SUSTAINABILITY REPORT 2017

tassalgroup.com.au

Contents

We value your feedback on this report and any questions you may have regarding our operations.

For more information, contact us at community@tassal.com.au


Mark Ryan

Reflections

Message from
Allan McCallum, *Chairman* and
Mark Ryan, *Managing Director & CEO*

We see what is good for the world and good for business are intrinsically linked. As the world's population grows, so does demand for vital resources including food, energy and healthy and responsible supply chains. Precious resources must be produced with a focus on minimising carbon footprints and protecting the natural environment.

As a proud Tasmanian company, which started from humble beginnings, we have evolved to become Australia's number one ocean farmer of nutritious Salmon and a leading provider of Seafood. We recognise the immense responsibility to farm and source produce with minimal environmental impact, whilst maximising shared value in the communities where we operate.

The world's oceans are fragile, and, if not treated responsibly, may result in significant implications for wild capture fishing industries, food security and marine eco-diversity. But, as the world's population grows, so too does the demand for sustainable food and we see Salmon and Seafood playing a key role in this.

In 2016 the world took substantial steps towards building a future to ensure resources are produced in a responsible way. The release of the United Nations Sustainable Development Goals (SDGs) set new targets for food security through sustainable farming, preserving waterways for sustainable development, tackling climate change, providing access to modern energy and promoting sustainable economic growth.

It has been a watershed year for Tassal, achieving record results against the backdrop of industry challenges and heightened scrutiny. For our business, and our people, there have been reflections and many learnings embraced. As part of a refreshed strategy, in line with the Sustainable Development Goals and supported by world-class partnerships and certification programs, we have set long term social and environmental ambitions which centre on collaboration, shared value and responsible farming.

Tassal has learned valuable lessons which we believe are necessary to informing a pathway to achieve responsible, sustainable growth. We understand ensuring a comprehensive approach to growth planning is paramount – particularly as we grow into new areas. This planning must include a deep assessment of environmental, operational, shared user and social overlays. For Tassal, our commitment is to continue to serve better: better quality Salmon, better environmental outcomes; better community opportunity and an overall better future for our people, communities and the world.

Fostering Shared Value

We are very proud Tassal helps to create and generate a substantial number of jobs in Tasmania. With our ocean farms established in economically and socially fragile communities, our investments into local people, organisations, businesses, state taxes, salaries and wages build better supply chains and improve social outcomes and access to better services for Tasmanians. Yet we understand we need to do more. Through programs focused on collective social impact and responsible farming, we can play a significant role in improving the lives and opportunities for our people, local community members as well as our national and global consumers. We understand as we grow, the more we need to do in fostering greater levels of shared value.

Think Global, Act Local

We are committed to a responsible, successful business strategy to improve shared value in our farming regions. Whilst considerable sustainability outcomes have been achieved through the global gold standard Aquaculture Stewardship Council (ASC), our valued partnership with WWF-Australia and our consistent benchmarking in the top three companies globally by Seafoodintel.com for transparent corporate sustainability reporting, we recognise more than ever it is equally vital to establish strong, healthy partnerships with our communities to achieve mutually satisfactory benefits and outcomes.

This is why in 2017 we adopted a new way of working with our communities through the establishment of the Tassal Community Foundation. Our Foundation is underpinned by core social, economic and environmental pillars, guiding our community based decisions and promoting a formal, collaborative engagement model. Dedicated 'Community Advisory Groups', with representatives across each core community pillar, have been established with the purpose of strengthening communities and meeting and exceeding expectations from an environmental, social and economic perspective. With this in mind, we are playing our part to support every community in which we operate into becoming an important contributor to Tasmania and Australia, whilst adopting farming solutions and practices which off-set impacts and therefore support our long-term operations and production of a healthy food source for future generations.

A Better Tomorrow

Protecting and rejuvenating our ocean farming areas ensures we are hand-raising our Salmon in healthy marine environments, minimising our impact from sustainable farming and investing in restoration and environmental compensatory programs which benefit our business, the eco-system and the community.

Our refreshed strategy aims to build on innovations and world-leading practices in place, whilst promoting further research and development with our Tasmanian, Australian and global industry peers.

Tassal believes it is time for bold moves to retire in-shore leases and transition to oceanic farming environments, where it makes social, environmental and operational sense to do so.

Tassal will be the first Tasmanian Salmon farming company to commence the phased retirement of in-shore farms in line with its strategy to future farm in more oceanic environments further off-shore.

We have committed to research and development over the past six years to support safe operations in some of the wildest conditions farmed globally, and it is timely to commence a transitional process towards future off-shore farming in 2018, a decision which centres on smarter and more responsible commercial farming.

Our commitment to maintaining globally high standards in responsible ocean farming is underpinned by continuous improvement. Over the next five years we will invest $275 million to effectively continue to improve year on year.

This includes:

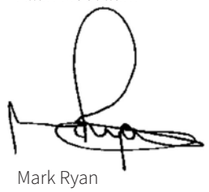
- World leading biosecurity practices
- A focus for future grow-out sites to be off-shore oceanic farms
- Continuing to produce Tasmania's largest smolt in our land based nurseries and promote further growth in this area
- Further investment in eco-aquaculture projects at our existing farms to off-set environmental impacts and rejuvenate local, native species for an improved marine environment
- Continued fast-track roll out of world-leading ocean sanctuary enclosures, allowing fish to be hand-raised with plenty of room to swim and grow safely and healthily
- Substantial progression of current trials into adoption of natural, organic feed materials
- Adopting carbon-neutral innovations focused on renewable energy, recycling and reuse
- 100% regulatory compliance across all leases maintained
- 100% ASC certification across all our harvest produce maintained
- 100% fully traceable, responsibly sourced Seafood maintained

Tasmanians deserve a responsible Salmon farming industry they can be proud of. An industry which is held up as best practice globally and fully integrated into Tasmania's economic, tourism and hospitality landscape.

Our commitment is to work collaboratively to foster an all of industry approach to achieving sensible and forward-looking ambitions.

We will continue to innovate and invest to achieve these outcomes and unlock further potential. The Tassal way is an ongoing commitment to serving our communities and stakeholders, to create a better tomorrow.

Allan McCallum



Mark Ryan


Allan McCallum

Our Journey

Message from Linda Sams,
Head of Sustainability

It is often said sustainability is a journey and not a destination.

And so, it is truly fitting as I prepare to embark on a new stage of my career, returning to Canada, I reflect on the Tassal journey – one which I am immensely proud of and one which I passionately believe is only just beginning.

When I began my relationship with Tassal back in 2008 our vision was to be the leading Salmon producer in Tasmania and Australia, adopting best practice global processes to achieve this.

In 2014 we achieved a mighty goal and became the first Salmon company in the world to successfully certify all our sites to the Aquaculture Stewardship Council (ASC) standard. The ASC is the highest level of certification available globally and assures consumers and communities the company is adopting responsible processes across all its operations. It also ensures full produce traceability and the highest levels of open and transparent reporting.

Along the way many lessons were learned and we understand it is not only about our ability to report transparently, but equally it is our responsibility to understand local priorities and listen to community feedback, concerns and opinions on sustainability. It is also about understanding how to effectively communicate and make often complex and voluminous information accessible. It is about fostering a healthy dialogue and to ensure we're addressing the issues which matter the most and engaging more.

We want to be at the forefront of change – I truly believe it is an integral part of our culture and our people are champions of innovation and improvement. We have this year made significant improvements to the way we engage but there is so much to still be achieved. We recognise more than ever while an annual sustainability report is an excellent way to consolidate milestones and achievements across the course of 12-months and to present validated data which can be trusted, we must also become more conversational, providing information in real-time, talking to all our stakeholders in a way which is both understandable and targeted at key priorities.

We have significantly invested in improved engagement and communications to ensure community dialogue is part of the way we do business every day. We have also welcomed the establishment of dedicated Community Advisory Groups in every region to foster an approach to achieving shared value in Tasmanian regional communities.

A key learning for Tassal has been a strong focus on continuous improvement across all our sites is fundamental to achieving a sustainable balance, whilst supporting our business in meeting its growth targets responsibly.

I am extremely proud to be part of the most innovative team I have ever worked with in my 30 years of Salmon farming and it is important we reflect on the work to date achieved in multi-trophic farming trials, which assist to foster an eco-aquaculture environment to off-set impacts from Salmon farming, whilst also nurturing and preserving precious marine ecology. Through trials conducted over the past two years, particularly in seaweed cultivation across several Tassal sites, the eyes of the world have been on us. It is a scientific area we have bolstered internal resources in and I am certain I will find a way to collaborate on these types of projects from Canada, into the future.

Together with the company's bold vision to farm in the most off-shore site ever farmed in Tasmania at Storm Bay, in some of the wildest conditions globally, continuing to grow the young fish in land based nurseries to larger sizes and continued trials into natural feed solutions, I could not be prouder of the people I have had the pleasure of working with.

Tassal is in a strong position to adopt the United Nations Sustainable Development Goals to support food security through sustainable farming, preserving waterways for sustainable development, tackling climate change, providing access to modern energy and promoting sustainable economic growth.

Through deeper engagement, commitment to achieving its vision and world-class standards I am confident Tassal will continue to evolve in a way its people, communities and industry colleagues can be immensely proud of and it has been my pleasure to be part of this incredible journey.

Lastly, I am also very pleased to communicate the Environment team will be left in the extremely capable hands of Sean Riley. Sean has over 25 years of experience in a range of scientific research and natural resource management roles within government and industry organisations. He has a long career devoted to marine resource management issues, marine research and fisheries management. Meanwhile our stakeholders will be in the hands of our Head of Engagement, Barbara McGregor.

Although saying goodbye is never easy, the aquaculture industry is a true fraternity and I look forward to an ongoing relationship with my colleagues and friends at Tassal as they enter into their next exciting chapter.

Linda Sams

About this Report

Tassal has been reporting using the Global Reporting Initiative (GRI) since 2011. We're very pleased to present you with our seventh annual sustainability report, which is aligned with the GRI Standards released in 2016. The report has been prepared in accordance with the GRI Standards: Core option, and provides an overview of our performance on material topics for the FY2017 period (1st July 2016 to 30th June 2017). Restatements of data from previous years have been identified throughout the report as necessary. The report boundary has changed with the closing of Tassal's Salmon Shop in Kew, Victoria.

Applying the GRI Reporting Principles for Report Content

We have incorporated the GRI Reporting Principles for Report Content as follows:

- Topics included in the report reflect the outcomes of consultation with internal stakeholders and external stakeholders: GRI Principle 'Stakeholder Inclusiveness'
- All information is presented so readers can understand Tassal's operations in the broader sustainable development context in both aquaculture and global sustainability issues: GRI Principle 'Sustainability Context'
- Internal stakeholders took part in identifying material topics; stories and data included relate to these material topics with any divergence only to provide additional context: GRI Principle 'Materiality'
- We believe all topics considered material and reported include those which are significant to Tassal and the aquaculture sector. This will enable stakeholders to make informed decisions on Tassal's sustainability performance. Boundaries have been defined for all topics: GRI Principle 'Completeness'

Data

We stated in our FY2016 report the intention to include environmental and animal welfare for De Costi Seafoods, which became part of the Tassal Group family in FY2015. Our data systems have unfortunately not yet been streamlined to the point where we can include this data, and we aim to have this resolved for the next reporting year.

Data	Tassal Group Salmon	De Costi Seafoods
Environmental	Marine Operations, Freshwater Hatcheries and Processing	N/A
Animal Welfare	Marine Operations, Freshwater Hatcheries and Processing	N/A
Human Resources	All	
Quality	All	
Safety (including contractors)	All	
Financial	All	

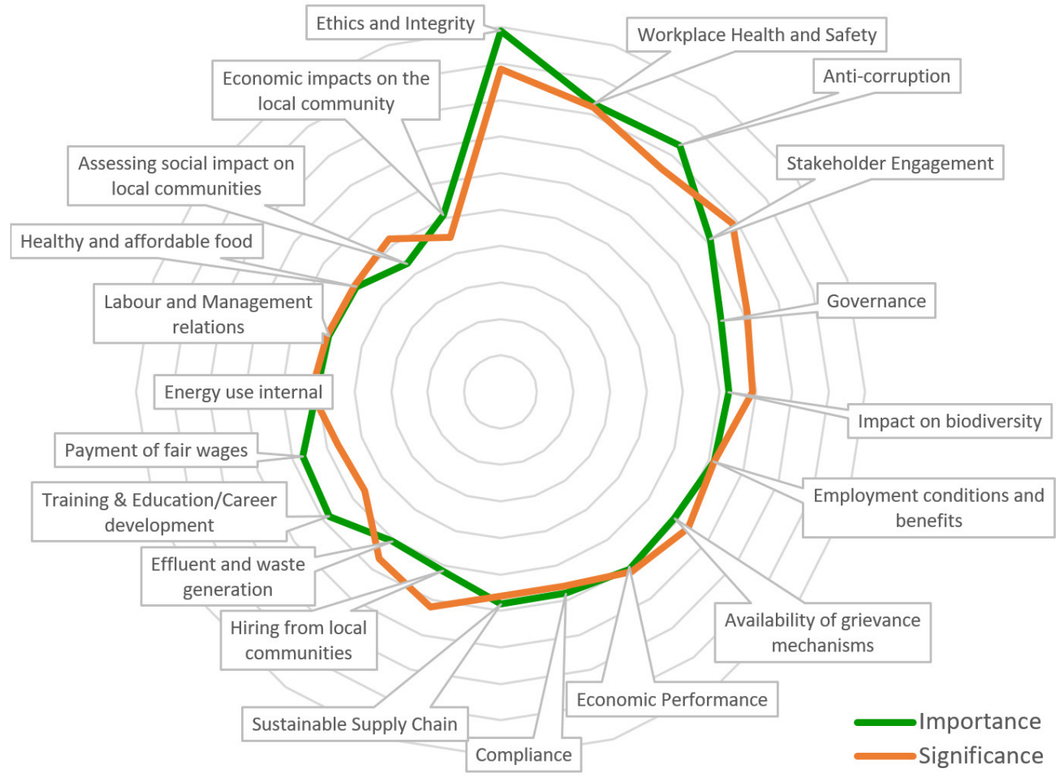
Assurance

Formal external assurance was not undertaken for this report, however, a third-party review of Tassal's reporting against the GRI Standards was conducted by sustainability consultancy ZOOiD. Financial, Salmon freshwater and marine operations, Safety and Food Quality data is independently audited annually.

Reporting on Material Issues

To prepare for the compilation of Tassal Group's FY2017 Sustainability Report, a bi-annual materiality assessment was completed using the online Materiality Assessment Tool (MAT). The MAT was undertaken by 25 Tassal managers to identify the sustainability issues which are most material to the organisation and to their own values.

While Climate Change and Animal Welfare were not identifed as material in this process, we have included these topics as we believe they are highly material to the aquaculture sector.



The Tassal Group

Tassal Group Limited (ASX:TGR) is a vertically integrated Salmon grower and Salmon and Seafood processor, seller and marketer. Tassal produces and sells premium Salmon and Seafood products for both the Australian domestic and export markets. Tassal grows delicious, fresh and healthy Atlantic Salmon in Tasmania's fresh waters, and, through its De Costi Seafood business, sources and processes a wide range of Seafood. Tassal is committed to taking a leadership role in sustainability in aquaculture and Seafood sourcing.

Our Brands

Financial Performance ($Am)

Statutory Results	2017	2016		Change
Revenue	450.45	430.92	▲	4.5%
EBITDA	114.55	97.29	▲	17.7%
EBIT	93.62	76.28	▲	22.7%
NPAT	58.08	48.49	▲	19.8%
Operating Results				
Operating EBITDA	88.97	82.18	▲	8.3%
Operating EBIT	68.03	61.17	▲	11.2%
Operating NPAT	42.19	37.92	▲	11.3%
Operating cashflow	51.36	50.22	▲	2.3%
Final dividend - cps	7.50	7.50		0.0%
Total dividend - cps	15.00	15.00		0.0%
Gearing Ratio	12.4%	33.5%		
Funding Ratio	24.3%	44.6%		

A comprehensive overview of financial data is available on page 28 in the Tassal Group Limited Annual Report 2017: www.tassalgroup.com.au/annual-reports/

Operating Revenue - Salmon & Seafood ($Am)

Operating Revenue	2017	2016		Change
Salmon	371.86	359.13	▲	3.5%
Seafood	72.86	66.05	▲	10.3%
Total Revenue	**444.72**	**425.19**	▲	**4.6%**
Domestic Sales	**2017**	**2016**		**Change**
Salmon	330.94	346.92	▼	(4.6%)
Seafood	69.64	65.22	▲	6.8%
Total Revenue	**400.58**	**412.14**	▼	(2.8%)
Export Sales	**2017**	**2016**		**Change**
Salmon	40.92	12.21	▲	235.1%
Seafood	3.22	0.84	▲	284.8%
Total Revenue	**44.14**	**13.05**	▲	**238.3%**

Salmon Sales

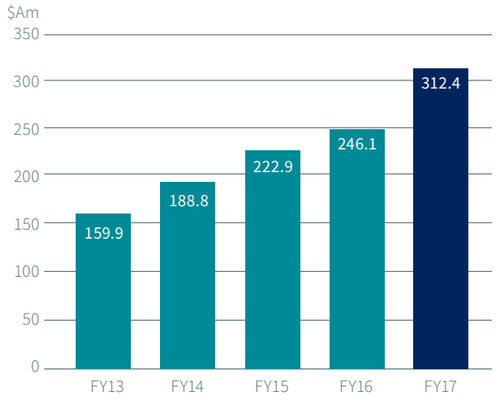
	Volume	Revenue
Unbranded	47%	51%
Branded	53%	49%

*Tassal and De Costi consolidated

Salmon

Our Salmon is farmed Atlantic Salmon: ***Salmo salar***.

Biological Assets (Salmon)



Harvest tonnage: 25,432.25 hog tonnes

Fish in sea water: 10,635,249

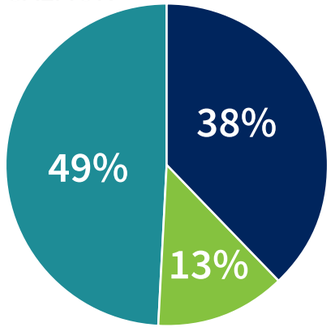
Fish biomass in sea water: 21,778.27 live weight tonnes

Combined processing output: 25,537.86 hog tonnes

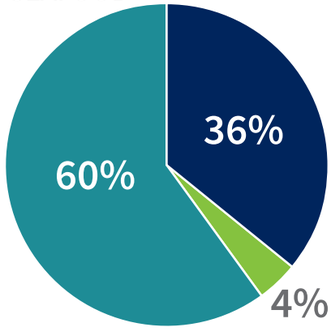
Fishmeal and Fish oil output: 3,981,415 kg

Markets

SALMON



SEAFOOD



Domestic Retail

Domestic Wholesale

Export

(Figures are based on revenue)

Our Export Markets

Bangladesh

China

Thailand

Malaysia

Japan

Taiwan

Indonesia

Singapore

Our Retail Customers

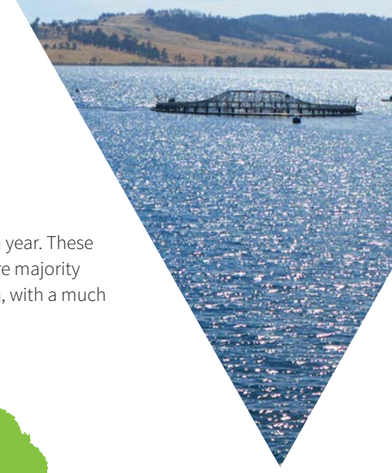
Woolworths

coles

Metcash

ALDI

Our Operations



Tassal operates three hatchery/nurseries which have the capacity to produce circa 10 million smolt a year. These smolt come from broodstock courtesy of an industry Selective Breeding Program (SBP). The smolt are majority reared at the company's state-of-the-art land-based Rookwood Road Nursery in Ranelagh, Tasmania, with a much smaller number reared at our flow through hatchery at Russell Falls. After eight to 12 months the smolt are transferred to sea.

Tassal has four marine zones, where the standard pen has a volume of 11,600 cubic meters and holds enough Salmon to produce approximately 120 tonnes once harvested. Salmon are kept in these large sea cages for between 12 – 18 months and continue to grow until they are ready to be harvested. Our target size is an average weight of 5.0 kg head on gutted (HOG) weight.

Corporate Governance

We aim to achieve best practice across all of our operations. Tassal's Board of Directors and its subcommittees oversee the company's governance framework; however, we take the view governance is not just a matter for the Board and management, and a good governance culture should be embedded across the business.

We are focused on achieving a whole of organisation approach to governance, and focus on transparency, accountability, stewardship and integrity. Tassal adopts and is committed to the ASX Corporate Governance Principles and Recommendations and Tassal's risk management system is supported by a well-structured framework and policy, which is based on AS/NZS ISO 31000:2009 and the ASX Corporate Governance Principles and Recommendations.

Our detailed corporate governance framework reflects our commitment to act ethically, openly and fairly and allows us to manage risk in line with organisational and strategic objectives. We engage widely with the community and are committed to being accountable and transparent through our behaviour and communications.

Tassal's recently formed Health & Safety and Environment & Community Committee (HSEC) has been designed to assist the Board:

a. In its oversight on health & safety, food safety and environmental matters arising out of Tassal's activities as they may affect employees, contractors and the local communities in which it operates; and

b. Making recommendations to the Board in relation to the effectiveness of Tassal's risk management and regulatory compliance frameworks pertaining to health, safety (including food safety) and the environment.

The committee has responsibility for Tassal Group's Health and Safety strategy as well as the Environment and Community Sustainability strategy.

A diverse range of operational and sustainability performance information, including audit information is made publicly available.

Tassal's Code of Conduct provides clear guidelines for the ethical and behavioural standards expected of its Directors and all employees and a comprehensive suite of policies cover all elements of organisational governance.

Tassal invests heavily in research to ensure integrity, compliance and improvement throughout our operations. Reliance on research and scientific evidence provides accountability and diligence in our decision making and fosters a culture of good governance.

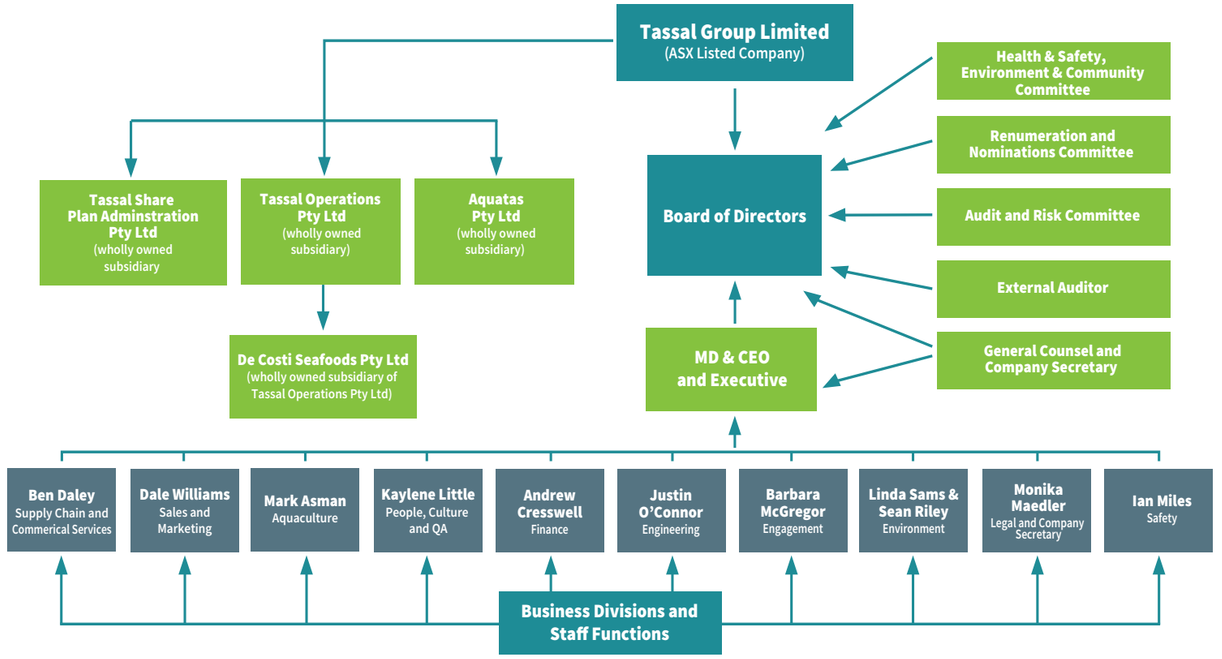
During the reporting period, an allegation was made Tassal was in contempt in relation to the rules of a Senate Inquiry in 2015. These allegations were vigorously denied by Tassal, and the matter was referred to the Senate Standing Committee of Privileges for review. The Committee recommended to the Senate a contempt should not be found, and the Senate accepted this recommendation.

Relevant Statements, Policies and Charters:

- **Code of Conduct**
- **Fraud Policy**
- **Whistleblowing Policy**
- **Ethical Behaviour Policy and Procedures**

http://www.tassal.com.au/governance-policies/

Governance Structure



Memberships and Committees

Tassal is a member of the following organisations:

- Tasmanian Salmon Growers Association
- Tasmanian Seafood Industry Council
- National Aquaculture Council
- Australian Human Resources Institute
- Institute of Engineers Australia
- Governance Institute of Australia Ltd
- Association of Corporate Counsel (ACC)
- Biosecurity Australia – Biosecurity Roundtable

Board Membership:

- Seafood Training Tasmania

Tassal staff also sit on the following committees:

- Agrifood Seafood Advisory committee
- Institute of Marine and Antarctic Studies Research Advisory Committee
- Gill Health Initiative Steering committee
- Birds Tasmania
- Derwent Estuary Program
- D'Entrecasteaux and Huon Collaboration
- Sense-T
- Australian Diver Accreditation Scheme (ADAS)
- Better Work Tasmania (BWT)
- Safety Institute of Australia (SIA)
- Member of Australian Institute of Company Directors (MAICD)
- Agri Food Advisory Board
- Employer of Choice reaccreditation committee
- Seafood Training Tasmania board
- Sustainable Agriculture Initiative (SAI) Platform Australia

The Tasmanian Salmon Industry

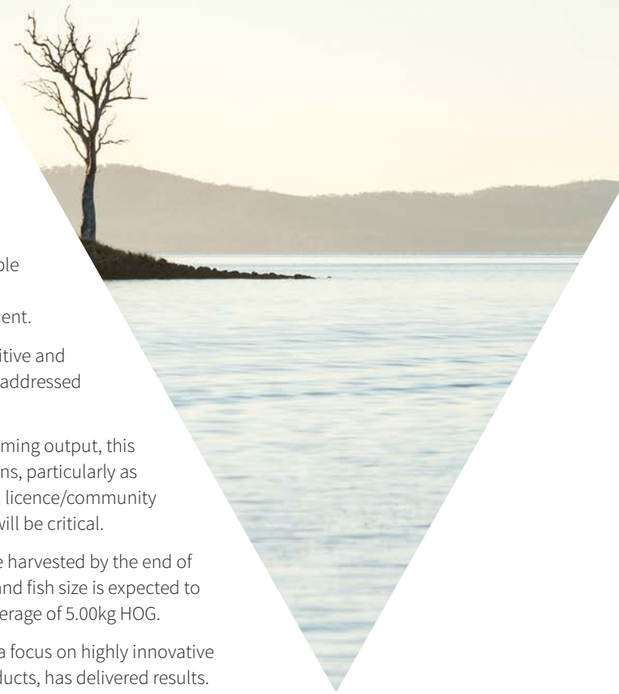
The Salmon industry is an important economic contributor to Tasmania. The industry has contributed to the creation of an estimated 5,200 jobs, including related industries and flow-on impacts which are largely in regional areas. It is the largest primary industry in the State, with increasing gross revenue reaching $726 million in the reporting period.

