



# Environmental Defenders Office

2 December 2019

Mr Stuart Wright  
Inquiry Secretary  
Parliament House  
HOBART TAS 7000

**By email:** [finfish@parliament.tas.gov.au](mailto:finfish@parliament.tas.gov.au)

Dear Mr Wright

## **Submission to Legislative Council Inquiry into Finfish Farming in Tasmania**

The Environmental Defenders Office (Tasmania) Inc\* (EDO) is a non-profit, community based legal service specialising in using the law to protect the environment. We have a long-standing interest in best practice assessment and regulation of finfish aquaculture and welcome this Inquiry.

I refer to my letter of 29 November 2019, in which I requested an extension of time for the making of a late submission to the Inquiry. I repeat the request that this submission be considered and an extension granted for the reasons set out in that correspondence.

This submission to the Inquiry relates to all three terms of reference, and the overarching question of the “planning, assessment, operation and regulation of finfish farming”. Given our expertise, this submission will focus on the assessment and regulation of finfish farming principally referencing those matters in the terms of reference at 2(a), 2(c) and 3. We do so broadly, rather than explicitly responding to the terms of reference as drafted and trust this is acceptable to the Committee.

To assist the Committee, our submission provides an outline of the current regulatory framework for marine farming, identified a model of best practice aquaculture regulation and a detailed analysis of the regulation of the finfish farming industry against best practice environmental regulation.

While the 2017 reforms allocating some responsibility for environmental regulation of finfish farming to the Tasmanian Environment Protection Authority (EPA) have improved some aspects of finfish farming regulation, there remain substantive concerns about the transparency and consistency of decision-making, with consequences for environmental and community outcomes.

The key issues that we have identified in this submission

1. The lack of clear legislative criteria for decision-makers, in particular, under the legislation under which approvals are granted, being the *Marine Farming Planning Act 1995* and the *Environmental Management and Pollution Control Act 1994*;

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2. Governance issues, in particular, the perceived overlap of regulatory and industry development functions of decision-makers;
3. The limits of spatial planning in identifying both suitable environmental locations for marine farming and “no go” areas, particularly the lack of baseline data to underpin such decisions;
4. The need for integrated assessment processes to reduce duplication and complexity, and facilitate comprehensive and integrated assessments;
5. The need for a focus on evidence-based environmental assessment and avoiding an over-reliance on adaptive management;
6. The need for greater access to information, through routine disclosure, publication of scientific studies, baseline and monitoring data and ability to access decision-makers to facilitate independent scrutiny of this data;
7. The limits to meaningful public participation of marine-farming decision-making, including the lack of access to independent review of decisions;
8. The need for rigorous, consistent and transparent monitoring and enforcement.

There are numerous practical steps that could and should be taken now to improve the transparency and scientific rigour of finfish farming planning, assessment and regulatory processes. To this end, we make a series of substantive recommendations at the end of this submission.

The implementation of our recommendations are aimed at enabling Tasmania to better achieve a truly sustainable finfish farming industry, in a transparent and open manner, with better environmental outcomes for our waterways and marine areas, and consequential improved community (and consumer) confidence that environmental and social impacts are being appropriately managed.

EDO has made a number of previous, detailed submissions to similar inquiries at a Commonwealth level focussing on regulation of aquaculture operations in Tasmania. We attach a copy of our submissions to:

- the Senate Committee Inquiry into the Regulation of Fin Fish Aquaculture in Tasmania (2015);
- the draft *Finfish Farming Environmental Regulation Bill 2017 (Tas)* (2017);
- the draft Salmon Growth Plan (2017);
- the draft *Environmental Legislation (Miscellaneous Amendments) Bill 2019*.

Despite there being some reform of State marine farming laws since the Senate Inquiry submissions was made, and the 2017 Bill has now been enacted, these submissions provide a detailed overview of our approach to the regulation of finfish farming in Tasmania, and its continued inadequacies.

Thank you for the opportunity to make this submission and we trust that this submission lends weight to our requested extension of time. We welcome the opportunity to appear at any public hearing held by Committee in relation to this Inquiry.

Yours sincerely

**Environmental Defenders Office\***

Per:



Nicole Sommer  
CEO and Principal Lawyer

## Tasmania's salmon industry

Tasmania's salmon farming industry has rapidly expanded since it was first established in the mid-1990s. In the ten years to 2013-14, production of farmed salmon in Tasmania increased by 151 per cent in volume terms and 194 per cent in value terms.<sup>i</sup> The industry now supplies more than 55,000 tonnes of salmon, largely to the domestic market<sup>ii</sup>, and has an estimated gross annual value of over \$620 million dollars.

Despite the salmon industry's economic success, its expansion has not been without controversy. Concerns have been raised about habitat modification (including for listed threatened species), marine floor degradation, reduced water quality, pests and disease, and algal blooms. Communities and landholders adjacent to marine farming leases report reduced amenity resulting from noise, light, and marine debris from the fish farms, while yacht clubs are concerned about marine farm debris and infrastructure causing navigation hazards. Onshore, concerns are being raised about the impacts of salmon hatcheries on adjacent waterways, odours from fish processing plants, and the use of precious freshwater resources for salmon disease prevention.

The Tasmanian government often claims that regulation of salmon farming in Tasmania is "world's best practice". However, the scientific reports demonstrating the adverse impacts of salmon operations in Macquarie Harbour challenge the view that the industry is meeting community expectations and satisfying the sustainability objectives of the managing legislation.

The proposed expansion of salmon farming along both the east and north coasts, together with the promotion of the relocation of leases offshore through the *Sustainable Industry Growth Plan for the Salmon Industry*, highlights the need to review the current planning and assessment framework to ensure the impacts of proposed salmon farming activities can be identified early, avoided and managed.

## Best practice regulation

There is no single approach to regulating salmon farming – each of the jurisdictions in which the industry operates adopts a different approach, making it difficult to identify what "best practice" requires. In its 2004 report, *Assessing Environmental Regulatory Arrangements for Aquaculture*, the Productivity Commission identified the following key features of an effective regulatory framework:

- clear legislative objectives to promote certainty and consistency in setting the parameters of the legislation and in guiding ministers, government agencies and others in interpreting and applying the legislation;
- separate agencies for industry development and regulation to remove potential conflicts of interest and improve public confidence in environmental protection, resource planning, allocation, approvals and enforcement;<sup>iii</sup>
- the use of a spatial planning regime for marine aquaculture to designate aquaculture development zones in suitable environmental locations;
- a land use planning system that recognises and provides for land-based aquaculture and provides guidance to local government planning arrangements;
- the effective provision of tenure to public waters and land to provide adequate security to meet the needs of different lease categories and uses;
- the use of environmental risk assessment processes to guide decision-making based on the species, production system, site location, management practices and the condition of the local environment (such as the quality and assimilative capacity of the receiving waters);
- a limited approvals process to minimise the number of different individual approvals required for an aquaculture development, ideally by having one approval for aquaculture operations and one for environmental management.<sup>iv</sup>

The Senate Environment and Communications References Committee 2015 Inquiry into Tasmania's finfish regulation also recommended that transparency was important to community confidence, including by recommending that there be a "greater provision of environmental information and access to data" by DPIPWE.<sup>v</sup> Finally, the objectives of the *Marine Farming Planning Act 1995* include taking account of "the community's right to have an interest" in marine farming activities.

Having regard to these findings and objectives, this submission assesses Tasmania's current marine farming laws against the following criteria:

1. Clear legislative criteria for decision-makers;
2. Independence of decision-makers responsible for industry regulation and separation from industry promotion and development;
3. Identification and security of suitable environmental locations for salmon farms;
4. Integrated assessments – reducing duplication and facilitating comprehensive and integrated assessments;
5. Evidence-based environmental assessment;
6. Access to information;
7. Meaningful public participation including access to independent review of decisions;
8. Rigorous, consistent and transparent monitoring and enforcement

This submission highlights key areas for reform to ensure that the laws governing salmon farming are effective in securing a well-planned and sustainable industry.

### How are salmon farms currently regulated?

Marine farming in Tasmania's state waters is principally<sup>vi</sup> regulated under the following Acts:

- *Marine Farming Planning Act 1995 (MFP Act)*;
- *Living Marine Resources Management Act 1995 (LMRM Act)*; and
- *Environmental Management and Pollution Control Act 1994 (EMPC Act)*.

The procedures for planning and approving activities are explained briefly below.

Land-based marine farming aquaculture facilities, including jetties, landing and loading areas, hatcheries, storage and processing facilities, are subject to the *Land Use Planning and Approvals Act 1993 (LUPA Act)*. Applications are determined by local councils, following an assessment against the relevant planning scheme. Depending on the size and location of a proposed development, this process will generally involve public notification and representation rights. The grant of any discretionary permit by a Council may be subject to merits appeal to the Resource Management and Planning Appeal Tribunal.

In contrast, marine farms in State waters are explicitly excluded from the operation of planning schemes. Such proposals are assessed primarily under the MFP Act, LMRM Act and EMPC Act.<sup>vii</sup>

There are now two different licences that marine salmon farms require before they can operate: a marine farming licence issued by the Minister under the LMRM Act, and an environmental licence issued under the EMPC Act. Applications for licences under the LMRM Act are assessed by the Marine Farming Branch of Department of Primary Industries Parks, Water and the Environment (**DPIPWE**). They are not subject to any transparent or public assessment process.

In terms of regulation and enforcement, the Secretary and Marine Farming Branch of DPIPWE was historically responsible for both planning for and regulating the salmon farming industry. Since July 2016, the EPA has had responsibility for the environmental regulation of the industry – first through delegation, and then through the implementations of amendments to the EMPC Act. The EPA now is responsible for monitoring and enforcing the environmental performance of salmon farms against conditions of their environmental licences, marine farming licences, and the management controls of Marine Farming Development Plans (**MFD Plans**).

Where non-compliances with the requirements are detected, the EPA has powers to take enforcement action against the operator, for example by issuing fines or taking prosecution.

Player	Description of Role	Planning	Permitting	Monitoring	Regulation & Enforcement	Research & development
<b>Minister for Primary Industries</b>	The Minister is currently responsible for both the promotion and regulation of the salmon farming industry. After considering the advice of the Panel on a draft MFD Plan, it is up to the Minister to decide where salmon farms should be located and how they should be regulated. The Minister also decides applications for leases and licences by salmon farm operators.	x	x		x	
<b>Marine Farming Development Panel</b>	The Panel consists of eight members with marine farming, fishing, planning and local government experience, appointed by the Governor for a period of five years. The Panel is responsible for assessing draft MFD Plans, and making recommendations to the Minister about whether they should be made. The Panel also provides advice to the Minister if requested.	x				
<b>Board of Advice and Reference (MFP Act)</b>	The Board of Advice and Reference consists of three persons (including a lawyer, a business person and a person with experience in marine farming) appointed by the Minister who are responsible for providing advice to the Minister on such matters as the criteria for and assessment of applications for the allocation of leases.		x			
<b>DPIPWE, Marine Farming Branch</b>	The Marine Farming Branch has the widest responsibilities of any player. It is responsible for the preparation of draft MFD Plans, preparing information for the Minister, the regulation of non-environmental aspects of salmon farming, and the promotion and development of the industry.	x		x	x	x
<b>EPA Director</b>	The EPA Director provides direction to the Panel and has responsibility for the environmental regulation and enforcement for salmon farms under the <i>Environmental Management and Pollution Control Act 1994</i> (EMPCA). The Director is also responsible for undertaking the assessment of some (but not all) finfish marine farms, hatcheries and fish-processing plants that are 'environmental licence' activities.	x	x	x	x	
<b>EPA Board</b>	The EPA Board is responsible for assessing some (but not all) finfish marine farms, hatcheries and fish-processing plants that are 'environmental licence' activities under EMPCA.		x	x		
<b>EPA Salmon Farming Unit</b>	Responsible for environmental regulation and enforcement for salmon farms and hatcheries.			x	x	
<b>Local Councils</b>	Responsible for planning for and permitting land-based marine farming activities, including onshore facilities, hatcheries and fish processing plants.	x			x	
<b>Leaseholders</b>	Responsible for applying for MFD Plans (including preparation of EIS), monitoring of compliance with conditions and contributing towards research and development.	x		x		x

<b>IMAS &amp; CSIRO</b>	Principally responsible for research and development. May also be engaged to assist with monitoring of compliance and providing advice to DPIPWE and EPA.			<b>x</b>		<b>x</b>
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### **Marine Farming Development Plans**

Areas of Tasmania’s coastal waters are set aside as zones under Marine Farming Development Plans (**MFD Plans**). In each designated zone, marine farming activities are permitted and regulated in accordance with management controls specific to the plan area.

Draft MFD Plans (or draft amendments) for salmon farms are prepared by either DPIPWE or the salmon farming company itself. Draft plans, or amendments<sup>viii</sup>, must be accompanied by an environmental impact statement (**EIS**), appropriate to the scale of the likely impacts and public interest in the proposed activities. Unless there is “a reason for confidentiality”, the EIS must disclose the information that it has relied upon.

Management controls in draft MFD Plans may include a range of rules to minimise and manage adverse effects of the marine farming activities, such as:

- restrictions on the types of marine farming activities that may take place in the area (for example, the types of fish that may be farmed, or the year classes that will be permitted);
- environmental baseline studies that must be undertaken by a lease holder;
- maximum nutrient output and biomass;
- water quality indicators and thresholds;
- restrictions on noise and light emissions; or
- size and location of structures within a marine farming zone.

It is noteworthy that, currently, no MFD Plans actually impose restrictions on maximum nutrient output (referred to as Total Permissible Dissolved Nitrogen Output), or total biomass (total quantity of fish that may be stocked). This is despite the fact that the EISs for the MFD Plans assess/model impacts based on an identified maximum nutrient output and biomass.

Draft MFD Plans, and most amendments to MFD Plans, will be publicly notified, and submissions to the Marine Farming Planning Review Panel (**Panel**) will be invited. The Panel may, but is not required to, hold hearings in relation to a draft MFD Plan or amendment. These hearings may or may not be open to the public.<sup>ix</sup>

While the Panel has the power to reject a draft MFD Plan, once it has determined that a MFD Plan is “acceptable” and contains any matters relating to environmental management required by the EPA Director, the Panel must make a recommendation to the Minister that the draft MFD Plan be approved. The Minister then has the power to either approve or refuse a draft MFD Plan. The Minister has the power to approve amendments to existing MFD Plans irrespective of whether the Panel has recommended that the amendment be rejected.

MFD Plans are required to be reviewed at least once every 10 years.

### **Marine farm leases and allocations**

Once a MFD Plan has been approved, the Minister consults with the Board about how lease areas designated in the plan are to be allocated. Applications for marine farming leases are referred to the Board, who will advise Minister if the applicant has the necessary technical and financial resources, and if the proposed lease allocation is consistent with the approved plan. After considering the Board’s advice, the Minister may grant a lease on any conditions or restrictions the Minister determines.

There is no public notification of the allocation, grant, renewal or variation of leases under the Act and rights of appeal are extremely limited.

