MARINE FARMING PLANNING IN TASMANIA – THE PERSPECTIVE OF THE PLANNING AUTHORITY

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• Context
• A quick history of the aquaculture planning process in Tasmania
• The Economic Development Plan
• Current planning regime
• Regulatory approach
I. THE OBJECTIVES OF THE RESOURCE MANAGEMENT AND PLANNING SYSTEM OF TASMANIA 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.
Tasmania has a long history of marine farming

Culture of native oysters commenced in the 1800s

By 1887 there were 33 established oyster farms
In the 1940s and 1950s the CSIRO introduced Pacific oysters to expand the industry in Australia.

Government and industry developed oyster hatcheries in the 1980s to provide more certainty of supply.
Trout introduced into the state in the early 1860’s

Successful Rainbow trout culture trials in marine environment in 1980

Atlantic salmon ova was introduced in 1984
Around 150 shellfish and finfish marine farming leases were allocated under the *Fisheries Act 1959* between 1980 and 1993.

Leases could be anywhere and allocated with limited public consultation.

Rapid expansion under outdated legislation led to a moratorium on the allocation of leases in the early 1990s.

To help industry reach its potential, specific legislation was introduced to provide for orderly and sustainable development.
Farm gate value = $400 M

Employs 1100 people in predominantly regional areas

Largest marine farming sector in Australia

Domestic demand is driving growth – industry plans to meet consumer demand with sales of $1 Billion by 2030
Farm gate value = $24 M

Employs 300 people

Oyster growers produced approximately 3,980,587 dozen oysters in 2010

Equates to around 3400 tonnes
Developing the Salmonid Industry has been identified as a key priority by the State Government in Tasmania’s Economic Development Plan.

Tasmania has natural and competitive advantages in producing salmon for the Australian market.
The *Marine Farming Planning Act 1995* provides for:

- Preparation of marine farming development plans
- Amendments to plans
- Reviews of plans

Plans establish zones where marine farming leases may be located. Plans and zones specify:

- The maximum lease area that can be granted in a zone
- The species that may be farmed within a zone
- Operational constraints on marine farming through the use of Management Controls
The objectives of the *Marine Farming Planning Act 1995* are to:

- Integrate marine farming activities with other marine users
- Minimise any adverse impacts
- Take account of land uses
- Take account of the community’s right to have an interest in those activities

The Act establishes the Marine Farming Planning Review Panel, an expertise and ability based panel to consider draft plans and draft amendments to plans, and make recommendations to the Minister.
ZONES AND LEASES – WHAT IS THE DIFFERENCE?

Zone boundary – no marine farming equipment to extend beyond zone boundary

Lease boundary

All marine farming equipment (moorings etc...) – at least 5 metres below surface outside lease boundary

Zone boundary – no marine farming equipment to extend beyond zone boundary
1. Proposal, application and Environmental Impact Statement

2. Consideration by Marine Farming Planning Review Panel (Panel) with direction to proceed to prepare amendment or not


4. Consideration by Panel and recommendation to the Minister – may go back to 2.
The Act requires that a new plan or a draft amendment be accompanied by an EIS

An EIS must:
• Disclose any available information relating to the environmental impact of the draft amendment

• Contain information appropriate to the significance of the amendment to the environment and the likely public interest
The EIS methodology is contemporary, but recognises any form of predictive assessment may have limitations

Accordingly, an EIS will usually include a detailed environmental management program to gather information about effects, and to allow future evaluation of mitigation measures

Draft amendments will have management controls that provide for future adaptive management if required

This provides an adaptive management framework based on monitoring, modelling, and review
The regulation of marine farming activities is achieved through multiple controls. These are provided by:

1. Statutory provisions under the *Marine Farming Planning Act 1995*
2. Marine farming lease conditions
3. Marine farming management controls contained within plans
4. Marine farming licence conditions
Example: Benthic Monitoring

• The benthic environmental monitoring approach was formalised in 1997 in consultation with a range of stakeholders including industry, the CSIRO, the Tasmanian Conservation Trust, and community

• The program represents the integration of management controls and licence conditions to inform lease and licence holders of obligations, and to provide the head of power for the Department to monitor and respond to compliance concerns.
3.1 General controls for all marine farming zones

Finfish 3.1.1 There must be no unacceptable environmental impact, to the satisfaction of the Secretary, 35 metres outside the boundary of the marine farming lease area. Relevant parameters must be monitored in the lease area, 35 metres from the boundary of the marine farming lease area and at any control site(s) in accordance with the requirements specified in the relevant marine farming licence.
There must be no significant visual, physico-chemical or biological impacts at or extending beyond 35 metres from the boundary of the Lease Area. The following impacts may be regarded as significant. Visual impacts:

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

In the event that a significant visual impact is detected at any point 35 metres or more from the lease boundary, the licence holder may be required to undertake a triggered environmental survey or other remedial activity determined by the Director.
• The licence condition on the previous slide clearly describes to the licence holder the likely response to evidence of non-compliance.
• This would be a triggered follow up survey and potential remediation activities at the instruction of the Director Marine Resources.
• It is important to note - there is no ecological risk in a breach of this type of condition – but rather a breach regarding the spatial extent of what are the anticipated impacts of farming.
• Gathering information to better understand risks is a key component of adaptive management
As with standard environmental compliance and enforcement programs in Australia, a pyramid approach is taken.

Prosecution by infringement notice or through the courts – Should be extremely rare

Administrative action such as formal written warning – Should be uncommon

Education and persuasion to achieve compliance – Should be occasional

No action due to compliance – Should be most common by far

Response Factors

- Significant harm, intention, responsibility avoidance
- Lower impact, negligent or reckless harm, proactive response from offender
- Minor breaches, low impact, already addressed by offender

Adapted from Ayres J and Braithwaite J, Responsive Regulation (Oxford Uni Press, 1992)
• Compliance is managed according to the Department’s Legislative Enforcement and Compliance Policy.
• This provides a framework for detection, investigation, and response to matters of non-compliance.
• Under the marine farm inspection and environmental management programs, marine farms are usually inspected and surveyed at least once per year for surface and benthic compliance.
• Responses are usually most severe where matters of public safety are at question.
• The majority of environmental controls are about sustaining the maximum production possible from the resource.
PLANNING AND REGULATORY INFORMATION USED AS THE BASIS FOR THIS PRESENTATION IS PUBLICLY AVAILABLE AT:

www.dpipwe.tas.gov.au
and
www.thelaw.tas.gov.au

THANK YOU