The majority of Tasmania's Seafood production comes from the aquaculture sector. Farmed Salmon is considered to be the most important contributor to this sector, accounting for 91% of production volume and 95% of the total volume generated by the industry. The significance of Tasmania's farmed Salmon industry to Australia's national Seafood production is also reflected in the Salmon industry's contribution to strengthening the social and economic structure in regional communities throughout Tasmania.

Value add processing is also important as the employment and Gross State Product contributions these activities generate would otherwise accrue to other states. 61.5% of Tassal's fish is sold with further processing beyond simply gutting, thus representing demand for the food processing rather than just aquaculture (ie a whole fish). 92% of Tassal's production is exported from Tasmania, predominantly into mainland Australia. (Sustainable industry growth plan for the salmon industry, 2017).

Our Strategy

Delivering on maximising shareholder value is a priority and can only be achieved through safe and sustainable operations. Tassal has been a top quartile earner for the ASX 200 over the last five years – and has achieved this while largely balancing environmental, operational, financial and community value.



We continue to execute on our strategy to be a world leading Seafood company by leveraging industry leading scientific know how; sustainable and efficient production; respect for the earth's resources and the communities in which we operate; and prudent commercial management.

Whilst community, government and regulatory support have been positive and largely remain supportive, growth presents challenges, which must be addressed proactively to maintain community value and a right to operate.

As Tassal and the Tasmanian Salmon industry seek to grow Salmon farming output, this growth will bring an element of risk to optimal growth and forecast plans, particularly as Tassal grows into newer regions. Ensuring the co-dependence of social licence/community value and operational planning through strategic planning processes will be critical.

We have achieved a 'step change' in biomass and fish size with fish size harvested by the end of FY2017 being circa 4.80kg head on gutted (HOG). Underlying biomass and fish size is expected to continue to improve in FY2018 and beyond. Our target fish size is an average of 5.00kg HOG.

De Costi Seafoods has driven Seafood sales and category growth with a focus on highly innovative product and packaging formats, and, together with higher margin products, has delivered results.

Tassal's strategic priorities supporting the company's 'Right to Operate' are:

- **Environment:** Maintaining world leading environmental certification, which is independently audited
- **Societal/Community Value:** Increasing investment and promotion of societal/community value credentials with a dedicated Community Foundation framework with appropriate engagement and perception metrics in place
- **People Safety:** Continuing to invest in our people and drive towards Zero Harm for Everyone, Everywhere

Tassal continues to successfully mitigate (where possible) risk at both the sales and marketing (customer and consumer) and production ends of its business. However, Tassal is an agricultural stock and continues to focus on further risk mitigation in the hatching and growing of Salmon with particular focus on operational risk in the marine environment. Our risk management system is robust, and, although our overall risk appetite is conservative, risk appetite differs for each area of the business. We adopt an adaptive management framework, which encompasses monitoring requirements and management practices aligned with the precautionary approach.

Tassal's risk mitigation strategies counter factors external to management's control including:

- **Disease** – potential of emerging viral diseases
- **Marine** – access and approval of new sites
- **Environmental** – predicting environmental conditions and adapting to environmental challenges

Quality science needs to permeate every aspect of aquaculture. Scientific modeling along with baseline studies remain the best tools to decide where to farm, at what scale, and under what regulatory conditions and process refinements. Science is also critical to how Tassal can adapt its fish stock and farming practices to address climate change.

Tassal's 'Right to Grow' strategic priorities are:

- Increasing volume to position Tassal with the superior biomass in the market, optimal margins (whether through price and/or cost out) and greatest scale, to capture the increasing demand for sustainable protein in Australia and internationally
- Enhancing Salmon growing performance on the back of Tassal's Selective Breeding Program (SBP) to reduce operating costs and improve return
- Maintaining existing channels to market as Tassal grows volume in line with the growth of the domestic market
- Continuing to improve traceability and freshness of products given consumer trends
- Positioning now for the next wave of growth, given typical capital cycle lead times of up to five years

The key initiatives for FY2018 are :

Increased Fish Size	Acceleration of improved fish harvest size to 5.00kg HOG supported by increased working capital funding, primarily for feed
	Fish size matched to sales market demand both domestically and internationally to support sales mix and to ultimately optimise margins
Increased Fish Performance – Survival & Feed Conversion Ratio)	Accelerated roll out of improved net technology, reducing wildlife interactions and improving fish survival (target 90%)
	New pens, grow-out nets and wildlife nets to provide Salmon an appropriate sanctuary environment
	Implementation of new state of the art fish feeding barges and technologies to improve feed conversion rates and unit costs of feeding
Farming Expansion in Okehampton and Oceanic Sites in Storm Bay	Final stages of Environmental Impact Statement (EIS) development for the West of Wedge Oceanic Farming Expansion, targeting approval in 2018
	Port Arthur lease (current lease) to support initial Salmon stocking for ultimate grow out at west of Wedge
	Supporting sustainable growth in harvest biomass – to fulfill demand growth in domestic per capita consumption and allow where appropriate, access to key export opportunities
	Okehampton (Triabunna) approved – fish stocked in FY18
Processing Expansion	Further investment in production, automation and processing capacity across De Costi Seafoods and Tassal's Salmon operations to meet increased demand and to lower costs

United Nations Sustainable Development Goals

In 2016, we introduced the United Nations Sustainable Development Goals (SDGs) as an important step for Tassal to address global sustainability issues. For businesses to operate sustainably they need to be economic and environmentally viable and socially acceptable. The SDGs present a comprehensive set of goals, targets and actions against which a company can develop its sustainability strategies.

Integrating the SDGs into Tassal's corporate strategy has provided a framework to translate social, environmental and economic responsibility into shareholder value. We aim to embed a process of delivering social value to regional communities through our newly formed Tassal Community Foundation, which is underpinned by four pillars which are guided by the SDGs.

The SDGs provide Tassal with an opportunity to broaden our scope and expand our thinking as we work towards a more sustainable future.

The Sustainable Development Goals which are applicable to Tassal are as follows:

2 ZERO HUNGER	Aquaculture is needed to meet ever increasing demands for protein. Salmon is the most efficient converter of feed to product of any Australian farmed protein. Tassal is committed to the long-term production of safe and nutritious food.
3 GOOD HEALTH AND WELL-BEING	We are committed to providing a healthy and safe working environment for all through our core value of Zero Harm for Everyone, Everywhere'. We demonstrate to our workers, customers, partners in business and regulators that safety matters. Salmon is one of the healthiest proteins for consumption - high in protein, good source of Omega 3 and provides essential vitamins and minerals
8 DECENT WORK AND ECONOMIC GROWTH	We continue to maintain our Employer of Choice status and are committed to building on this as a solid foundation for a better future for our people. Employment at Tassal means connection to a larger community.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	We take a pragmatic and innovative approach to how we do business, striving for rapid assimilation of international research and innovations, underpinned by global benchmarking and adaptive management associated with voluntary, third party developed certifications.
11 SUSTAINABLE CITIES AND COMMUNITIES	We place a strong emphasis on employing people from local communities. For regional areas where our industry exists, the attraction of stable employment and regular income supports industry growth across many other sectors. We foster positive relationships and maintain open lines of communication with the communities in which we are based.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Our SAI Platform Australia membership facilitates our commitment to working with similar minded businesses on a shared vision of sustainable food production. Our eco-aquaculture vision allows us to take a circular economy approach to aquaculture through integrated multi-trophic farming, reducing environmental impact through the growth of shared species in a shared space.
13 CLIMATE ACTION	We maintain a comprehensive risk management system to manage the long-term risks, issues and opportunities presented by climate change and respond accordingly. We engage scientists to identify emerging climate trends and system responses and have developed considerable options for adaptation via selective breeding, modification of farming technologies and practices, and geographic diversification.
14 LIFE BELOW WATER	We believe part of our role is as a custodian of the environment, particularly the marine environment. Our Aquaculture Stewardship Council (ASC) certification underpins our dedication to responsible aquaculture. We implement marine debris initiatives across our business, including Adopt a Shoreline programs and the use of identifiable rope and equipment to drive accountability.
17 PARTNERSHIPS FOR THE GOALS	Investing in high profile, meaningful partnerships is critical. We ensure our partnerships align to the Tassal Community Foundation core pillars of health & wellbeing, environmental stewardship, youth and education, and social inclusion.

Climate Change

As a primary producer, the climate plays an important role in Tassal's operations. Tassal recognises climate change is likely to present a range of challenges to the aquaculture industry. Without proactive adaptation, Salmon farming may become more vulnerable to disease or changes in environmental conditions. During the reporting year, Tassal participated in a case study to identify issues and the potential ramifications of climate change for Tassal to 2020 and 2050).

In response to the changing climate, in particular rising sea temperatures, Tassal has developed considerable options for adaptation including selective breeding, modification of farming technologies and practices, and geographic diversification of the marine farm portfolio. Tassal has also engaged scientists to identify emerging climate trends and system responses, and to undertake comprehensive broad scale environmental monitoring.

We recognise long term strategies are required to protect the industry from the effects of high water temperatures due to climate change. Tassal currently mitigates the impacts of seasonal temperature and oxygen fluctuation through husbandry strategies that include lowered stocking density, optimised seasonal diets and by optimising water flow and oxygen availability through net hygiene and venturation.

If farmed Salmon is managed effectively for the impacts of climate change, a positive financial benefit may be realised from the increased demand of farmed fish to the reduced availability of global wild stocks as a result of climate change impacts and over-fishing.

Our Climate Change Commitments for FY2018

Goals	Targets
Review climate change governance	Develop a corporate standard to ensure future measurement and management of climate change and its impacts

CASE STUDY:

Selective breeding to prepare for the effects of climate change

This project was undertaken as part of the Tassal CRA (Collaborative Research Agreement), which is co-funded by CSIRO, Tassal, and the the Fisheries Research and Development Corporation (FRDC).

Tassal recognises long term strategies are required to protect the industry from the effects of high water temperatures due to climate change. Tassal currently mitigates the impacts of seasonal temperature and oxygen fluctuation through husbandry strategies, which include lowered stocking density, optimised seasonal diets and optimising water flow and oxygen availability through net hygiene and venturation.

However, more effective Salmon breeding methods are necessary to ensure the sustainability of Salmon farming in Tasmania within the parameters of changing climatic conditions.

A research project was conducted at the CSIRO Agriculture facilities to measure variation of thermal tolerance in the Tasmanian Atlantic Salmon population. Water temperatures in south-eastern Tasmania currently reach 18°C to 23°C in summer, which can negatively impact the productivity and survival of Atlantic Salmon.

There is also a large variation in peak temperatures experienced, depending on the site and the year, with some years being much cooler than others.

Increased water temperature due to climate change may be beneficial in terms of increased Salmon growth rates in particular seasons and regions (Pankhurst and King, 2010), however, there is a small thermal window, which if passed will see increased temperature and associated reduced oxygen solubility having a detrimental effect upon Salmon growth, susceptibility to disease and reproduction.

The research consisted of a chronic thermal challenge in which individual fish were measured prior to, and subsequent to, one month at slowly increasing temperatures from 15°C up to a maximum of 20°C.

The results clearly show on a population level, the fish feeding rate increases up to 17°C in temperature, then declines slowly to 19°C and then more dramatically to 20°C. However, on an individual level, some fish continue to feed and grow at high temperatures, whilst others cease feeding and begin to lose weight.

These results are significant because it is this variation in the fish feeding rate which we positively foster through selective breeding. The theory is if we breed from fish who keep feeding and growing in high temperatures, offspring of these fish will also keep feeding and growing in high temperatures.

The research project marks the first step within a systematic approach to help us understand how to breed more thermally tolerant fish within our existing selective breeding program (SBP).

The next stage in this research is to determine the pedigree of these fish and establish how much of this variation is due to their genetics. We may see, for instance, some families of fish are much more thermally tolerant than others, which will allow us to select these Salmon as water temperature increases over time.

Sustainability Goals and Targets

We measure the benefit, impact and value of sustainability by working closely with and across all of our departments: Processing, Marine and Freshwater Operations (MOPS), Administration, Human Resources, Environment , Engagement, Logistics, Sales and Marketing, Finance, Quality Assurance, Legal, Safety, Engineering and Risk, IT and Purchasing. Setting goals and targets creates benefits which are often difficult to quantify, however, many of these benefits can be translated into risk reduction, social acceptance, improved market share, employee satisfaction, retention and improved operational practices.

Our goals and targets are set annually and endorsed by the Tassal Board and now presented and annually reviewed by the Health & Safety and Environment & Community Committee (HSEC). Internally, we report on progress monthly, and we report our progress publicly for each reporting period.

Our Progress in 2017

Goal	Target	Did we achieve our target?	Commentary
Environment			
Improve recycling and reuse of waste across Salmon marine sites	Implement a net, rope and high-density polyethylene recycling program across all marine sites to reduce waste going to landfill and find reuse opportunities	Yes	HDPE stanchions, feed pipe and buoys are being successfully recycled at all marine sites Environex rope processing facility is currently under construction and will be capable of recycling net and scrap rope moving forward
Initiate Integrated Multi-Trophic Aquaculture Project	Have ongoing trials deployed at marine sites to initiate growth of seaweed and urchin species in conjunction with Salmon	Yes	Ongoing seaweed trials have been rolled out at various marine sites Tassal has entered into the second phase of the trial and will begin urchin trials in FY2018
Fish Health and Welfare			
Reduce use of antibiotics	Implement Yersinia IP vaccination for all 17YC Salmon	In progress	All at risk animals have been vaccinated with IP Yersinia vaccine
Build fish health capacity	Upskill technical teams and staff members on best practice husbandry and welfare	In progress	Training for existing and new members of the fish health team includes finfish physiology; health and epidemiology
Support industry goals to have a commercial pilchard orthomyxovirus vaccine	Support successful completion of vaccine development by the Fish Health Unit (Aquatic Animal Health and Vaccines Centre of Excellence)	In progress	Vaccine is due to be released in 2018/2019 which will assist in protecting our naïve fish from POMV
People			
Revamp 'Workforce Transition' programs to have greater reach	Work with local school communities to offer school based apprenticeships	Yes	Project 'Connect' commenced
Strengthen Leadership Development program	Appoint Learning and Development Advisor	Yes	Commences November 2017
Establish Okehampton farm working with local community base	Employ 70% from local communities	Yes	87% local employment achieved
People			
Achieve Zero Harm for People	Achieve 95% overall score for WHS Compliance Scorecard	Yes (Group overall score 95.6%)	Only one reporting site below the standard (88.46%)
	Achieve Driving Safety Culture Scorecard target >92% overall score	Yes (Group overall score 92.4%)	
	Leading indicator targets: - >60% controls to be level 1 or 2 - Actions outstanding 0% overdue	Yes Yes	
	Lagging indicator targets: - TRIFR <15 - Fatalities 0 - LTIFR 0 - MTIFR <15 - Incident Rate 0 - Average Time Lost 0	Yes (13.61) Yes (0) No (0.94) Yes (12.67) No (0.17) No (15.5)	
Food Safety & Quality Accountability			
Expand export approval for Dover, Margate and Huonville to include the EU	Obtain European Union certification for Dover, Margate and Huonville	In progress	We have progressed and successfully have Dover under review for certification
Establish De Costi Seafoods as an export approved site	Obtain export certification at De Costi operations	In progress	The system and product groups have been determined and ready to be submitted for desk top review
Reinvigorate QMS aligned with best practice	Redevelop and implement a QMS which is based on Tassal maturity and risk profile, and aligns with best practice	Yes	
Strategy			
Implement relevant Sustainable Development Goals across the business	Investigate specific Sustainable Development Goals and their applicability to Tassal	Yes	
Gain cross sector traction on the Sustainable Development Goals	Key staff to engage and collaborate with broad range of Australian business leaders on the Sustainable Development Goals	Yes	

Sustainable Salmon Farming

Mark Asman
Head of Aquaculture

Aquaculture to me is simply the best way to grow food for an ever increasing world population. Just looking at the facts: world population expected to rise to 9.5 billion by 2050 and not stopping there, 70% of our planet is covered in water, less than 6% of our protein comes from the sea, and wild-capture fisheries have plateaued.

There is no doubt aquaculture will continue to be one of the fastest growing agricultural businesses for many years to come. Going further, land, freshwater and energy will be in increasing demand, so it is best to leave these resources for people, cows and chickens, while we look to the sea to meet growing seafood demands.

I was fortunate to have become involved in the aquaculture industry over 30 years ago and have the opportunity to work in several countries with several different species. What I have seen is a young industry grow, learn and improve extremely rapidly. In fact, the rate of change today is at its greatest pace. When growing at this pace, some mistakes can be made and conflicts with other user groups occur, however the overall picture is positive and the industry will continue to evolve and grow because the demand is there.

What truly impresses me is how our small industry in Tasmania is on the cutting edge of the Salmon farming industry and recognised the world over. Our team at Tassal is among the world's best. Not only willing and able to produce the best fish, but to do so safely, sustainably and have the ability to adapt to the challenges of a rapidly developing industry.

Tassal has understood for many years it can't make up its own standards, nor choose its own science, but rather it needs to submit itself to expert scrutiny, assessment and evaluation. We are committed to providing Australians with responsibly sourced Tasmanian grown Atlantic Salmon. We actively pursue Aquaculture Stewardship Council (ASC) certification across our operations and we have full chain of custody across all our processing plants.

Obtaining and maintaining ASC certification, which provides consumers and the public full traceability and transparency, is difficult. ASC audits are comprehensive and review Tassal's entire operation across 154 individual compliance criteria. It is not just marine farms which the ASC assesses, but also hatcheries/ nurseries, workplace health and safety systems, human resources and the Chain of Custody from harvest through to distribution and sale.

Community and stakeholder engagement is also a requirement of each audit, with feedback sought through community meetings and written submissions. Nothing less than ASC certification, embracing world's best practice, can be claimed as the most credible endorsement of sustainability for farmed Salmon.

Trusted certification schemes accelerate demand growth and are a critical mechanism for improving consumer knowledge and building new markets for sustainable products.

Certification has allowed us to understand stakeholder needs as well as understand how to better enhance public confidence in the areas where we operate. It ensures continuous improvement and supports growth and operational performance. We are entering into a whole new phase with our certification – identifying gaps and building more local relevance in the process. This is being achieved through the implementation of regional Community Advisory Groups and increased frequency of local information sessions.

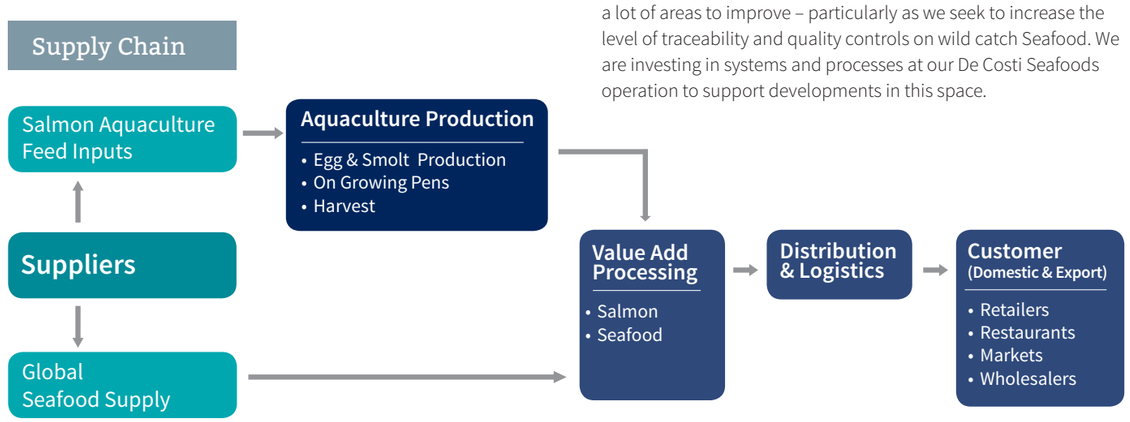
Sustainable Seafood

Ben Daley
Head of Supply Chain and Commercial Services

As our business strives towards leading sustainable practices in aquaculture, there is also a strong focus on sustainable practices once the fish has completed its lifecycle and is transformed into one of the most healthy protein sources for consumption.

As Head of Supply Chain at Tassal, I'm proud to lead a very talented team focused on freshness, industry leading quality controls and making Salmon and Seafood more accessible to consumers. Each year, our processing operations are subject to over 30 external audits, verifying our Quality and Food Safety systems, including risk management, traceability, new product development, hygiene and good manufacturing practices. We have a team of 20 people whose roles are solely to maintain the systems and support production and the wider business on these aspects – this level of people dedication leads the way in the Australian Seafood industry. In addition to regulatory requirements, we adhere to 10 various standards which cover Quality and Food Safety and Chain of Custody, and have invested in safety leadership training for all processing managers and senior team leaders to assist driving the culture of food safety and freshness.

Sustainability also means our customers and consumers have a consistent and enjoyable experience so our Salmon and Seafood becomes an ongoing part of their product range or diet. With Tassal product sold in over 2,000 locations, there always remain opportunities to improve the supply chain. We maintain joint reform and enhancement programs with key supply chain partners, as well as continuous improvement programs internally. These programs are not only important to improve the customer and consumer experience, but also ensure the supply chains can grow and cope with future demand. We call this sustainable scalability.

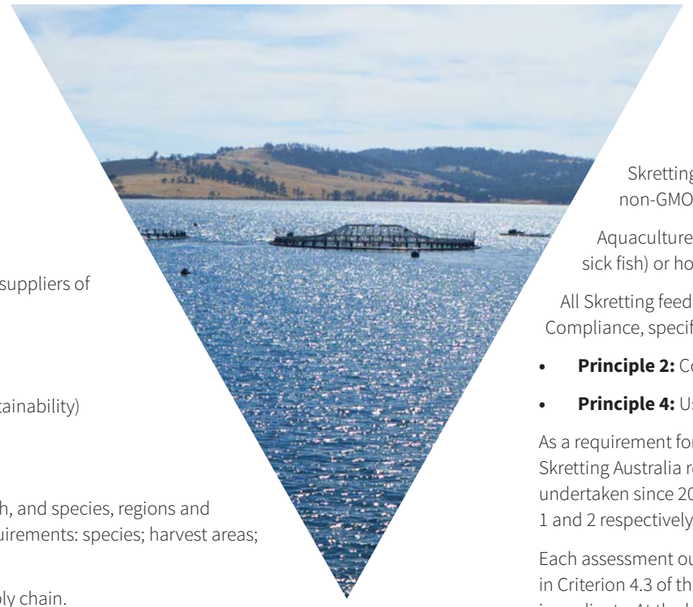


Consumers are demanding more traceability from Salmon and Seafood as they become increasingly concerned about where their Seafood is from, whether it is sustainably sourced and the products are made to high quality standards. This is a large focus area of the industry and requires investment and reform to bring practices in line with consumer expectations. We take an industry leadership approach to our standards for traceability systems. This can be tangibly represented by the fact we have a dedicated IT department of 15 staff, including business intelligence and traceability experts.

We can trace a packet of Tassal smoked Salmon from a retail shop, back to every step of the supply chain to a processing run of one day, right back to the nursery the fish was grown – all within minutes. For smoked Salmon, we hold every single production lot to assess for quality and safety standards, before releasing the product to the market – a standard of quality and assurance is well above the industry norms. These types of practices demonstrate the sustainability of our business does not end at the farm gate, but continues to be a core of our supply chain to consumers.

Just like our farming operations, we are still learning and still have a lot of areas to improve – particularly as we seek to increase the level of traceability and quality controls on wild catch Seafood. We are investing in systems and processes at our De Costi Seafoods operation to support developments in this space.

Approved Supplier Program



A key component of Tassal's Approved Supplier Program is a supplier questionnaire for potential suppliers of products and services which may have an impact on quality and/or food safety.

This provides a formal check of the supplier sustainability credentials.
The questionnaire requires disclosure of the following:

- Ethical sourcing standards (including environment, health and safety, human rights and sustainability)
- Quality and food safety (including auditing, certifications and traceability)
- Transport

Seafood suppliers, excluding oyster suppliers, are required to disclose certifications for farmed fish, and species, regions and certifications for wild caught Seafood. Oyster suppliers are required to disclose, among other requirements: species; harvest areas; certifications; and membership of the Australian Shellfish Quality Assurance Program.

Questionnaires are sent to existing suppliers every three years to capture any changes in the supply chain.

Currently in draft and expected to be approved in FY2018 is Tassal's Supplier Social Responsibility Policy, which addresses compliance, human rights, labour practices, environment, sustainability and continuous improvement.

Sustainable Fish Feed

Tassal's primary fish feed supplier, Skretting Australia, is part of the Nutreco Group and is the largest Australian producer of aquaculture feed. Skretting operates a dedicated aquaculture feed plant in Cambridge, Tasmania, which meets global quality standards. Products are manufactured in accordance with: Full traceability - Nutrace®; ISO 9001 Quality Management System; ISO 14001 Environmental Management System; HACCP certification; FeedSafe™ certification and GlobalG.A.P. CFM certification.

Skretting's supplies of fishmeals and fish oils are governed by Nutreco's vendor policy which subscribes to and promotes the fishery management principles of the FAO Code of Conduct for Responsible Fisheries. Nutreco expects its suppliers to work towards complying with the principles specified in the code.

Supplies of poultry and mammalian products are derived from Australian producers which are Australian Renderers Association (ARA) accredited and are approved for use in aquaculture feeds in Australia and New Zealand. They are a sustainable co-product of animals reared for human consumption and are treated according to controlled processing parameters which maintain the integrity of the raw material. Rendered raw materials have a high nutritional value for fish and enhance the sustainability of the aquaculture industry.