Temporary, emergency leases may be granted for up to 12 months where the original lease area becomes unavailable due to “a situation affecting water quality” or where fish are “substantially affected” by pollution, pests or diseases.<sup>x</sup>

### **Marine farming licences**

The LMRM Act regulates marine farming, and fisheries more generally, in Tasmania.

Once a lease has been granted, the lessee can apply to the Minister for a marine farming licence to carry out marine farming in State waters, or to operate a hatchery for release of fish into State waters. The licence can include specific conditions relating to environmental management. There is no requirement for licence applications to be publicly advertised, and appeal rights are limited.

Salmon farming cannot occur unless both a lease and a licence have been granted for the activity. A marine farming licence is automatically terminated if the licensee ceases to hold a marine farming lease.<sup>xi</sup>

### **Environmental licences**

All proposals involving “finfish farming” (which is presently broadly defined as “the farming, culturing, hatching, rearing, ranching, enhancement, or breeding, of finfish” or any activities associated with, and for the purposes of, those activities), require an environmental licence issued by the Environment Protection Authority (**EPA**).

Unlike all other “level 2” activities regulated by the EPA under the EMPC Act, there is no guarantee that a finfish farming activity will be subject to a transparent and public assessment process conducted by the EPA Board.

As the EMPC Act is presently drafted, the EPA Director has some discretion as to whether to refer an application for an environmental licence to the EPA Board. Before determining whether a particular application must be referred by the EPA Director to the EPA Board for assessment, the following questions must be answered:

- Is the application is an emergency application?
- Is the hatchery/farm on land?
- If the farm in state waters, will it operate under a MFD Plan?
- If there is a MFD Plan, was the Plan assessed by the Panel over 2 years ago, and were there considerations that the Panel failed to have regard to?
- If there is a MFD Plan, is it greater than 10 years old?
- Is there a lot of public interest in relation to the proposal?
- Is it likely that the proposal will require an EPBC approval?
- Is the proposal to increase the biomass or nitrogen by more than 10% than the caps imposed under the MFDP?

The public is not able to make a formal representation in relation an application assessed by the EPA Director, instead of the EPA Board. There are no third-party appeal rights relating to any environmental licence granted to finfish farm by the EPA Director.

There are no criteria for a decision by either the EPA Board or EPA Director to grant an environmental licence.

## **How does the current system measure up?**

### **1. Need for clear criteria for decision makers**

Across the board, the legislation governing decision-making lacks clear and specific criteria to guide decision-making – whether this be decisions made by the MFD Panel, the Resources Minister, the EPA Director or the EPA Board.

The lack of criteria means that decisions made in respect of fin-fish farming are entirely discretionary. The consequence of this is that decision-making is opaque, there lacks the transparency and certainty needed to give the community confidence about how decision-making weighs economic, environmental and social considerations.

(a) MFP Act

There are no criteria legislated in the MFP Act on when the impacts identified in an Environmental Impact Statement (**EIS**) will be acceptable, what level of scientific certainty is required about potential adverse environmental impacts, or the extent to which economic, social or amenity issues will be considered.<sup>xii</sup>

There are criteria about what a draft MFD Plan must do (s21(1) of the MFP Act) and must contain draft “management controls” to “satisfactorily manage and mitigate negative effect of the draft plan” (s24(1) & (2) of the MFP Act). A draft Plan must be prepared with an EIS which:

- Discloses any available information relating to the environmental impact of the draft plan, except if there is a reason for confidentiality;
- Contains any matter relating to environmental management required by a s17A(1) notice issued by the EPA Director;
- Contain any information appropriate to the significance of the draft plan...to the environment and likely public interest.

However, the Panel is not required to take into account or be satisfied that a draft plan in fact complies with s21(1) or s24 of the MFP Act. It is not required to assess whether the draft Plan against any statutory criteria.

Section 31 of the MFP Act merely requires the Panel to recommend to the Minister that a draft MFD Plan be approved if satisfied it is “acceptable”:

*The Panel must recommend to the Minister that the draft plan be approved if satisfied that –*

*(a) the draft plan including any modification to the plan is acceptable; and*

*(b) the draft plan contains any matter relating to environmental management of finfish farming that the Director, EPA, in a notice under [section 17A\(1\)](#), requires the Panel to include in the draft plan or any draft plan.*

We note that the Director’s power to issue a s17A(1) notice is discretionary, and we are not aware of any such notices being issued. If it is the intention of the legislation to delegate the assessment of environmental management to the EPA Director, the better approach would be to mandate the issue of a s17A(1) notice.

This would ensure that any MFD Plan contained environmental management controls required by the EPA Director, and would be beneficial for industry consistency, proper spatial planning

The preparation of a marine farming development plan is a spatial planning tool for marine areas, much like a planning scheme for land areas. The process for approval of a draft plan in some ways mirrors that of a planning scheme or amendment to a planning scheme in that the Minister approves the initiation of a MFD plan, the draft plan has criteria it must meet, the draft plan is approved by the Panel for public exhibition, the Panel’s role is to consider representations made, hold hearings and recommend any modifications to a draft plan.

However, in approving a planning scheme amendment, there are legislated criteria in the *Land Use Planning and Approvals Act 1993* (LUPA Act) that guide the Planning Commission’s decision-making. The Planning Commission must be of the opinion that the amendment:

- must, as far as practicable, avoid the potential for land use conflicts with use and development permissible under the planning scheme applying to the adjacent area;<sup>xiii</sup> and
- must have regard to the impact that the use and development permissible under the amendment will have on the use and development of the region as an entity in environmental, economic and social terms.<sup>xiv</sup>
- That the amendment is as far as is practicable, consistent with the regional land use strategy, if any, for the regional area in which is situated the land to which the scheme applies.<sup>xv</sup>

In addition, the Commission, in giving approval to an amendment, must in its opinion:

*(a) seek to further the objectives set out in [Schedule 1](#) within the area covered by the scheme; and*

*(b) prepare the scheme in accordance with State Policies made under [section 11 of the State Policies and Projects Act 1993](#); and*

...

- (d) *have regard to the strategic plan of a council referred to in [Division 2 of Part 7 of the Local Government Act 1993](#) as adopted by the council at the time the planning scheme is prepared; and*
- (e) *have regard to the safety requirements set out in the standards prescribed under the [Gas Pipelines Act 2000](#).*

By contrast, the MFP Act is unclear as to what it requires. While there are criteria for the preparation of a draft plan<sup>xvi</sup> and a broad statement that “any person performing a function or power under the Act” must do so “in a manner which furthers the resource management objectives”, neither the Panel nor Minister are explicitly required to assess a draft plan or amendment against any criteria.

Each is only required to consider whether the draft plan is “acceptable” and whether it contains the matters prescribed in a s17A(1) notice issued by the EPA Director, if any. In practice, the Panel has assessed a draft plan against the criteria in section 21 of the Act. However, it is not clearly stated as a legislative requirement on the Panel, and the Minister who ultimately approves a MFD Plan is under no such obligation.

This means that the decisions made by the Minister under the MFP Act are entirely discretionary, and there is uncertainty about how decisions are made by the Panel. The lack of objective criteria can result in a lack of consistency in how the Panel approaches its decision-making function, and may change over time, depending on the constitution of the Panel instead of than legislative criteria. In the case of the Minister, there is no transparency over how decisions are made in the absence of such criteria.

This is particularly important when there is no right to review these decisions through appeal rights to an independent decision-maker such as the Resource Management and Planning Appeal Tribunal, and where spatial planning sets the expectation of approving salmon farming leases and licences in these areas and has implications for what environmental licences are publicly advertised.

Further, the MFP Act provides no guidance about how to balancing competing economic, social and environmental considerations, which can lead to economic considerations being weighed against environmental ones. Clear criteria for decision-making, for instance, about whether marine farming development plans in an area should be approved should be legislated and should reflect the environmental values of an area, and the impacts or potential impacts on those values.

#### (b) Environmental licences under the EMPC Act

The same criticisms can be made about when the EPA Board or Director may issue an environmental licence or variation under the EMPC Act. The Director or Board can “grant to a person an environmental licence in relation to an activity if ... satisfied that it is appropriate to do so”.<sup>xvii</sup>

There are no legislative criteria about when it will be “appropriate” to issue a licence. While there are general environmental duties under the Act, those duties are not explicitly called up by the legislation. Discretion is “at large”, with resulting consequences for consistent and transparent decision-making.

Further, the lack of legislative criteria defeats the purposes of public participation, including effective options for legal redress.

We recommend that the legislation include clear criteria for decision-making as to whether an environmental licence should be issued, including any relevant MFD Plan and its management controls, an environment impact assessment submitted with the application, water quality objectives, and the precautionary principle to scientific uncertainty.

#### (c) Lack of scientific certainty and adaptive management

Decision-making under the MFP Act is underpinned by the objectives of the resource management and planning system, specified in Schedule 1 to the MFP Act. Those objects are:

- (a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and*
- (b) to provide for the fair, orderly and sustainable use and development of air, land and water; and*

(c) to encourage public involvement in resource management and planning; and

(d) to facilitate economic development in accordance with the objectives set out in [paragraphs \(a\), \(b\) and \(c\)](#); and

(e) to promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State.

Sustainable development is defined in Schedule 1 as:

**sustainable development** means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while –

(a) sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil and ecosystems; and

(c) avoiding, remedying or mitigating any adverse effects of activities on the environment.

Part of the function of sustainable development is to take a precautionary approach in the face of scientific uncertainty. It has been observed that ‘the precautionary principle has its origins in the “common folk wisdom that ‘it is better to be safe than sorry’ and ‘an ounce of prevention is worth a pound of cure’”’.<sup>xviii</sup>

The precautionary principle is explicitly adopted in the EMPC Act and the MFP Act, as one of the Part 2 objectives of the RMP System which underpin that legislation.<sup>xix</sup>

In an article on the application of the precautionary principle in Tasmania, His Honour Justice Estcourt of the Tasmanian Supreme Court cites the judicial decision about a mobile phone tower in *Telstra Corporation Ltd v Hornsby Shire Council* as the leading case on this principle, observing that it is “widely regarded as containing the most extensive judicial analysis of the principle of ESD and the precautionary principle in Australia”.<sup>xx</sup> He identifies the following as the “fundamental conclusion” from that case:<sup>xxi</sup>

*The application of the precautionary principle and the concomitant need to take precautionary measures is triggered by the satisfaction of two conditions precedent or thresholds: a threat of serious or irreversible environmental damage and scientific uncertainty as to the environmental damage. These conditions or thresholds are cumulative. Once both of these conditions or thresholds are satisfied, a precautionary measure may be taken to avert the anticipated threat of environmental damage, but it should be proportionate.*

The application of the precautionary principle has much relevance in the planning, assessment and operation of the marine farming industry.

The Panel has adopted what it describes as an “adaptive management” approach to assessments of MFD Plans and EIS, in place of regulatory controls. For example, adaptive management was explicitly endorsed in the Panel’s assessment of the draft MFD Plan for Macquarie Harbour (see Box 2).

This concept is not derived from marine farming legislation, nor is it otherwise defined. “Adaptive management” broadly is an environmental management tool that derives from academic literature, however what it means and how it is implemented can vary and is complex. It has been described as an “intuitive” approach, one that is “not always fully understood” and that “remains an ideal”.<sup>xxii</sup>

Adaptive management is therefore only as good as its implementation. It is generally acknowledged that effective environmental management through an adaptive management process must involve each of the following:<sup>xxiii</sup>

- Setting of clear objectives and measurable performance indicators for management;
- Specifying multiple management options
- Hypothesising how the system under management will respond to management interventions;
- Implementing management action(s);
- Monitoring the system response to see if it supports the hypothesis of otherwise;
- Based on the analysis results, refining and adjusting management practice.

Baseline data and monitoring of the system’s change under management is critical to good adaptive management. “And without ongoing processes of monitoring and evaluation, there is no adaptive management.”

Key environmental indicators must be identified up-front, baseline data of those indicators gathered, and monitoring against the system under management undertaken. In our opinion, this requires explicit triggers at which point management actions must be taken. For instance, once thresholds set in performance indicators are met or exceeded, this triggers identified management options to be introduced, action taken to enforce identified management responses, and monitoring to see if the management response is producing the desired effect. It also requires the flexibility to refine and adjust the management practice.

Simply adopting a practice of “adaptive management” without each of these steps is not sufficient. “Adaptive management” should not be used to compensate for a lack of baseline data or regulatory controls through MFD Plans or environmental licences.

We are concerned that “adaptive management” has been relied on to such an extent in salmon farming regulation, that it has justified decisions that have the potential to cause serious or irreversible damage to environmental values in the absence of scientific certainty.

In practice in Tasmania, the term “adaptive management” has been relied upon in the absence of scientific information, as a justification for proceeding with marine farming, but without the rigour ordinarily applied in adaptive management. For instance, there is a lack of scientific certainty as to the impacts of marine farming to threatened species such as the critically endangered Spotted Hand Fish *Brachionichthys hirsutus* and the Maugean Skate *Zearaja maugeana*, however a precautionary approach has not been adopted in favour of “adaptive management”. Further, there is a connection between repeated failures to set biomass and nitrogen caps and the reliance on adaptive management. This is discussed in more detail in “Evidence-based Decisions” below.

The problem with reliance on adaptive management as an assessment tool is that, once approvals are issued, operators have a real and genuine expectation of being able to act in reliance on those approvals. It is only at the early stages of planning and assessment that an assessment of environmental impacts can be undertaken and, with respect to MFD Plans, decisions about whether an area should be subject to marine farming occurs or, with respect to the EMPCA, whether an environmental licence ought to be issued for that activity.

Once a Plan is approved or approvals issued, it is hard to “turn back”. The evidence of this can be seen in our Macquarie Harbour case study below, where biomass limits were set too high, resulting in untenable environmental conditions and conditions for other leaseholders in the area. While the EPA Director reduced the biomass limit, it had to be in a staged way and with special ad hoc approval of waste management measures, in order to accommodate Tassal’s planned expansion. This only evidences the need to get it right at the assessment stage.

The approach taken to adaptive management specifically eschews the precautionary approach. We recommend that the legislation require decision-makers to adopt a precautionary approach to scientific uncertainty particularly in the planning and assessment stages, consistent with the objectives of the RMP System.

(d) Biomass and nitrogen caps

While the MFP Act states that MFD Plans may provide for total nitrogen output and biomass caps, there is no clear guidance of how this is to be implemented. Currently, MFD Plans include provisions providing the EPA Director with complete discretion to set such limits.

For instance, in the *Storm Bay Off Trumpler Bay North Bruny Island Marine Farming Development Plan 2018* (Storm Bay North MFD Plan), the controls for dissolved nitrogen include:

3.2.1 *The Director, EPA may, from time to time, determine the total permissible dissolved nitrogen output, within specified periods, attributable to marine farming operations within a specified area covered by this Plan.*

...

