

# SEAL MANAGEMENT FRAMEWORK 2018

*FOR THE MITIGATION OF SEAL INTERACTIONS WITH  
AQUACULTURE STAFF AND INFRASTRUCTURE IN TASMANIA*

Wildlife Management Branch  
Natural and Cultural Heritage Division  
Department of Primary Industries, Parks, Water and Environment



# Seal Management Framework 2018

## I. BACKGROUND

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Marine farming of salmonid fish (Atlantic salmon and ocean trout) commenced in Tasmania in the mid-1980s and has since expanded to be the largest primary industry in the State. In 2016-17, Tasmanian salmonid farming had a gross revenue of \$726 million and the industry aims to become a \$1 billion a year industry by 2030.

In Tasmania, fur seals are known to interact with marine farming operations. Some interactions present a risk to the health and safety of marine farm workers and to the welfare of the seals. Seal interactions may also cause loss or damage to fish stocks, and interfere with or damage industry infrastructure.

Types of interactions experienced at salmonid farms requiring management intervention may include:

- Fur seals entering or interfering with stocked and unstocked fish containment pens;
- Fur seals being trapped between or entangled in marine farm infrastructure;
- Fur seals creating holes in fish containment and wildlife exclusion netting to access fish stock;
- Fur seals interfering with farm infrastructure or vessels and presenting an unacceptable risk to work health and safety of marine farm staff.

This *Seal Management Framework* (the Framework) adopts an adaptive management approach to manage the risks posed to both human and wildlife interests from fur seal interactions on marine farming leases. The Framework applies only to marine fin-fish farming operations in Tasmania.

Two species of fur seal are commonly found in south-east Australia; the Australian (*Arctocephalus pusillus*) and New Zealand (long-nosed) (*A. forsteri*) fur seal. Seal interactions with marine farming operations in Tasmania primarily involve male Australian fur seals, however New Zealand (long-nosed) fur seals are also encountered infrequently. Seal interactions with marine farms in Tasmania typically peak during winter when fur seals disperse from their summer breeding locations.

Australian and New Zealand (long-nosed) fur seals are scheduled respectively as Protected and Specially Protected Wildlife under the *Wildlife (General) Regulations 2010*, and as such are afforded statutory protection. The New Zealand (long-nosed) fur seal is also listed as *Rare* under the *Tasmanian Threatened Species Protection Act 1995*. The Department has responsibility for administering both these pieces of legislation.

## 2. OBJECTIVES

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The Framework and supporting documents aim to provide:

- A framework for the management of fur seal interactions with the marine farming industry on marine farming leases in Tasmania to help minimise risk to farm staff and seal welfare;
- Detail of wildlife exclusion measures that must be met on marine farming leases for access to approved fur seal management options;
- A set of seal management options for the marine farming industry to access, and clear requirements and processes for undertaking seal management activities;
- Clear requirements for compliance and auditing; *and*
- Flexibility to accommodate future advances in infrastructure development and changes in environmental pressures.

## 3. PRINCIPLES

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The Framework outlines the broad marine farm seal management system in Tasmania, with detailed procedural information provided in the supporting *Minimum Requirements for the Mitigation of Seal Interactions with Aquaculture Staff and Infrastructure 2018A* (the Minimum Requirements).

The Framework recognises the marine farming industry's need for certainty and timeliness when managing seal interactions, particularly when responding to fur seals that represent a Work Health and Safety (WHS) risk to staff, or that may be causing damage to marine farming infrastructure and fish stocks. The Framework also recognises that farm staff are best placed to provide rapid and effective responses to manage seal interactions on marine farms.

Under the Framework, marine farming lease holders that demonstrate approved wildlife exclusion standards, and have agreed to implement policies and procedures in accordance with the minimum requirements for a particular management option, are permitted to undertake approved seal management actions. Wildlife exclusion measures largely focus on exclusion of fur seals from fish containment pens, but also include a number of requirements for exclusion of birds.