Aquaculture feeds may include the following ingredients:

Antioxidants	Maize gluten meal	Tapioca starch
Attractants	Meat meal	Tuna fish trimmings
Crystaline amino acid	Mammalian blood meal	Vegetable oil
Essential oils	Mould inhibitors	Vitamin/mineral/pigment premixes
Faba bean meal	Potato starch meal	Wheat gluten meal
Fishmeal	Poultry meal	Wheat starch meal
Fish oil	Poultry oil	Whole wheat
Glucans	Shrimp meal	Yeast and yeast-like product
Lupin dehulled meal	Soy protein concentrate	

Skretting Australia has maintained a 'GMO DNA-free' status for aquaculture feeds. All vegetable raw materials are purchased as non-GMO and supplier certifications are documented.

Aquaculture feeds do not contain antibiotics (unless specifically prescribed by a registered veterinarian for the purpose of treating sick fish) or hormones.

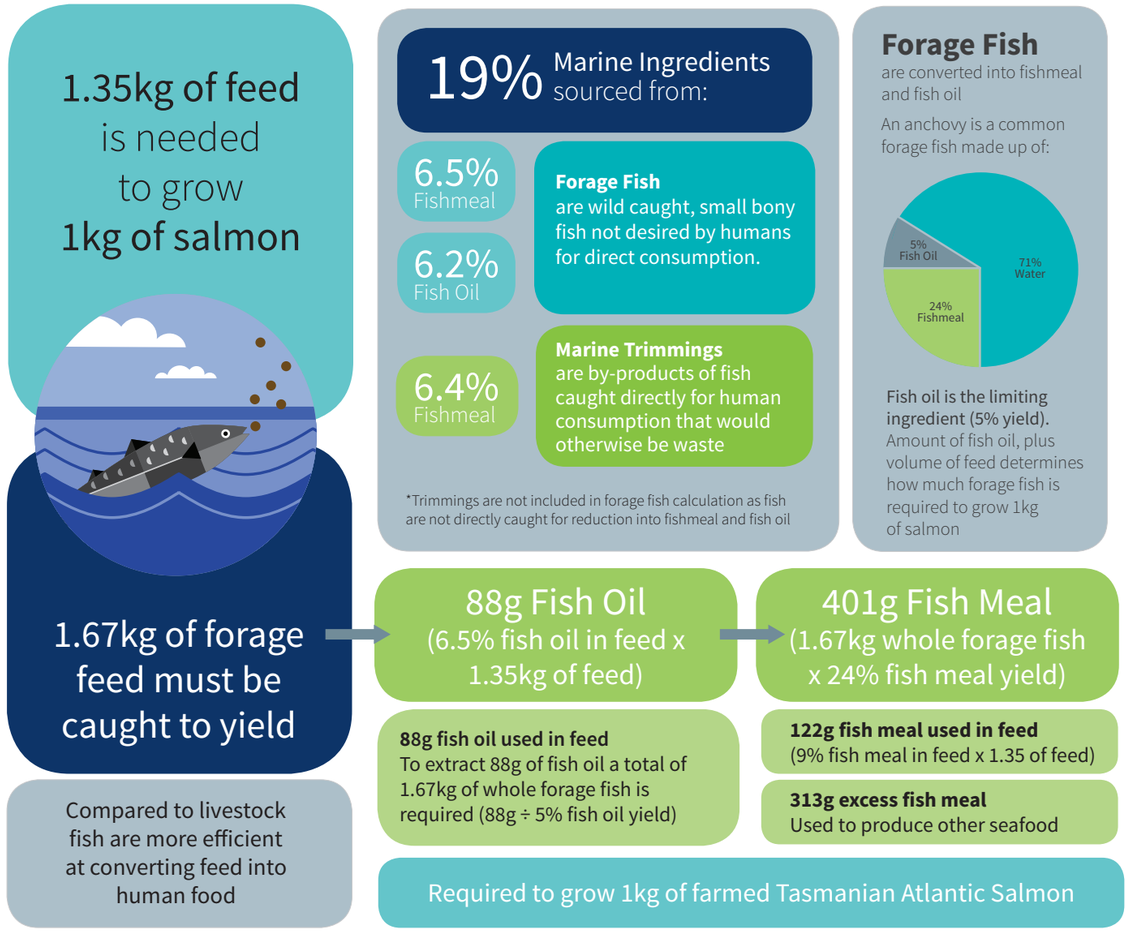
All Skretting feed supplied to Tassal is compliant with the Aquaculture Stewardship Council (ASC) Salmon Standard Compliance, specifically:

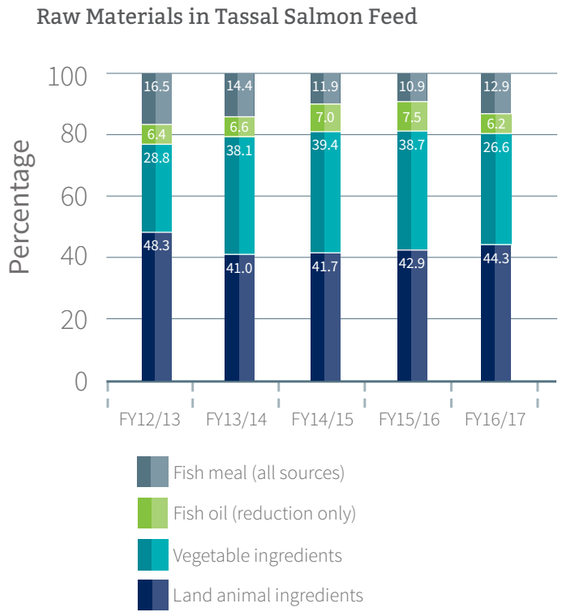
- **Principle 2:** Conserve Natural Habitat, Local Biodiversity and Ecosystem Function
- **Principle 4:** Use Resources in an Environmentally Efficient and Responsible Manner

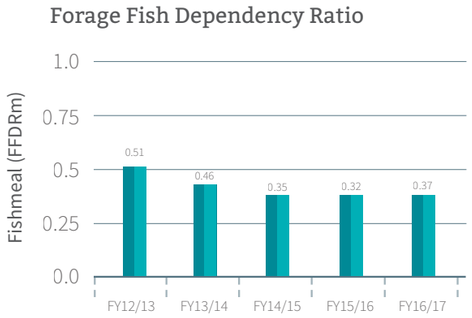
As a requirement for ASC certification, the proponent is required to illustrate feed products are sustainable. To address these requirements, Skretting Australia requested an assessment of stock status of marine fish used in their fish feed. Formal assessments have been undertaken since 2014. The results of the 2017 study for trimming fish species and reduction fisheries species can be found in Appendices 1 and 2 respectively.

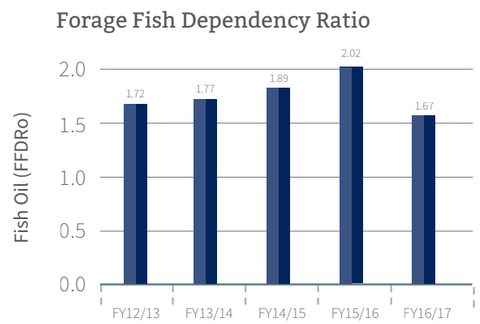
Each assessment outlines the species and population/fishery, and presents the current IUCN listing for the species/populations required in Criterion 4.3 of the ASC Salmon Standard. Skretting uses the mass balance system to demonstrate compliance to origin of marine ingredients. At the beginning of each new quarter purchased volumes of fishmeal and fish oil which meet the criteria in the ASC standard 4.3.2 and 4.3.4 are recorded. Based on the average inclusion rate of fishmeal and fish oil in Salmon diets, these purchased volumes of raw materials are transferred into 'ASC Feed Certificates'.

The ASC is currently in the last stages of developing a 'Responsible Feed Standard', and future assessments will be aligned to this new Standard rather than the Criterion 4.3 of the Salmon Standard.









Seafood Traceability

Traceability may be defined as 'the ability to trace and follow a food, feed, food producing animal or ingredients, through all stages of production and distribution'. It requires the systematic ability to access any or all information relating to a food product under consideration, throughout its entire life cycle, by means of recorded identifications.

De Costi Seafoods

With our entry into the Seafood market, the development of the De Costi Seafood Sustainable Seafood Strategy is a key component of Tassal's overarching sustainability strategy and for the path to responsible production and sourcing across the entire seafood supply chain.

The first step in Tassal's journey towards improving the sustainability of sourced Seafood, has been to develop a greater understanding of our sustainability baseline for Seafood products within the supply chain.

Certification for the De Costi Seafoods Range

The De Costi Seafoods range consists of a large variety of products from diverse sources across Australia and internationally, including New Zealand and the Asian regions.

While for most wild catch fisheries there are a limited number of certifications in place, as is also the case for many aquaculture operations, Tassal has been seeking out supply from certified suppliers where able. For example, we have switched to ASC certified imported prawns, for certain species, replacing a non-certified source. When introducing new products, we seek to obtain a sustainable sourced raw material, so as our range grows, so does our certified offering. Tassal will preferentially source Marine Stewardship Council (MSC) and ASC certified product as practical, and if available, make certified products the first choice when sourcing new product lines.

For De Costi farmed aquaculture products, credible certification schemes such as GLOBALG.A.P. and Best Aquaculture Practice (BAP) will be used as stepping stones toward ASC certification. Tassal will accept products certified by these schemes. There are no such stepping stone schemes for wild capture fisheries. However, for the wild catch fisheries, we will look to ensure no high risk species are purchased and will implement improved traceability systems to enhance trust and freshness. Our De Costi processing facility has MSC Chain of Custody certification for Hoki and Blue Grenadier products.

De Costi Seafood Supplied	Certification
Tiger and Vannamei 100/200 prawns	ASC
Cooked Vannamei Cutlets	BAP, ASC
Patagonia Tooth Fish	MSC
Basa	GAP, ASC
Seafood Extender (Coles), Prawns	MSC (Extender)
Frozen Seafood	BAP
Hake	MSC
Atlantic Salmon	ASC
Hoki	MSC
Ling	MSC
Albacore Tuna	MSC

Note: Percentage of certified Seafood is not available for the reporting year.

Research and Development

Dr. Brad Evans
Senior Manager
Breeding and Research

Tassal is recognised as a leader within the international Salmon farming industry, we have a responsibility to support and participate in significant research and development for our company, Tasmania, the broader community and industry in Australia and around the world.

Tassal undertakes predominately collaborative science with world leading, local and international researchers and institutions. The primary research focus for Tassal in 2016/17 has been in the areas of environmental research, fish health and breeding.

ENVIRONMENT		
Project Name	**Description**	**Impact on Sustainability**
Managing ecosystem interactions across differing environments	Building flexibility and risk assurance into environmental management strategies	• Assess wild fisheries interactions • Tailor regulation to different farming locations around the State • Assess baseline reef conditions prior to new site developments
Re-assessment of intertidal macroalgal communities	Assess macroalgal communities near to, and distant from Salmon farms and an evaluation of using drones to survey macroalgal distribution	• Assess the impacts of climate change upon fringe reef communities
Oxygen in Macquarie Harbour	Understanding oxygen dynamics and the importance for benthic recovery in Macquarie Harbour	• Broaden understanding of this complex system • Assess other oxygen consumers within the MH system
Predicting marine currents	Predicting marine currents, nutrients and plankton in the coastal waters of south eastern Tasmania response to changing weather patterns	• Reduce environmental impact of aquaculture • Develop water quality understanding within offshore waters • Assist offshore shift for the aquaculture sector

FISH HEALTH AND WELFARE		
Project Name	**Description**	**Impact on Sustainability**
Thermal stress project – Deakin University	Determining thermal stress markers in Salmon	• Assists with breeding thermal resistance into our stock to improve health and welfare
ATP-ase project – Deakin University	Accurate determination of smolt 'readiness' for optimal entry time into salt water	• Improve fish health and welfare
CSIRO Collaborative Research Agreement – Amoebic Gill Disease (AGD)	Develop a better understanding of amoeba biology and alternate treatment options for AGD	• Reduce freshwater use through reduced AGD bathing • Improve fish health and welfare
POMV Vaccine development 1 year project	Development of a POMV vaccine for Salmonids - a fast track viral vaccine	• Reduce POMV related mortality and morbidity • Improve health and welfare of stock
POMV Vaccine development 3 year project	Development of a POMV vaccine for Salmonids- including genetic selection of strain and recombinant vaccine	• Reduce POMV related mortality and morbidity • Improve health and welfare of stock
TSRV Vaccine development	Development of a TSRV vaccine for Salmonids	• Reduce health and welfare effects of TSRV infection
TABV Vaccine development	Development of a TABV vaccine for Salmonids	• Reduce the health and welfare effects of TABV infection
Gut Microbiome Project	Temporal study of the gut microbiome in Salmonids from different hatchery origins to different sites	• Improved understanding of the gut microbiome of Salmonids and its relationship to health, allows development of feed types to assist in reducing negative impacts

BREEDING AND GENETICS		
Project Name	**Description**	**Impact on Sustainability**
Whole genome selection	Application of new genomic markers in the selection of resistance to Amoebic Gill Disease (AGD) within the Tasmanian Selective Breeding Program	• Improve the power of genome selection for a number of traits
Genetic correlations between ploidy status and the effects of the environment	Examination of the effects of ploidy on fish performance in the two major Atlantic Salmon growing areas of Tasmania: Macquarie Harbour, and the South East region	• Maximise fish health and welfare and performance • Non-reproductive fish reduces risk to local ecology
The genetics of Yersiniosis in Atlantic Salmon	Examining the variation in genetic resistance to the pathogen Yersinia ruckerii	• Improve survival • Improve fish health and welfare through less disease • Minimise cost of production as more fish will survive for harvesting
Salmonid Maturation – Recommendations for control within the SBP	Demonstrate a successful delay of spawning in 2017 followed by advancing spawning in 2018	• Improve fish health and welfare through earlier production of eggs and hence earlier transfer of smolt to sea • Minimise cost of production as only before base number of fish is required as broodstock
Understanding gender in Atlantic Salmon	Perfecting the production of all female stocks	• Improve survival • Improve fish health and welfare

Rookwood Nursery

Okehampton Bay –

Australia's first eco-aquaculture site

Tassal's Okehampton Bay farm is proposed to be Australia's first eco-aquaculture site. It will feature an integrated multi-trophic farm, which reduces environmental impact through the growth of shared species in shared spaces – including Salmon, mussels, native oysters and seaweed. Selecting appropriate species and sizing the various populations to provide necessary ecosystem functions allows the biological and chemical processes involved to achieve a stable balance - mutually benefiting the organisms and improving whole ecosystem health.

Seaweed cultivation research trials by Tassal have been ongoing for two years on Tassal's sites. Seaweed can both absorb excess nutrients and create a valuable co-product. Tassal's proposed eco-aquaculture hub, provides opportunity for continued research investment.

The potential to establish a dedicated centre-of- excellence research facility, focused on cross cutting research on climate change and aquaculture and fisheries sustainability, interfacing with education and tourism, is being considered.

Multi-Species Research Projects

Tassal is working with researchers on a series of potential projects at Okehampton Bay to generate this eco-aquaculture environment, including:

SEAWEED

Rehabilitation of kelp barrens to encourage native species, and support recreational fishers and tourism. Three native species of seaweed *(Macrocystis pyrifera, Ecklonia radiata and Lessonia corrugate)* are currently being grown at Tassal's following leases: Meads Creek, Badgers Cove, Okehampton Bay, Tinderbox, Creeses Mistake, Simmonds Point and Chale Bay & Hawkers Point. Long Bay at Port Arthur will also become part of the second seeding phase for FY2018.

SEA URCHINS

Reduction of pest urchins in the surrounding reef systems through a ranching project, which is looking at how we can transform a pest into a commercial outcome, and hopefully improve the local environment for both commercial and recreational fishers. Sea urchin trials will commence at Okehampton Bay in FY2018.

SALMON

Supporting regionally relevant climate change research in conjunction with studies looking into the production of thermally tolerant fish through a dedicated selective breeding program.

ENVIRONMENT

Hydrodynamic and nutrient modelling in the broader area as part of a project with CSIRO.

OYSTERS

Identification of historic native oyster habitat, with a goal of reintroducing the species.

Together with our Communities, Stakeholders and Partners

Barbara McGregor
Head of Engagement

Sustainability is underpinned by a healthy balanced approach to environmental, social and financial commitments.

As a leading economic driver for the state, with a strong regional community presence, we take seriously our responsibility to engage and have meaningful partnerships which lead to mutually beneficial outcomes.

We are continuing to review and transform our approach to engagement. This includes the establishment of an overarching Community Foundation, bolstered by a Charter of Commitment and actions, including the establishment of Community Advisory Groups in every region and major partnerships which benefit social, environmental and economic outcomes.

More than ever we are cognisant of the importance of ongoing, meaningful consultation with our communities, in which we share our waterways with, particularly as we are in a growth phase. Our future will see a strengthening of our partnership with WWF-Australia while we endeavour to introduce concepts of shared marine values mapping to underpin future responsible growth.

The principles include multi-layered engagement and assessment of environmental, operational, shared use and social overlays in fish farming. This assists stakeholders to work together to fully understand the cumulative effects and shared values within the waterways, minimising conflicts, and promoting better biosecurity and outcomes for everyone.

Our Partnerships

Tassal focuses on and invests in meaningful partnerships which will deliver benefits across the communities in which we operate.

Partnerships perform an important role in accountability and transparency, making complex technical data and information more accessible to our stakeholders. Partnerships can also drive awareness and institute pride and confidence in our customers and employees.

As a responsible business, we ensure our partnerships align to the core pillars of our Tassal Community Foundation. Along our sustainability journey, partnerships and collaboration have been pivotal to sustainable aquaculture production, supporting local communities and having an impact across the supply chain.

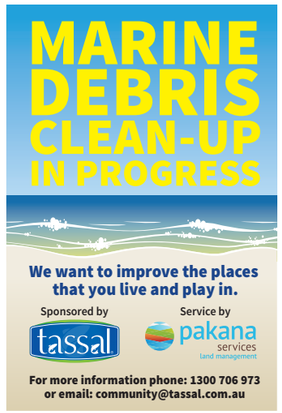
Along with our longstanding partnership with WWF-Australia, we have partnered with many smaller organisations.

pakana

Tassal, in partnership with pakana Services, an indigenous training and employment organisation, has implemented a marine debris initiative covering the Channel region to provide positive environmental outcomes. pakana works in collaboration with regional Councils, NGO groups and other contractors to provide meaningful training and employment focus for the indigenous community in Tasmania.

The partnership will further build on marine debris initiatives in collaboration with NRM groups, Tasmanian Seafood Industry Council, Tasmanian Salmonid Growers Association and other stakeholders. Tassal already contributes hundreds of human-hours towards shoreline clean-up across all regions of operation, including leading the development of a major collaborative clean-up event at Macquarie Harbour and Ocean Beach – now an annual event in April with over a hundred volunteers, including all three Tasmanian Salmon companies, covering some 80km of shoreline.

This is an important partnership which provides positive employment, environmental and engagement outcomes within the community, which could be further extended to other regions such as the Tasman Peninsula and East Coast.



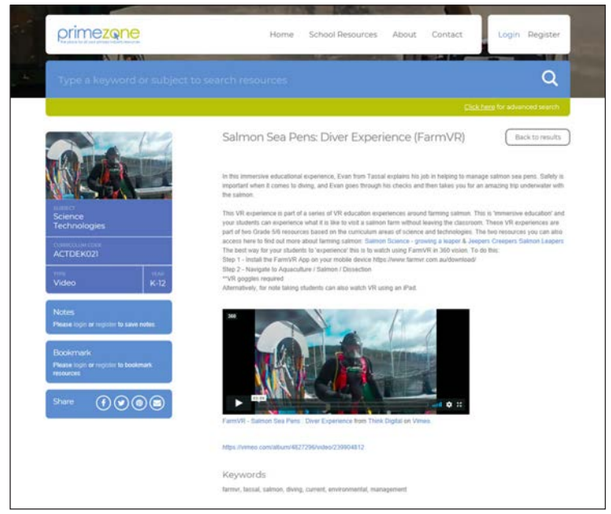
Primary Industries Education Foundation Australia (PIEFA)

We are thrilled to support the development of ground-breaking resources which provide both students and the broader community access to information and virtual experience of Salmon farming.

Developed by the Primary Industries Education Foundation Australia (PIEFA), Atlantic Salmon production is being used as a case study, aiming to increase understanding of Australia's $3 billion fishing industry.

The resources are designed for students from grades 4-8 and are explicitly written for Australian curriculum outcomes in the learning areas of science, technology and geography and have a distinct STEM (science, technology, engineering and mathematics) flavour.

Funded by PIEFA through its membership, which includes the Fisheries Research and Development Corporation (FRDC). With the support of Tassal, the program features online teacher guides, downloadable workbooks for students, assessment tools and are accompanied by eight innovative Virtual Reality 360 videos that allow students and general public to view every aspect of Salmon production from egg to plate.



Viewable online or via a 360 VR headset, the viewer can fully immerse themselves in the production process, whether it is watching the eggs hatch or diving into an offshore pen with 20,000 live salmon to conduct environmental monitoring!

The resources are available via PIEFAs resource portal **www.primezone.edu.au** (search 'Salmon').

Tasmanian Hospitality Association

Tassal entered a formal partnership with the Tasmanian Hospitality Association (THA) to provide a pathway for responsible chefs to access information about Sustainable Salmon and Seafood first hand.

As part of this relationship Tassal has hosted around 30 chefs on farm tours visiting the Rookwood Road nursery, Huonville processing and Roberts Point marine farm. The aim of the partnership is to raise ongoing awareness about the Aquaculture Stewardship Council (ASC) and the transparency of our farming operations.

The partnership centres around community, health and nutrition.

Hobart Hurricanes

In 2017 Tassal became the major partner of the Hobart Hurricanes. The partnership centres on delivering vital messages and activities into local communities and nationally on the health and nutritional benefits of Salmon to complement a healthy, active and socially inclusive lifestyle.

Partnership Highlight – *WWF-Australia*

Dermot O'Gorman, *WWF-Australia CEO*

WWF's mission is to create a world in which people prosper in harmony with nature. A challenge for us all is humanity's single biggest impact on the natural environment is driven by food production. Current forecasts of food supply and demand are simply unsustainable.

If we are to have any hope of feeding the world equitably, while also preserving the natural environment we love and need, we must make significant changes.

Businesses need to be responsible for how food is produced, processed and sourced. Individuals need to understand their choices when buying and consuming food. We cannot rely on others (whether governments, businesses, or consumers in other countries) to meet the challenge of sustainable food. Given the connectedness of global supply chains, it can only be met if all of us work together.

Which brings me to WWF-Australia's relationship with Tassal. We have worked together for six years and WWF remains committed to our partnership with Tassal. We are pleased Tassal retains ASC certification - the world's highest standard of responsible aquaculture - for 100% of its operations. We are delighted recent assessments and certifications with other Salmon growers mean over 60% of the Tasmanian Salmon farming industry is now certified by ASC, and we are committed to working towards the entire industry achieving 100% ASC certification in the near future.

This is a major step forward in under six years. It is a testament to the commitment of Tasmania's Salmon farmers to continuously improve in their social, economic and environmental performance. WWF-Australia into the future will be adopting a wider focus on the industry as a whole and the need to protect Tasmania's marine environment.

That said, 2016/2017 has not been an easy year. There have been multiple challenges including deteriorating environmental conditions, community concerns, government regulations, and balancing the interests of other stakeholders such as fishers and the tourism industry, not to mention shareholder expectations. Whilst this is a difficult balancing act - it is far from impossible. Building a shared vision and objective across all stakeholders – with extensive community engagement – is essential if these challenges are to be met. Whilst there are many legitimate issues and challenges to be addressed - it is heartening collectively all stakeholders have stated their desire to have a sustainable Tasmanian Salmon industry.

WWF-Australia aims to contribute to consensus through an open dialogue with the community, government and industry, and we have Tassal's commitment to support this approach.

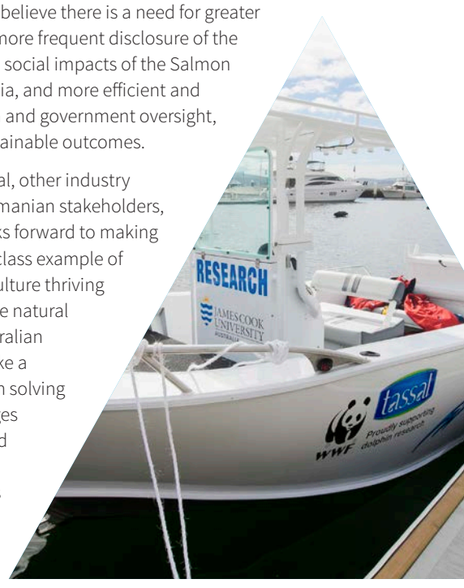
WWF-Australia's vision is for the world's best Salmon production which protects Tasmania's marine environment. To achieve this vision, WWF believes three conditions need to be met:

- All Tasmanian Salmon farmers achieve and maintain ASC certification
- The cumulative impacts of Salmon farming, especially when multiple producers operate in one area, are managed to a sustainable level
- No-grow zones for aquaculture are established to protect Tasmania's marine environment, based on participatory conservation planning and management

One issue of particular concern for WWF, and the wider Tasmanian community, is an expanding aquaculture industry must not threaten areas of high conservation value. We believe any further expansion of Salmon farming (and other industrial developments) must be supported by a comprehensive and participatory evaluation of all uses, users and values of Tasmania's marine and coastal environment, with strong legal protections for agreed 'no grow' areas.

More generally, we believe there is a need for greater transparency and more frequent disclosure of the environmental and social impacts of the Salmon industry in Tasmania, and more efficient and effective regulation and government oversight, to ensure truly sustainable outcomes.

Together with Tassal, other industry players and all Tasmanian stakeholders, WWF-Australia looks forward to making Tasmania a world class example of sustainable aquaculture thriving in harmony with the natural environment. Australian leadership can make a critical contribution solving the global challenges of feeding the world equitably and sustainably - and is one we all cannot afford to walk away from.



Our Communities

We are proud of the aquaculture industry's position in anchoring regional communities, providing considerable opportunities and benefits in fragile economic areas. Tassal's operations alone stimulate thousands of jobs, directly and indirectly, and contribute ~ $600 million (GSP) to the State's economy. Tassal is anchored in Tasmania's South, South-East, East and West coast communities through a variety of operations, processing and value-add activities.

Tassal operates within shared waterways throughout Tasmania and there has always been a natural tension between the economic and socio-economic benefit of fish farming versus people's amenity and the environment. We understand there is enormous trust placed by communities in Tassal to operate responsibly.

Our strategic plans are developed with community development as a key component in terms of considerations for selecting, developing and operating sites. Our sustainability depends on ensuring we are good corporate citizens and we are committed to working with our communities, hand in hand.

Tassal will continue to invest in the communities we directly operate in and also communities we reach through our broader supply chain. We achieve this externally through direct investment and partnerships with schools and other educational institutions, community environmental, sporting, health and other groups.