3.2.3 *For the purpose of assessing quantities of dissolved nitrogen output attributable to Licenced finfish farming, the Director, EPA may use any method that the Director, EPA is satisfied delivers a proper measure of total dissolved nitrogen output from finfish farming.*

And similarly for biomass:

3.3.5 *The Director, EPA may from time to time, using whatever information the Director, EPA considers appropriate, determine the maximum permissible biomass (tonnes per hectare) of finfish that may be stocked within the area covered by this plan or any other specified area within the plan area.*

There is no guidance on, or limits for the exercise of these powers by the Director, EPA, notwithstanding that the decisions are critically important when it comes to the management of environmental impacts of salmon farming on the environment. It was biomass limits that played the key role in the environmental catastrophe that occurred in Macquarie Harbour in 2015, and yet, the most recent MFD Plan leaves a complete discretion to the EPA Director as to how biomass limits are to be imposed.

These two factors should be mandatory in all MFD Plans, as they have consequences for the licencing of marine farming and are the two factors that will most influence environmental outcomes from marine farming footprints.

(e) Compensation payable

Section 22(1) of the MFP Act states that a draft plan must not “prevent the use of any water within a lease” unless compensation is paid or an alternative lease area is agreed upon between the lessee and the Minister. Section 22(1) states:

- (1) A draft marine farming development plan must not prevent the use of any water within a lease area unless the lessee and the Minister agree –*
- (a) to compensation; or*
- (b) to an alternative lease area.*

This provision means in effect that a lessee has an expectation to farm a leased area to the limits of that area and that, if any contrary decision is made through a MFD Plan then there will be financial implications for the government. From a regulatory perspective, our opinion is that this must have a chilling effect on regulation of the salmon farming. It may in fact be the reason why MFD Plans do not set biomass limits.

A similar provision is found in the *Nature Conservation Act 2002* for compensation in the forest practices regulation. That is, if a forest practices plan is refused or modified under the *Forest Practices Act 1985* due to environmental considerations, compensation will be payable by the government. The logical consequence of this provision is that the Forest Practices Authority must hesitate before prioritising environmental considerations in forest practices plan decision-making, conscious of the compensation consequences that might flow from such a decision. The same can be said of s22(1) of the MFP Act in relation to marine farming.

## **2. Separation of governance arrangements for industry development and regulation**

Strong decision-making requires independence as between the regulator and promoter of an industry. That is one reason why we support the role of the Tasmanian EPA as regulator of finfish farming, with some caveats outlined below.

However, in relation to spatial planning and issuing of leases, these functions are both performed by the Minister for Primary Industries. It is true that in relation to spatial assessment, the Minister is advised by the MFD Panel, albeit with no obligation to act on the advice and recommendations of the Panel.

Further, the composition of the MFD Panel is cause for concern, with no requirement to represent the community or expertise in ecological disciplines.

(a) MFD Panel

The Panel responsible for assessing salmon farm proposals and setting the management controls for marine farming activities. Section 8(2) of the Act requires the Panel comprise eight people, constituted as follows:

- (a) one is the chairperson of the Panel; and*
- (b) one is a person nominated by the chairperson of the Tasmanian Planning Commission with ability and experience in planning issues; and*
- (c) one is a person, other than the Director, EPA, with ability and experience in environmental management; and*
- (ca) one is a person, other than the Director, EPA, with ability and expertise in fish health and biosecurity; and*
- (d) one is a person with ability in marine resource management; and*
- (e) one is a person with ability to assess boating, recreational and navigational issues; and*

- (f) one is a person with experience in marine farming; and*
- (fa) one is a person with expertise in local government issues; and*
- (g) one is a person nominated by the Minister.*

Notably, while nominees under s.8(a), (c), (ca), (d), (f) and (g) could have relevant scientific expertise, there is no explicit requirement for the Panel to include a member with qualifications in relation to marine ecology, hydrology, marine sediments or conservation management. Other than s.8(g), there is also no capacity for community concerns to be represented (e.g. residents concerned regarding nuisance impacts from marine farming).

It would also seem sensible, given the responsibility for regulation and consequences for enforcement, that one member is a legal member, which would better ensure that management measures specified in MFD Plans are the controls are enforceable, meet the requirements of s22 of the Act and are consistent with the objectives of the MFP Act, and who would have a greater capacity to recognise issues of conflict of interest and good governance. However, this is of lesser importance than community and ecological membership.

We recommend that the membership include:

- One or more members with qualifications in marine ecology, hydrology and marine sediments and conservation management;
- A community representative; and
- A legal member.

The current composition means that the quorum has the potential to be weighted towards industry members rather than community or scientific expert members. For instance, there is no requirement that, in the absence of members “with ability and experience in environmental management” or “expertise in fish health and biosecurity”, decisions should not continue to be made, or for any such members to be part of the quorum that makes a decision on whether or not to recommend approval of a MFD Plan or an amendment to a MFD Plan. However, these are the critical decisions that are being made by the Panel and it is only these members that have the expertise and experience to properly understand the consequences of environmental impacts and effectiveness of any proposed management controls. The reported resignation of panel members with expertise in environmental management and biosecurity in response to the Storm Bay North MFD Plan decision, highlights the need for balance.<sup>xxiv</sup>

If our recommendations were adopted as to membership composition, this would restore the balance to scientific and expert membership, with community and industry members being legitimate voices, but without the balance of power. This would go some way to restoring community confidence in the decisions of the Panel.

#### (b) Role of the Minister

The Minister for Primary Industries and Water is responsible for approval of MFD Plans and amendments to Plans under the MFP Act.

While the Panel’s role is to assess a draft plan or amendment to a plan, and hear representations made by members of the public, the Panel’s role is only to make a recommendation to the Minister. The Minister is not obliged to follow that recommendation.<sup>xxv</sup> There is no apparent reason for this “at large” discretion.

The lack of criteria for the Minister’s decision is important in the context of the Minister’s portfolio role. While the Minister is the regulator of marine farming under the MFP Act, he is also responsible for the promotion and development of the industry. There is an inherent conflict in the Minister’s responsibilities in this respect. Recall that the MFD Plan is the key document that identifies where marine farming can be located and on what terms. It is legislatively a reason that an application for environmental licence is not publicly notified. It is therefore important that there is transparency and community confidence in how decisions are made.

In this context, the Minister should not be the decision-maker on MFP Plans or Amendments.

We recommend that:

- The Panel be the decision-maker for MFD Plans; or
- There be a clear set of prescribed criteria identifying on what basis a Minister can disagree with a recommendation of the Panel.

(c) Role of the EPA

The EDO is on the record as being supportive of the transfer of marine farming regulation to the EPA Director and Salmon Farming Unit, however with caveats.

First, neither the Unit or the Director are statutorily independent of the government, contrary to public statements by the government. The EPA Director and staff of the Unit are public sector employees, part of the Department of Primary Industries Water and the Environment, and thus under the direction and control of the Minister for Environment. Any employee of the government is not statutorily independent of that government. We note that the same conflict arguably exists for the current Minister for Environment, who as Treasurer promotes industry and development and as Minister for the Environment, oversees government employees who regulate that industry.

Second, the decision-making function under the EMPC Act for all other industries regulated as Level 2 activities sits with the EPA Board. The Act only carves out the regulation of finfish farming for special treatment. It is only for finfish farming that the Director has powers to make approval decisions without reference to the Board. This is important because it is only when the Board makes decisions that there are third party appeal rights, allowing independent scrutiny and oversight of such decisions.

We recommend that the Board be the decision-maker for all finfish farming decisions under the EMPC Act.

### **3. Identification and security of suitable locations**

Spatial planning, by way of MFD Plans, is used in Tasmania to identify areas that are considered suitable for marine farming and provide some security to industry that those areas will be made available. A similar approach is applied in Scotland, where marine farming is permitted within designated farm management areas.

In contrast, New Zealand has abandoned its approach of restricting fish farms to designated Aquaculture Management Areas, as the process for establishing the areas was considered “lengthy, complex and costly”.<sup>xxvi</sup> Instead, all new aquaculture proposals require a resource consent, assessed and administered by the local council in the same manner as all other uses and developments.

Spatial planning which identifies locations in which salmon farming can occur and, equally importantly, those areas where it cannot occur, provides certainty to all industry, government, local councils and the community. However, it is critical that the spatial planning exercise is undertaken comprehensively, informed by the best available science and subject to periodic review to determine whether areas remain suitable (see Box 1 – Okehampton Bay).

In reforms to the MFD Act in 2017, the Government introduced a power for the Governor to declare “finfish marine farming exclusion zones” where finfish farming is not able to be authorised by the Panel. At the time of the reforms, an exclusion zone was declared for Mercury Passage (except for the Okehampton Bay salmon farm site). The amendments to the Act did not provide any framework around the identification of other exclusion zones, however it was understood at the time that it was the Government’s intention that the foreshadowed *Sustainable Industry Growth Plan for the Salmon Industry* would identify areas that are suitable and unsuitable for finfish farming. While the *Sustainable Industry Growth Plan for the Salmon Industry* did indicate that large areas of Tasmania’s coast would be in “no grow” zones, these are yet to be implemented through declared exclusion zones. We note that “no grow” areas identified to date are unlikely to be suitable for finfish marine farming in any event, and consequently there

may be some doubt as to whether this is based on spatial planning weighing all economic, environmental and social considerations.

There is room for improvement in the process of spatial planning where salmon farming cannot occur in Tasmania.

In terms of security of tenure for salmon farms, when a lease is granted within a MFD Plan zone, it provides exclusive possession over the lease area for the duration of the lease. This provides significant security of tenure and management control to the lease holder.

Having regard to the compensation provisions in s22 of the MFP Act and their consequences for the approval of MFD Plans, we recommend that the legislation make clear that leases can only be granted in areas to which a MFD Plan applies.

While the integration marine farming planning with other elements of Tasmania's planning framework remains poor (see below), and subject to our comments above, the current framework for spatial planning and tenure security is reasonably strong. Improvements to the practical implementation of spatial planning are discussed under "Integrated Assessments" and "Science-Based Decisions" below.

#### **4. Integrated assessments**

Most coastal ecosystems are subjected to a range of population and development pressures. Marine farming operations in State waters also involve an allocation of public space for a private, commercial purpose, with potential impacts on recreational and tourist users and the amenity of neighbouring landowners. As Warwick Gullet has observed, this has meant that:

*a regulatory framework for aquaculture must, in addition to assessing environmental impacts, aim to achieve a balance between aquaculture needs and other legitimate uses of the marine environment (this is commonly referred to as 'Integrated Coastal Zone Management')<sup>xxvii</sup>*

As outlined above, Tasmania's system maintains separate assessment frameworks for marine farming and for other use and development, including land-based aquaculture. Proponents are able to propose new or expanded marine farming operations with little regard to existing or potential uses of adjoining land. As the Okehampton Bay example highlights (Box 1), this often results in salmon farming companies needing to obtain a series of permits or approvals, with each application assessed without regard for the outcome of related applications. That is, a failure to consider the cumulative impacts of marine farming on the marine environment and communities.

In our work, it is apparent to us that there is substantial concern in the community about the lack of integrated and cumulative assessment. The impacts of marine farms on communities is, in our experience, much greater than is currently assessed by the Panel under the MFP Act. Communities are concerned about amenity impacts directly from marine farms themselves - noise, odour, visual impact - but also the related and necessary consequential impacts from supporting infrastructure, including smolt breeding, land-based processing, freshwater dams and pipes, access to transport routes and waste management facilities. There are impacts not only to residents in the affected areas, but also to tourism and recreation activities, none of which are adequately assessed through existing processes.

True spatial planning would assess both the direct and indirect impacts of new proposed industry hubs - including the network impacts, supply chain and infrastructure impacts, and cumulative impacts of those facilities.

While the Panel has the power to incorporate management controls in a MFD Plan to mitigate noise, odour and visual amenity impacts, the Panel's consideration of wider issues relating to supporting infrastructure (such as land-based processing and support facilities, freshwater dams and pipes), access to transport routes or waste facilities, impacts on other industries such as tourism or recreation activities is very limited.<sup>xxviii</sup> The inclusion of a Panel member with experience in local government is not sufficient to overcome the lack of integration.

In fact, the Panel may direct a local council to amend its planning schemes to ensure that future land use and development adjacent to marine farming zones does not adversely affect marine farms.<sup>xxix</sup> This fragmented approach to planning for marine farming hinders effective strategic planning at local and regional levels and appears to prioritise marine farming over other land uses and developments.

The pressure this places on local governments, including managing complaints from affected residents and maintaining infrastructure, is further compounded by current government efforts to prevent local councils from levying rates on marine farm lease areas.<sup>xxx</sup>

Other jurisdictions with intensive salmon farming, such as Scotland, New Zealand and Norway, have adopted a more integrated approach to marine farming planning.<sup>xxxii</sup> These jurisdictions require a range of authorities to be consulted in relation to marine farming approvals, but generally provide for a coordinated process for undertaking the consultation. Each of these jurisdictions emphasises environmental protection in the coordinated assessment process.

This integrated approach to marine farming planning means that these jurisdictions are better placed to provide “well-planned, sustainable development” than Tasmania.

If marine farming planning was better integrated with land use planning under the LUPA Act, it would ensure that communities would be better informed about areas that are within or outside of marine farming zones. It would also ensure that areas where marine farms are clearly incompatible with existing land uses or the natural values of a marine area could be identified and marine farms prohibited.

Spatial planning should also assess the cumulative impacts of proximal marine farming areas and other industry. For instance, where there are impacts from mining tailings (as in Macquarie Harbour) or from sewage outfall or heavy metal contamination (as in the Derwent), or other proximal marine farms and hatcheries. The Panel’s function should be to ensure spatial planning adequately accounts for marine health, and that marine farming development areas adequately account for existing and proposed conditions.

## **BOX 1**

### **CASE STUDY – OKEHAMPTON BAY**

In 2015, Tassal announced plans to expand its salmon farming operations to Okehampton Bay, near Triabunna on Tasmania’s East Coast. As outlined below, the impacts of the salmon farm in this location, and necessary supporting infrastructure, was assessed under numerous distinct approval processes, each with its own unique criteria, and varying levels of public involvement. There was no one strategic assessment process to assess whether the proposed farm was in the best location, with the least adverse environmental, social or economic impacts.

#### ***Marine farming sublease and licence***

The *Great Oyster Bay and Mercury Passage MFD Plan*, which was approved in October 1998,<sup>xxxiii</sup> allows finfish farming in Okehampton Bay. Consequently, there was no requirement to publicly advertise any details relating to the proposed marine farm within Okehampton Bay, and there was no opportunity for public input before the Minister decided to grant the necessary approvals for the farm. Subsequent to the sublease and licence being granted the Minister for Primary Industries and Water directed the Panel to provide advice on three terms of reference (TOR) relating to whether there was adequate environmental science and data to enable salmon farming to be regulated on the site. The Minister stated that the purpose of the advice was to improve community confidence in marine farming, however the TOR did not enable the Panel to reconsider the fundamental question of whether Okehampton Bay was a suitable location for salmon farming.