Management actions and procedures implemented by the marine farming industry must meet and, where possible, exceed the minimum requirements identified for each seal management option and subsequently described in Standard Operating Procedures prepared by individual marine farming companies and approved by the Department.

The Framework recognises that management approaches, technology, design and available materials will change with time. In addition, environmental conditions and the abundance and behaviour of fur seals may also change. With the Framework approved by the Minister, the Minimum Requirements may be periodically modified by the Secretary, in consultation with the marine farming industry, without a change to the Framework. Assessment of new management methods will consider risks to animal welfare as well as the risk of adverse impacts on the well-being and livelihood of Tasmanian industries and communities.

## 4. GOVERNANCE

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The Department provides an oversight, permitting and audit role to ensure the *Minimum Requirements for Wildlife Exclusion Measures (MRWEM)* and seal trapping and holding obligations are met and seal management activities are conducted appropriately.

Direct management actions are largely undertaken by the marine farming industry, under permit where appropriate. This facilitates effective and timely management of seal interaction issues by marine farm staff, while ensuring that management actions are undertaken in an agreed, appropriate and transparent manner.

Review of the Framework may be undertaken periodically as required but at least every three (3) years by the Department's Wildlife Management Branch, with industry and stakeholder consultation.

Amendments to the Seal Management Framework require approval from the Minister for Primary Industries and Water.

Amendments to the subsidiary Minimum Requirements require approval from the DPIPW Secretary.

## 5. MANAGEMENT OPTIONS

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The following provides a summary of management options available to the marine farming industry under the Framework. Requirements and procedural details for each option are defined in the *Minimum Requirements 2018A* document and relevant Standard Operating Procedures prepared by individual marine farming companies and approved by the Department.

### **5.1 Wildlife Exclusion**

Design features of fish containment pens intended to exclude wildlife from fish stock held in fish containment pens continue to evolve as fur seals, in particular, learn to locate and create weaknesses in pen defences. Compliance with the *Minimum Requirements for Wildlife Exclusion Measures (MRWEM)* is an essential prerequisite for any marine farming company wishing to operate under the Framework and access the following approved seal management options.

### **5.2 Seal Deterrent Devices**

Seal deterrent devices may be deployed under permit to deter fur seals from presenting an unacceptable risk to marine farm staff or interfering with marine farming infrastructure. The following deterrent devices, subject to conditions and limitations detailed in the *Minimum Requirements 2018A* and on relevant permits, are available under the Framework:

- **Seal Control Units (Crackers):** explosive charges that are thrown into the water to detonate under the surface.
- **Beanbags:** lead-filled projectiles, capable of being fired from a choke-less 12-gauge shot gun.
- **Seal Scare Caps:** blunt pre-stressed darts fired from a DPIPWE-approved firearm, which detonate on impact with the target.

### **5.3 Trapping**

Trapping may be undertaken under permit to remove fur seals from within marine farming infrastructure or a farm lease area, principally to limit loss of fish stock and to minimise work health and safety risks to farm workers. A trapped seal can either be released within the marine farming lease on which it was trapped, or at a DPIPWE-approved shore-based facility where it may be held for an approved period prior to release.

Relocation of trapped fur seals from marine farming leases to other parts of the state for seal interaction management purposes is not allowed due to its potential to cause unwanted impacts on local communities and other industries, in particular on commercial and recreational fishers.

### **5.4 Sedation**

Sedation and removal of a fur seal from a fish containment pen may occur under permit when an individual seal enters, but will not exit, a fish containment pen in response to appropriate deployment of deterrent devices. Sedation is achieved via the use of a tranquiliser firearm and sedative under appropriate veterinary authority.

### **5.5 Humane Destruction**

Humane destruction of an individual fur seal identified as presenting a significant Work Health and Safety risk to marine farm staff may occur under permit as a management option of last resort and only under specific circumstances with approval from the DPIPWE Secretary.