"Tassal ... proudly supporting our local communities since 1986."

TASSAL'S
Community Foundation

Tassal's Community Foundation is an overarching strategy, which underpins our intention to achieve thoughtful, meaningful and sustainable partnerships in the communities in which we operate. The Foundation is supported by four core pillars aligned to Tassal's company values which guide decision-making processes in areas in which we offer communities direct and indirect support.

Health & Wellbeing

We support initiatives which foster and enhance the resilience, engagement, health and safety of our neighboring communities.

Environmental Stewardship

We take our role as a steward of the environment very seriously and support initiatives which achieve the same.

Youth & Education

We take a long-term view of our commitments by supporting the learnings, aspirations and potential of youth as an investment in the future.

Social Inclusion

We support our Indigenous community and its heritage as part of capacity development, acknowledgment and prosperity building within the regions where we operate.

We believe that guided by our core Community Foundation pillars, we are investing in the diversification of local communities where we operate to enhance their vibrancy and sustainability.

Establishment of Community Advisory Groups

We have established dedicated Community Advisory Groups (CAG) across our operational regions: Okehampton Bay (East), Tasman (South-east), Channel and Southern regions (South Bruny Island including Huon to Dover). The establishment of these groups aim to ensure all (100%) of Tassal operations are formally engaged with local communities.

Tassal has led a very successful industry-based CAG model in operation on Tasmania's West Coast, which has an excellent cross-representation of members from the community sector, with a dedicated focus on guiding Tassal improvement programs, partnership opportunities and addressing community needs, concerns and opportunities.

We have encouraged representatives from environment, education, community, tourism and local business groups as well as Council delegates as a community representative voice.

In line with the Tassal Community Foundation and Community Engagement Charter, CAG meetings are being held quarterly and every region hosting two community open-day information sessions annually. Community Health Surveys will also be held as part of the 2017/2018 Community Engagement Plan.

The CAGS, together with Tassal's internal grievance mechanisms, will further strengthen our community connection and communication.

Community Feedback

Tassal works quickly to mitigate any negative community impact as soon as it becomes known. During the reporting year, 37 complaints were received across our operating regions. Each complaint was responded to promptly and either mitigated through works or change in operational practices.

- 1 x safety
- 10 x marine debris
- 6 x noise
- 3 x odour
- 1 x visual
- 14 x environmental
- 2 x wildlife

Tassal Community Foundation Charter

OUR COMMITMENT

- **We will foster positive relationships and maintain open lines of communication with the communities in which we are based**
- **We will perform our operations with transparency, openness, honesty and integrity**
- **We commit to local employment and sourcing wherever possible**
- **We will invest in our people and communities' health and well-being through program funding and support as well as education on the benefits of Salmon as a natural superfood**
- **We commit to fostering education pathways to employment, skills development and training opportunities in the communities where we are based**
- **We will work directly with our local communities to protect our environment and the planet through operational stewardship, funding and dedicated programs**
- **We will work with indigenous community representatives, supporting awareness and social inclusion programs, to ensure we respect and acknowledge the traditional landowners within communities where we are based**
- **We will measure the effectiveness every year of our Foundation Charter and engagement activities through a Community Perception Survey and through Aquaculture Stewardship Council (ASC) audits**

Stakeholder Engagement

We place a high priority on consultation with internal and external stakeholders. Stakeholder consultation is built into strategic planning processes at the executive level within the company.

Our ongoing community engagement program provides a coordinated approach, which assists in the management of emerging issues, keeping all stakeholders informed and maintaining relationships and open dialogue.

Stakeholder group	Engagement type	Engagement frequency
Employees	Co-ordination and liaison with staff across community meetings, regional information sessions, community advisory group forums, educational partnership programs	As required
	Pre-audits of sites and assistance with site preparation for ASC audits	Annual
	Head of sustainability visits all sites to speak with all staff regarding certification, updates on site development, environmental issues, fish health, general research and development activities	Annual
Communities and neighbours (to our operations)	Meetings and presentations with local elected representatives (local government)	Annual/as required
	One-on-one resolution of complaints	As required
	Issues based meetings and briefings to all stakeholders and community groups	As required
	Community forums, committee meetings and presentations	Quarterly
	Community information sessions (regional)	Twice yearly per region
	Stakeholder and community meetings (ASC)	In-person consultative feedback forums every three years each site as certification requires
	Stakeholder and Community Advisory Group committee meetings	Quarterly (each region)
	Participation on joint stakeholder committees across regions	As required
	D'Entrecasteaux and Huon Collaboration Steering Committee and Technical Advisory Committee; marine debris clean-up events	On-going regular meetings; annual clean-up events
	Presentations to school groups, development of 'Salmon in schools' education and careers programs and Primary Industries Education Foundation Australia on-line education lesson plans as part of national curriculum from 2018	As required/on-going
	School group tours of hatchery and farming operations – Working on Water careers program participation	Annual
	Community events, festivals and shows including the Wooden Boat Festival, Koonya Garlic Festival, Unconformity, Huon Agricultural Show, Tasman Science Week and Triabunna Careers Expo	Annual/on-going
	Assisting co-ordination of community marine debris events – Macquarie Harbour and Ocean Beach Shoreline Clean-up event	Annual/on-going
	Regional quarterly newsletters, community social media site	Quarterly/on-going
	Provide briefings and presentations to community 'friends of' committees	As required
National audience	Update local and federal government on current issues and advise as part of regulatory process	As required
	Community social media – national reach & engagement	On-going
Indigenous communities	On-going meetings and discussions with peak aboriginal groups including Tasmanian Aboriginal Corporation	On-going
	Engagement policy framework finalised with key future direction and consultation agenda	On-going
Stakeholders in waterways in which we operate (commercial/recreational)	Presentations and Q&A to various clubs and associations (including sailing groups and peak representative bodies)	As required
	Workshops and consultation including research and scientific forums	As required
	Navigation and Environmental briefings across departmental and peak association bodies including Marine and Safety Tasmania (MAST), Marine Farming, Environment Protection Authority (EPA), Tasmanian Association for Recreational Fishing (TARFish) and the Tasmanian Seafood Industry Council (TSIC)	As required
	NRM groups (including Channel Collaboration alongside TasWater, Councils, Derwent Estuary Program, Huon Aquaculture, IMAS and CSIRO)	On-going
Regulators (state and federal governments)	Formal briefings, Q&A feedback	As required/on-going
	Compliance and audit processes, EIS submission and consultation, marine farming development proposals	As required/on-going
	Response to complaints directed to departmental offices regarding Salmon farming	As required/on-going
Industry Associations	In-person meetings and briefings (including peak representatives such as TSIC, rock lobster, abalone, and scale fisheries, as well as TARFish	As required/on-going
Education Providers	'Working on Water' regional schools program co-ordinated by TSIC	Annual
	Collaborate with trade training centres across Tasmania to provide joint displays and presentations to link education and training with industry and explore opportunities to provide greater exposure for students	On-going
	PIEFA 'Salmon in schools' education and careers program – Triabunna lead school to initialise and develop the program	On-going
	Partnerships with Huon Valley High School and STEM program as well as Future Energy Prize project	On-going
Tourism bodies	Provide briefings and presentations to peak tourism bodies across regions regarding proposed developments or general Q&A	As required/on-going
	Participate in collaborative stakeholder committees and forums (including Strahan Community Forum, South-east information sessions and briefings)	As required/on-going
Certification bodies	Engage throughout scheduled audit process and on issue-specific and needs basis	On-going
Environmental organisations	Partnership with WWF-Australia	On-going
	NRM peak environmental groups across regions inline with national Land Care program (including collaborative marine debris initiatives)	On-going
	Envorinex (George Town) recycling program initiatives to value-add rope and other plastic originating from Tassal operations	On-going
	Birdlife Tasmania – consultation regarding best practice inline with operations and marine debris clean-up initiatives	As required
	The Nature Conservancy and other ENGO and research partners relating to restoration projects (including wild angasi reef restoration), Seaweed culture for remediation and restoration (including giant kelp)	On-going
Customers and consumers	Social media – issues based on-line posts and direct feedback to public	Three posts live each week and direct responses provided as required
	Sales staff – team meetings and updates on sustainability issues	As required
	Website – current re-development and updates via dashboard, including direct community@tassal enquiry contact	On-going
Suppliers	Information provided on relevant accreditation and certification bodies process, policies, and other food quality and safety information	At least every three years
	Issue non-conformance notification	Ad-hoc
	Conduct supplier audits	Every one to three years

Compliance

Tassal has a responsibility to address potential negative social impacts related to our operations, including interactions with other users of the waterways in which we operate. During the reporting period, Tassal received three cautions or infringement notices from regulatory bodies. In each instance, marine farming management rectified the issue immediately, and appropriate controls were implemented to prevent reoccurrence.

Infringements issued

During the reporting year, three infringement notices were received:

1. In July 2016, DPIPWE Marine Farming Branch (MFB) inspected marine farm No.109 at Great Taylor's Bay in the D'Entrecasteaux Channel Marine Farming Development Plan (MFDP) area and found marine farming equipment located outside the lease area. Tassal was issued with a caution notice.
2. In July 2016, Marine and Safety Tasmania (MAST) issued Tassal with an infringement notice as a result of a navigation aid audit in the Lower D'Entrecasteaux Channel. It was found marine farming gear were outside the lease boundaries, including two complete fish pens, and several mooring buoys – some with long rope tails. Lease markers were also installed and lit a night without the relative notice to mariners being issues.
3. In May 2017, MAST served Tassal with an infringement notice following an incident in April 2017, where a recreational boat collided with a long length of poly pipe being towed by Tassal's 'Vortex' vessel. The 'Vortex' was not displaying the required day mark, nor was the pipe being towed marked in any way.

Tassal's Giving and Partnership Programs

Tassal is one of Tasmania's leading employers and a major contributor to the state's economy. Our unique regional operating footprint bolsters important, fragile communities and provides flow on benefits which deliver positive social and economic outcomes.

Ensuring balance between operational, social, economic and environmental factors is pivotal. Having systems and processes in place from a regulatory, policy and global certification standard is both mandatory and essential for underpinning a healthy community balance.

To provide support to local communities and more Tasmania more broadly, Tassal has a dedicated Giving and Partnership Program as part of its broader Foundation model.

Tassal has a long and proud history of supporting local community organisations through its Giving Program and in FY2017 provided around $650,000 in donations and sponsorships for community based organisations, schools, sporting groups and charities.

Schools are at the heart of communities, which is why Tassal supports local school activities wherever possible. During the reporting year, Tassal supported 24 schools with either financial or product donations.

Organisations and Events Supported by Tassal

This year Tassal supported a diverse range of approximately 250 organisations and events.

Our Commitment to Communities for FY2018

Vision: *To create highly engaged communities*

Goals	Targets
Implement Community Foundation Charter	Undertake EMRS Community Perception Survey
Deliver mutually beneficial programs (health, social inclusion, environment and education)	Achieve 100% community inquiry response rate
Establish Community Advisory Groups in operational areas	Implement quarterly community forums
Increase localised communications	Distribute quarterly community newsletter and coordinate biannual regional information sessions
Develop and implement PIEFA based Salmon in Schools program	Support successful development of Australian curriculum aligned program

Our Responsibility for the Environment

Matt Barrenger
Senior Manager – Environment

Understanding and measuring our environmental impacts, including the ecological impacts of aquaculture and effects to biodiversity, in addition to our waste and energy impacts is a key focus for Tassal.

It is my team's job to maintain environmental compliance across all Marine and Hatchery sites throughout the state. In doing so, we work closely with numerous research groups and regulation bodies to monitor environmental parameters, conduct research projects and develop new sites.

Our role is significantly important in maintaining environmental sustainability, while conducting efficient farming practices. In particular, it is our responsibility to ensure the company abides by both licencing and regulatory requirements as set out by the Environmental Protection Authority Tasmania (EPA). In doing so, monitoring both new and existing sites is vital for us to remain competitive and successful in the supply of Atlantic Salmon.

The Aquaculture Stewardship Council (ASC) is a key framework for continuous improvement and the review of our practices. Industry and collaborative research through IMAS and CSIRO are other key components in the adaptive management and modernisation of how we operate within shared spaces and waterways.

We have waste management and disposal procedures for all of our operations, underpinned by our Environmental Policy. The purpose of these procedures is to ensure the appropriate management of all waste. Fundamental to these procedures is a company culture of reuse or repurposing alternatives for 'waste' to avoid disposal within the company or by an external stakeholder, partner or service provider.

Tassal uses sophisticated modelling and monitoring programs to understand changes in near field and far field water quality as a result of our farming operations and are investing heavily into research in this area. In terms of monitoring environmental parameters, we collate a broad range of data across all sites. This includes the use of scientific instruments and six broad scale water quality programs as part of our regulatory requirement. Using ROV technology, our internal monitoring program collects footage to track the benthic conditions several times annually for each marine lease.

We are deeply involved in assisting and conducting an array of research at an industry level through the Tasmanian Salmonid Growers Association (TSGA). Working closely with research bodies, we aim to investigate and monitor environmental methodologies to ensure we can implement the most up to date and sustainable practices. Ongoing research includes the hydrodynamic and biogeochemical modelling to meet regulatory requirements within some of the waterways in which we operate, as well as depositional modelling to maintain nutrient balance amongst the broader ecosystem.

When developing sites, it is our role to ensure we optimise all internal and external resources to ensure the appropriateness of the new sites. It is our responsibility to prioritise environmental stewardship in relation to flora, fauna and nutrients within these areas. In addition, we oversee all licencing which includes feed barges, leases, water fill stations, bathe barges and a range of other assets, which may have any form of environmental influence.

Our Marine Farms

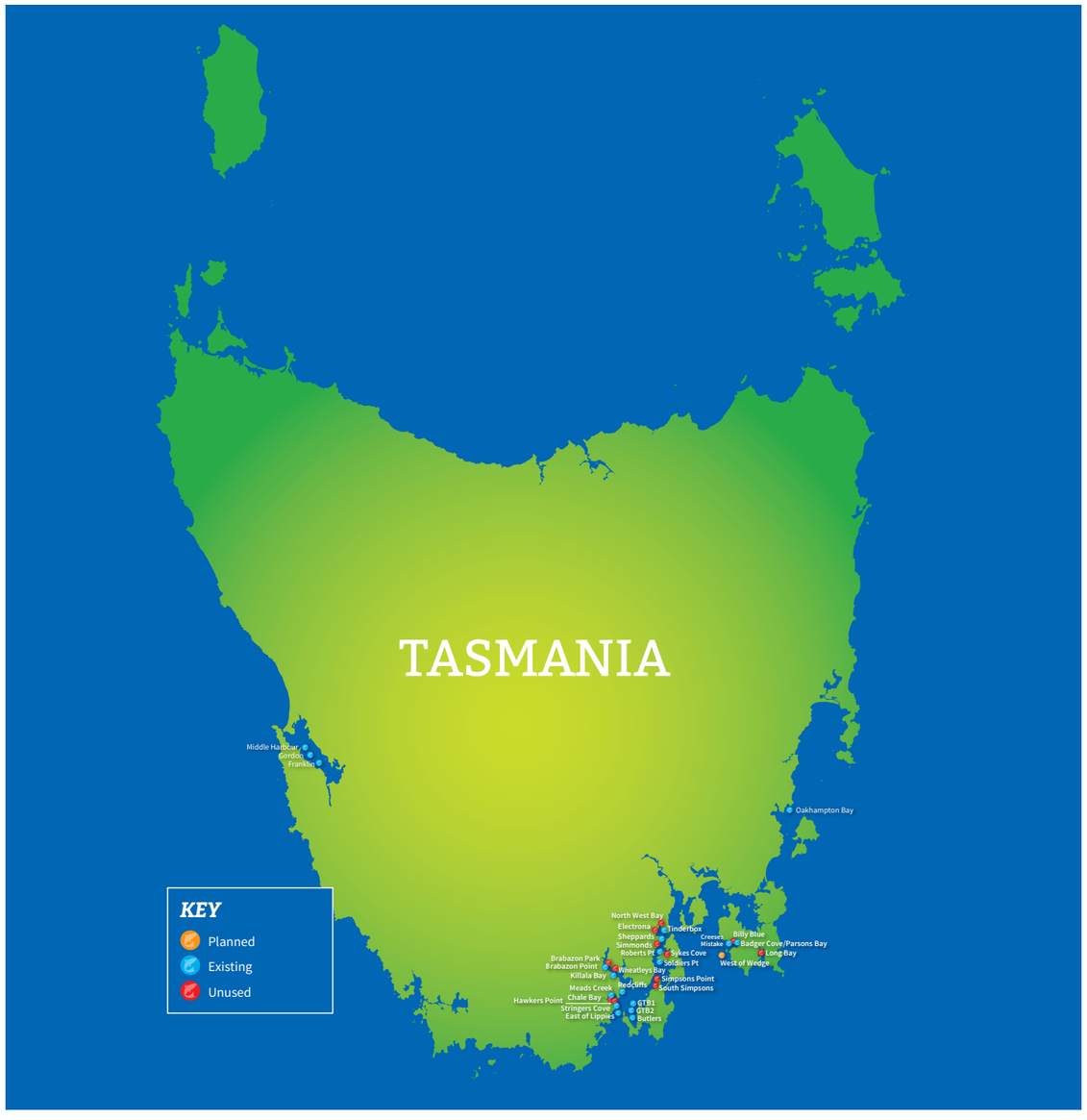
Marine Reserves and Marine Conservation Areas

Tassal has no marine leases sited within marine reserves, although some leases are contained within marine conservation areas, most of which were created in 2009 via the Nature Conservation Act 2002, some years after the establishment of these marine farming leases. Generally, marine reserves have a higher protection status than marine conservation areas and any form of recreational fishing is prohibited in a marine reserve.

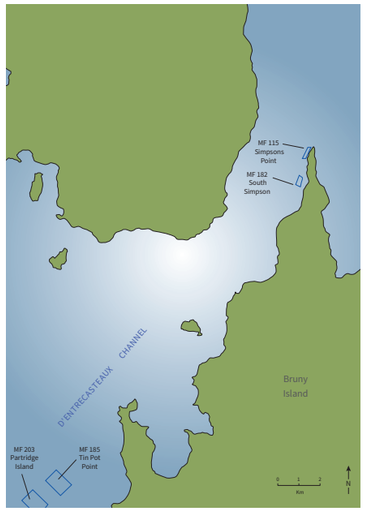
Marine reserves close to Tassal's operational areas are located at Tinderbox, Ninepin Point and Maria Island. Marine conservation areas relevant to Tassal's operational areas are those at Central Channel, Simpsons Point, Roberts Point, Huon Estuary and Port Cygnet. These areas are either solely managed by Tasmanian Parks and Wildlife Service or in conjunction with the Marine Resources Branch of DPIPWE.

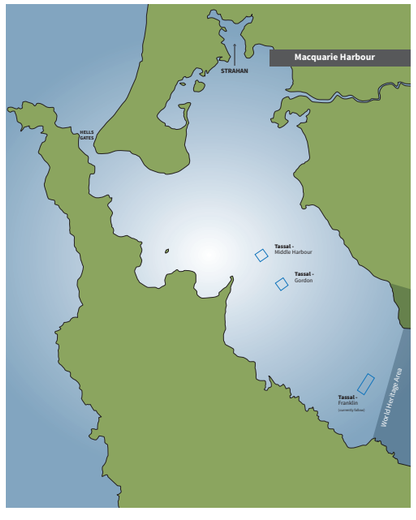
Two of Tassal's leases are close to land based national parks.

The Franklin Lease in Macquarie Harbour is within 1 km from the boundary of the Tasmanian Wilderness World Heritage Area (WHA) at its nearest point. The siting of this lease was fully assessed by the Federal Government Department of the Environment under the Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act).



Minimum distance between lease and High Value Conservation Area (km)									
Lease	Lease size (ha)	Marine Reserves			Marine Conservation Areas				
		Tinderbox	Ninepin Point	Maria Island	Central Channel	Simpsons Point	Roberts Point	Huon Estuary	Port Cygnet
Channel Zone									
Tinderbox	18.99	0.85	> 20	> 20	19.3	19.6	8.7	> 20	> 20
Sheppards	20	3.1	3.1	> 20	15.7	15.5	5.1	> 20	> 20
Roberts Point	30	8	> 20	> 20	> 20	> 20	0.1	> 20	> 20
Soldiers Point	15	13.8	12.12	> 20	5.5	5.5	3.1	> 20	> 20
Southern Zone									
Redcliffs	51	> 20	6.1	> 20	5.9	15.7	> 20	> 20	> 20
Meads Creek	40	> 20	11.8	> 20	10.8	> 20	> 20	> 20	> 20
Stringers	40	> 20	10.5	> 20	9.3	19.9	> 20	> 20	> 20
Killala	12	> 20	14.4	> 20	15.1	> 20	> 20	8.9	10.5
GTB1 & GTB 2	150	> 20	10.1	> 20	7.9	16.5	> 20	> 20	> 20
Butlers	28.5	> 20	14.0	> 20	> 20	> 20	> 20	> 20	> 20
Lippies	76.51	> 20	10.5	> 20	> 20	> 20	> 20	> 20	> 20
Eastern Zone									
Creeses Mistake	48.5	> 20	> 20	> 20	> 20	> 20	> 20	> 20	> 20
Badger Cove	30	> 20	> 20	> 20	> 20	> 20	> 20	> 20	> 20
Port Arthur	15	> 20	> 20	> 20	> 20	> 20	> 20	> 20	> 20
Okehampton									
Okehampton Bay	100	> 20	> 20	7	> 20	> 20	> 20	> 20	> 20
Western Zone									
Gordon	80	> 20	> 20	> 20	> 20	> 20	> 20	> 20	> 20
Middle Harbour	80	> 20	> 20	> 20	> 20	> 20	> 20	> 20	> 20
Franklin	120	> 20	> 20	> 20	> 20	> 20	> 20	> 20	> 20
TOTAL	**840.5 ha**								





Macquarie Harbour

Macquarie Harbour is a large estuary supplied with freshwater from the Gordon and King Rivers. Oceanic bottom waters mix with large volumes of freshwater and the water column in the harbour is typically three-layered: fresh, marine and brackish. The Harbour is approximately 33 km long and 9 km wide, with a total surface area of 276 km^2. The total space occupied by Salmon industry marine leases within Macquarie Harbour is 3.3%.

Marine Farming Licence Conditions relating to environmental management of finfish farms in Macquarie Harbour require there must be no significant visual impacts at, or extending beyond, 35 metres from the boundary of the lease area. During the reporting period we experienced benthic non-compliances as a result of an extended period of low, bottom water dissolved oxygen (DO). Low DO in bottom water slows down the assimilation of Salmon waste. Visible benthic impacts are an early indicator of benthic health issues but are reversible and do not have an impact on fish welfare or oxygen available to our stock.

Lease	No. of 35m compliance survey points found to be non-compliant for Beggiatoa: September 2016	No. of 35m compliance survey points found to be non-compliant for Beggiatoa: January 2017	No. of 35m compliance survey points found to be non- compliant for Beggiatoa: May 2017	No. of survey points found to be non- compliant for Beggiatoa: May 2017
Middle Harbour Lease 214	0/9	2/10	0/10	0
Gordon Lease 219	0/10	2/9	0/9	0
Franklin Lease 266	14/22	19/21	0/21	0

In December 2016, in preparation for the Western Zone ASC full re-assessment audit, Tassal raised specific concerns regarding the Franklin lease with the Conformity Assessment Body (CAB). Due to negative environmental circumstances, Tassal did not pursue ASC re-certification for the Franklin site as it would not be restocked following harvest until appropriate to do so.

Compliance results have reinforced to all operators in Macquarie Harbour that not every hectare of the system will yield the same environmental performance. In fact, benthic compliance is also dependent on a marine lease's location in the Harbour and external influences. Copper contamination and riverine influences have been determined as the major contributors to the health or otherwise of Macquarie Harbour. There are natural and anthropogenic influences in the Harbour and they contribute to the overall, current environmental conditions. Historic operations (i.e. mining), recent events (i.e. hydro-electric water discharges and drought conditions) and fish farming, have further modified the Harbour.

Waste Capture System for Macquarie Harbour

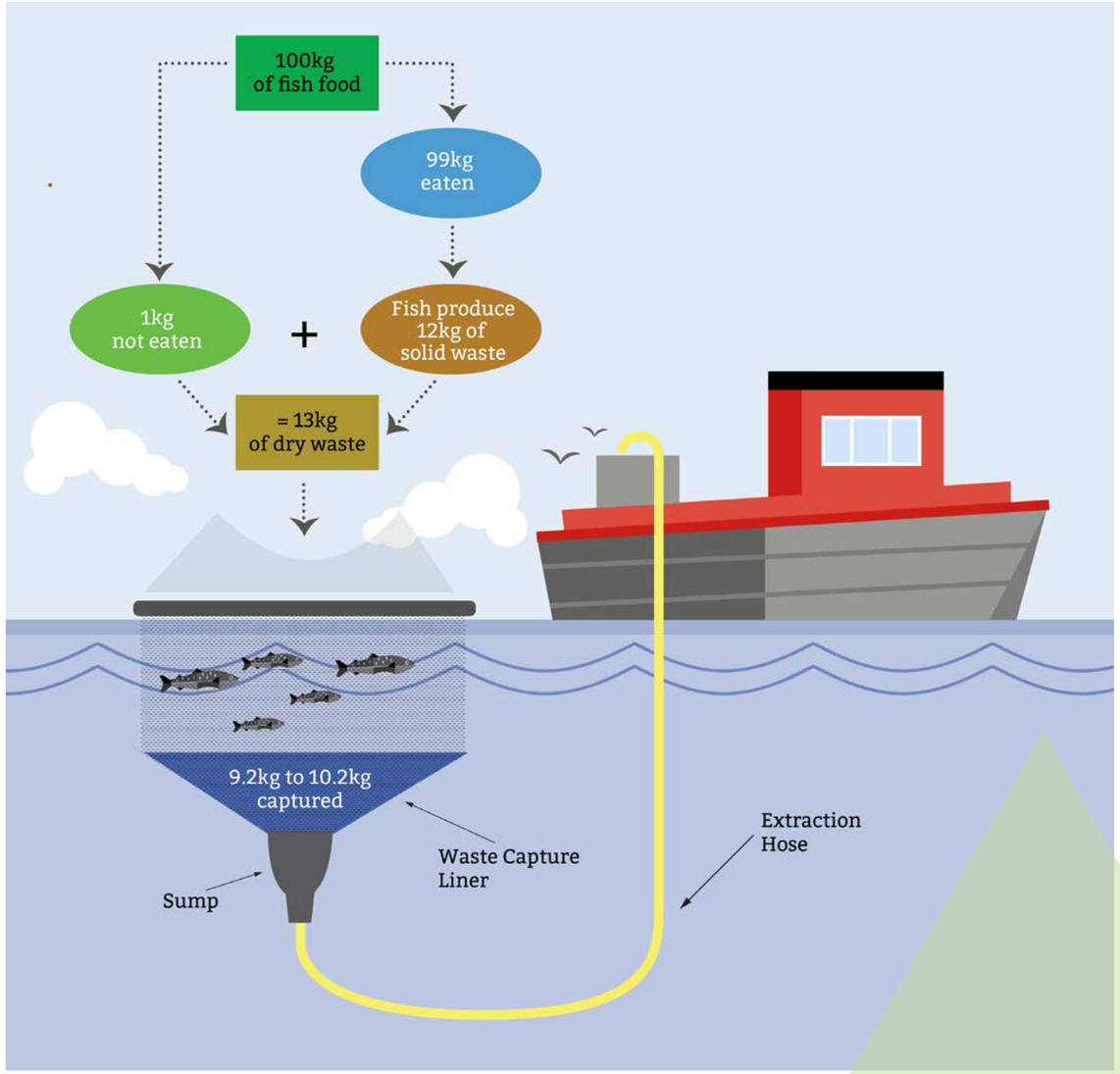
In response to benthic recovery within Macquarie Harbour, Tassal investigated and trialled a waste capture system (WCS) to better manage Salmon waste, which contributed to previous non-compliances .