The Panel invited representations from the community in relation to the TOR. Community representations were hamstrung by a lack of access to information. Much of the information necessary to inform submissions, including the complete baseline monitoring data and conditions imposed on Tassal’s marine farming licence (being the key element of the environmental management regime for the activity) were not publicly available. Public submissions were made, which included the issue of whether salmon farming should occur in Okehampton Bay and about the need for access to further information.

The Panel acknowledged the lack of available information, however decided not to hold any public hearings as it “considered it unlikely that presenters would confine their representations to address the ToR and thus there would be minimal benefit to the Panel in the preparation of its Report.”

The Panel advised the Minister that the MFD Plan and scientific information available was sufficient to support the salmon farm in Okehampton Bay. In response to a submission made by IMAS, the Panel acknowledged that further baseline studies for threatened species and reef communities would need to be undertaken by Tassal before the commencement of salmon farming. The Panel was satisfied that this requirement for baseline monitoring could be incorporated as a condition of Tassal’s marine farming licence, rather than requiring it to inform its decision and allowing scrutiny of that data through the public participation processes prescribed under the Act.

### ***Planning approval for the onshore marine farming facility***

In February 2016, Spring Bay Seafoods applied (on behalf of Tassal) to the Glamorgan Spring Bay Council (**Council**) for a combined permit application and to rezone land in Triabunna to allow for Tassal's onshore facilities to support its Okehampton Bay salmon farm. The onshore development included a 196 metre long wharf. The Council initiated the amendment and approved the permit application, referred it to the Tasmanian Planning Commission (**Commission**) for assessment under LUPA Act. It was publicly exhibited in October 2016, with over 6000 representations from the public and surrounding land users in response.

In March 2017, the Commission decided that the public notice had been incorrectly given and found the request and permit application would need to be readvertised by Tassal and Spring Bay Seafoods.

The application was readvertised, with over 5,900 submissions made opposing the proposal. Public hearings were held. The Commission ultimately approved the rezoning and permit application in March 2018. The Commission's assessment necessarily had regard to the approved marine farm, and the need for the onshore works in that context. The Commission could not reconsider whether the marine farm should be approved in that location.

Many of the representations expressed concern at the approval of the salmon farm within Okehampton Bay and the potential environmental impacts on coastal waters. Other issues raised by representations related to the impacts of the development on the region's water supply, the expanding tourism industry, public access to the foreshore and amenity, and the recreational and commercial fishing industries, which were either not relevant to the Commission's decision or outweighed by the need for the facility to support the approved marine farm.

This is an example of the need for integrated assessment at the marine farming planning stage to ensure all works are considered together, rather than the piecemeal approach in the current regulatory framework.

### ***Federal environmental referral for salmon farm***

Questions were raised through the Commission hearings about impacts of marine farming boats and nets on the endangered southern right whale. On 29 May 2017, Tassal referred its proposed fish farm to the Federal Environment Minister for assessment under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* (**EPBC Act**).

A delegate of the Federal Environment Minister ultimately decided that the farm could proceed without a detailed environmental impact assessment being undertaken, provided the action was undertaken in accordance with identified "particular manner" requirements outlined in the decision notice. This decision was subject to legal challenge by an environmental group and a private landholder. The Full Court of the Federal Court ultimately found in favour of the legal challenge on 15 April 2019, however, by that stage the fish farm had been operating for nearly two years. The Full Court's decision turned on a technical legal point and did not require the farm to cease or be subject to a rigorous impact assessment.

### ***Water licence***

As another part of this development, in February 2016, Tassal, in conjunction with the Council and a private landholder applied to the Minister for Primary Industries and Water for approval of a water licence to secure up to 1,795 mega litres of freshwater per year from the upper Prosser River catchment. The water was to be used to bath salmon from the Okehampton Bay marine farm as a treatment for amoebic gill disease. This water allocation was part of what the Council called the Prosser Plains Raw Water Scheme.

At the time the water licence application was advertised, there was limited public awareness of the proposed development of Okehampton Bay for salmon farming and how the water licence would fit into the greater development. This included for instance the precise location of the proposed dam to store the water if allocated (see "Dam Permit" below). For this reason, there was limited public comment on the water allocation. We understand that only one public representation was received by DPIPW in relation to the proposed allocation.

As far as the EDO is aware, this water licence was granted in the absence of approval for the development of the associated necessary dam infrastructure on a private property near Buckland (the **Twamley dam**) (discussed further below).<sup>xxxiii</sup>

### ***Pipeline permits***

In June 2017, as part of its Prosser Plains Raw Water Scheme, the Council lodged a planning permit application to itself for the approval of the construction of the pipeline to carry water from the Lower Prosser Dam, along the Prosser River, through the Raspins Beach Conservation Area and public land to the proposed Solis golf course at Louisville Point.

The pipeline was proposed, in part, to connect to Tassal's undersea planned pipeline from Louisville Point to Freestone Point and from there to its salmon farm lease at Okehampton Bay. Tassal separately made a permit application for its sections of the pipeline in July 2017.

Numerous representations were made in response to public notice of both pipeline applications. Concerns included the allocation of such large quantities of freshwater to private developers, the provision of public funds by the Council and State Government towards infrastructure for the benefit of private developers, and the impacts of the pipeline construction on the habitats of numerous threatened species.

As planning authority, due to the operation of the Glamorgan Spring Bay Interim Planning Scheme 2015, the Council took the view that it was not entitled to consider the broader issues around the use that the water would be put, the security of access to freshwater from the Prosser River for other uses including drinking water, or whether the development was the best use of the Council's limited financial resources.<sup>xxxiv</sup> The Council's consideration of impacts on threatened species was similarly limited by the operation of the planning scheme. The Council issued permits for both pipelines.

It is our understanding that both pipelines have now been constructed and are delivering water to the Okehampton Bay salmon farm, notwithstanding that the associated Twamley Dam is yet to be approved and constructed.

### **Dam Permit**

The Council proposed a 4,000 ML water storage for the Prosser Plains Raw Water Scheme, the Twamley Dam. It was referred for assessment by the Federal Government under the EPBC Act because it involves the proposed removal of 52ha of native vegetation, over 20ha of which is *Eucalyptus ovata forest and woodland*. This vegetation type is a critically endangered ecological community listed under the EPBC Act and provides feeding and breeding habitat for the critically endangered Swift Parrot *Lathamus discolor*, as well as other listed threatened species.

On 18 June 2017, the Federal Government decided it is a controlled action that requires assessment under the EPBC Act including due to the impact on the *E. ovata* community and the potential impact on the Swift Parrot.

The controlled action is still being assessed by the Federal Government. There are very broad criteria for the Federal Minister's decision on whether to grant an approval, and very limited options for independent scrutiny of decisions made under the EPBC Act, with no rights of merits appeal.

If the dam is approved under the EPBC Act, approval will need to be sought under the *Water Management Act 1999* (Tas). This will involve public notice and public representations. While there is potential to appeal any dam permit granted to the Resource Management and Planning Appeal Tribunal, appeals do not afford independent scrutiny or transparency in decision-making because the WM Act prevents appeals being brought against the critical scientific or economic determinations.

### **Environmental Licence**

Upon the commencement of amendments to the EMPC Act in late 2017, Tassal was required to obtain an environmental licence for its Okehampton Bay salmon farm from the EPA. Consistent with the policy position taken by the EPA to marine farms that were already operational, the EPA Director issued an environmental licence for the activity without referring it to the Board, thereby precluding any opportunity for public input or requirement for detailed environmental impact assessment.

### **Conclusion**

This case study demonstrates the lack of integration between the assessment of the different components of the Okehampton Bay farm. Similarly complex regulatory processes would apply to just about every marine salmon farm now operating in Tasmania. This demonstrates the failure of the current regulatory framework to provide for detailed scientific assessment of a proposed project prior to the granting of leases, licences, permits and approvals for salmon farms and their related infrastructure.

An integrated approach to marine farm planning, with real opportunities for community input and public participation, and evidence-based decision-making informed by science would enable informed decision-making and greater community confidence in the regulatory processes surrounding salmon farming.

## 5. Evidence-based environmental assessments

The University of Tasmania's Institute of Marine and Antarctic Science (*IMAS*) enormously contributes to the understanding of marine ecosystems, fisheries and aquaculture through its scientific work around marine farming, in particular in Macquarie Harbour. However, we consider that there is still considerable scope to ensure that this scientific research is targeted to the better regulation of the marine farming industry, and thereby, better environmental and community outcomes.

Despite the opportunities presented by having world-class scientific researchers based in Tasmania, there are a number of areas in which the current laws fail to ensure that regulatory decisions are supported by scientific data regarding environmental impacts, biosecurity, carrying capacity or future risks to productivity.

### (a) Expertise on the Panel

We refer to our recommendations above regarding governance and membership of the Panel under the MFP Act.

We repeat that while there is a requirement for a person with an “ability and expertise” in fish health and biosecurity to be appointed to the Panel, currently, there is no similar requirement for any of the appointed Panel members to hold specific qualifications in environmental and marine resource management (rather than demonstrating “an ability” or “experience”). Further, there is no requirement for Panel members with expertise in marine ecology or hydrology. The Minister is able to nominate a Chairperson and another member, and has previously used these nominations to empanel scientists. However, there is no explicit requirement for this to occur.

The Panel is also able (but not required) to seek external expert advice regarding proposed environmental controls, technical farming questions or biological demands of farmed species. It is unclear how regularly such advice is sought, although we understand that the Panel has previously been briefed by IMAS experts.

As highlighted by the resignations of Louise Cherie and Professor Barbara Nowak during the assessments of the Storm Bay MFD Plans, there is no requirement that the quorum of the Panel that ultimately recommends the approval of a MFD Plan, or any amendment to a MFD Plan, includes those with scientific qualifications in relevant fields.

### (b) Minister not bound by Panel recommendations

Even where the Panel includes members with relevant scientific expertise, the MFP Act does not require the Panel's recommendations to be followed. Since amendments in 2011 removed the Panel's power to refuse an application for an amendment to a MFD Plan, the Minister has not been bound by the Panel's advice and can make a decision contrary to the recommendation of the Panel, including where the Panel recommends that a proposed activity should be refused due to unacceptable environmental impacts.

Where an amendment to an MFD Plan is proposed, the Minister may also make any alterations she or he considers “necessary or expedient” before approving the amendment.<sup>xxxv</sup>

The Minister is required to table reasons in Parliament where his decision is contrary to the recommendations of the Panel.<sup>xxxvi</sup> While this provides some transparency regarding the decision-making process, it fails to ensure that decisions with the potential to cause significant environmental impacts are guided by science.

### (c) Assessment of individual salmon farms

Where an approved MFD Plan allows marine farming in a designated zone, no further detailed scientific assessment is required before the Minister can issue a marine farming licence under the LMRM Act for a salmon farm to operate in that area.<sup>xxxvii</sup>

However, before the marine farm can operate, it will also require an environmental licence issued under the EMPC Act. An environmental licence may be issued by the EPA Director or by the EPA Board if referred to it by the EPA

Director. The EPA Director is to refer an environmental licence application to the EPA Board in the circumstances prescribed by clause 8 of the *Environmental Management and Pollution Control (Environmental Licences) Regulations 2019*. This is critical because public notice is only required for an EL where referred by the EPA Director to the EPA Board.

The criteria in clause 8 of the Regulations are complex. In summary, a referral must be made where:

- There is “likely to be a very high level of public interest in the application”; or
- It is reasonably likely that an EPBC Act approval will be required for the activity; or
- There is no MFD Plan or emergency plan in force for the relevant waters, unless a permit has been issued under the LMRM Act; or
- A MFD Plan has been in force for the waters for 10 years but no finfish have been kept in that area or, if they have been kept, they have been kept in accordance with a LMRM Act permit, emergency order or emergency plan; or
- A MFD Plan has been in force for the waters for the last 2 years but the Director considers the information provided to the Panel about environmental impacts of finfish farming did not adequately take into account the likely effects of the activity.

A referral does not need to be made where the application is for an emergency order.

These criteria provide broad discretion to the Director for marine farming as to whether to refer the activity where there is a MFD Plan in force for the area of State waters to which the application relates.

For instance, for the Storm Bay marine farming development area, a MFD Plan was in force and environmental licences were assessed by the Director and not made available to the public. This decision not to refer the EL applications was taken by the Director despite the arguably “very high level of public interest in the application”. As a result, there was no capacity for public scrutiny of the application or independent oversight through an appeal mechanism.

The lack of transparency means the public is not to know whether the approval was made on the best available science, nor did the public have the opportunity to test the science upon which the approval was based. This is important where the relevant MFD Plan leaves to the Director the dissolved nitrogen and biomass limits for each activity:<sup>xxxviii</sup>

*The Director, EPA, may, from time to time, determine the total permissible dissolved nitrogen output (TPDNO), within specified periods, attributable to licenced finfish farming for a specified area.*

*The Director, EPA may from time to time, using whatever information the Director, EPA considers appropriate, determine the maximum permissible biomass of finfish that may be stocked within the area covered by this plan or any other specified area within the plan area.*

Further, the EMPC Act does not prescribe criteria to guide a decision on whether an environmental licence should be granted. The Director and the Board may “grant to a person an environmental licence in relation to an activity if ... satisfied that it is appropriate to do so”<sup>xxxix</sup>.

The EPA Board and Director are bound to apply any Water Quality Objectives (**WQO**) in making a decision under the EMPC Act, including to grant an environmental licence.<sup>xl</sup> However, in the 22 years since the commencement of the *State Policy on Water Quality Management 1997*, there are no published WQO for either marine or freshwater anywhere in the State. The EPA has advised the EDO that WQO for a particular waterway are developed by EPA Board (or the Director as the case may be) on a “case by case” basis in consideration of the “Default Guidelines Values for Aquatic Ecosystems” and/or a proponent’s own water quality monitoring data.<sup>xli</sup>

Water Quality Objectives should be State-wide, published and enforcement. WQOs should set clear objectives waterways (riverine and estuarine) or marine area, so that the EPA when exercising powers and functions under the EMPC Act, is required to manage that environment to achieve the WQOs. In this respect, it is like spatial planning for air emissions from industrial pollution, where a threshold maximum emissions concentration is identified for an airshed and individual emissions licences are matched to and monitored so that the aggregate of emissions from all point sources does not exceed the limit.

To date no environmental licence applications for marine finfish farms have been assessed by the EPA Board. The EPA Director’s assessments of environmental licence applications have not been made publicly available. It is

therefore unknown what the WQO are for a particular activity or area, whether the WQO identified and applied in an assessment of proposed marine farm are based on the best available science and would withstand scientific scrutiny, or how those WQO account for cumulative impacts (discussed above).

Further, given the EPA Director's broad discretion to vary the total biomass and nitrogen output of marine farms, it is necessary to know how such determinations are made consistent with the achievement of the WQO for a waterway in which the marine farm operates.

