fisheries 2008, Health management technical guidelines for aquaculture

Department of Agriculture and Fisheries 2015, Oyster industry plan for Moreton Bay Marine Park

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## Translocation and biosecurity

Department of Agriculture and Fisheries, [Use of agricultural and veterinary chemicals](#)

Department of Agriculture and Fisheries 2018, [FAMPR001 – Health protocol for the movement of live prawns](#)

Department of Agriculture, Fisheries and Forestry 2011, [FAMPR002 – Health protocol for the importation and movement of live barramundi](#)

Department of Agriculture and Fisheries 2019, [FAMPR003 – Health protocol for the movement of live bivalve molluscs](#)

Queensland Primary Industries and Fisheries 2003, [FAMOP005 – Policy relating to the relaying of oysters within Queensland waters](#)

Queensland Primary Industries and Fisheries 2003, [FAMOP006 – Policy relating to the trans-shipment of oysters into Queensland waters](#)

Department of Agriculture and Fisheries, [Preventing disease in aquaculture](#)

Department of Agriculture and Fisheries, [Identifying and reporting disease in aquaculture](#)

Department of Agriculture and Fisheries, [Managing disease in aquaculture farms](#)

Department of Agriculture, Fisheries and Forestry 2011, [FAMPR004 – Health protocol for the movement of live marine crustaceans including crabs, lobsters and bugs](#)

Department of Agriculture, Fisheries and Forestry 2011, [FAMPR005 – Health protocol for the movement of live eels](#)

Department of Agriculture, Fisheries and Forestry 2011, [FAMPR006 – Health protocol for the movement of live freshwater crayfish and prawns](#)

Department of Employment, Economic Development and Innovation 2011, [FAMPR007 – Health protocol for the movement of live freshwater native finfish \(other than barramundi and eels\)](#)

Department of Agriculture and Fisheries 2017, [FAMPR008 – Health protocol for movement of aquatic animals for aquaculture in Queensland](#)

## Accepted Development

Department of Agriculture and Fisheries 2020, [Accepted development requirements for material change of use that is aquaculture](#)

## Other references

Australian Government Department of Agriculture, Water and the Environment, [AQUAVETPLAN](#)

Australian Government Department of Agriculture, Water and the Environment 2020, [National policy guidelines for the translocation of live aquatic animals](#)

Department of Agriculture and Fisheries 2019, [Aquaculture Development Areas](#)

Department of Science, Information Technology, Innovation and the Arts 2014, [Queensland Acid Sulfate Soil Technical Manual](#)

International Erosion Control Association 2008, [Best Practice Erosion and Sediment Control Guidelines](#)

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# Glossary of terms

**Aquaculture** see the *Fisheries Act 1994*.

Note: **Aquaculture** means the cultivation of live fisheries resources for sale other than in circumstances prescribed by regulation.

**Aquaculture fisheries resources** see the *Fisheries Act 1994*.

Note: **Aquaculture fisheries resources** means live **fish** and other marine plants cultivated in aquaculture.

**Aquaculture furniture** see the *Fisheries Act 1994*.

Note: **Aquaculture furniture** means a cage, rack, **tank**, tray, or anything else used, or capable of being used, in aquaculture or to assist in aquaculture.

**Bioremediation** means the branch of biotechnology that uses biological processes to overcome environmental problems. For example, the culture of fisheries resources for the purpose of improving the quality of **discharge** water from treatment and settlement **ponds**.

**Biosecurity** means protection from the risks posed by organisms to the economy, environment and people's health.

**Container** see the *Fisheries Act 1994*.

Note: **Container** includes a basket, case and tray.

**Discharge** means the release of wastewater into natural **waterways**.

**Disease** see the *Biosecurity Act 2014*.

Note: **Disease** means:

1. the presence of a pathogenic agent in a host; or
2. the clinical manifestation of infection; or
3. a syndrome

**Exotic fish** means **fish** originating from anywhere outside Queensland.

**Fish** see the *Fisheries Act 1994*.

Note: **Fish** means

1. means an animal (whether living or dead) of a species that throughout its life cycle usually lives:
  - a. in water (whether freshwater or saltwater);
  - b. in or on foreshores; or
  - c. in or on land under water.
2. includes:
  - a. prawns, crayfish, rock lobsters, crabs and other crustaceans;
  - b. scallops, oysters, pearl oysters and other molluscs;
  - c. sponges, annelid worms, bêche-de-mer and other holothurians;
  - d. trochus and green snails.
3. however, does not include:
  - a. crocodiles;
  - b. protected animals under the *Nature Conservation Act 1992*;
  - c. pests under the *Pest Management Act 2001*; or
  - d. animals prescribed under a regulation not to be **fish**
4. also includes:
  - a. the spat, spawn and eggs of **fish**;
  - b. any part of **fish** or of spat, spawn or eggs of **fish**;
  - c. treated **fish**, including treated spat, spawn and eggs of **fish**;
  - d. coral, coral limestone, shell grit or star sand;
  - e. freshwater or saltwater products declared under a regulation to be **fish**.

**Fish habitat** see the *Fisheries Act 1994*.

Note: **Fish habitat** includes land, waters and plants associated with the life cycle of **fish**, and includes land and waters not presently occupied by fisheries resources.

**Fisheries resources** see the *Fisheries Act 1994*.

Note: **Fisheries resources** includes **fish** and marine plants.

**Fishery** see the *Fisheries Act 1994*.

Note: **Fishery** includes activities by way of **fishing**, including, for example, activities specified by reference to all or any of the following:

- a. a species of **fish**;
- b. a type of fish by reference to sex, size or age or another characteristic;

- c. an area;
- d. a way of **fishing**;
- e. a type of boat;
- f. a class of person;
- g. the purpose of an activity;
- h. the effect of the activity on a **fish** habitat, whether or not the activity involves **fishing**;
- i. anything else prescribed by regulation.

**Fishing** see the *Fisheries Act 1994*.

Note: **Fishing** includes:

1. searching for, or taking, **fish**;
2. attempting to search for, or take, **fish**;
3. engaging in other activities that can reasonably be expected to result in the locating, or taking, of **fish**;
4. landing **fish** (from a boat or another way), bringing **fish** ashore or transshipping **fish**.

**High risk activities** mean activities involving aquaculture of **exotic fish** species, barramundi in inland catchments and species of conservation interest.

**Highest astronomical tide** means the highest level of the tides that can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.

**Land** see the *Fisheries Act 1994*.

Note: Land includes foreshores and tidal and non-tidal land.

**Marine park** means a **marine park** declared, or taken to be declared, under the *Marine Parks Act 2004*.

**Pond** means an earthen in-ground container.

**Prescribed aquaculture** means aquaculture for which a **resource allocation authority** has been obtained.

**Resource allocation authority** means a current **resource allocation authority** issued under the *Fisheries Act 1994*.

**Tank** means an above-ground container used for intensive aquaculture within an enclosed facility.

**Tidal land** see the *Fisheries Act 1994*.

Note: **Tidal land** includes reefs, shoals and other **land** permanently or periodically submerged by waters subject to tidal influence.

**Waterway** see the *Fisheries Act 1994*.

Note: **Waterway** includes a river, creek, stream, watercourse, drainage feature or inlet of the sea.