Tasmania's EPA approved Tassal waste capture systems (WCS) for Macquarie Harbour and was rolled out on pens which represented biomass in excess of 13 tonnes per hectare and also on a number of pens holding below 13 tonnes per hectare. The effect of this demonstrates the equivalent of a significant biomass reduction.

The waste capture system intercepts and collects solids, including fish excrement and uneaten food. Conical liners with in-built sumps are secured below the sea cages. The liners funnel the waste into the sump, where it accumulates and can be subsequently removed.

Between 65% to 87% of all dry waste is captured in the liner, pumped through the sump up the extraction hose and into the service vessel. A dedicated service vessel makes regular rounds to extract the waste via hoses hard-plumbed to the sump.

All waste captured will be held in secure tanks on the service vessel, with no liquid waste to be discharged back into Macquarie Harbour. All waste is disposed of at an approved wastewater treatment plant, with approval of the EPA.



New Site Development

For the past six years, Tassal has been undertaking a 'South East Optimisation' plan to improve the use and management of current leases. The optimisation process aims to increase animal health and welfare, enhance fish performance and support improved environmental management and biosecurity measures. The project involves Tassal marine farms within South East Tasmanian waterways and includes amendments to existing marine leases as well as new site developments.

Okehampton Bay

Located on Tasmania's East Coast, Okehampton Bay is located within the Great Oyster Bay and Mercury Passage Marine Farming Development Plan (MFDP) area. The Okehampton Bay farm is currently utilised by Spring Bay Seafoods for blue mussel and seaweed farming and is also licenced for farming of marine finfish. Tassal entered into an agreement with Spring Bay Seafoods to utilise an area of the existing lease and integrate Salmon farming with the culture of other species, including mussels and seaweed.

Tassal will expand into Okehampton Bay in FY2018 and stock 800,000 fish over 80 hectares.

The first baseline environmental assessment for the lease was conducted in 2000. Tassal initiated its own water quality sampling work in 2014, and, over two years conducted consecutive monthly sampling of temperature, salinity, dissolved oxygen, nutrient profile and chlorophyll and algal samples, in addition to monitoring and baseline studies undertaken by Spring Bay Seafoods.

The characteristics of Okehampton Bay are like those found in South East Tasmania where aquaculture farms have been concentrated.

Studies by IMAS and the Marine Farming Panel have concluded 'the current environmental science supports the proposed environmental management and monitoring of Salmon farming in Okehampton Bay'.

While algal blooms are increasing on Tasmania's East Coast, the latest international science shows there is an unlikely link between the prevalence of algal blooms and fish farming. Algal blooms can however harm fish, and Tassal conducts daily plankton monitoring and has an emergency response plan in place in the event of a harmful algal bloom. Tassal has invested in an algologist position to complement its technical team and environmental monitoring.

Tassal will undertake a further baseline assessment prior to the commencement of farming and the establishment of the management regime.

West of Wedge Island

Six years in planning, an area west of Wedge Island in Storm Bay has been identified for a new lease development as part of the Tasman Peninsula and Norfolk Bay Marine Farm Development Plan (MFDP) area. This proposal in Storm Bay plays a key role in the South-East Optimisation Plan allowing offshore development. This proposal will establish a new farming zone approximately 2 km west of Wedge Island.

Long Bay, Port Arthur

Tassal will re-establish Salmon farming operations in Long Bay, near Port Arthur. The marine site has lain dormant for 11 years, and following discussions with stakeholders including Council, community, neighbours and tourism operators, the decision was made to re-stock the lease. Extensive work has begun to modernise and renovate the marine site, wharf and shore base facilities.

Long Bay will ultimately serve as a supply site for fish destined for west of Wedge Island.

Conserving Natural Habitat, Local Biodiversity and Ecosystem Function

Tasmania's marine environment is truly unique and contains a diversity of ecosystems and temperate marine life forms amongst the highest in the world.

Biodiversity Management Strategies

A number of threatened and migratory species listed under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) and Tasmania's Threatened Species Protection Act 1995, are known to occur in and around our marine operations. As part of our Aquaculture Stewardship Council (ASC) certification, we conduct desktop assessments of the known risks to these species to determine any significant impact and any additional mitigation measures may be required to be implemented.

In addition, we undertake a range of ecological surveys at established monitoring sites to investigate potential impacts on biological assemblages from fish farming activities. These surveys include:

- Subtidal surveys for EPBC listed species
- Intertidal surveys of rocky shores
- Understanding broadscale impacts of Salmonid farming on rocky reef communities, and
- Monthly water quality monitoring programs

Both near-field and broadscale monitoring activities are undertaken routinely to provide knowledge of how well the ecosystem is functioning with an increased nutrient load and to allow any significant temporal and spatial trends to be detected.

Rocky Reef Communities

Tassal has supported a study 'Understanding the broadscale impacts of Salmonid farming on rocky reef communities' aimed at assessing the health of rocky reef communities in south east Tasmania. The 2016 study, published in FY2017, involved the establishment of 26 reef monitoring sites from Maria Island on Tasmania's east coast to Actaeon Island off Tasmania's south coast. Reef health was characterised based on an assessment of macroalgal community assemblages at each of the sites, with ecological and video surveys undertaken to assess and measure reef condition and health over time.

This study also focused on three Tasmanian Marine Protected Areas (MPAs) – Ninepin Point, Tinderbox and Maria Island.

An analysis of the data collected from MPA monitoring sites for the period 1992-2015 was undertaken to assess reef health and identify whether there are any patterns of broad-scale change in macroalgal community structure over time. This project aims to augment existing monitoring programs with a more refined program which continues to monitor pelagic, benthic and rocky reef ecosystems.

Spotted Handfish

The Spotted Handfish *(Brachionichthys hirsutus)* is listed as endangered under the Tasmanian Threatened Species Protection Act 1995 and critically endangered under EPBC Act. The species is endemic to south-eastern Tasmania, occurring in the lower Derwent River estuary, Frederick Henry Bay, D'Entrecasteaux Channel and the northern regions of Storm Bay. These regions correspond to Tassal's marine farming sites in the Channel, Southern and Eastern zones.

While most known populations occur in the Derwent River Estuary, Spotted Handfish individuals have been observed in North West Bay (2008 sighting) and the southern D'Entrecasteaux Channel (2013 sightings). A number of recovery plan actions have been produced for this species, documenting potential threats and methods for recovering handfish habitats and populations (Bruce and Green 1998, DPIW 2002, DEH 2004a).

Maugean Skate

Maugean Skate *(Zearaja maugeana)* is listed as a matter of National Environmental Significance under the EPBC Act, and listed as endangered on the IUCN Red List. Tassal has worked with IMAS to continue research into the species as the skate is endemic to Macquarie Harbour.

The new project addresses an important issue in the assessment of the ecological impacts of marine farming and will assist in improving confidence in the broader ecological sustainability of the activities. A key outcome will be an integrated approach to the management of ecological risks posed in Macquarie Harbour on the Maugean Skate.

By understanding how recent changes to the benthic and pelagic environment may have impacted the Skate, effective and appropriate action plans can be developed and implemented to manage these risks. This should result in an improved conservation outcome for the Maugean Skate and other resident species.

Gunn's Screw Shell

Gunn's Screw Shell *(Gazameda gunnii)* is a member of the benthic infauna community and is endemic to Australia. It is listed as vulnerable in the Threatened Species Protection Act 1995.

Its distribution has been recorded from Cape Moreton (Queensland) southwards to northern and eastern Tasmania. Information on the distribution of Gunn's Screw Shell in Tasmanian waters is extremely limited. Consultation with the Natural Values Atlas reveals nil records in Tasmanian waters, however, there is evidence low numbers of specimens have been recorded in the D'Entrecasteaux Channel through postgraduate studies (University of Tasmania) and in the conduct of marine environmental baseline surveys.

Energy Use

We understand increasing greenhouse gas concentrations in the atmosphere and associated climate change risks need to be addressed at both a global and local level.

Behavioural change, innovation and technical progress are essential to achieve a balance in meeting natural resource and energy needs in the food production sector. We undertake to establish energy usage and emissions targets and invest in and encourage innovation to improve operational energy usage and emissions performance. In line with our Aquaculture Stewardship Council (ASC) Certification, we monitor energy consumption in the production of fish and aim to improve efficiency and reduce consumption of energy sources.

Effluents and Waste

In line with best practice and our Aquaculture Stewardship Council (ASC) certification, our policy for the proper and responsible disposal of non-biological waste from production guides our activities. All of our marine operations sites maintain a waste flow chart, allowing us to identify waste streams and methods of disposal. We continuously look for ways to improve our shore-based waste management.

Tassal's key waste streams are:

- Organic materials (primarily fish by-product)
- Plastics
- General waste

During the reporting period 1,644 m^3 of sludge from our Rookwood Road nursery was sent to composting. Another 44m^3 of sludge was removed from our Russell Falls hatchery by a waste service provider and used for land spreading.

We are also investigating a biodegradable alternative to the current plastic liner used in all polyboxes. A move to such a liner would be a strong commitment to minimising environmental impacts of our packaging and would eliminate 800,000 bags ending up in landfill each year.

Recycling continues to take precedence in an effort to reduce our bulk plastic waste to landfill.

Approximately 195,000 kg of HDPE waste Salmon pen pipe, walkways, stanchions and feed pipe has been collected, with around 120,000 kg of this waste recycled into pellets ready for remanufacturing into new products such as steel truss spacers, fire extinguisher brackets and dip tubes, fence posts, permeable pavers and chain wire fence security screening by local company Envorinex.

We have disposed of 150 tonnes of mussel shells and 180 tonnes of centrifuge fines from our net slab through Cement Australia and continue to investigate disposal options for condemned legacy copper nets.

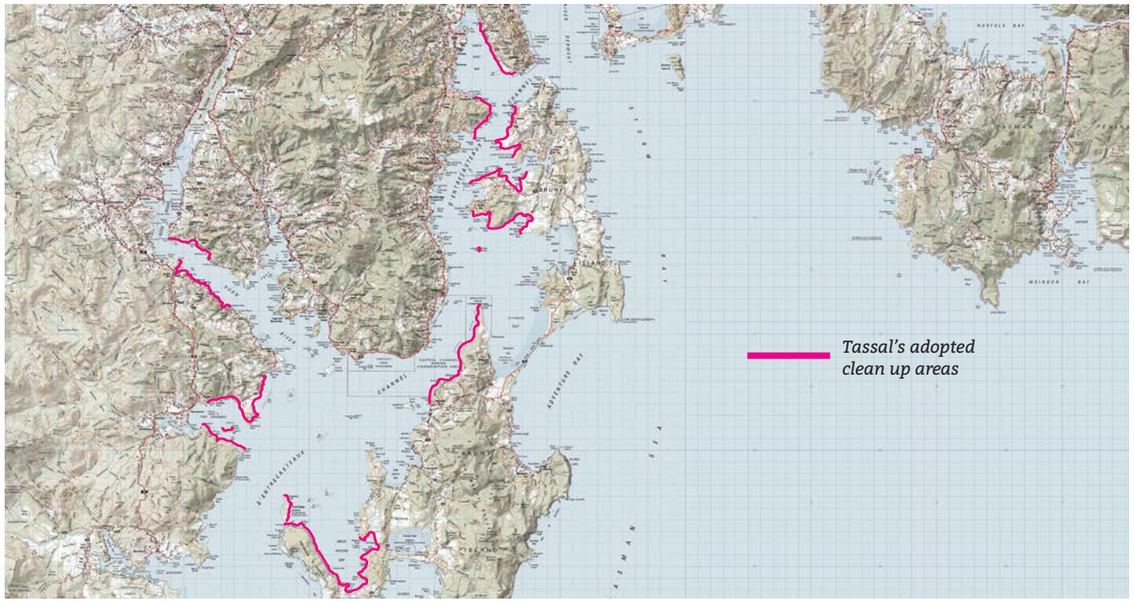
CLEAN UP EVENTS

D'Entrecasteaux and Huon Collaboration

Clean-up events have taken place as part of the D'Entrecasteaux and Huon Collaboration, a program hosted by NRM South and supported by local government and industry. Tassal is a proud sponsor of the Collaboration. In the April/May 2017 clean-up, more than 36 m^3 of marine debris was collected by staff and volunteers.

The clean-up area included beaches and foreshores in Dover, Alonnah to Simpsons Point on Bruny Island, Garden Island, and Randalls Bay to Nine Pin Point in the Huon Estuary. As well as rope, nets and other fishing gear, a large amount of soft plastic rubbish was collected. A new hotline has been established for reporting marine debris in the D'Entrecastreaux Channel and the Huon Estuary.

Marine farmers have also adopted new specific coastlines, so when a call to the hotline is made, it will be clear who is responsible for clean-up.



Macquarie Harbour, Strahan and Ocean Beach Clean-up

A shoreline clean-up of unparalleled proportions was completed at Macquarie Harbour, Strahan and Ocean Beach. Using four boats and land crews, more than 80 volunteers and staff covered 80 km of shoreline, removing more than 55.5 m^3 (six tonnes) of marine debris.

The clean-up event was a collaborative effort and supported financially by all three Tasmanian Salmon companies, Cradle Coast NRM, Strahan Village and the West Coast Council.

The project has protected marine life from entanglement and ingestion of plastics in Macquarie Harbour, Strahan's waterways and Tasmania's World Heritage Area and contributed towards protecting the natural values of the World Heritage Area and Commonwealth-listed bird species which feed and breed in and around the Harbour and Ocean Beach. The clean-up will also increase protection of marine mammals. Surveys were undertaken on bird and mammal species impacted by marine debris, and entered into the CSIRO marine debris database.

Bird species affected by marine debris in clean up area	Mammals affected by marine debris in clean up area
Short-tailed Shearwater – ***migratory***	Humpback Whale - ***vulnerable***
White-breasted Sea Eagle	Southern Right Whale
Wedge-tailed Eagle - ***endangered***	Pygmy Right Whale
Black-browed Albatross – ***endangered***	Sperm Whale
Shy Albatross - ***vulnerable***	Pilot Whales
Azure Kingfisher – ***endangered***	Common Dolphin
Hooded Plover – ***vulnerable***	
Fairy Tern – ***vulnerable***	

Marine, Freshwater and Processing Compliance

Marine Farming Compliance

The Environmental Protection Authority (EPA) Tasmania is responsible for environmental regulation of the Salmon farming Industry. All of Tassal's marine farming operations must be licenced under the Living Marine Resources Management Act (1995). Each licence includes environmental monitoring conditions specific to that licence to ensure activities carried out under licence are managed in ways which prevent unacceptable impacts to the marine environment.

The Marine Farming Planning Act (1995) provides a legislative mechanism for the development and approval of marine farming development plans.

Nitrogen Cap

The release of nutrients into the environment from finfish farming is largely associated with feed input. Approximately 5% of the total feed input from Salmon farming is released into the receiving environment as a form of nitrogen (Wild-Allen et al, 2005), of which 85% is released as dissolved nitrogen (predominantly ammonium) and 15% in particulate form.

In south-eastern Tasmania, the primary management and regulatory tool for ensuring eutrophication of the marine environment does not occur is through the Total Permissible Dissolved Nitrogen Output (TPDNO), which is regulated by the Tasmanian EPA.

Management controls and licence conditions control and manage the carrying capacity for Tasmanian Salmon farming operations. This includes the TPDNO for the South East Marine Farming sites within the D'Entrecasteaux Channel and Huon River Marine Farming Development Plan (MFDP) areas.

In 2008 the Secretary of the Department of Primary Industries, Water and Environment (DPIPWE) formally determined and apportioned a TPDNO resulting from finfish marine farming. This condition exists to limit nutrients transferred to the environment. During the reporting period, an additional 115 tonnes of TPDNO was transferred to Tassal which had previously been apportioned to another aquaculture operator within the plan area.

Freshwater Hatchery/Nursery Compliance

Local councils play a lead role in the regulation of our freshwater nurseries and hatcheries. All applications for development must be submitted to the local council, who can then refer the approval process up to higher level of governance (EPA Tasmania) if the development is classified as level two or above, as is the Russell Falls infrastructure upgrade.

During the reporting period, revised environmental conditions were integrated into the requirements of the DA 127/2013 for the Russell Falls Hatchery upgrade. These include:

- Introduction of an annual Environmental Report to detail water quality monitoring data, the first of which was submitted in the reporting period
- Requirement to install and commission a drum screen for all farm effluent prior to discharge from the settlement pond to the river
- Installation of a flow meter and turbidity probe to monitor water outflow to the Tyenna River
- Development of a nutrient reduction management plan

The main structural difference between our Russell Falls hatchery and our Rookwood Road I & II nurseries is the development of contemporary recirculating systems.

Recirculating systems align with world best practice and incorporate the latest technology to reuse water by means of a series of filters, removing excess nutrients and particulate matter from the water. Tassal's recirculation hatcheries source their water from a bore, ensuring no water is taken from, or goes back into the adjacent Huon River. Bore source recirculating systems provide a greater surety of water volumes and a more consistent quality and greater biosecurity, resulting in better fish health and performance.

Flowthrough systems divert river flow through a series of tanks or earthen ponds which house the stock, before it flows back into the river via a settlement pond downstream of the hatchery. The vast majority (76% for 17YC) of our smolt are reared in our recirculation hatcheries.

Environmental Compliance in Processing Facilities

Tassal's processing activities (Dover, Margate, Huonville and Triabunna) operate within a planning and regulatory environment governed by State legislation under the Tasmanian Resource Management and Planning System (RMPS). Where the EPA has deemed it appropriate, biosecurity management has been integrated into environmental conditions for specific Processing activities under collaboration with Biosecurity Tasmania. Environmental management at each of the processing sites is underpinned by environmental conditions determined by the EPA contained within a Permit issued by the relevant planning authority.

The environmental conditions for a facility may be amended by the EPA by issuing an Environmental Protection Notice (EPN).

The key areas of environmental management for the Processing facilities are:

- Wastewater management and irrigation
- Air quality
- Noise emissions
- Biosecurity
- Waste management

Tassal is committed to maintaining compliance and good environmental management practices at all of its processing facilities. Structured monitoring programs have been developed and implemented to continuously assess environmental performance. Significant work has been undertaken to further understand and identify wastewater treatment improvements across Processing with the outcomes of the work planned to occur during 2018.

Dover Processing Facility

The Dover processing facility operates under an environmental protection notice (EPN No. 9635/1) which was issued by the EPA in June 2017.

In November 2016, the commissioning of a sludge screw press was completed. The screw press replaces the need to use dams to store and then dewater waste activated sludge produced in the wastewater treatment process. From February 2017, a significant improvement in all effluent compliance parameters was observed with levels meeting compliance limits.

Margate Processing Facility

The Margate processing facility operates under an environment protection notice (EPN 7098/2). The Margate factory WWTP is managed under a three-year wastewater management plan formulated to manage wastewater from the factory and to ensure emissions are in compliance with revised emission limits.

Effluent quality has noticeably improved since November 2016 with general compliance being maintained. The observed improvement can be attributed to work completed as part of the Wastewater Management Plan and the decommissioning of the dry processing (bottom) factory in November 2016.

A revised Wastewater Management Plan is being developed for the facility which will contain further commitments to ensure the ongoing compliance of effluent quality. The plan will be submitted to the EPA for review and approval.

The site also operates under a comprehensive approved Biosecurity Management Plan with a very strong wastewater management and disinfection focus, as required under the EPN. The site has maintained compliance with the Biosecurity Management Plan.

Huonville Processing Facility

The Huonville processing facility operates under a land use planning permit issued by Huon Valley Council (DA 54/2009) containing environmental conditions issued and regulated by the EPA.

Wastewater is discharged untreated to TasWater Ranelagh WWTP, which is monitored by Tassal and TasWater to ensure responsible discharge. Tassal is working in conjunction with TasWater to assess the current nutrient loading of wastewater produced and to identify treatment requirements to improve the wastewater quality being received at the Ranelagh plant.

Triabunna Rendering Facility

The Triabunna Rendering Facility operates under a land use planning permit issued by Glamorgan Spring Bay Council (DA 2014/00001) containing environmental conditions issued and regulated by the EPA. Wastewater produced from the rendering and meal drying process is sent to and stored in a large dam and subsequently irrigated on the 'Rostrevor' property (where the facility is located) under an approved Water Reuse Irrigation Plan. In September 2016, The EPA granted approval for the interim use of a second irrigation area to allow for the management of high volumes of rainfall received at the facility. From July 2016 to June 2017 a total of 15.2 ML of water was irrigated.

The performance of plant equipment differs from what was described in the approved Development Proposal Environmental Management Plan (DPEMP). An updated Reuse Water Management Plan and Irrigation Management Plan is being developed to reflect current operations and to provide procedures to ensure ongoing compliance. The updated plans will be submitted to the EPA for review and approval.

An audit was conducted by the EPA against the EPN for the facility in June 2017. The audit identified the variation of plant equipment performance from what was described in the DPEMP. Two complaints were received regarding odour emissions from the facility. Notification of the complaints was provided to the regulatory authority and remedial action was implemented. Ongoing work is being conducted to identify and manage odour at the facility.

ISO 14001:2015 – Environmental Management Systems

Tassal will be working towards developing and implementing an Environmental Management System to be accredited to ISO 14001:2015 for all processing facilities. The management system will provide the framework and procedures for continuous assessment and management of compliance activities and environmental risks.

Our Environmental Commitments for FY2018

Vision: *To protect the environment through sustainable management practices*

GOALS	TARGETS
Maintain independently certified compliance for marine farms to world leading standard	Achieve 100% ASC across all leases
Operate at all times within regulatory requirements (local, state and national guidelines)	Achieve no compliance breach which impedes licence conditions, social licence or operations
Strengthen WWF-Australia Partnership	Establish KPIs aligned to shared marine values mapping principles.
Improved and increased freshwater monitoring vigilance across all flow-through hatcheries	Develop and implement freshwater monitoring plans for individual hatcheries
Roll-out of 'company-wide' recycling program	Extend recycling program to all facilities
Increased internal marine monitoring program	Roll out intermediate surveys across all leases three times per year
Obtain ISO-14001 certification across processing sites	Develop Environmental Management System (EMS) which aligns with ISO-14001

Environment Snapshot

Benthic and water quality management compliance – marine operations

	FY2015	FY2016	FY2017
Number of ROV Dives	329	380	206
Number in Compliance	322	367	169
% Compliance	97.9	96.46	82.03

Table has been adapted to report only on 35m compliance sites. The table no longer includes baseline surveys, research work, in lease dives, monthly extent work at MF266, world heritage area dives or non-regulatory work.

Energy: total fuel consumption – non-renewables

FUEL USAGE	
Diesel (L)	1,696,445
Unleaded (L)	1,260,327
Total (L)	2,956,772
ELECTRICITY CONSUMPTION	
Electricity consumption	36,133,895.67 kWh
TOTAL ENERGY CONSUMPTION	
Total energy consumption	238,668 (GJ)

*Fuel for fleet for FY17 was 281,637.47 litres (made up of diesel & unleaded)

Effluents and waste - water discharge by quality and destination

SITE	DESTINATION	VOLUME	Quality	Treatment method	Used by another organisation
Huonville Fish Processing Factory	TasWater - Ranelagh Sewerage Treatment Plant	Maximum 19.8kL/ hour	As per the Trade Waste Agreement with TasWater	Trade Waste Agreement	No
Margate Fish Processing Factory	Effluent release to North West Bay, Under EPN No. 7092/2	Maximum 8kL/hour	Compliance limits determined by DPIPWE Guidelines for Sewerage Treatment Plant Discharge Limits (for discharge into the marine environment)	Screening, biological, oil and grease removal, lagoon disinfection	No
Dover Wet Fish Processing Factory	Effluent release to Port Esperance under EPN No. 9635/1	Maximum 490kL/day	Compliance limits determined by EPA Emission Limit Guidelines for Sewerage Treatment Plants which Discharge to Fresh and Marine Waters 2001, Tasmania	Screening, biological, biosolids removal, disinfection	No
Triabunna Fish Rendering Facility	Irrigation to land under EPA approved Irrigation Management Plan	65 – 70 kL/ day	Guideline values determined by Class B Recycled Water limits contained within the EPA Environmental Guidelines of Recycled Water in Tasmania 2002	Aeration and settling dam	Irrigation to land

Compliance in hatchery/nursery

Hatchery	Water quality compliance %	Biological macroinvertebrates compliance %
Rookwood I & II	97.9	N/A
Russell Falls	100	100
Karanja	100	N/A

*All hatcheries are audited under ASC certification including Saltas

Waste disposal

Waste type	Amount	Disposal method
Liquid Bulk (non-hazardous)	1,217.96 (litres)	Third party landfill
General	914.20 (tonnes)	Third party landfill
Hazardous (packaged)	264.00 (tonnes)	Third party landfill
Cardboard	60.66 (tonnes)	Recycled
Timber	6.60 (tonnes)	Recycled
Plastic	4.06 (tonnes)	Recycled
Comingled	3.08 (tonnes)	Third party landfill
Paper	1.30 (tonnes)	Recycled
Medical (hazardous)	0.21 (tonnes)	Third party landfill
Sanitary (hazardous)	0.02 (tonnes)	Third party landfill
Marine farm pipe	195 (tonnes)	Recycled

Recovery of nutrients from biomass 'waste'

	Weight (tonnes)			Protein (tonnes)			Omega-3 (tonnes)		
Biomass	**FY2015**	**FY2016**	**FY2017**	**FY2015**	**FY2016**	**FY2017**	**FY2015**	**FY2016**	**FY2017**
Heads & Frames	1,416	1,529	3,711	160	183	445	12	13	32
Guts	3,117	2,524	7,268	686	555	1,599	318	257	741
Trims	850	918	2,227	159	110	267	6	8	19
Skins	424	458	1,484	85	55	178	2.9	4	13
Mortalities	1,684	736	161	315	138	30	84	37	74
Total Nutrients Recovered	7,491	6,164	14,851	1404	1,041	2,520	422.9	319	879

Marine debris

Year	Volume of rubbish removed (m^3)	Hours dedicated	Percentage attributable to Salmon farms*
FY2015	33.2	319	36
FY2016	23.5	250	65
FY2017	72	386	66

Note: All three Salmon farms in Tasmania have contributed to marine debris

Total permissible dissolved nitrogen output (nitrogen cap)

TPDNO	Tassal Limit	Results 2014	Results 2015	Tassal Limit	Results 2016	Tassal Limit	Results 2017
Total Tassal Huon	425.00	254.51	323.22	325.00	312.26	325.00	294.94
Total Tassal Channel	821.03	637.99	673.57	921.03	850.11	1036.03	953.65
Total Tassal Huon and Channel	1246.03	892.5	996.79	1246.03	1163.37	1261.03	1248.59
Compliance	N/A	**100%**	**100%**	N/A	**100%**	N/A	**100%**

All up to date statistics are available on the Tassal ASC Dashboard: http://dashboard.tassalgroup.com.au/

Our Responsibility for Animal Welfare

In any production system, the health and welfare of stock is pivotal for the sustainability of the business. Health and welfare will have a direct impact on the performance of stock and the ability of animals to ward off disease.