(d) Adaptive management / nitrogen and biomass caps

Adaptive management can be a useful tool to allow for flexibility in management responses to unexpected environmental conditions.<sup>xliii</sup> However, adaptive management is only appropriate in circumstances where sufficient baseline data is available to accurately set thresholds and predict environmental responses to proposed management controls. It does not lend itself to scenarios where the environmental impacts of the activities are potentially serious or irreversible (such as loss of critically endangered species) or where too little is known to reliably anticipate risks.

As outlined under the heading "Clear Guidance" above, adaptive management of Tasmania's salmon farms sets management controls without comprehensive or even adequate baseline data.

Effective implementation of adaptive management also requires rigorous monitoring and reporting to identify when triggers are activated, and to measure the effectiveness of management responses.

One example of an adaptive management approach is the inclusion of a power to set biomass caps for marine farming zones or leases in MFD Plans. A biomass cap is a limit on the amount of salmon farmed in a particular area with the aim of limiting environmental impacts. Environmental indicators (such as the presence of opportunistic indicator species) and compliance with physical or chemical thresholds should inform any decision on whether a biomass limit should be increased or decreased. However, decisions by the Secretary of DPIPW and the EPA Director setting the biomass cap in Macquarie Harbour have not accorded with this principle, with economic and social considerations appearing to outweigh environmental considerations in these decisions (see discussion in Box 2 below).

Litigation taken by Huon Aquaculture in relation to the biomass determination and carrying capacity of Macquarie Harbour highlighted the concern about regulatory failure in determination of biomass limits for environmental and fish health.

(e) Review of MFD Plans

The MFP Act requires MFD Plans to be reviewed at least once every 10 years to "ensure that the objectives of resource management, having regard to any relevant changing circumstances, are achieved to the maximum extent possible."<sup>xliiii</sup> This is critical where waters within designated marine farming zones have warmed significantly and can no longer support salmon farming, where evidence coastal development adjacent to marine farming zones has intensified since the MFD Plan commenced, or where new data is available regarding impacts of nutrients on biodiversity.

The process for a review of a MFD Plan starts with a preliminary review conducted by DPIPW. Public comment is only invited if DPIPW considers that modifications to the MFD Plan are required. There are no requirements for DPIPW to consult with the Panel, IMAS or the public in deciding whether modifications are required. As acknowledged by the Panel when it was tasked with looking at the Okehampton Bay salmon farm proposal, after the expiry of 10 years, further data will be needed to assess the suitability of salmon farming at a particular location. It is unclear why opportunities for the input of this data are not given to public (including scientific bodies such as IMAS) in the MFD Plan review process.

If a 10-yearly review of MFD Plan does reveal that a zone or area is not suitable for salmon farming due to unforeseen or changing environmental impacts, this does not give rise to any right alter the terms or lengths of leases issued to salmon farms in these areas. Should the leases be cancelled, or the MFD Plan amended to reduce number or remove salmon farms from the MFD Plan area, salmon farm operators would have an entitlement to compensation from the Government. This highlights the problem with the granting of leases potentially for 30 years with renewal options from 15 years, being timeframes that potentially exceed the length of time that a particular location can sustain salmon farming.

## 6. Access to information

The 2015 Senate Committee Report into Tasmania’s Regulation of Finfish Farming recommended that the “Tasmanian Government support the greater provision of environmental information and data relating to the finfish industry by the [DPIPWE]”.<sup>xliv</sup>

As demonstrated in the Okehampton Bay case study (Box 1), historically it has been very difficult for interested parties to obtain information about specific salmon farms and related infrastructure. However, since 2017, there have been steady improvements in the release of information by regulators.

Access to all environmental licences and licences issued under the LMRM Act for finfish farms through the Land Information System Tasmania (LIST) Map website.<sup>xlv</sup> The EPA website provides aggregated compliance monitoring results for salmon farms in Macquarie Harbour, annual environmental reports and/or broad scale environmental monitoring for some salmon farming locations, and also previously published IMAS reports relating to the health of Macquarie Harbour (the latest reports are otherwise available through the IMAS website).

DPIPWE has recently created the Salmon Farming Data Portal.<sup>xlvi</sup> This portal provides aggregated data about salmon farms operating within a MFD Plan area. While the information is helpful for generally understanding an operator’s level of compliance with certain management controls within a MFD Plan, the lack of the underlying scientific data and reports makes it difficult to assess the seriousness of any non-compliances, and the consequences of non-compliances or of “business as usual” in terms of environmental impacts that are occurring or have occurred. It is also difficult to ascertain what enforcement action has been undertaken in response to particular non-compliances, and whether that action is proportionate in all the circumstances.

Tassal, Huon and Petuna are each variously engaged in voluntary, third-party certification programmes that encourage proactive release of information, and all release selected, often aggregated, data on their websites. As outlined above, aggregated data can be difficult to interrogate.

However, despite all of these data sources, timely environmental monitoring data (particularly raw data) and compliance audits remains very difficult to obtain.<sup>xlvii</sup>

In the absence of consistent, proactive release of data, members of the public must rely on Right to Information requests to access information. It is our experience that such requests are excessively time consuming (one has taken over 3 years to resolve), with such requests being regularly refused by the EPA and DPIPWE on the basis of commercial confidentiality, unreasonable diversion of resources, or a reluctance to discourage future voluntary disclosures by industry. This is particularly critical when there are reported delays in the Ombudsman’s office of an average of 318 days in the 2017-2018 financial year.<sup>xlviii</sup>

We recommend that regulators must make all environmental information available to the public in a timely manner, including real-time reporting of monitoring data including the underlying scientific data and reports and compliance action. This will reduce the need to rely on RTI requests to obtain access to this information and improve community confidence in the actions of regulators and science upon which decisions are based.

## 7. Opportunities for meaningful public participation

Public participation in environmental decision-making is foundational to the Tasmanian resource management and planning system, of which the MFP Act and the EMPC Act form part.<sup>xlix</sup>

It is generally acknowledged that the elements of public participation are:<sup>i</sup>

- Full public disclosure of information by government about environmental decision-making in a timely way, including access to applications, monitoring data and all scientific information;
- Early involvement in and ability to make representations to authorities making environmental decisions, and be entitled to have that representation properly considered by the relevant decision-maker;
- Notice from decision-makers to people affected by the decision, including those that made representations;
- Recourse to legal review mechanisms, including both substantive review and judicial review, and access to justice to take such review.

The benefits of public participation have been described thus:<sup>ii</sup>

*For many policy-makers and environmental advocates, public participation is an intrinsic good, regardless of outcome. Allowing impacted communities and other stakeholders to take part in decision-making is a basic component of democracy (Rosenbaum 1978; Thomas 1990)*

...  
*Public participation can also improve policy implementation by increasing the legitimacy of the decision-making process and, in so doing, reducing conflict. Multiple studies have demonstrated that whether or not the public accepts a decision hinges on whether or not the public sees the decision-making process as fair (Bulkeley and Mol 2003; Lind and Tyler 1988; Newig 2007; Murphy 2004; Tyler 1990). Engaging the public in decision-making can help overcome deficits in democracy, such as distrust of political leaders, declining faith in public agencies, and low voter turnout (Dalton 2008; Newig 2007; Nye et al. 1997; Welp et al. 2009).*

That meaningful public participation increases transparency and aids legitimacy of the decision-making process and public confidence is widely acknowledged.<sup>lii</sup>

(a) Public participation in marine farming decisions

The only guaranteed formal opportunity for public participation in marine farming decisions are provided in relation to the development and amendment of MFD Plans. That is, provided the Panel does not consider an amendment is not of a substantial nature, to correct an error or to remove an anomaly to clarify or simplify the Plan.<sup>liii</sup>

Where an MFD Plan or an amendment to one is prepared, the Minister is required to give approval to the public exhibition of a draft amendment, and the planning authority must then advertise it. Any person may make a representation during the exhibition period, and any representation made must be considered. The Panel is not obliged to hold public hearings.<sup>liv</sup> The Act entitles a person making a representation to request that a hearing be held, and the Panel has done so on some previous occasions.

There is no opportunity to appeal against a decision to approve a MFD Plan, or an amendment to a plan, other than for existing marine farm operators where it adversely impacts their existing marine farming activities.

There are no opportunities for public comment or third party appeals in relation to allocations, grants, renewals or variations of leases under the MFP Act. The granting of a new lease or variation of an existing lease can only be challenged if the quality of water in another marine farming lease will be unreasonably affected.<sup>lv</sup>

In relation to environmental licence applications, only those applications assessed by the EPA Board will be open to public comment and, potentially, appeal, and not any licence applications or amendment applications for which the EPA Director is the decision-maker.

Where an application is assessed by the EPA Board, it is required to take any representations it receives into account in its decision to grant an Environmental Licence. Provided a person can demonstrate that they are a “person aggrieved” of the Board’s decision, they may appeal that the grant of an Environmental Licence to the Resource Management and Planning Appeals Tribunal. However, for those applications that are decided solely by the EPA Director, there are presently no opportunities for public participation through notice and rights of review.

Based on the criteria currently in the EMPC Act, the vast majority of environmental licence applications relating to marine salmon farms will be assessed by the EPA Director without any opportunity for public participation or scrutiny. The way the regulations are drafted, it effectively makes an application “permitted” (in a planning scheme sense) where there is a MFD Plan approved within the last 10 years. However, the impacts of a particular activity fall to be assessed at the environmental licence stage, and it is usually that particular activity and its impacts which are of greatest public concern.

By way of analogy, if we look at the planning scheme and permit processes under the LUPA Act, a planning scheme or amendment is the spatial tool that identifies what land uses can go where. Agricultural land might be rezoned for residential use, and the decision about whether that should be approved is undertaken by the Tasmanian Planning Commission, with rights of public notice and hearings. However, this rezoning only allows a planning permit application to be made for a particular use and development, if it meets the requirements of the planning scheme. The public still receive notice of that planning permit application, and have the right to make a representation to the planning authority and to take an appeal in the Tribunal.

The marine farming process, however, assumes that if a MFD Plan exists, there is no need to involve the public in decision-making by the EPA. This assumption does not withstand scrutiny. For instance, as is clear from the Storm Bay North MFD Plan, the operator is only required to do the baseline environmental surveys after the Plan is approved. This data is critical to understanding the basis of decision-making. The first opportunity a member of the public will have to test the scientific data will be at the environmental licence stage. If there are no rights of public notice and review, the science underpinning decision-making cannot be tested by the public or an independent court or tribunal.

Further, the fact that this decision rests upon the discretion of the EPA Director leads to uncertainty for the community and for the regulated as to when an application will be referred to the Board. For instance, one of the prescribed criteria for referral is whether there will be a high level of public interest. The Storm Bay North environmental licence application was not referred to the EPA Board and, in the context of that application, it is not clear how that application would not have met the threshold “public interest” test.

We recommend that all environmental licence applications be assessed by the Board. We recommend that the criteria be refined to reverse the onus – all applications for environmental licence must be referred to the Board, except in clearly defined (and limited) circumstances, and being circumstances that require a quantitative assessment rather than exercise of discretion.

(b) Access to justice in marine farming decisions – merits review

Part of a transparent and robust regulatory system is the ability to apply to an independent umpire for a review of an administrative (government) decision on the merits. The ability to substantively (not just legally) review environmental decisions is a recognised component of public participation.

The regulation of marine farming is unique in industrial regulation in Tasmania, in that neither the proponent of a marine farm nor a third party has rights to bring a merits review of a MFD Plan, an amendment to the plan. There are also no rights of appeal in relation to decisions of the EPA Director to issue environmental licences where not referred to the EPA Board or approve emergency applications. Likewise, there is no right to appeal biomass or management determinations by the EPA Director under MFD Plans.

This places marine farming in a unique position. All other industrial activity in Tasmania regulated by the EPA as a Level 2 activity under the EMPC Act and is subject to rights of appeal to an independent third party, in that case, the Resource Management and Planning Appeals Tribunal or to be assessed by an independent expert body – the Tasmanian Planning Commission – in the case of combined planning scheme amendments and permit application.

This is to be contrasted to marine farming, where:

- the spatial planning exercise – and existence of a MFD Plan – effectively excludes public notice at the environmental licence stage because it precludes referral by the EPA Director to the Board;
- MFD Plans are prepared and assessed by the MFPR Panel:
  - the constitution of which under s8(1) of the MFP Act is weighted against scientific expertise, does not require expertise in marine ecology, hydrogeology or conservation, and no community or legal member in contrast to the Tasmanian Planning Commission;<sup>lvi</sup> and
  - the decisions are made by the Panel, in contrast to the Commission, where decisions are made by delegates who are appointed Commissioners with expert planning or scientific members.
- MFD Plans routinely give the EPA Director a discretion over biomass and nitrogen limits.

The reason this is important became was demonstrated in February 2017, when Huon Aquaculture – one of three marine farming operators in Macquarie Harbour - commenced legal proceedings to challenge biomass determinations made in relation to Macquarie Harbour. However, those proceedings were taken through the narrow and costly process of judicial review in the Tasmanian Supreme Court, rather than through merits based appeal on the substance of the biomass determination.

Huon Aquaculture brought judicial review proceedings against the Secretary of DPIPW, the EPA Director and the Minister in the Tasmanian Supreme Court, and also commenced proceedings in the Federal Court against the same parties and Commonwealth Minister for Environment and Energy.

The biomass determination under challenge was that made by the EPA Director which limited biomass in Macquarie Harbour to 14,000 tonnes. Huon Aquaculture alleged that this decision failed to give adequate weight to the scientific evidence which showed that salmon farming was adversely impacting on the dissolved oxygen levels

in the harbour and causing widespread adverse biological impacts on the harbour floor, and potentially, the endangered Maugean Skate. Huon Aquaculture alleged that the EPA Director placed undue weight on short-term economic factors in his decision, and that the biomass limit ought to have been 10,000 tonnes so as to ensure the long-term environmental and economic viability of salmon farming in the harbour.

After the Federal Court found against Huon Aquaculture in July 2018, it withdrew its judicial review applications in the Supreme Court prior to hearing.

The lack of any internal or merits review processes force interested parties to commence judicial review proceedings, which are more focussed on whether the decisions are legally supported rather than a transparent and independent review of the science. Judicial review proceedings can be both costly and time consuming, meaning that the key issues will not be resolved and a cloud will hang over any management decisions made in the meantime.

While changes to the law in 2017 means that there may be an opportunity for third parties to challenge the merits of a decision by the EPA Board to grant an environmental licence to the Resource Management and Planning Appeals Tribunal, this is only where the EPA Director refers such applications to the Board. No such referral has yet been made for any marine farm, and the criteria on which that decision are made are weighted toward the EPA Director making those decisions.

There will be very limited circumstances in which the EPA Board will make decisions, and therefore the public is effectively shut out of decision making under the EMPC Act. This is contrary to the objectives of the EMPC Act, which are to promote public participation in environmental decision-making, including through review processes in the Tribunal.

## **8. Rigorous, consistent monitoring and enforcement**

The EMPC Act and the MFP Act contain offences that apply to finfish farming, however, in our submission the penalties for these provisions are inadequate and do not provide sufficient deterrent. Further, there is little public reporting on enforcement action taken, which means there is no transparency about the outcomes of complaints, consistent application of regulatory tools or how breaches are treated by regulators.