Tassal has a culture of proactive health management, through our Fish Health Management Plan. Effective implementation of fish health strategies is assessed by our health teams who provide support across all of our farming sites. Biosecurity across the industry and on a farm level is imperative to drive this proactive culture as it minimises the risk of disease incurrence and transmission. We strive to create a continuous improvement culture in our fish health space.

1 Domestic broodstock of *Salmo salar* are kept in freshwater hatchery facilities located at Saltas and Russell Falls

2 Fertilised eggs are sourced from industry hatchery Saltas and our Russell Falls operation. Eggs are then transported to our nurseries where young Salmon (smolt) are grown to between 120 – 330 grams before being relocated into the marine environment

3 The fish spend approximately 18 months at our marine based farms and are grown to between 4 and 5 HOG kg before harvesting

4 Once harvested, fish are either processed as fresh whole fish, fresh fillets or portions, smoked Salmon or other value-added products

Use of Triploids in Aquaculture

Tassal uses triploid fish which are sterile fish produced by pressure shocking commercial eggs. Triploids are important as they fill an important market gap because unlike diploid fish, they do not mature and produce eggs. Maturation prior to harvest size leads to issues such as reduced immune capacity, reduced ability to fight off parasites; and poorer flesh quality.

Fish Health Training on Biosecurity

Biosecurity refers to the management of stock health and prevention of disease entry into a farming unit. Biosecurity is important for the sustainability of the company and the Tasmanian Salmon industry. We have invested heavily in our biosecurity culture over the years, and believe best practice should be employed to drive continuous improvement within the industry.

To drive this culture, we have upskilled our staff with the following training programs (non-accredited):

- Disease and dissection training: Upskilling staff members in early detection of disease and recognising abnormal gross pathology; educating staff members on endemic diseases significant to Tasmania
- Biosecurity – farm management: Upskilling staff on pathway biosecurity and disease vectors and their control
- Fish physiology: Upskilling staff on fish physiology and the impacts of stress/handling on animals to drive better practices to improve welfare

Upskilling staff members will improve early detection of disease, response time and skills in disease investigations. It is important these investments are made every year and training is redeveloped so new published information can be disseminated across the industry.

Gill Necrosis and POMV

Gill necrosis has caused mortality events through warmer periods, and is a new disease of concern in addition to Pilchard Orthomyxovirus (POMV). This syndrome is caused by environmental factors e.g. biofouling organisms and algae throughout the spring/summer period. It causes grey nodules on the gills and can cause issues with respiration. There is no definitive cause of gill necrosis, but there is a high association with biofouling (by multiple unidentified hydrozoan species). During the summer months, when biofouling organisms are in high loads, there is an increased prevalence of gill necrosis across particular sites. It has been the direct cause of mortality as water temperatures increase.

Our fish health management plan has been updated during the reporting year to include both Gill necrosis and POMV.

Anaesthetic Use

Anaesthetics are used to improve the welfare of fish during handling events such as broodstock handling, and processes such as tagging and vaccination. Tassal primarily uses two anaesthetics, benzocaine and Aqui-S (isoeugenol). Benzocaine is only used in freshwater production (hatchery phase) during vaccination of our stock as it immobilises our stock effectively for the process of intraperitoneal vaccination. Aqui-S is used in the rest of our production stock because of its registration and nil withdrawal time. Isoeugenol is a derivative of clove oil, and moderate sedation is used within guidelines and veterinary oversight to reduce stress on animals during our stock health checks. It is important that we routinely check the health of our stock, which is done through indirect measures such as weight checks, and also by checking them for signs of disease.

Antibiotic Use

The ability to use antimicrobials is important in all intensive animal production systems. However, there is a need to ensure the use is stringent to reduce the risk of antimicrobial resistance. Strict guidelines exist in the use of antibiotics including the evidence of disease and elevations in mortality; sensitivity of the disease agent to the antimicrobial, and the ability to effectively administer the antimicrobial.

Follow up to a treatment is necessary to ensure the treatment has been effective. A withdrawal period is used to ensure the antimicrobial levels are beneath food safety maximum residue limits.

Tassal has not used any antibiotics since December 2016.

The vast majority of our fish never see antibiotics and we do not feed antibiotics routinely, nor for performance reasons.

In the unlikely event fish need antibiotics, they go through an extended withdrawal process before harvest, guided by a history of extensive residue testing, that ensures the fish are harvested only when they are well below Australian and international maximum residue levels. Because we are ASC certified, part of the strict requirements are we release all of our antibiotic use data to the public, including any use within hatcheries. This data can be found on our website within 30 days of a treatment occurring. Other companies who are not ASC certified are not required to do so.

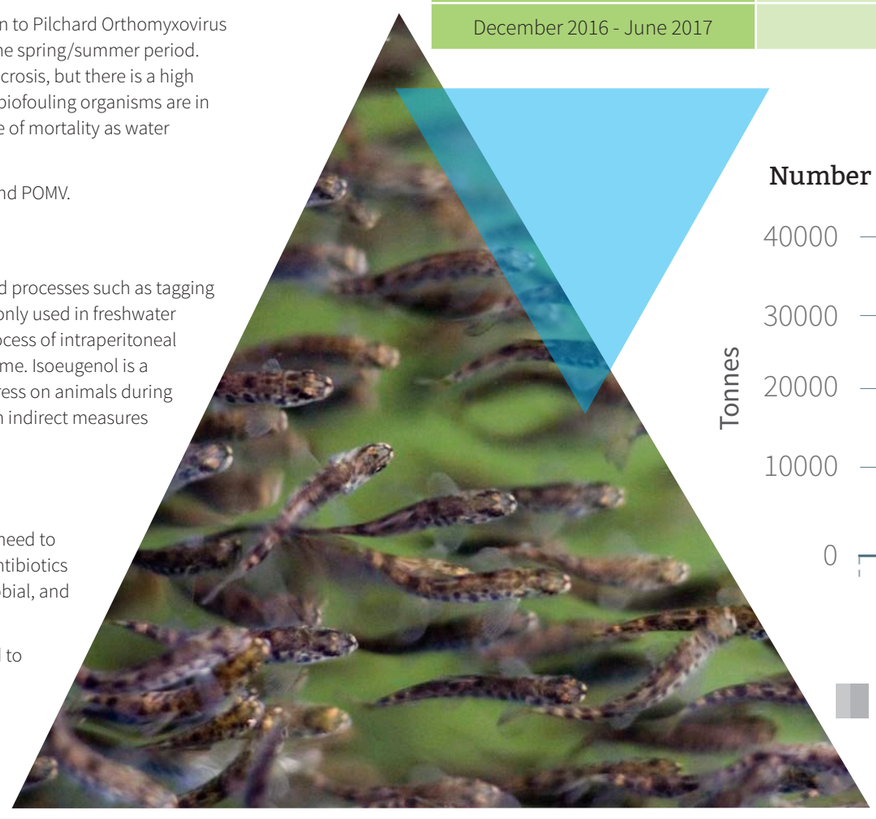
During the FY15/16 period we started changing our antibiotic from one that was administered at 30mg per measured dosage to a different antibiotic administered at a dosage of 100mg.

This continued during the most recent reporting period. Therefore, while the total weight of antibiotic has increased since 2015, it is because of the different prescribing rates.

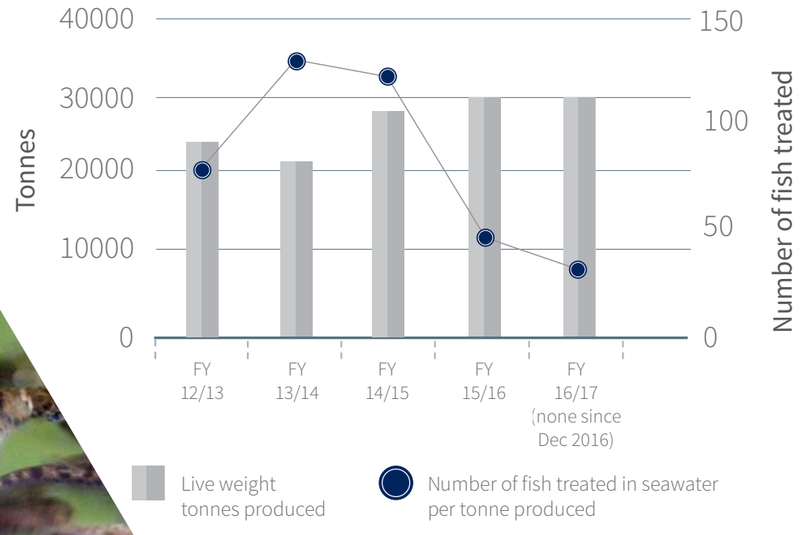
The graph below shows that the number of fish receiving antibiotics in our marine farms has actually declined each year since FY13/14. This has been achieved through the strategic use of available vaccines. Tassal is also supporting the development of new vaccines.

Tassal has not used any antibiotics since December 2016

Period	Grams antibiotic used per tonne of fish produced		
	Marine farms	Nurseries	Total
July 2012 – June 2013 (FY2013)	2.44	1.15	3.58
July 2013 – June 2014 (FY2014)	7.82	2.50	10.32
July 2014 – June 2015 (FY2015)	4.84	0.78	5.62
July 2015 – June 2016 (FY2016)	9.92	1.54	11.46
July 2016 – November 2016	17.13	0.03	17.16
December 2016 - June 2017	0	0	0



Number of fish treated in seawater per tonne harvested



Wildlife Interactions

Tassal has long advocated for and worked on the prevention of seal intrusion on site through the accelerated roll out of the environmentally safe and most advanced seal proof pens – 'Ocean Sanctuary Pens'.

This is a $70 million investment and a demonstration of the company's ongoing commitment to continuous improvement when it comes to the safety and welfare of people, wildlife and stock.

Seal and Bird Interactions

Australian and New Zealand fur seals are protected wildlife and are the natural inhabitants of the marine environment in which Tassal farms. As the population of seals continues to grow in Tasmania, Tassal is adopting a prudent cautionary approach to managing the seal population around Salmon pens, and we carefully manage seal interactions through an established process and in line with regulatory requirements. Our core objective is to achieve this with no harm to our employees or to seals.

Increasing numbers of seals are attracted to our farms, at all sites due to the availability of food, posing a threat to workplace health and safety, increased stress in our fish, and of course, predation. Tassal has worked closely with the Department of Primary Industries, Water and the Environment (DPIPWE) to ensure a best practice approach to seal management.

Tassal's exclusion strategy includes a combination of seal proof bird nets, three metre jump fences (above water) and K-Grid stock nets. The high outer jump fences are made of 100mm, 600kg break strength mesh and have been fitted to 85 of the 120 metre cages across our south east marine sites. All pen netting is heavily weighted to provide protection against seal predation.

New to Tassal are our Ocean Sanctuary Enclosures which have also been rolled out as part of our exclusion strategy. In the reporting period we installed 20 of these cages across our operations.

The Ocean Sanctuary Enclosures consist of rigid and strong bi-polymer K-Grid nets below the water, a three metre high outer fence above water, and bird net over the top of the cage. Ocean Sanctuaries pens have a patented double stanchion system supporting a three metre high netting fence on the outside of a walkway. This barrier stops seals from jumping into the pen while also keeping our staff safely out of reach from seal encounters.

The removal of mortalities from fish cages in a timely fashion also takes away the attraction of our operations to seals.

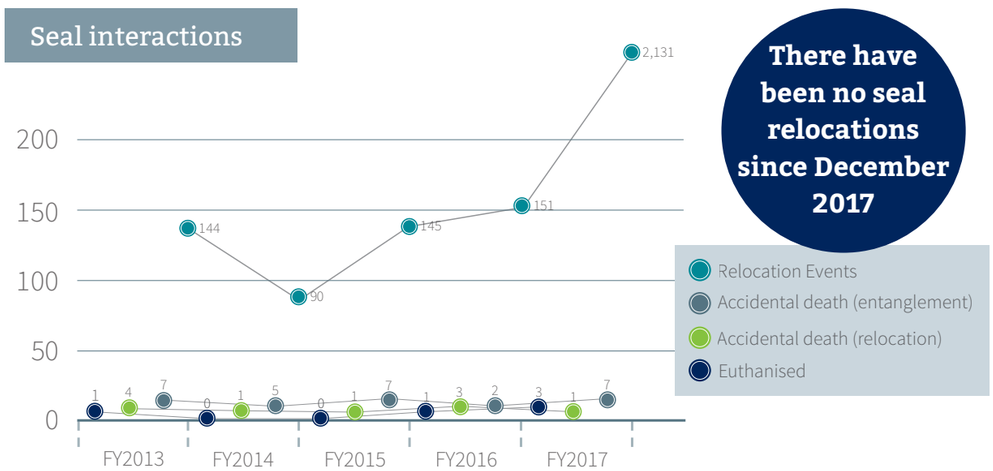
Marine farms can have general impacts on birds ranging from habitat modification to entanglement. Tassal implement a range of stringent bird protocols to mitigate potential interactions around their marine farms. These protocols seek to provide guidance to our employees to assist with the passive exclusions of birds from sea cages, removal of birds that may be trapped in pens, and reporting of any entanglements of birds in exclusion nets. We maintain bird monitoring data for each of our farming zones.

During the reporting period Tassal experienced a significant increase in seal numbers from seals targeting pens yet to be replaced with seal proof infrastructure. The inundation of seals on marine sites is a significant issue for our marine operations – particularly our staff. The impacts of seals include WHS risk to employees, predation of stock and stress in fish.

Relocation events increased in FY2017 as a result of an operational focus to proactively manage fish welfare and relocate repeat problem seals which were an immediate threat to our people and our fish. It is important to note no seals were harmed during the relocation process.

We are constantly adapting to changing conditions when it comes to interactions between seals and our farms and to date our new Ocean Sanctuary Pens have experienced zero seal breaches.

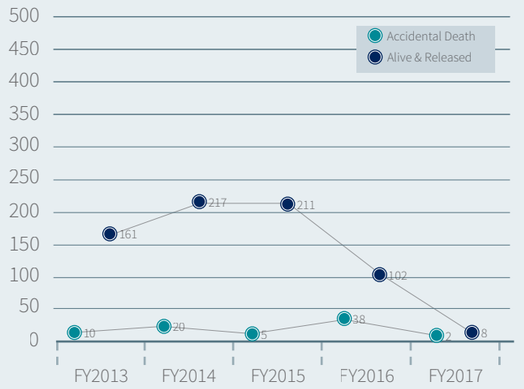
Seal interactions



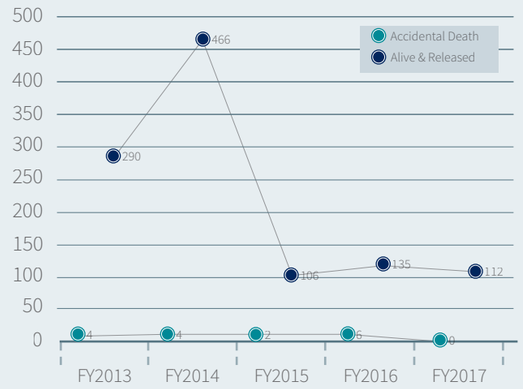
There have been no seal relocations since December 2017

Bird interactions

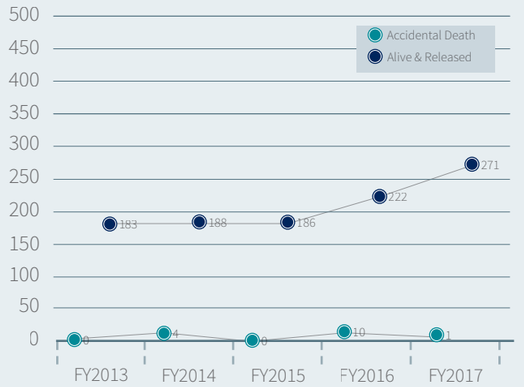
Channel Zone



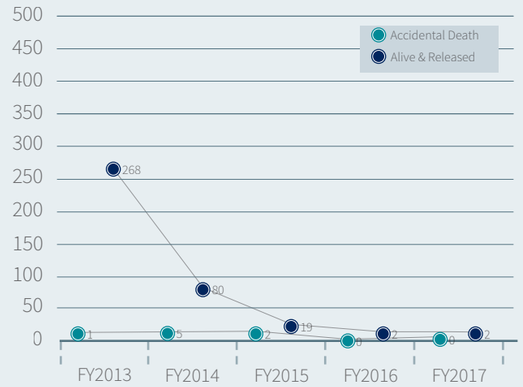
Southern Zone



Eastern Zone



Western Zone



There were no interactions with sharks, whales or dolphins during the reporting year.

Our Animal Welfare Commitments for FY2018

Vision: *Fish Safety – No Harm to our Fish*

GOALS	TARGETS
Maintain program to protect fish from predators and disease	Roll out replacement and upgrade program for sanctuary infrastructure
Selective Breeding Program (SBP) to support increased survival	Achieve less than seven bathes per year class through improvements in SBP
Support industry goals to have a commercial pilchard orthomyxovirus vaccine	Support successful completion of vaccine development by the Fish Health Unit (Aquatic Animal Health and Vaccines Centre of Excellence). Vaccine to be in place for 18YC
Implement an Area Management Agreement for the South East	Work with industry to develop industry Area Based Management framework
Reduce use of antibiotics	Total grams per tonnes produced to be reduced year on year
Improve fish health and welfare on marine sites	Trial POMV vaccine in field in FY18 to determine effectiveness in-field and assess welfare aspects of vaccination

Workplace Health and Safety Responsibility

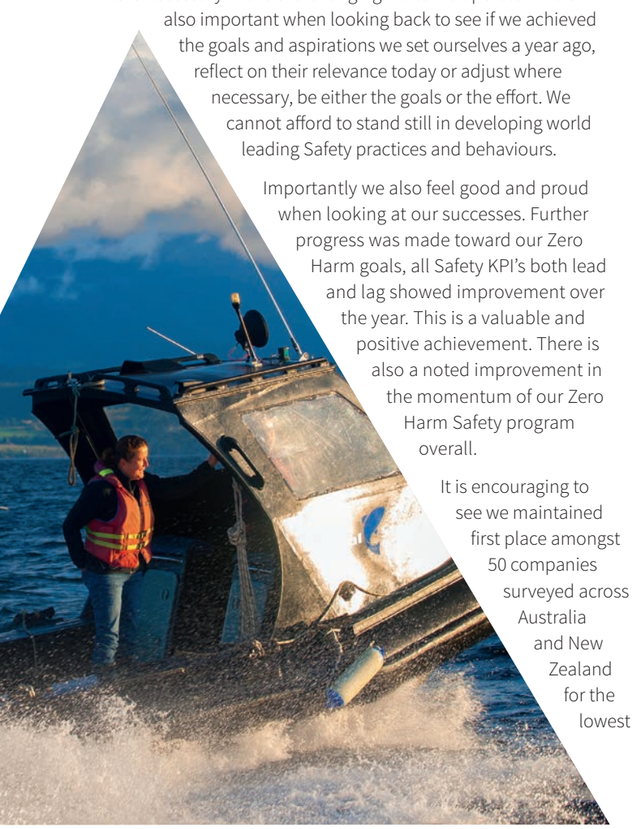
Ian Miles
Head of Safety

It is worthwhile to look back on the year past and reflect on our progress as well as failures. There needs to be a healthy balance in reflecting on both. We have learned valuable lessons from the failings and are determined not to repeat them. We have worked hard and smart to improve where it was necessary to ensure a successful future.

This is necessary in the everchanging world we operate in. It is also important when looking back to see if we achieved the goals and aspirations we set ourselves a year ago, reflect on their relevance today or adjust where necessary, be either the goals or the effort. We cannot afford to stand still in developing world leading Safety practices and behaviours.

Importantly we also feel good and proud when looking at our successes. Further progress was made toward our Zero Harm goals, all Safety KPI's both lead and lag showed improvement over the year. This is a valuable and positive achievement. There is also a noted improvement in the momentum of our Zero Harm Safety program overall.

It is encouraging to see we maintained first place amongst 50 companies surveyed across Australia and New Zealand for the lowest workers compensation cost per employee, testament to a well executed Safety program and a well managed injury prevention program. Further confirming Tassal's commitment to our Zero Harm program were the results of our 2017 materiality assessment which showed Workplace Health & Safety (WHS) was rated as being both highly significant to and highly performing at Tassal. In addition, and just as encouraging is Workplace Health & Safety was rated as being both highly significant to and highly performing by individuals. To me, this means we are on the right track and, we achieved what we set out to achieve in 2017.



Looking into the future. Our overall focuses continue to drive the right Safety climate and the right Safety culture, which is key to future success. This is also well supported by the right Safety programs, the right systems and resources. We will be enhancing and accelerating innovation, to ensure fit for purpose equipment, better equipment so we can do more with less, and have safer outcomes.

We will continue to build Safety Leadership capacity both at site level and within the WHS Department. Operational initiatives will focus on further reducing lazy controls in favour of effective controls, with a preference toward elimination and/or engineering controls of safety risk. We are also looking forward to further capitalising on successful integration of Safety systems into operations and improving on practices which create production bottlenecks which can negatively affect safety outcomes.

Last but not least we continue to pursue our Zero Harm For Everyone, Everywhere vision with purpose, with a resolute value of "I care for" and "I take care of" our People, Planet, Product and Performance. This ultimately in my view is what will lead to our success.

Safety Climate Survey

Tassal conducts an annual Safety Climate Survey which intends to build a picture of what the site 'climate' is surrounding safety from the perspective of the workers. This survey measures the current attitude and perspective of safety at a particular site.

The data is valuable to create insight into where site management (and the organisation) requires focus in order to create the right climate for the right safety culture to flourish.

The higher the percentage acheived, the more positive employees are about a specific safety topic and the overall safety climate at their site.

Survey results also benchmark Tassal against best practice and global averages of the same data. We achieved a survey completion rate of over 90%.

This year's safety survey identified the following:

Consistent strengths:

- Managers and supervisors are focused on safety
- Staff are feeling well informed about safety rules and regulations, their work area is safe and they are comfortable reporting unsafe situations
- There is an overall sense that fixing hazards is everyone's responsibility and staff generally display a more mature approach to safety behaviour

Areas for improvement:

- A review of resourcing plans and staff scheduling systems should occur
- Employees should not take shortcuts when rushed to get tasks done.
- Managers and supervisors must be held accountable for safety breaches

WHS Innovations

Incident and hazard reporting App

Tassal's WHS and IT department, in collaboration with a third-party developer, have created an online computer and mobile device application for reporting of incidents and hazards.

The hazard reporting app allows sites to upload detailed summaries of any identified hazards on-site, including the capacity to take photos. This can be done on any mobile device making hazard ID much easier for all staff who work in the business. The data is uploaded immediately to the sites working group for instant consultation. The WHS department are also prompted via email of the hazard to strengthen the consultation process.

The incident reporting app allows sites to upload incident reports via any mobile device or computer allowing incident notification and reporting to occur more quickly than without the app. There is also the capacity to close-out the report online, eliminating much of the administrative burden of paper based systems. All incidents are also alerted to the WHS department advisors immediately via email so appropriate advice or consultation can be implemented swiftly. Data from the incident reporting app is uploaded to Tassal's central database and dashboard immediately providing real-time data to the WHS department, site managers and executives.

Both of these initiatives intend to further streamline the WHS Management System to make hazard identification, risk assessment and control even more effective for the whole business.

AWARD:

We were very pleased to receive the Finalist (Highly Commended) in Oct 2016 (FY17) Worksafe Tasmania awards – in the Best solution to an identified work health & safety issue category

Ocean Sanctuary Pens

Tassal has developed a 168 metre circumference pen which is to replace all 120 metre versions (traditional design). The new pen and net system, called the 'Ocean Sanctuary Pen' boasts superior safety protection against seals for livestock and staff. Each pen is complete with a fixed walkway making the working area much more user friendly. Traditionally, seal jump-fences have been erected above the handrail leaving the working platform exposed for seals to 'haul-out' on.

Safety Leadership Training

The ROCK Safety Leadership Program this year saw another group of Tassal's current and upcoming leadership group gather together over four two-day sessions. The sessions focused on building personal resilience to do the right thing and lead WHS from the top and gave participants the opportunity to reflect on the leadership and communication style for themselves and their teams so they can get the best out of themselves and each worker they influence. Extending from this is content delivery from WHS specialists on key areas of the safety system so participants can sharpen their knowledge.

Workplace health and safety committees

All (100%) of our employees are invited to attend WHS meetings and engage with the management team on any WHS related matter. Quarterly WHS committee meetings function as per Tassal's WHS-102 Consultative Arrangements procedure which stipulates a 50:50 ratio of workers to management/supervisors for any given site.

Tassal doesn't have formal agreements with the Union around safety, as we refuse to negotiate around safety. Everyone has the right to a safe workplace, and our policies/procedures and actions are more in depth than union agreements.

Ocean Sanctuary Enclosure

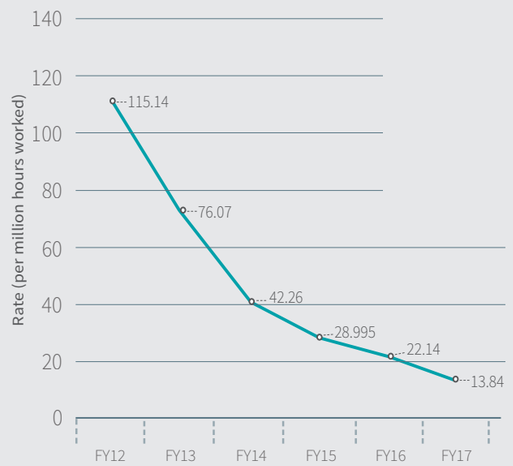
Our Safety Commitments for FY2018

Vision: *No Harm to our People*

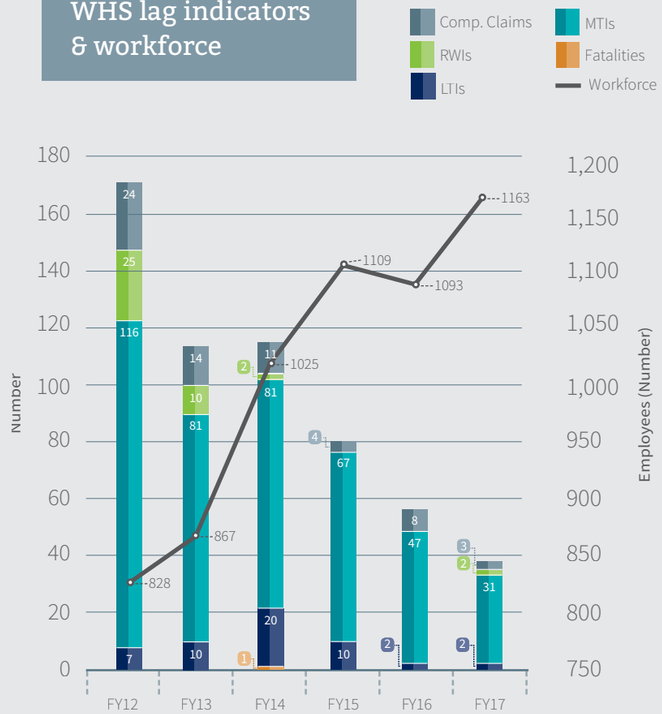
GOALS	TARGETS
Achieve Zero Harm for Everyone, Everywhere	95% overall score for WHS Compliance Scorecard
	Driving Safety Culture Scorecard target >94% overall score
Zero Serious or significant incidents	>70% controls to be level 1 or 2
Zero legislative breaches (compliance, right to operate across all of business)	- 0% overdue safety actions - TRIFR <10 - Fatalities 0 - LTIFR 0 - MTIFR <10 - Incident Rate 0 - Average Time Lost 0

Safety Snapshot

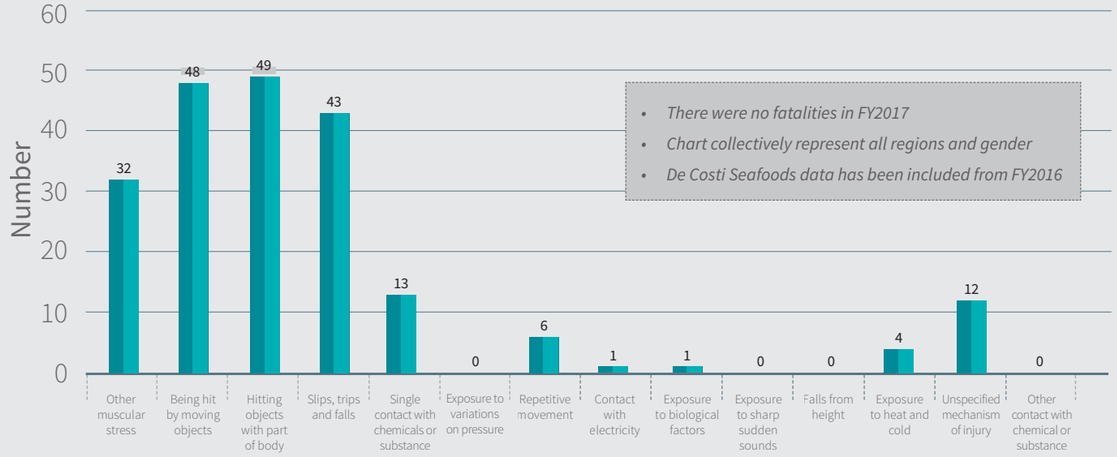
Tassal's total recordable injury frequency rate (TRIFR)



WHS lag indicators & workforce



Mechanism of Incident



Respecting our People

Kaylene Little
Head of People, Culture & QA

As Head of People, Culture and QA it is always such a privilege to sit back, reflect and observe the amazing team of people who collectively define our DNA. As we work towards our vision on a better tomorrow it takes the combined energy of the team. Regardless of position each person, day and activity counts.

Our achievements are supported and guided by our values of - Can do – Safely, Passion, Achieve Together and We Own It along with our 4Ps - People, Planet, Product and Performance. These combined with our energy, define us.

FY2017 has provided our teams with additional challenges and I am confident we have reflected, learned and move forward stronger as a result.

As one of Tasmania's largest employers, and Australia's largest employer in the aquaculture sector, we hold the position of fostering a unique workplace where employees feel engaged and empowered throughout all areas of the business. We have also retained our Employer of Choice accreditation. Tassal is committed to providing conditions of employment which are competitive and attractive to attract and retain the best candidates. Our employees are the heart of Tassal and we strive to look after everyone. All conditions of employment are consistent with our legal obligations and covered by the provisions of the NES (National Employment Standards) and Paid Parental Leave Bill 2010 under the Australian Fair Work Act 2009. In many cases, Tassal employment conditions surpass legislative requirements such as above minimum wage payment and parental leave top ups.

This year we have placed a great emphasis on better understanding how engaged our employees are. We believe the best outcomes are achieved when people are doing their best work and love doing it. We have rolled out the 5 FOCUSed Conversations framework across the business which will help us to establish more meaningful and effective conversations between managers and team members about feedback, objectives, capability development, underlying motivators and strengths. Feedback on the framework from employees so far has been extremely positive.

Training and education continues to be a priority and we strive to incorporate innovative training in addition to standard skills based training. This ensures Tassal employees are equipped to undertake their roles with confidence, and contribute to Tassal's vision of an empowered workforce, which will grow as the company grows. We are committed to being an Equal Opportunity Employer who recruits and selects the best applicants based on merit based criteria and where possible promote internal applicants. We value the diversity and contribution which people with different skills, experience and backgrounds bring to our company.

Labour and Management Relations

The value we place on employees is supported by our systems, policies and procedures which complements numerous aspects including our Zero harm focus, diversity and code of conduct.

Our aim is 'to value and to be valued by our best on ground team'. As part of this our terms and conditions go beyond a basic salary structure and include flexibilities of roster options and work arrangements where possible.

In support of our flexible working arrangements, we have a number of options to formulate terms and conditions, mainly dependant on position and location. These include modern awards, union negotiated agreements and common law contracts – all demonstrating good governance in employment practices.

Tassal employees contribute to and participate in establishing standards, such as union negotiated Workplace Partnership Agreements (WPA) and one on one negotiations. As a minimum these terms and conditions outline expectations of all parties and include policies which assist in many aspects including complaints resolution and performance management.

One aspect we are very clear on is we do not include safety as part of our collective or individual negotiations. At Tassal we believe safety is a right for each and every employee, each and every day and as a result set the highest standards as part of the employment experience at Tassal.

Across Tassal, we employ team members on working holiday visas in positions where we are unable to fill vacancies with suitably skilled Australian residents, or when we have not had the volume of suitable Australian residents apply for vacancies.

Tassie Salmon: Our Jobs Our Future Campaign

In the intense debate about the future of aquaculture in Tasmania, one voice has been consistently overlooked: the voice of the people who work in the industry. As the union representing the majority of aquaculture workers, the Australian Worker's Union (AWU) decided it was time workers were given an opportunity to have their say. In January 2017, the AWU kicked off a campaign to give Salmon workers a platform from which their voices could be heard, which was fully supported by Tassal.

The Tassie Salmon: Our Jobs, Our Future campaign was launched at an event outside Parliament House in Hobart, with around 500 aquaculture workers from across Tasmania joined by members of the community and State and Federal politicians. Workers told their personal stories about what the industry meant for them and their families. They also spoke about the need for sustainable, secure industries which could support life in Tasmania's regional communities.

The campaign has been about empowering workers so they can have a say in decisions which affect their lives. In that sense, it has been a genuine grass-roots, community-based campaign. The campaign also has sought to constructively engage with employers, politicians and local communities, with a view to finding common ground.

The campaign has continued to grow. A delegation of aquaculture workers addressed the Tasmanian Legislative Council, while another delegation went to Canberra to meet with a number of Federal politicians. One of the consistent themes to come out of the campaign has been the level of pride workers have in Tasmanian Salmon. From pride in the product, to pride in the way industry manages its environmental impacts – workers on the front line see the reality of how Salmon farming works and are committed to its future.

Closing of our Kew Salmon Shop (Victoria)

As we continue to grow, change can sometimes bring chapters to an end. With our lease expiring at our Kew store and café, we decided not to renew the lease moving forward and the store closed in April, 2017. Instead we will look to consider other options more aligned to our current strategic growth plans in Seafood and larger geographical distribution reach. This was a difficult decision and in no way a reflection on current activities in the market place as sales remain extremely strong across the business.

The lease conditions and area around the shop changed dramatically in the seven years since the store's opening including storage and parking restrictions which limited our opportunity to grow sales further.

We worked with each of the team individually on a plan which best worked and supported their transition within or outside the company. Our team remained loyal and 100% committed until the last door was closed and can always be proud of the part they played in their journey with Tassal.

Training and Education

We have a diverse range of opportunities available in a wide variety of fields including marine operations (freshwater and saltwater), legal, human resources, sales, quality, processing, accounts and finance, work health and safety, environment and sustainability, payroll, maintenance, purchasing, retail, hospitality, research and development and marketing.

Within Tassal there are opportunities to progress careers both horizontally and vertically. We encourage movement of our people into fields which may not be traditionally within their skill sets.

Our employees form part of a community which prides itself on delivering strategic priorities in a balanced, safe and sustainable manner. We acknowledge our impacts go beyond the financial outcomes and also include a commitment to grow and develop our internal talent via in-house and external learning and development solutions.

We have provided relevant, topical and innovative training opportunities for our current and future employees this reporting year. We have highlighted here only some of the training conducted, and additional staff training in safety, numeracy, literacy, drugs, alcohol and domestic violence has also been conducted.

2IC Program at Huonville Slicing (Tasmania)

The Slicing Team at Huonville has implemented a new initiative known as the 2IC Program. Slicing is a key responsibility of the processing team for value added cold smoked products. Staff are invited each morning by the Senior Processor on the Line to perform duties as a Second in Charge (2IC) processor for the day. The 2IC will then assist the Senior Processor with daily paperwork, line supervision, and various other tasks. This has proven to be beneficial in a number of ways. Staff are more engaged and involved in the day-to-day running of a production line. They develop a more in-depth understanding of the operations in terms of quality and production, and can be a valuable support for frontline staff. This has led to the development of a more cohesive and unified team. Team members have a greater sense of belonging and confidence in their own abilities. Staff involved in the program have been successfully called upon to act in the position of Senior Processor when required.

Filleter Training Program –" Project Top Gun" – Lidcombe (New South Wales)

After completing a theory component, six trainees completed their practical filleting assessments. Training has focused on sharpening knives on a wet stone and honing steel. Trainees have learned how to cut wild caught species such as Flathead and Saddletail and hand cut farmed aquaculture species such as King Trout and Salmon. Preliminary training has begun with a smaller group of trainees from a pool of casual and full-time staff to bolster our capabilities during peak periods. We now run a buddy system and 'graduates' are assisting and guiding the new trainees.

ROCK Solid Safety Leadership Program

Our ROCK Solid Safety Leadership Program, now in its eighth year, boasts 178 Tassal graduates with nationally recognised qualifications including Diploma of Management, Certificate IV in Frontline Management and Certificate IV in Work Health and Safety. During the reporting year, there were four enrolments in a Certificate IV in Work Health and Safety. For employees who preferred to undertake learnings, but not progress formal assessments, a Certificate of Recognition is awarded.

Mental Health First Aid - Huonville (Tasmania)

Mentally healthy workplaces are positive, productive, and get the best out of their people. A gap was identified in the need for Mental Health support. February saw the rollout of our first Mental Health First Aid course at Huonville. The purpose of this course was to enable First Aid people to recognise the signs and symptoms of mental health conditions and to be able to provide informed assistance to fellow employees. We currently have 18 accredited Mental Health First Aid employees.

Schools based Apprenticeships

As part of the Australian School-Based Apprenticeship (ASBA) program, each year Tassal offers school-based apprenticeships to interested students in Year 10, 11, or 12 at each of our farm sites. This is a paid employment based training program where students work one to two days per week, training towards a Certificate III in Aquaculture, as well as completing their school studies. In FY2017, five new school based apprentices came on board and three apprentices from FY2016 completed their apprenticeship and transferred to full time positions at Tassal.

POLICIES AND FURTHER INFORMATION:

The 2016 Workplace Gender and Equality Report and Tassal's Diversity Policy are available at: http://www.tassal.com.au/governance-policies/

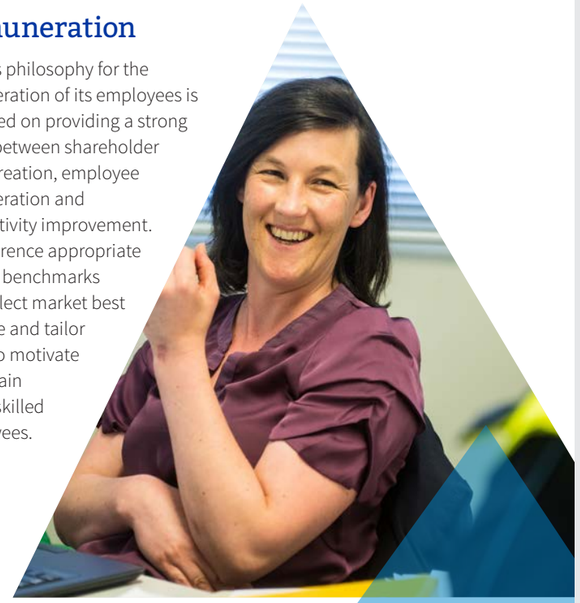
Diversity and Equal Opportunity

Our focus remains on supporting local communities, and the diversity which is represented within the communities, we have the privilege to operate within.

Tassal is committed to being an equal opportunity employer (EOO). We ensure our selection process encourages equal and diverse opportunities for all. We operate within an environment of "the right person for each position, regardless of gender", which we believe is a stance respected by all of our employees.

Remuneration

Tassal's philosophy for the remuneration of its employees is premised on providing a strong nexus between shareholder value creation, employee remuneration and productivity improvement. We reference appropriate market benchmarks that reflect market best practice and tailor these to motivate and retain highly skilled employees.

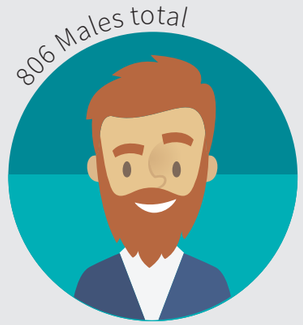


Our Commitment to Our People for FY2018

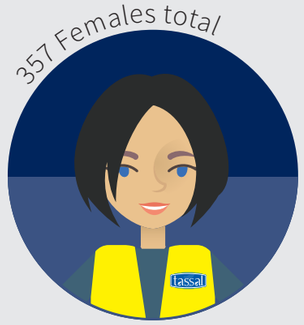
Vision: *A highly engaged and productive workforce*

GOALS	TARGETS
Assess current reality of where employee engagement score sits	Conduct baseline employee engagement survey
Strengthen learning and development across Tassal	Develop learning and development strategy
Align all position descriptions through 'Project Re-Align'	Roll out success focused position description alignment project

Our People: A Snapshot



69% Male



31% Female

Total Employees = 1163

New hires by age, gender & region

	Male <30	Female <30	Male 30 - 50	Female 30 - 50	Male >50	Female >50	Total
NSW	22	35	37	22	8	4	128
TAS	69	45	54	22	7	2	199
VIC	0	0	0	3	0	0	3
Total	91	80	91	47	15	6	330

Leavers by age, gender & region

	Male <30	Female <30	Male 30 - 50	Female 30 - 50	Male >50	Female >50	Total
NSW	51	62	44	30	6	7	200
TAS	121	112	95	42	24	8	402
VIC	5	8	11	0	0	1	25
Total	177	182	150	72	30	16	627

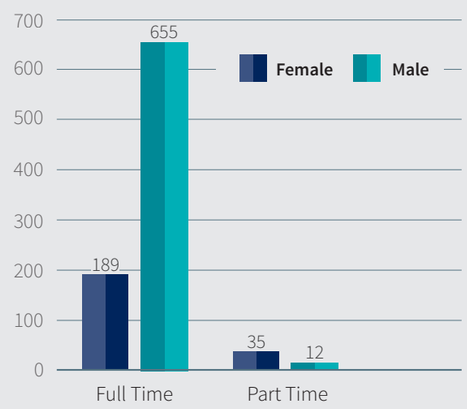
* 76 leavers were due to end of contract, season, or visa. *243 leavers were casuals

Turnover rate by age, gender & region

	Male <30	Female <30	Male 30 - 50	Female 30 - 50	Male >50	Female >50	Total
NSW	27%	18%	19%	18%	10%	6%	18%
TAS	15%	16%	10%	11%	10%	4%	11%
VIC	33%	25%	59%	0%	0%	100%	35%
Total	17%	17%	12%	12%	10%	6%	13%

*Data excludes casual and fixed term employees

Permanent employees by employee type



Directors by gender and age

6 = Directors

Male = 5

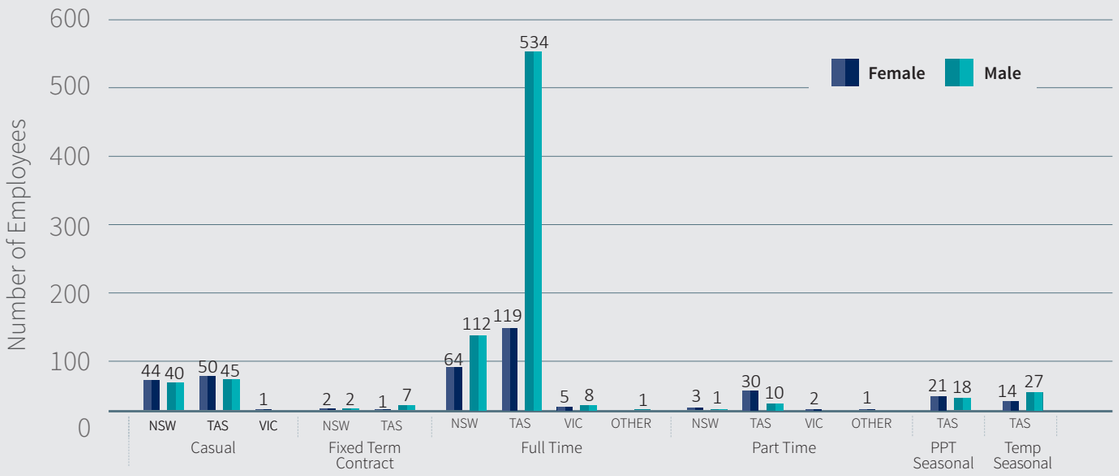
1 = Female

One male is aged between 30 and 50;

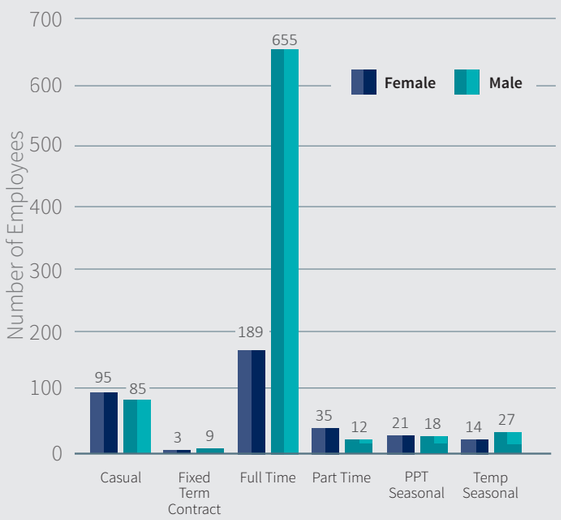
Four males are >50;

One female is >50.

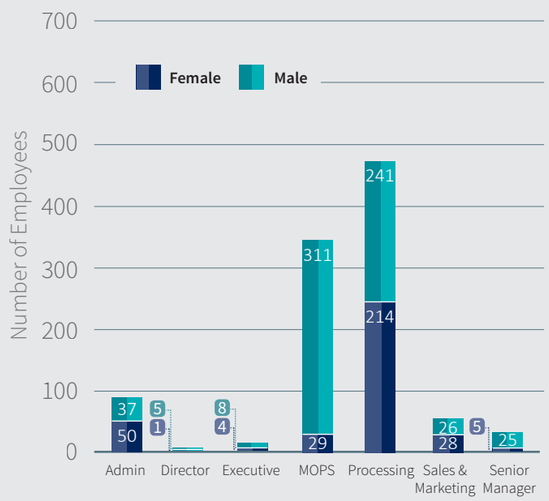
Employment type by gender & location



Employment type by gender



Employment category by gender



Parental leave

Parental leave: 83% return to work/100% retention

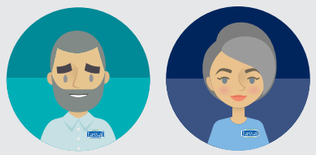
Employees who were entitled to parental leave

Male 484 | Female 191

Employees taking parental leave

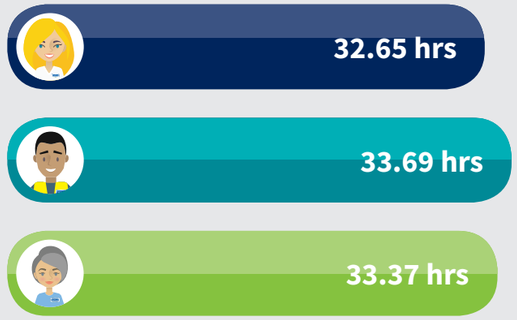
Male 25 | Female 6

Employees returning to work and still employed after parental leave

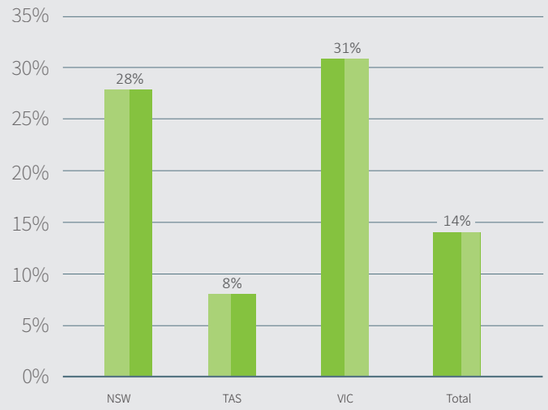


Male 25 | Female 5

Average training hours by gender

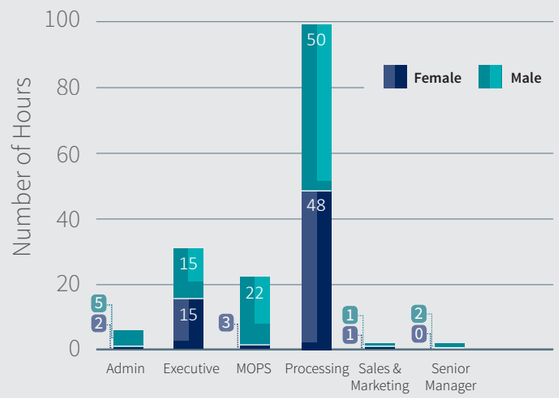


Gender pay gap by location (full time)

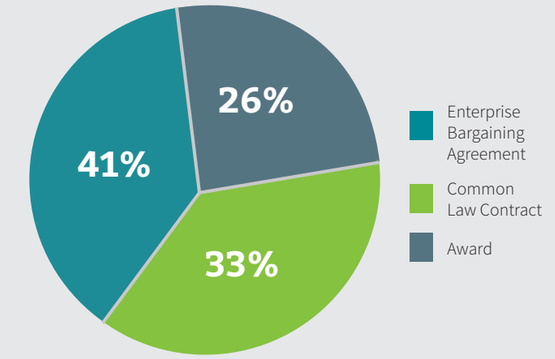


Calculated as the difference between women's and men's average full-time earnings, expressed as a percentage of men's earnings.

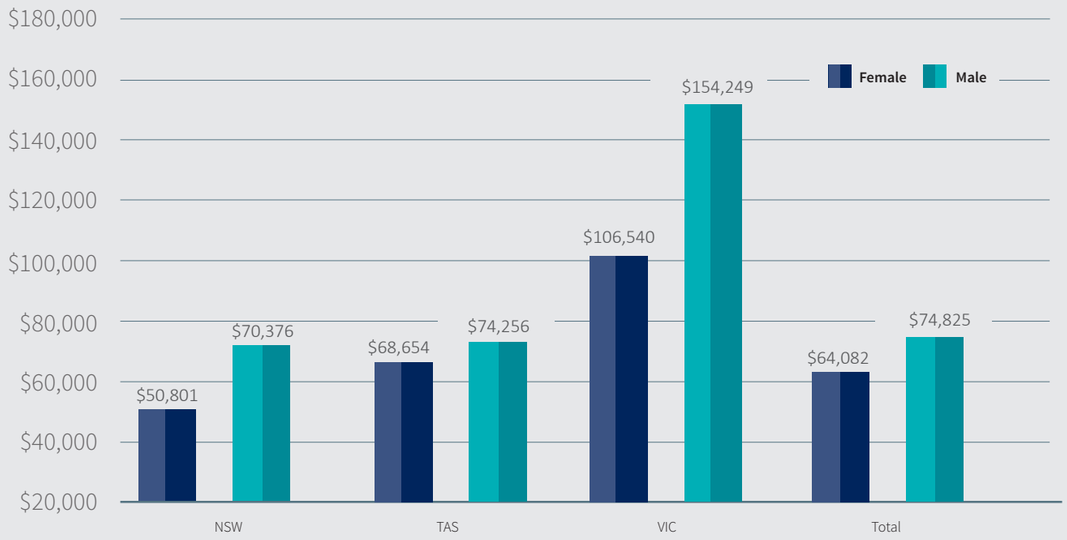
Average training hours by employment category



Percentage of employees covered by collective bargaining agreements



Average remuneration by gender and location (full time employees)



Summary of gender pay ratios: NSW: 32.3%, TAS: 7.84%, VIC: 36.6%, Total: 15.47%

Okehampton Bay

Tassal continues its commitment to providing sustainable financial stability and jobs to regional and rural areas where aquaculture is an important part of the local economy. Our new fish farms at Okehampton Bay, just outside the township of Triabunna demonstrates this commitment with a $30 million investment into regional Tasmania. This aids the local economy and community and supports growth and employment opportunities.