### **(a) MFP Act**

The MFP Act creates offences for marine farm operators who fail to comply with MFD Plans, with penalties up to \$33,600 plus daily penalties. The LMRM Act provides penalties of \$84,000 or 2 years imprisonment who fail to comply with conditions of their licence plus daily penalties of up to \$8,400 for marine farm operators for continuing breaches.

The MFD Plans contain “management controls” under s24 of the MFP Act, which would be the control capable of enforcement. However, the drafting of these controls is such that – other than limits to the marine farming area authorised by the Plan – would be difficult to see how they are enforced or defer to directions made by the Secretary to DPIPWE or the EPA Director. Any directions issued by either person are not publicly reported on as far as we are aware, and certainly there is no requirement for such reporting.

For instance, the Storm Bay North MDP, the EPA Director may impose caps on total permissible dissolved nitrogen output and biomass for the relevant area, with these caps to be apportioned to each leasehold area.<sup>lvii</sup> These controls would be enforceable under the Act, if there was any such cap in force, however this is unknown and not reported.

There is also a requirement to provide baseline environmental surveys to the satisfaction of the EPA Director, and record-keeping requirements imposed on lessees.<sup>lviii</sup> Again, whether such conditions have been complied with is unknown, and baseline environmental surveys are not required to be made publicly available. The Storm Bay North Plan acknowledges that baseline environmental surveys are required to regulate the marine farming activity allowed for in the Plan:

*The Director, EPA will use the information from the baseline environmental survey to assess whether the area to be farmed contains any rare or endangered species or any unusual habitat and to determine conditions and requirements relating to environmental management.*

Compliance with these provisions is therefore critical to the subsequent regulation of the marine farming activity. It is relevant to the setting of licence conditions under the EMPC Act and to the subsequent enforcement of that licence and of the general environmental duties under the Act in relation to environmental harm.

(b) EMPC Act

The primary enforcement tools exist in the EMPC Act. While there are offences under the EMPC Act for breaches of general environmental offences of causing serious or material environmental harm,<sup>lix</sup> with penalties up to \$1.68 million, there are statutory defences to these offences which in practice will enable an operator to rely on the existence of an environmental licence.<sup>lx</sup> For instance:

- That the emission of a pollutant does not exceed a maximum quantity, concentration, emission rate, discharge rate or overall volume set in an environmental licence.<sup>lxi</sup> This defence applies expect to environmental licence conditions that limiting the biomass, production, raw material or water and energy use for a finfish farm.
- That an environmental licence states that compliance with specified provisions of it will satisfy the general environmental duty and those provisions were complied with<sup>lxii</sup>

In addition, any such prosecution needs to prove that the person causing the pollution did so “intentionally or recklessly and with the knowledge that serious [or material] environmental harm will or might result”.<sup>lxiii</sup> Further, the proof of “serious or material” environmental harm was caused by a marine farm operator necessarily depends on the veracity of baseline environmental surveys and monitoring undertaken and the EPA’s standards, for instance, to prove that there has been environmental harm, and that harm has occurred as a direct result of a particular marine farm or its stocking density.

There are strict liability offences (s50(2) of the EMPC Act), that do not require intention or recklessness to be proved. However, the penalty is also less. A breach of s50(2) has a maximum penalty of \$420,000 for a body corporate. Such a prosecution will therefore necessarily be complex, in particular, as proving intent or knowledge to the standard of proof is necessarily difficult and potentially prohibitive of successfully relying on these offences. These provisions have, anecdotally, rarely been used. In determining whether enforcement powers are sufficient, it is appropriate to look at the practicalities of using various enforcement tools.

For these reasons, it is likely that any prosecution, if taken, would be for breach of conditions of environmental licences.

The penalties for a breach of a licence are considerably lower than the general environmental offences. The EMPC Act prescribes penalties of up to a \$168,000 fine for a body corporate or an \$84,000 fine or 2 years imprisonment for an individual found by a court to be contravening conditions of an environmental licence.

Our quoted penalties above are for the environmental licence breach. These are comparably low penalties for corporate and individual breaches in other jurisdictions. Penalties for breach of conditions are commensurate with the higher range of offences of the general environmental offences. For instance, penalties for breach of an EPA licence condition in NSW are:<sup>lxiv</sup>

- For a corporation - \$1,000,000, and \$120,000 for each day it continues; and
- For an individual - \$250,000, and \$60,000 for each day the offence continues.

The EMPC Act also empowers a court to impose a “special penalty” on an operator in relation to any contravention of a condition of an environmental licence regulating the amount of dissolved nitrogen produced or emitted. Currently this special penalty is set at \$168,000 per each extra tonne of nitrogen released over the cap. This is a welcome additional penalty. However, as currently no environmental licences impose any clear, enforceable caps on nitrogen, this special penalty is effectively redundant.<sup>lxv</sup>

(c) Demerit points

Both the MFP Act and LMRM Act provide for the imposition of demerit points for each penalty unit imposed upon the conviction of a person for these offences by a court. The LMRM Act provides for additional demerit points where a person receives a term of imprisonment or suspended sentence, while the MFD Act was amended so that demerit points would be allocated to a marine farm operator for each penalty unit of an infringement notice for failing to comply with the MFD Plan, an emergency order or plan.

The existence of a “big stick” will only serve as a deterrent where the regulator is willing to wield it.

While we support the reforms to penalties imposed on marine farm operators who do not comply with MFD Plans or licence conditions, the likelihood a marine farm operator would accrue the 200 demerit points required to be disqualified from holding a licence (either permanently or temporarily) are low. This is because of the approach regulators take to enforcement.

Data released to the EDO in 2017 indicated that observed breaches of marine farm plans and licence conditions are generally not punished by way of fine or prosecution, with the typical regulatory response being to issue a management direction to the operator to rectify the issue.<sup>lxvi</sup>

Therefore the demerit points (or existence of other penalties) are unlikely to provide any real deterrent to breaches of the law.

As suggested by the Macquarie Harbour case study below, the economic benefits derived by marine farm operators in breaching MFD Plan or licence requirements may far exceed the fines that might be imposed by the EPA or the court.

(d) Civil enforcement

There is capacity for third parties to take legal action where regulators fail to Act under the civil enforcement provisions of the EMPC Act. For instance, where communities are seeking to prevent serious or material environmental harm, where there is evidence of breach of environmental licences. The primary issue is a person's ability to seek access monitoring data and where caps are not set in MFD Plans or licences to establish whether there is a breach.

There are, however, no third party rights to enforce breaches of management controls of a MFD Plan or lease or licence issued under the LMRM Act.

Civil enforcement in an administrative tribunal is one of the components of public participation, enabling effective redress for environmental harm. The Tasmanian Resource Management and Planning Appeals Tribunal has jurisdiction in respect to civil enforcement of planning breaches where the planning authority fails to act.

It is unlikely that civil enforcement proceedings could be taken to argue for different environmental licence or management controls to be imposed or allow for an order of the Tribunal be made setting, for instance, a different biomass limit.

**BOX 2**

**CASE STUDY - MACQUARIE HARBOUR**

When the Macquarie Harbour MFD Plan was amended in 2012 to allow for a large expansion of salmon farming, the Panel recommended that the MFD Plan include a biomass cap which was only to be increased where environmental indicators demonstrated environmental impacts, such as the presence of opportunistic species such as benthic worms and bacteria, were under control. Conditions imposed by the Commonwealth Environment Minister on the Macquarie Harbour salmon farms to protect to the endangered Maugean Skate and the Tasmanian Wilderness World Heritage Area (TWWHA) also required that the biomass of salmon in the harbour not exceed 52.5% of the "maximum sustainable biomass" being approximately 15,500 tonnes. Under these conditions the biomass cap was to be reviewed by the Tasmanian Government in 2013.

In late 2014, Macquarie Harbour salmon farm operators were advised that the biomass cap had lapsed and that DPIPWE would be undertaking a review of conditions in the harbour before setting a new cap. In the meantime, management directions issued to each of the companies resulted in an effective biomass cap of 19,000 tonnes.<sup>lxvii</sup> In April 2015, DPIPWE advised operators that it was intending to increase the biomass cap to approximately 20,150 tonnes,<sup>lxviii</sup> despite the fact there was evidence of a trend of decreasing benthic dissolved oxygen levels in the harbour since the intensification of salmon farming, and widespread presence of opportunistic worms in the harbour (including within the TWWHA).<sup>lxix</sup> At this time DPIPWE also indicated that it would not to rely on the presence of worms as one of the key indicators of adverse impacts of the farms, as the worms were not behaving as they had in other salmon farming regions.

The Secretary of DPIPWE formally increased the biomass cap to 20,150 tonnes in October 2015, and subsequently increased it again in April 2016 to 21,500 tonnes. There was no public release of the reasons for the decisions to increase the caps.

In July 2016, the responsibility for setting the biomass cap was delegated by the Secretary of DPIPWE to the EPA Director. By September 2016, environmental monitoring data had revealed very low dissolved oxygen levels on the harbour floor (reaching a record low in some locations), and a large increase in the presence of bacterial mats at some lease sites.<sup>lxx</sup> In November 2016, IMAS advised the EPA and salmon farm operators that the floor of Tassal's Franklin lease and surrounding seafloor was virtually devoid of life due to extremely low dissolved oxygen levels, and it was unknown what impact this would have on the Maugean Skate or the TWWHA.

Following the IMAS briefing, the EPA Director gave management directions to the operators in respect of their non-compliant leases, and in particular, directed Tassal to destock its Franklin lease by 28 February 2017. Following a number of submissions by Tassal citing the "logistical, staffing and safety" impacts of this direction, the EPA Director decided to allow Tassal until 15 April 2017 to destock the lease. In his decision granting this extension, the EPA Director stated that "[a]t this point I do not have an adequate level of information to indicate that the delay in harvesting will cause any significant variation in the underlying impacts on a harbour wide or neighbouring lease basis."<sup>lxxi</sup>

It was not until January 2017 that the EPA Director formally decided to reduce the biomass for harbour to 14,000 tonnes. However by that stage, some of the operators had already stocked their leases with smolt in accordance with the previous biomass limit of 21,500 tonnes. In late April 2017, Tassal announced that it would not be able to comply with the 14,000 tonne biomass limit if it was extended past 1 May 2017. The EPA Director responded by announcing that he would delay of his decision on next biomass cap while he assessed the submissions of the operators and latest compliance surveys.

After considering the salmon farm companies' submission and preliminary IMAS reports, on 31 May 2017, the EPA Director decided to set a year-long biomass limit for the harbour at 12,000 tonnes.<sup>lxxii</sup> However, the EPA Director's determination allowed Tassal to farm an extra 4,000 tonnes of additional salmon until January 2018 provided that implemented an experimental "waste capture system". The determination was made after Tassal requested approval to grow out its 2016-year class fish through to market size.<sup>lxxiii</sup> The trial waste capture system was approved by management determination of the EPA Director on 6 June 2017, and the final system was approved by Environment Protection Notice No. 9702/1 issued by the EPA Director on 30 June 2017.<sup>lxxiv</sup>

Tassal was authorised by the EPA Director to exceed the cap because it was implementing a novel and untested technology to capture solid fish farm waste underneath its pens and pump it to a boat. This technique did not capture or address the increased levels of dissolved waste from the fish pens. The solid waste was concentrated on board the boat, transported to land and transferred to tanks. While Tassal originally proposed to dispose of the waste at the mouth of the Macquarie Harbour,<sup>lxxv</sup> it eventually settled on transporting the waste from Macquarie Harbour to a fish processing facility in George Town. It was then pumped into the trade waste of that plant, ultimately to be treated by TasWater's wastewater treatment plant at Pardoe. Each of these steps was approved by the EPA Director through the issue of environment protection notices. No referral was made to the Federal Environment Minister for an assessment of the experimental waste capture system under the EPBC Act. There was no opportunity for public comment in relation to these activities, or independent review of the science presented by Tassal in support of them by the EPA Board.

In June 2017, Huon Aquaculture commenced a number of legal proceedings seeking to challenge the validity of the EPA Director's determinations, and the validity of the EPBC Act decision that authorised all three salmon farms to operate in Macquarie Harbour. Huon maintained that the harbour could not safely sustain the level of fish allowed by the EPA Director.

By late November 2017, the EPA confirmed that significant fish mortalities had been reported by all three companies operating in the harbour. Petuna Seafoods lost approximately 3 per cent of smolt stock, Huon Aquaculture lost fish from one trout pen. Tassal did not confirm the extent of its losses.<sup>lxxvi</sup>

Two days after the State election, and during the Federal Court's hearing of Huon Aquaculture's legal case, the EPA Director cut the biomass limit to 9,000 tonnes on 23 March 2018. In discussing his decision, the EPA Director admitted that science and modelling used as the basis for the expansion of salmon farming in Macquarie Harbour in 2012 was "flat wrong".<sup>lxxvii</sup> This was confirmed by the IMAS report on the health of Macquarie Harbour released

on 21 March 2017, which had shown that despite the measure taken to reduce biomass in the harbour, very low levels of dissolved oxygen in mid-bottom waters continued during Spring 2017 and there had been a decline in benthic faunal abundance, including within the Tasmanian Wilderness World Heritage Area.<sup>lxviii</sup>

By 2017, there had been a failure by regulators to set biomass caps in Macquarie Harbour in an effective or timely manner in response to declining environmental conditions. The EPA Director's 2017 decisions to reduce the cap and issue the associated management directions that allowed for waste capture technology, placed excessive weight on short-term economic considerations in the absence of scientific certainty on the precise impacts and likely recovery of the environment.<sup>lxix</sup> The delay in the setting of biomass cap also resulted in excessive stocking of leases by at least one operator, which in turn makes future decisions on sustainable stocking density and biomass caps more challenging.

Huon Aquaculture's Federal Court challenge was ultimately unsuccessful. Given the length of time since the EPBC Act approval have been granted in 2012, Huon Aquaculture's failure to avail itself of other opportunities to challenge the decision, and the economic impacts likely to result on the other salmon farm companies in the harbour, the Court decided on 6 July 2018 that the balance of convenience weighed against it exercising its discretion to grant the declaratory relief that Huon was seeking. The Court therefore found that it did not need to consider Huon Aquaculture's substantive arguments.

By May 2018, the EPA Director had confirmed that at least 1.35 million salmon had died in Macquarie Harbour since October 2017.<sup>lxx</sup> The fish deaths resulted from an outbreak of Pilchard Orthomyxovirus (**POMV**). Following that revelation, in July 2018, the EPA Director set the biomass cap in Macquarie Harbour to 9,500 tonnes until 2020. While, this time, no additional biomass was allocated based on the use of waste capture systems, Huon Aquaculture still argued that the limit simply reflected the current stocking levels in the harbour, rather than the conservative stocking levels necessary to respond to the poor environmental conditions recorded in the IMAS February 2018 report.<sup>lxxi</sup> Huon Aquaculture linked the numerous large mass fish kills in the harbour from POMV to the high stocking rates facilitated by the waste capture systems and declining environmental health of the harbour. It called for a biomass cap in the vicinity of 6000 tonnes to be imposed. That call has been ignored.

While Macquarie Harbour floor may be slowly recovering,<sup>lxxii</sup> it remains unclear whether the endangered Maugean Skate population has escaped the worst effects of the nutrient loading and reduced dissolved oxygen levels resulting from the salmon farming expansion. Being a long-lived and cryptic fish, the skate is difficult to study. It may be some years before the science can tell us whether the skate has effectively been studied to extinction.<sup>lxxiii</sup>

The absence of any strong enforcement response by DPIW, and subsequently the EPA, to repeated breaches of licence and MFD Plan requirements raises the question whether any of the operators will be deterred from future breaches. Indeed, it appears that there is now a strong market incentive working against compliance with future biomass caps.

Even where formal biomass caps have been reduced, it appears the caps have been imposed as more of a reflection current stocking levels, rather than a real reduction in fish numbers. Without some mandatory, science-based criteria for biomass determinations, and a legal pathway for those decisions to be reviewed by an independent expert tribunal, it is possible that the situation in Macquarie Harbour could be repeated in waterways around Tasmania.

## Recommendations for reform

### (a) Clear criteria for decision-making

If the MFP Act is not repealed, it should be amended to ensure that a clear hierarchy of objectives is set out to guide decision-making under that Act with priority given to the maintenance of natural values. The MFP Act should also be amended to introduce a formal consultation period between the Panel and local councils for areas where marine farming is proposed or expanding, with the aim of identifying potential conflicts between land and marine farming uses.

### (b) Separation of regulatory and development roles

The 2017 reforms introducing the EPA as part regulator of marine farming in part addressed these concerns, however there are remaining conflicts.

To improve governance and independence of those responsible for making decisions in respect of marine farming, we recommend:

- The constitution of the MFD Panel be weighted towards scientific expertise and provide for community input by amending the MFP Act to ensure Panel membership includes:
  - One or more members with qualifications in marine ecology, hydrology and marine sediments and conservation management;
  - A community representative; and
  - A legal member.
- Removing the potential conflict of interest by:
  - removing the Minister as decision-maker under the MFP Act for MFD Plans; or
  - at a minimum legislating a prescribed a clear set of criteria as to the circumstances in which the Minister can disagree with a recommendation of the Panel.
- Making the EPA Board the decision-maker for all environmental licence applications and variations, rather than the EPA Director.

### **(c) Integrated assessments**

Having regard to the totality of our analysis above, and to ensure better integration between marine farming and land use planning, we recommend:

- Marine farming planning be brought under the LUPA Act. This should be implemented through the development of State Planning Provisions (**SPP**) in consultation with councils, the public and interested stakeholders. The SPP should outline objectives for the sustainable management of coastal waters and provide clear criteria for marine farming and any other use or development within the coastal waters zone, with the overarching principle being to maintain the natural values of the coast. Under this proposal, councils would be responsible for the development of Local Provisions Schedules (**LPS**) to identify areas appropriate for marine farming and those that are not. These SPP and LPS should be subject to review by the Tasmanian Planning Commission, which should be entitled to consult with the Panel for expert advice.
- Integrate MFD Plan and EPA assessments into these decisions, for instance, by:
  - Ensuring that marine farming is assessed by the planning authority in the usual course;
  - Making the EPA a referral authority for assessment of Level 2 activities; and
  - Integrating the functions of the MFD Panel and planning authority in respect of the spatial planning exercise, for instance, by re-positioning the MFD Panel's role to an advisory role.
  - Enabling all cumulative, downstream and supply chain impacts to be considered in spatial planning.

### **(d) Evidence-based decision-making**

To ensure that there is sufficient scientific information to allow the Panel to assess a proposed MFD Plan, we recommend:

- The MFP Act be amended to include clear criteria against which the Panel should assess EISs and MFD Plans, with overarching priority given to the maintenance of the biodiversity and ecological processes (sometimes described as the natural values) of the marine environment.
- The Panel have the ability to request more information before making its assessment if it considers it necessary.
- Guidance be provided to the Panel on when adaptive management is an appropriate management strategy, and a clear indication that it is not to be used to accommodate a lack of baseline monitoring or where the impacts of salmon farming may be serious or irreversible.
- To ensure that decisions about MFD Plans are based upon the science, the removal of the Minister's discretion to approve Plans or amendments that are not supported by the Panel.

- Where biomass limits are considered by the Panel to be an appropriate method of mitigating or preventing impacts of finfish farming on a marine farming zone or lease:
  - the upper biomass threshold should be clearly stated in the MFD Plan, and clear science-based triggers should be articulated in the MFD Plan for decisions to amend the biomass limit up to the threshold. Any proposal to increase the upper biomass threshold should be treated as an amendment to the MFD Plan.

We further recommend that the Panel be required to undertake a full scientific review of all approved MFD Plans at least once every 10 years, so as to ensure that its assessments remain valid. The reviews must be subject to public participation.

**(e) Public participation and merits review**

The 2017 amendments to the EMPC Act introduced a further assessment process for salmon farms. Unlike other Level 2 Activities, the EPA Director has a discretion about whether or not an application for an environmental licence for a salmon farm are referred to the EPA Board for assessment.

If the application is referred to the Board for assessment, it will be given a class of assessment and assessed in the same way as other Level 2 activities.

While EDO Tasmania is generally supportive regulating salmon farms as Level 2 activities under EMPC Act, the Act should be amended such that:

- All applications for environmental licences and variations are assessed by the EPA Board, to ensure that public participation rights are preserved, including notice and third-party review;
- the MFP Act and LMRM Act be amended to incorporate broad standing allowing third parties to appeal the grant or leases and licences to salmon farms;
- amend the EMPC Act to ensure that “a person aggrieved of a decision” is defined to include those persons who make representations to the EPA Board or Director in relation to the assessment of any Level 2 or Level 3 activities;
- EPA Board’s decision-making powers under the EMPC Act are to be upon the application of clear criteria which prioritises the preservation or maintenance of the natural values of the marine environment, including meeting water quality objectives.

Further, the EPA must prioritise the making and publication of Water Quality Objectives in accordance with the *State Policy on Water Quality Management 1997*, that apply throughout the State in riverine, estuarine and marine environments and to be applied in decision-making on marine farming.

**(f) Access to information**

In order to improve transparency, and ensure the streamlined and efficient regulation of marine farming activities we recommended the active public release (or availability) in a central location of information affecting marine farming, of the following:

- The baseline environmental data that forms the basis of MFD Plans and amendments, or is submitted by a proponent in response to management controls in a MFD Plan.
- All baseline data and monitoring and/or environmental impact assessments for proposed leases where salmon have not previously been farmed and for leases where salmon farming is being re-established following a prolonged interval.
- All licences, leases and associated management plans for salmon farms..
- All monitoring of environmental parameters on the perimeter and outside of marine farming leases.
- All enforcement actions taken by regulators under the MFP Act, LMRM Act, EMPC Act or any MFD Plan, including measures or directions issued to marine farm operators, statutory notices or fines issued and prosecutions commenced.

We note that environmental licences are now available through TheList and this disclosure should continue. However, many community members may not be aware of this access, and steps should be taken by regulators to ensure that information is provided in one location in order to enhance transparency.

Finally, we make the above suggestions as to what should be actively disclosed by regulators, but do not purport to make an exhaustive statement of public disclosure as this warrants closer investigation by the regulator(s), who is/are the holders of such information.<sup>lxxxiv</sup> Other jurisdictions prescribe what information must be available. This is certainly an approach we would recommend, but does not prevent active disclosure by government authorities.

#### **(g) Enforcement, monitoring and compliance**

To ensure that a transparent and consistent approach is taken to enforcement of marine farming, and with the aim of increasing community confidence in the regulation of this sector, having a deterrent effect and ensuring that threshold levels of environmental health are maintained, we recommend:

- MPD Plans and environmental licences should be drafted such that the conditions or management controls therein are clear, certain and enforceable, including specifying quantifiable limits capable of enforcement in respect to nitrogen and biomass;
- The EPA develop and publish an enforcement policy relating to marine farms which clearly sets out its expectations and the types of situations where it may use the enforcement tools it has available to it;
- In addition to imposing management controls such as environmental monitoring or following for breaches of licence conditions, operators should be fined or prosecuted in order to have a deterrent effect;
- All enforcement actions should be reported by the EPA through real time reporting in a central record published online, and access to enforcement instruments and management directions;
- Penalties for breach of a MFD Plan and licence conditions should be increased, commensurate with other jurisdictions and the offences for serious and material environmental harm prescribed in the EMPC Act;
- In addition to the accrual of demerit points, the EPA and courts should have the power to make publication orders where there have been breaches of marine farming laws and regulatory instruments;
- The MFP Act should be amended to include executive officer liability for breaches of that Act by aquaculture companies;
- The MFP Regulations should prescribe the method for the calculation of “special penalties” to be imposed by Courts upon the conviction of an operator for contravening a MFD Plan. The calculation of the special penalty should account for any profits derived by the operator from the non-compliance.
- The MFP Act and EMPC Act should be amended to enable third parties to seek redress for environmental harm through civil enforcement proceedings to the Resource Management and Planning Appeals Tribunal.

## ENDNOTES

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<sup>i</sup> Savage and Hobsbawn 2015

<sup>ii</sup> Exports accounted for around 2 per cent of the value of Tasmanian salmon production in 2013-14 (DoSG Tas 2015)

<sup>iii</sup> This was repeated in the Productivity Commission's 2016 report *Marine Fisheries and Aquaculture: Productivity Commission Inquiry Report Overview & Recommendations* [accessed: <https://www.pc.gov.au/inquiries/completed/fisheries-aquaculture-overview.pdf> at Finding 8.3, p41: "Concerns about the environmental and amenity impacts of aquaculture developments are prominent in some states, highlighting tensions for governments in both regulating and promoting industry growth. These concerns could be minimised by having separate agencies responsible for regulatory and industry development functions."

<sup>iv</sup> Productivity Commission (2016) report, *ibid* at 6.3, p111.

<sup>v</sup> Senate Environment and Communications References Committee, Parliament of Australia, *Regulation of the fin-fish aquaculture industry in Tasmania* (2015) at 3.91 & 3.92.

<sup>vi</sup> There are a number of other Acts with which the industry must comply, however these two Acts set out the main planning and assessment rules. Some inland hatcheries are also regulated by the *Inland Fisheries Act 1995*.

<sup>vii</sup> Section 11(3)(d) LUPA Act.

<sup>viii</sup> An environmental impact statement is not required for a modification to a draft plan if the Panel is satisfied that there is not likely to be any significant effect on the environment as a result of the modification (s.23(3), MFP Act).

<sup>ix</sup> While the Panel has the power to hold "public hearings" under s12(1) of the MFP Act, the Panel hearings in relation to the Storm Bay MFD Plans were not generally open to the public. Rather, the Panel restricted attendance to those who had made submissions and were actually giving evidence. The Panel's [hearing guidelines](#) suggest such a practice is in line with the Panel's powers, however that interpretation is arguably incorrect.

<sup>x</sup> Section 62, MFP Act

<sup>xi</sup> Section 66, MFP Act

<sup>xii</sup> After considering a draft MFD Plan, Environmental Impact Statement (EIS) and report on representations received, the Panel must make an assessment of whether the draft MFD Plan "is acceptable" and make recommendation to the Minister about whether to approve or refuse to approve it – section 31(1)(a) MFP Act.

<sup>xiii</sup> Section 32(1)(e) of the LUPA Act.

<sup>xiv</sup> Section 32(1)(f) of the LUPA Act.

<sup>xv</sup> Section 300(1) of the LUPA Act.

<sup>xvi</sup> Section 21(1) of the MFP Act.

<sup>xvii</sup> Sections 42J(2) and 42K(4) of the EMPC Act.

<sup>xviii</sup> Justice Preston, 'The Judicial Development of the Precautionary Principle', presentation to the Queensland Government Environmental Management of Firefighting Foam Policy Implementation Seminar, 21 February 2017, Brisbane [accessed: <http://www.lec.justice.nsw.gov.au/Documents/Speeches%20and%20Papers/PrestonCJ/Justice%20Brian%20J%20Preston%20SC%20Keynote%20Address%20-%20Precautionary%20Principle%20%20delivered%2021.02.17.pdf>]

<sup>xix</sup> See Clause 3(h) of Schedule 1 to the MFP Act and the EMPC Act.

<sup>xx</sup> Hon. Justice Stephen Estcourt, 'The precautionary principle, the coast and Temwood Holdings' (2014) 31 *Environment and Planning Law Journal* 288 at 290. [accessed: <https://www.supremecourt.tas.gov.au/wp-content/uploads/2018/01/LAWREP-31-EPL-JL-288.pdf>]

<sup>xxi</sup> Hon. Justice Stephen Estcourt, *ibid*; *Preston CJ in Telstra Corporation Limited v Hornsby Shire Council* (2006) 67 NSWLR 256; 146 LGERA at [128], cited in *Environment East Gippsland Inc v VicForests* [2010] VSC 335 at [188].

<sup>xxii</sup> Worboys et al (2015). *Protected Areas Governance and Management*, ANU Press, p222.

<sup>xxiii</sup> From Worboys et al (2015). *Protected Areas Governance and Management*, ANU Press, p222

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<sup>xxiv</sup> Report accessed <https://www.abc.net.au/news/2018-11-20/storm-bay-salmon-farm-approvals-prompt-scientists-to-quit/10491042>

<sup>xxv</sup> Section 42 of the MFP Act. If the Minister makes a decision to amend a MFD Plan that does not accord with the Panel's recommendation, then the Minister must provide a notice of that decision and reasons for it to Parliament – see section 42A of the MFP Act.

<sup>xxvi</sup> Sim-Smith and Forsythe (2013)

<sup>xxvii</sup> Gullet, W. 2006. 'Contesting the Merits of Aquaculture Development: *Port Stephens Pearls Pty Ltd v Minister for Infrastructure and Planning* [2005] NSWLEC 426', 11 *Australasian Journal of Natural Resources Law and Policy* 109-117

<sup>xxviii</sup> Section 21(1) of the MFP Act states that the draft plan must "(d) have regard for the use and development of the region as an entity in environmental, economic, recreational and social terms; and (e) seek a co-ordinated approach with respect to any matter affecting adjacent land under the jurisdiction of the Marine and Safety Authority or council;..."

<sup>xxix</sup> Section 20(3) of the MFP Act.

<sup>xxx</sup> In case of *Coverdale v West Coast Council* [2016] HCA 15, the High Court found that the waters and seabed of Macquarie Harbour were "Crown land", which being within the West Coast Council's municipal area, could be subjected to council rates. It is an unusual situation for marine farms to be within a council's municipal area.

<sup>xxxi</sup> In NSW, current reforms seek to move towards more integrated coastal management. The current *State Environment Planning Policy 71 – Coastal Management* does not apply to land subject to the *State Environment Planning Policy 62 - Sustainable Aquaculture*. However, the advertised draft of a new Coastal Management Policy removes the exclusion for aquaculture.

<sup>xxxii</sup> Section 48 of the MFP Act requires the MFD Plan to be reviewed by the Planning Authority at least every "10 years to ensure that the objectives of resource management, having regard to any relevant changing circumstances, are achieved to the maximum extent possible." The last review of the MFD Plan by DPIPWE was in 2007, and it is due for another review in May 2017. It must be noted that the review of the MFD Plan in 2007 did not consider whether Okehampton Bay continued to be a suitable location for finfish farming.

<sup>xxxiii</sup> GSBC Prosser Plains Raw Water Scheme status report of 17 February 2019, accessed at <https://gsbc.tas.gov.au/wp-content/uploads/2019/02/PPRWS-Status-Report.pdf> on 27 November 2019

<sup>xxxiv</sup> The GSBC has since revealed that it has run out of money to complete the Prosser Plains Raw Water Scheme: see <https://www.abc.net.au/news/2019-09-09/council-cries-poor-and-asks-salmon-giant-tassal-to-pay-for-dam/11488814>

<sup>xxxv</sup> Section 42(1)(b), MFP Act.

<sup>xxxvi</sup> Section 42A, MFP Act.

<sup>xxxvii</sup> Section 77 and 78 of the LMRM Act govern applications and grants of marine farming licences.

<sup>xxxviii</sup> Clauses 3.2.1 and 3.3.5 of the *Storm Bay off Trumpeter Bay North Bruny Island Marine Farming Development Plan August 2018*

<sup>xxxix</sup> Sections 42J(2) and 42K(4) of the EMPC Act respectively.

<sup>xl</sup> See clauses 16.2, 20.1 of the *State Policy on Water Quality Management 1997*, and section 13C of the *State Policies and Projects Act 1993*.

<sup>xli</sup> Personal communication with Ms Bookless. While there is no explicit requirement in the *State Policy on Water Quality Management 1997* for WQO to be published, it would be in line with the EMPC Act's objective of encouraging public involvement in resource management and planning for them to be made publicly available. The EPA's [Fact Sheet on Setting Water Quality Objectives in Tasmania](#) dated February 2015, suggests that the EPA Board would be seeking public comment on the WQOs. To the EDO's knowledge this has not occurred.

<sup>xlii</sup> As much was acknowledged by the Panel in its May 2012 report on its assessment of *Draft Amendment No. 1 of the Macquarie Harbour MFD Plan* where it said (at section 1.5) "An adaptive management approach provides a framework within which the farming operations may occur while more is learnt about its effects. In order for the Panel to support such an approach it needs to be satisfied that any environmental effects caused by marine

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farming operations undertaken in accordance with the development plan can be effectively detected and mitigated without irreversible impacts.”

<sup>xliii</sup> Section 48, MFP Act.

<sup>xliiv</sup> Australia. Parliament. Senate. Environment and Communications References Committee & Urquhart, Anne (2015). *Regulation of the fin-fish aquaculture industry in Tasmania*. Canberra, ACT Environment and Communications References Committee, at [3.92]. In his evidence to the Senate Committee, the Secretary of DPIPWE John Whittington indicated that “DPIPWE would like to further investigate the provision of online reporting of some of the environmental data that it receives and this will be considered over the coming year.” To date there has been no online reporting of this environmental data.

<sup>xliv</sup> Accessible at <https://maps.thelist.tas.gov.au/listmap/app/list/map>

<sup>xlvi</sup> Accessed at <https://dpiipwe.tas.gov.au/sea-fishing-aquaculture/salmon-farming-data-portal>.

<sup>xlvii</sup> While most specific environmental compliance information is difficult to obtain, these companies are now involved in the Sense-T project (a collaboration between UTAS, the Commonwealth and Tasmania Governments) involving real-time reporting of certain environmental parameters within their fish farming leases (although the public does not have access to this information).

<sup>xlviii</sup> The Guardian, ‘Tasmania’s FOI regime crippled by ‘outrageous delays’, academic says’, 13 January 2019. [accessed: <https://www.theguardian.com/australia-news/2019/jan/14/tasmanias-foi-regime-crippled-by-outrageous-delays-academics-say>]

<sup>xlix</sup> Clause 1(c) of Schedule 1 to both the EMPC Act and MFP Act.

<sup>l</sup> The Rio Declaration on Environment and Development, 1992 [Accessed: [http://www.unesco.org/education/pdf/RIO\\_E.PDF](http://www.unesco.org/education/pdf/RIO_E.PDF)]; United Nations Environment Programme 2010. *Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters*, adopted by the Governing Council of the UNEP in decision SS.XI/5, part A of 26 February 2010. [Accessed: <https://www.unenvironment.org/resources/publication/guidelines-development-national-legislation-access-information-public>]

<sup>li</sup> Berry et al, January 2019. ‘Making space: how public participation shapes environmental decision-making’, *SEI Discussion Brief*, Stockholm Environment Institute [Accessed: <https://www.sei.org/wp-content/uploads/2019/01/making-space-how-public-participation-shapes-environmental-decision-making.pdf>]

<sup>lii</sup> See also van Bekhoven 2016. ‘Public Participation as a General Principle in International Environmental Law: Its Current Status and Real Impact’ *National Taiwan University Law Review* 220 [11] 2: 230; Cooper T, Bryer T & Meek J 2006. ‘Citizen-Centred Collaborative Public Management’ 66 *Public Administrative Review* 76-88 at [79-80]

<sup>liii</sup> Section 37(1) of the MFP Act.

<sup>liiv</sup> Sections 8 and 12 of the MFP Act.

<sup>liv</sup> Section 95, MFP Act.

<sup>lvi</sup> See section 5 of the *Tasmanian Planning Commission Act 1997*.

<sup>lvii</sup> Clauses 3.2 and 3.3 of the *Storm Bay North Marine Farming Development Plan November 2017*.

<sup>lviii</sup> Clauses 3.4.1 and 3.4.2 of the *Storm Bay North Marine Farming Development Plan November 2017*.

<sup>lix</sup> Section 50(1) of the EMPC Act.

<sup>lx</sup> Sections 55 and 55A of the EMPC Act.

<sup>lxi</sup> Section 55A(1)(a) of the EMPC Act.

<sup>lxii</sup> Section 55A(1)(b)(i) of the EMPC Act.

<sup>lxiii</sup> See sections 50(1) and 51(1) of the EMPC Act.

<sup>lxiv</sup> Section 64 of the *Protection of the Environment Operations Act 1997 (NSW)*.

<sup>lxv</sup> Environmental licences have a condition regulating the “rolling annual median indicator values” at certain compliance sites. The condition requires that the indicator values, including for ammonia (which contains nitrogen), must not exceed a certain threshold (being a rate per L as measured at surface and bottom waters). However, this condition is only enforceable where the EPA can prove that the nitrogen levels at the compliance site “are directly attributable to marine farming operations”. Where there are multiple marine farms operating in an area and a compliance site is showing higher levels of ammonia that is allowed under the condition, it is difficult to imagine how the EPA could take an enforcement action against the responsible marine farm operator. Likewise, if there

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were other potential sources of nitrogen, such as land-based agriculture nearby, a salmon farm operator might easily raise reasonable doubt as to whether they have breached the condition.

<sup>lxvi</sup> EDO Tasmania's 2012 submission to the Standing Committee on Agriculture, Resources, Fisheries and Forestry inquiry into the Role of Science in Fisheries and Aquaculture provides a summary of enforcement measures undertaken in response to observed breaches of marine farm plan and licence conditions. Compliance data released by DPIWE in response to EDO's request confirm that regulators are far more likely to issue a direction than issue any fine or take any other enforcement action in response to a non-compliance; see [https://dpiwwe.tas.gov.au/Documents/GM\\_Memo\\_Active%20Disclosure%20\(Salmon%20Farming\)%20-EDO.pdf](https://dpiwwe.tas.gov.au/Documents/GM_Memo_Active%20Disclosure%20(Salmon%20Farming)%20-EDO.pdf)

<sup>lxvii</sup> *Huon Aquaculture Company Pty Ltd, Macquarie Harbour Submission to EPA (January 2017)* accessed at <https://www.huonaqua.com.au/wp-content/uploads/2017/03/Huon-Aquaculture-response-to-EPA-draft-biomass-determination-REDACTED-for-public-release-NEW-1.pdf>

<sup>lxviii</sup> *Huon Aquaculture Company Pty Ltd, Macquarie Harbour Submission to EPA (January 2017)* accessed at <https://www.huonaqua.com.au/wp-content/uploads/2017/03/Huon-Aquaculture-response-to-EPA-draft-biomass-determination-REDACTED-for-public-release-NEW-1.pdf>

<sup>lxix</sup> *DPIPWE Macquarie Harbour Status Report Update April 2016*, accessed at <http://dpiwwe.tas.gov.au/Documents/2016%20Update%20to%20the%20Macquarie%20Harbour%20Status%20Report.pdf>

<sup>lxx</sup> *EPA Compliance Summary, Macquarie Harbour, September 2016* accessed at <http://epa.tas.gov.au/regulation/salmon-aquaculture/macquarie-harbour-management>

<sup>lxxi</sup> *Letter from EPA Director Wes Ford to Tassal CEO Mark Ryan dated 20 February 2017* accessed at <http://epa.tas.gov.au/Documents/EPA%2020%20Feb%202017%20Letter%20to%20Tassal%20CEO%20-%20Macquarie%20Harbour%20Lease%20266.pdf>

<sup>lxxii</sup> *EPA responds to media regarding Macquarie Harbour salmon farming\** 28 April 2017 accessed at <http://epa.tas.gov.au/pages/news.aspx?newsstory=3696>

<sup>lxxiii</sup> All the EPA's determinations and correspondence with salmon farm operators about the Macquarie Harbour biomass caps can be viewed here: <https://epa.tas.gov.au/regulation/salmon-aquaculture/macquarie-harbour/management-determinations#tassal>

<sup>lxxiv</sup> See under heading 'Waste Capture System Trial' and 'Waste Capture System Approval, June 2017' at <https://epa.tas.gov.au/regulation/salmon-aquaculture/macquarie-harbour/management-determinations#waste-capture-approval>

<sup>lxxv</sup> *Tassal backs away from dumping treated wastewater from salmon pens back into Macquarie Harbour*, ABC News dated 13 November 2017 accessed at <https://www.abc.net.au/news/2017-11-13/tassal-backs-away-from-dumping-waste-back-into-macquarie-harbour/9145722>

<sup>lxxvi</sup> *Spate of finfish deaths in Macquarie Harbour after warm spell*, The Mercury dated 27 November 2017, accessed at: <https://www.themercury.com.au/business/spate-of-fish-deaths-in-macquarie-harbour-after-warm-spell/news-story/1439dc6bae2c09c24d1dec29baf5dd01>

<sup>lxxvii</sup> *Macquarie Harbour salmon expansion science 'wrong'*, ABC News on 23 March 2018, accessed at: <https://www.abc.net.au/news/2018-03-23/macquarie-harbour-salmon-expansion-science-wrong-admits-epa/9579140>

<sup>lxxviii</sup> Ross and Macleod (2018) *Environmental Research in Macquarie Harbour FRDC 2016/067: Understanding oxygen dynamics and the importance for benthic recovery in Macquarie Harbour PROGRESS REPORT Approved by the Project Steering Committee and FRDC on 8/02/2018* IMAS.

<sup>lxxix</sup> To read a copy of the EPA Director's reasons, click here: <https://epa.tas.gov.au/regulation/salmon-aquaculture/macquarie-harbour/management-determinations#biomass-limit-set>

<sup>lxxx</sup> *Macquarie Harbour salmon: 1.35 million fish deaths prompt call to 'empty' waterway of farms*, ABC News, dated 29 May 2019, accessed at: <https://www.abc.net.au/news/2018-05-29/salmon-deaths-in-macquarie-harbour-top-one-million-epa-says/9810720>

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<sup>lxxxii</sup> To read a copy of the Huon Aquaculture’s 6 April 2018 submission reasons, click here: <https://epa.tas.gov.au/regulation/salmon-aquaculture/macquarie-harbour/management-determinations#biomass-limit-set>

<sup>lxxxiii</sup> On the 20 July 2019, the IMAS released the latest progress report of the environmental health of Macquarie Harbour: Ross *et al* (2019) *Environmental Research in Macquarie Harbour FRDC 2016/067: Understanding oxygen dynamics and the importance for benthic recovery in Macquarie Harbour PROGRESS REPORT Approved by the Project Steering Committee and FRDC on 11/07/2019*, IMAS. The results indicate that middle- to bottom-level water oxygen levels in Macquarie Harbour dipped again to very low levels in spring 2018, but have since improved due to oceanic recharge of the harbour. While no benthic (sediment) faunal surveys were undertaken in spring 2018, the IMAS report concludes that benthic faunal conditions have improved compared to previous years. The report also shows a reduction in bacterial mats in the harbour compared to the same period in 2016 and 2017. EDO contacted IMAS researcher Jeff Ross to find out why benthic monitoring had not been undertaken in spring 2018, being the time mostly likely to show poor benthic conditions. Mr Ross explained that when research project was extended by the EPA, the number of benthic fauna surveys were reduced based on a “balance of logistics, costs and information gained.” Mr Ross said that he considered that the level of benthic monitoring would still provide a good indication of environmental conditions.

<sup>lxxxiiii</sup> *Scientists urge action to protect habitat of Tasmania's endangered ancient skate* ABC News dated 2 December 2018 accessed at: <https://www.abc.net.au/news/2018-12-02/skate-study-endangered-fish-waters-tasmania/10572918>

<sup>lxxxv</sup> By way of example, under s.80 of the *Aquaculture Act 2001* (SA), the Minister must maintain a register of applicants for aquaculture leases, the terms and conditions of aquaculture leases and licences, and a summary of each environmental monitoring report furnished to the Minister in accordance with regulations or lease or licence conditions. This register is to be kept available for free public inspection. Under s.154 of *Fisheries Management Act 1994* (NSW), a register of aquaculture permits are required to be kept, including any details of suspension or cancellation of a permit, and under r.44(3) of the *Fisheries Management (Aquaculture) Regulation 2012* (NSW).

We further note that in most other Australian jurisdictions, similar information relating to activities that have the potential to cause environmental harm is required to be kept on a public register (see Part 4, Chapter 11 *Environmental Protection Act 1994* (Qld); Part 9.5 of *Protection of the Environment Operations Act 1997* (NSW); ss23, 31D, and 67G *Environment Protection Act 1970* (Vic); s.109 *Environment Protection Act 1993* (SA)). Tasmania’s EMPC Act, does have a form of a public register for environmental management and enforcement instruments, however under the proposed reform of the Act, this register will be unlikely to capture the full breadth of information relating to the approval and regulation of salmon farms, even where they are granted an Environmental Licence.