The town with a population of approximately 800 was severely impacted by the downturn in the forestry industry when the local woodchip mill closed in 2011. 87% of those employed are local.

Independent economic modelling has demonstrated the Okehampton Bay operation, once at full capacity, will provide an economic contribution to Tasmania of more than $80 million, and generate over 250 full time and part time jobs within the supply chain, scientific community and broader economy.

New Okehampton Bay team members:

Leigh Wrigley (pictured bottom left)

"I was lucky to get a mechanical apprenticeship at a local business after leaving school in Triabunna. Upon completion of my apprenticeship I traveled daily to Richmond, as there were no opportunities available for me in Triabunna. When the jobs became available with Tassal, it presented an opportunity for my hobby as a diver to become my profession and work locally. Tassal has paid for me to get my dive ticket, crane licence and coxswain ticket. I find they are a great employer. As a diver I'm part of a team of four, we really get along well, it's a fun environment and I really look forward to coming to work. My hobby has become my career, and I can't see myself ever walking away from this. I'm really looking forward to a long-term career with Tassal."

Matt Rasti (pictured bottom right)

"I am a diver at Okehampton and live in the region with my partner and her daughter. I come from a hospitality background working in hotel management, however, changed career and began working with an organisation where I was traveling 1300kms per week to get to and from work. In my spare time I would go fishing and diving. I applied for a role at Tassal's Okehampton site in early 2017 and was offered a role. I am now doing my hobby every day, alongside an awesome, supportive team and getting paid to do it. If I hadn't secured a job with Tassal I would have likely had to move interstate or do fly in fly out work. This job, training and experience have been life changing for me and my family."

Steve Sweet

"Since leaving school I have worked in many different businesses. I have done a bit of fly in fly out work and worked as a fisheries inspector. Most recently I was doing a few fishing jobs before I started with Tassal as a night-watchman. This job suits me as I enjoy being outdoors and doing a bit of fishing. I've found Tassal to be a good place to work and the new team are coming along really well. I enjoy being in the Triabunna region because of the urban lifestyle and the ability to go fishing whenever I want. The best thing about working for Tassal is I get to be back home and close to my family who are living here."

Anthony Kube

"I was born in Triabunna and this is the first full time job I've had in the area. For the last three months I've been working as a night-watchman at Okehampton Bay where part of my role is patrolling pens, maintenance and refueling. I work a roster which consists of four days on and four days off, so it allows me a great work life balance. I've have spent many years working in the cray fishing industry, where I would spend many weeks working away from my family. I love living in Triabunna, beautiful weather, nice safe community where people look out for each other. With the opening of Okehampton Bay you can already see an improvement in the local community, the town is abuzz and has really come back to life. I'm loving my new job, lots of new things to learn and I'll be here until retirement."

Leigh Wrigley (left and Matt Rasti (right)

Ensuring Quality Salmon and Seafood

Lisa Keating
Senior Manager – Quality

Reinvigorating our Quality Management System

Over the past few years, some non-regulatory Quality Standards have become increasingly prescriptive and we have found the intent behind some requirements are either not relevant to our operation, do not add value or manage our risks.

This has provided us with the opportunity to reinvigorate our Quality Management System (QMS) so it is based on risk management rather than compliance.

During the revision of the QMS, we have used a simplified model of:

- Over-arching policies which outline the commitment of the business
- Procedures which outline controls and responsibilities of specific areas
- Task breakdowns which have specific detail of a task
- Records for verification and data collection

By taking this approach, we can now focus our resources on 'working in the system and not on the system'.

Quality Scorecard

As part of our internal audit program, which verifies the effectiveness and compliance of our system and processes, we have introduced a Quality Scorecard.

The scorecard complements our risk based approach, and provides each site with a bi-monthly review of the site, processing activities, and a real-time review of records.

The scorecard is largely focused on observation and discussion, ensuring our people have a sound understanding of requirements and also to provide them with an opportunity to raise suggestions for improvement.

Each criteria of the scorecard are weighted based on the risk and significance of non-compliance, this results in a score for each section as well as an overall score for the site.

Continuous Improvement

This year we have had an increased focus on continuous improvement in the Quality space.

In partnership with processing, we have investigated opportunities such as packaging and ingredients for improved shelf life and microbial control, technology for thawing Seafood and processing technology such as HPP (high pressure processing).

In support of this, we have had team members attend the Brussel's Seafood Expo, FoodPro 2017, Interpack in Germany and Packaging Seafood Safely workshop at the CSIRO.

We have also commenced working with a PhD student, funding her research into Salmon quality.

Our Certifications

	Auditing body	Coverage	Main Purpose	Audit Frequency
Quality				
Export	Department of Agriculture, Water Resources (formerly AQIS)	• Dover • Huonville • Margate • Harvest boat – as catcher boat only	Export compliance	Dependant on site rating and previous audit results - between six and 12 months All facilities currently have an A rating
HACCP	BSI	• Dover • Huonville • Margate • De Costi Seafoods	International Standard	Annual recertification/ six monthly surveillance (processing sites only)
SQF Code (Safe Quality Food) Level 3	BSI	• Huonville • Margate • De Costi Seafoods	International Standard/ Customer requirement	Annual recertification for Huonville and Margate Six monthly surveillance for De Costi Seafoods
WSE (formerly WQA)	BSI	• Huonville* • Margate • De Costi Seafoods	Customer requirement	Six monthly *Voluntarily ceased certification at Huonville in Feb 2017
Aldi	BSI	• De Costi Seafoods	Customer requirement	Six monthly or as per SQF
Coles (CFMSR or CSR)	BSI or Coles	• Margate – CFMSR • De Costi Seafoods - CSR	Customer requirement	Annual
ASC/MSC Chain of Custody	SCS Global Services	• Dover • Margate • Huonville • Petuna • George Town Seafoods • Huon Valley Seafoods • De Costi Seafoods – ASC and MSC	ASC/MSC traceability for Chain of Custody	Three-year recertification/ annual surveillance
HALAL	Halal Australia	• Huonville • Margate • All products	Sell product with Halal approval	Annual audit
KOSHER	Kosher Australia	• Dover • Huonville • Margate • Most products	Sell product with Kosher approval	Annual audit
ARA Code of Practice	AUS-MEAT Ltd	• Triabunna	Certification to Australian Rendering Standard	Annual audit
Environmental				
Aquaculture Stewardship Council (ASC)	SCS Global Services	• Marine Operations	International standard	Certification for three years with annual surveillance
Workplace Health and Safety				
AS 4801	TQCS	• All sites	Australian standard	Annual audit rotation basis/ three yearly recertification
OHS AS 18001:2007	TQCS	• All sites	International standard	Annual audit rotation basis/ three yearly recertification

Our Commitment to Quality for FY2018

Vision: *To deliver safe, high quality products to consumers*

Goals	Targets
Achieve full traceability (catch to plate)	Maintain 100% traceability for all Salmon products and develop a traceability strategy for Seafood products
Maintain all third party domestic and export certifications	Pass all external quality audits

Driving Salmon and Seafood Consumption and Healthy Lifestyles

Tassal is passionate about increasing Australians' awareness of healthy protein options and the promotion of healthy lifestyle choices. Our vision is 'A Better Tomorrow', a better tomorrow for Australians and the environment.

Seafood is widely recognised as one of the healthiest and most sustainable protein options.

The Australian government recommend we consume two to three serves of fish and seafood per week (FSANZ Advice on Fish Consumption, 2018). Although Australians are becoming more aware of the health benefits of incorporating more Seafood within their diets we are falling short of the government recommended levels. This also means we are not realising the potential health cost savings that comes with consuming a healthy and nutrient rich diet.

Salmon and Seafood are healthy, nutritious and nutrient rich sources of protein and can contribute to a healthy diet, are rich in Omega 3, and a valued low-fat protein source which has other valuable nutrients including essential vitamins and minerals. Seafood is also recognised as having one of the lowest carbon footprint of all animal sourced proteins.

Our marketing programs include a wide range of integrated programs designed to educate and encourage consumers, communities and our stakeholders across Australia to incorporate more Salmon and Seafood into their meal plans, highlighting the benefits of making these choices as part of a healthy lifestyle for the whole family. Our programs include a range of activations across many channels and mediums including print, cooking shows, digital, out of home and retailer specific promotions. Tassal's consumer website and digital platforms provide ideas, tips and suggestions on the benefits of eating Salmon and Seafood every day and share a wide range of healthy recipes. These are all aimed at creating a better tomorrow for all.

Insights into consumer needs and behaviours, such as lifestyles changes, changing attitudes towards the planet and increasing trends towards healthy eating allows us to develop communication and educational material to better inform consumers on our processes, products and commitments.

The success of our marketing programs and efforts to increase Australians incorporating Seafood in their diets is measured annually through consumption per capita data by Australians across Seafood and Salmon.

Hawthorn Football Club

Tassal has proudly partnered with Hawthorn Football Club to educate players, their families and their supporters on healthy eating recipes with Tassal Salmon via cooking classes and demonstrations. We have worked with club nutritionists to develop a range of healthy recipes, rich in protein and essential vitamins and minerals which show how Tassal Salmon can be a key element in an everyday healthy and balanced diet.

Glossary

Adaptation
The process of change by which an organism or species becomes better suited to its environment.

Adaptive Management
A systematic approach for improving resource management by learning from management outcomes.

Algal
Unicellular or multicellular organisms formerly classified as plants, occurring in fresh or salt water or moist ground, that have chlorophyll and other pigments but lack true stems, roots, and leaves. Relating to algae.

Algal bloom
A rapid growth of microscopic algae or cyanobacteria in water, often resulting in a coloured scum on the surface.

Amoebic Gill Disease (AGD)
Caused by Neoparamoeba perurans, the most important amoeba in cultured fish.

Antimicrobial
A group of drugs which includes antibiotics, antifungals, antiprotozoals, and antivirals.

Aquaculture
The farming of aquatic organisms including fish, molluscs, crustaceans and aquatic plants with intervention such as regular stocking, feeding and protection from predators in the rearing process to enhance production.

ARA Code of Practice
Australian Renderers Association Inc. Code of Practice.

AS/NZS 4801
Australian and New Zealand standard for Occupational Health and Safety Management Systems.

AS/NZS ISO 31000:2009
Australian and New Zealand Risk Management Standard.

ASX Corporate Governance Principles and Recommendations
The benchmark for good corporate governance in Australia.

ATP-ase
An enzyme involved in the smoltification process.

Beggiatoa
A colourless, sulphur-storing bacterium belonging to the Gammaproteobacteria.

Best Aquaculture Practices (BAP)
A third party audited world recognised environmental standard.

Benthic
Ecological region at the lowest level of a body of water.

Benthic compliance
Compliance with benthic conditions relating to the environmental management in and around finfish farms as set by the EPA Tasmania.

Biogeochemical
Relating to or denoting the cycle in which chemical elements and simple substances are transferred between living systems and the environment.

Biomass
A measure of weight.

Biosecurity
Procedures or measures designed to protect a population against harmful biological or biochemical substances.

Broadscale monitoring
Monitoring which is conducted at distance further afield then the marine farming zone to assess detectable levels of change in a region.

Broodstock
Broodstock, also known as broodfish, are a group of mature Salmon for breeding purposes in aquaculture.

Carbon footprint
The amount of carbon dioxide released into the atmosphere as a result of activities.

Carbon neutral
Making or resulting in no net release of carbon dioxide into the atmosphere, especially as a result of carbon offsetting.

Centrifuge
A machine with a rapidly rotating container that applies centrifugal force to its contents, typically to separate fluids of different densities or liquids from solids.

Chlorophyll
A green pigment, present in all green plants and in cyanobacteria, which is responsible for the absorption of light to provide energy for photosynthesis.

Coles Food Manufacturing Supplier Requirements (CFMSR)
Coles store own set of supplier requirements.

Coles Supplier Requirements (CSR)
An additional set of Coles store supplier requirements which are designed to enhance the Coles brand protection program and address known issues/areas of customer concern.

Conformity Assessment Body (CAB)
Third party impartial conformity assessment bodies which can certify product, process or services, management systems or persons.

DA
Development Application.

Diploid
A cell or nucleus containing two complete sets of chromosomes, one from each parent.

Dissolved oxygen (DO)
Amount of oxygen dissolved (and hence available to sustain marine life) in a body of water. DO is the most important indicator of the health of a water body and its capacity to support a balanced aquatic ecosystem of plants and animals.

Eco-aquaculture
The growth of shared species in shared spaces – including salmon, mussels, native oysters and seaweed.

Ecosystem
A biological community of interacting organisms and their physical environment.

Environmental Impact Statement (EIS)
A document prepared to describe the effects for proposed activities on the environment.

Epidemiology
The branch of medicine which deals with the incidence, distribution, and possible control of diseases and other factors relating to health.

Eutrophication
Natural or artificial addition of nutrients to bodies of water which may change the natural marine or fresh water systems.

FAO Code of Conduct for Responsible Fisheries
A voluntary code set out by the Food and Agriculture Organisation which sets out principles and international standards of behaviour for responsible practices with a view to ensuring the effective conservation, management and development of living aquatic resources, with due respect for the ecosystem and biodiversity.

Fish Feed Dependency Ratio (FFDR)
A measure of the quantity of wild (forage) fish used to grow a defined quantity of farmed fish. FFDR is the quantity of wild fish used per quantity of cultured fish produced. This measure can be calculated based on fish meal (FM) or fish oil (FO).

FFDRm
Fishmeal Forage Fish Dependency Ration (FFDRm): formula available in ASC Salmon Standard Version 1.0 (available at: http://www.asc-aqua.org/upload/ASC%20Salmon%20Standard_v1.0.pdf).

FFDRo
Fish oil Forage Fish Dependency Ratio (FFDRo): formula available in ASC Salmon Standard Version 1.0 (available at: http://www.asc-aqua.org/upload/ASC%20Salmon%20Standard_v1.0.pdf).

Fin-fish
Free swimming fish with fins as opposed to less motile crustaceans or molluscs.

Fishmeal
A commercial product made from both whole fish and the bones and offal from processed fish. It is a brown powder or cake obtained by rendering and pressing the cooked whole fish or fish trimmings to remove most of the fish oil and water.

Fish oil
Fish oil is oil derived from the tissues of oily fish.

Forage fish
Often called bait fish, forage fish are usually smaller fish which sustain larger predators.

Freshwater hatchery
A freshwater facility where eggs are hatched under artificial conditions.

Freshwater operation
Aquaculture which occurs in a freshwater system.

Genome
The complete set of genes or genetic material present in a cell or organism.

Gill necrosis
A syndrome caused by environmental factors throughout the spring/summer period that can cause issues with respiration.

GJ
Gigajoule. A unit of measure of energy in joules. 1GJ = 1 billion joules.

GMO
Genetically modified organism.

Grow-out site
A marine farming lease where fish over 1.5kg are grown to harvest size.

Halal (food)
Any foods are allowed to be eaten according to Islamic Sharia law.

Hatchery
A facility where fish eggs are hatched under artificial conditions.

Hazard Analysis Critical Control Point (HACCP)
A tool to identify specific hazards and measures for the control and safety of food. It assesses hazards and establishes control systems which focus on prevention rather than relying mainly on end-product testing.

High density polyethylene (HDPE)
A versatile hard plastic.

HOG
Fish which have been processed as 'head on and gutted'.

Hog tonnes
Head on gutted weight.

Husbandry
The care, cultivation and breeding of crops and animals.

Hydrodynamic
The branch of science concerned with forces acting on or exerted by fluids (especially liquids).

Hydrozoan species
A taxonomic class of very small, predatory animals which can be solitary or colonial and which mostly live in saltwater with some living in freshwater. These organisms are related to jellyfish and corals.

Intertidal
The area of a seashore which is covered at high tide and uncovered at low tide.

Intertidal macroalgal communities
Species of seaweed which inhabit the zone between high and low water marks along rocky foreshores.

Intraperitoneal vaccine
Vaccination by injection into the peritoneum (body cavity).

ISO 9001:2008
An international standard related to quality management systems.

ISO 14001:2015
An environmental management system.

IUCN Red List of Threatened Species
Provides taxonomic, conservation status and distribution information on plants, fungi and animals which have been globally evaluated using the IUCN Red List Categories and Criteria.

K-Grid Net
Nets comprised of two interwoven polymers to form a rigid net which can withstand the force of large predators.

Kosher
Foods are those which conform to the regulations of kashrut (Jewish dietary law). Only fish with fins and scales may be eaten, for instance, tuna, salmon, and herring.

Lag indicator
An indicator which follows an event (e.g. rate of incidents/injuries).

Land based nursery
A facility where fish eggs are hatched under artificial conditions

LTI
Lost Time Injury.

LTIFR
Lost Time Injury Frequency Rate.

Macroalgal community
A naturally occurring group of seaweed species which interact within a unique habitat or system.

Macroalgal community assemblages
Groups of seaweed species which co-exist as functional communities within similar habitats.

Macroalgal distribution
The spatial pattern and range of seaweed species across habitat types.

Macroinvertebrate
A small animal who does not have a spinal column, such as worms and crustaceans, and can be seen with the naked eye.

Marine lease
Areas of water registered to grow finfish, shellfish or other marine organisms.

Microbiome
A community of microorganisms (such as bacteria, fungi, and viruses) that inhabit a particular environment.

ML
Megalitre. 1 ML = one million litres.

MTIFR
Medically Treated Injury Frequency Rate.

Multi-trophic farming
The growth of shared species in shared spaces – including salmon, mussels, native oysters and seaweed.

Near-field
Monitoring which occurs within or around a marine lease.

Net slab
A facility where nets are repaired, stored and managed.

Nitrogen
A fundamental chemical element with the symbol N.

NRM
National Resource Management.

Offshore aquaculture
Aquaculture operations positioned in deeper, exposed, high energy locations.

OHS AS 18001: 2007
An Occupational Health and Safety Standard.

Omega-3
Any of several polyunsaturated fatty acids found in leafy green vegetables, vegetable oils, and cold-water fish such as salmon and mackerel. These acids are capable of reducing serum cholesterol levels and have anticoagulant properties.

Pathogen
A bacterium, virus or other microorganism which can cause disease.

Pelagic fisheries
Commercial fishery of fish which inhabit the pelagic zone. Species include forage fish such as anchovies and sardines.

Physiology
The branch of biology that deals with the normal functions of living organisms and their parts.

Phytoplankton
Very small plants that float near the surface of water and on which sea creatures feed.

Pilchard orthomyxovirus
An endemic disease of pilchards belonging to the family orthomyxoviridae.

Plankton
The small and microscopic organisms drifting or floating in the sea or fresh water, consisting mainly of diatoms, protozoans, small crustaceans, and the eggs and larval stages of larger animals.

Ploidy
The number of sets of chromosomes in a cell, or in the cells of an organism.

POMV
(see Pilchard orthomyxovirus).

Precautionary principle
When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.

Processing facility
A facility where raw materials are processed into finished products.

Recirculation hatchery
A fish growing environment which biologically filters system water for re-use, removes ammonia, CO2 & solids and oxygenates the water.

Reticulated Water
Treated water supplied through a system of pipes, mains and control valves.

ROV Dive
Inspection dives which are performed by Remote Operated Vehicles.

Salmonid
Any fish of the family Salmonidiae, which includes Salmon.

Salmo salar
The scientific name for Atlantic Salmon.

SDG
See United Nations Sustainable Development Goals.

Sea based nursery
A marine farming lease where fish are grown to 1.5kg.

Selective breeding
The intentional breeding of organisms with desirable traits to produce offspring with similar desirable characteristics or with improved traits.

Sludge
Concentrated waste product mixed with water.

Smolt
A stage in the life cycle of salmonids at which the salmon is ready to move from the freshwater to saltwater environment.

SQF Code
SQF is recognised by retailers, foodservice providers and regulatory agencies around the world that require HACCP food safety and quality management systems by their suppliers.

Stanchion
An L shaped component of a plastic fish pen used to support the hand rail and overall structure.

Stocking density
The biomass of fish in kilograms per cubic metre of cage volume.

Subtidal
Relating to, inhabiting or existing in the region below the level of low tide, that is always underwater.

Sump
A pit at the lowest point in a circulating or drainage system.

Sustainable development
Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

Thermal resistance
The ability to maintain health and performance at the upper extent of the natural temperature range.

Thermal stress
Stress caused by water temperature fluctuations.

Total Permissible Dissolved Nitrogen Output (TPDNO)
A marine farming regulation. The TPDNO limits the output of allowable nitrogen from farming operations.

Total Recordable Injury Frequency Rate
The number of fatalities, lost time injuries, cases and other injuries requiring medical treatment per million hours worked.

Traceability
The ability to track any food through all stages of production, processing and distribution. All movements can be traced one step backwards and one step forward at any point in the supply chain.

Trimmings (trims)
By-products produced when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption.

Triploid
Fish who have been sterilised, resulting in an embryo which has more chromosomes than occur naturally.

United Nations Sustainable Development Goals
A set of 17 goals and 169 targets agreed to by member countries in 2015 which address a broad range of sustainable development issues.

Value-add
The enhancement of a product.

Vertically integrated
The structure employed by a company when it controls more than one stage of the supply chain e.g. turning raw material into a product.

Water column
The column of water from the surface of the sea (or estuary) to the seafloor (or substrate)

Wild catch
Fisheries harvesting seafood from the wild.

WQA
The Woolworths Quality Assurance (WQA) Standard represents benchmarking of the Woolworths Quality program against global product safety standards.

WSE
Woolworths Supplier Excellence program supplier requirements.

Year class (YC)
YC in Saltwater: a group of fish which enter the marine environment in a calendar year; YC in Freshwater: a group of fish hatched in the same calendar year.

Yersinia
A bacterial disease endemic in Tasmania.

Yersiniosis
An infectious disease which is caused by a Yersinia.

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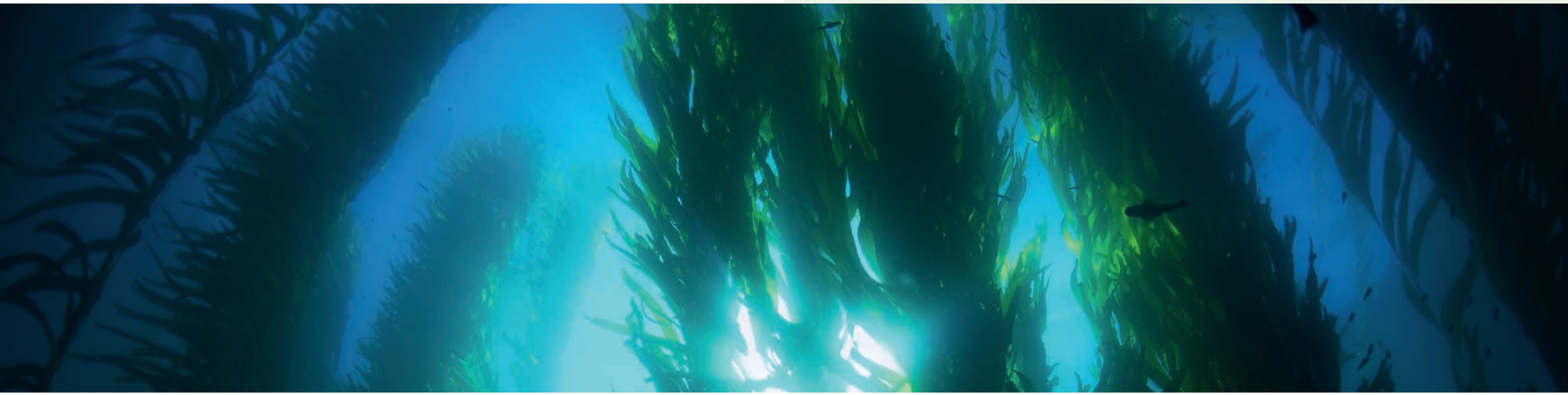

GRI Content Index

GRI Standard	Disclosure	Internal/External Boundary Identification (I/E)	Page/Reference or more information
GRI 101: Foundation 2016			
GRI 102: General Disclosures	Organisational Profile		
	102-1: Name of the organisation	N/A	p.10
	102-2: Activities, brands, products and services	N/A	pp. 10, 11,12
	102-3: Location of headquarters	N/A	p.13
	102-4: Location of operations	N/A	p.13
	102-5: Ownership and legal form	N/A	p.15
	102-6: Markets served	N/A	p.12
	102-7: Scale of the organisation	N/A	pp.11-13, 73 Volume of Seafood is not disclosed as it is sensitive market information
	102-8: Information on employees and other workers	N/A	pp.73-75
	102-9: Supply Chain	N/A	pp.24-28
	102-10: Significant changes to the organisation and its supply chain	N/A	Tassal's Salmon Shop in Kew, Victoria ceased trading
	102-11: Precautionary Principle or approach	N/A	p.17
	102-12: External initiatives	N/A	pp.18, 19, 26, 29-33, 34-43, 53
	102-13: Membership of associations	N/A	p.14
	Strategy		
	102-14: Statement from senior decision-maker	N/A	pp.4-7
	Ethics and Integrity		
	102-16: Values, principles, standards and norms of behaviour	N/A	pp.14, 15
	Governance		
	102-18: Governance structure	N/A	pp.14, 15 www.tassalgroup.com.au/investors/governance/policies/
	Stakeholder Engagement		
	102-40: List of stakeholder groups	N/A	pp.42, 43
	102-41: Collective bargaining agreements		p.75
	102-42: Identifying and selecting stakeholders		pp.42, 43
	102-43: Approach to stakeholder engagement		pp.34, 42, 43
	102-44: Key topics and concerns raised		pp.42, 43
	Reporting Practice		
	102-45: Entities included in the consolidated financial statements	N/A	www.tassalgroup.com.au/investors/reports/annual-reports/
	102-46: Defining report content and topic boundaries	N/A	p.8
	102-47: List of material topics	N/A	p.9
	102-48: Restatements of information	N/A	There are no restatements of information required for this report
	102-49: Changes in reporting	N/A	p.8
	102-50: Reporting period	N/A	p.8
	102-51: Date of most recent report	N/A	Sustainability Report 2016
	102-52: Reporting cycle	N/A	Annual
	102-53: Contact point for questions regarding the report	N/A	p.2
	102-54: Claims of reporting in accordance with the GRI Standards	N/A	p.8
	102-55: GRI Content Index	N/A	pp.86-90
	102-56: External assurance	N/A	p.8

Specific Disclosures: Material Topics			
GRI 200: Economic			
Economic Performance			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.17, 18
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 201: Economic Performance 2016	201-1: Direct economic value generated and distributed	I/E	pp. 10, 11 www.tassalgroup.com.au/investors/reports/annual-reports/
	201-2: Financial implications and other risks/ opportunities due to climate change	I/E	While Tassal accrues operational costs that result from actions to manage climate change (e.g. selective breeding, venturation, chillers etc.) the value of what has been invested specifically for this purpose is not tracked
Market Presence			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.13, 38, 76, 77
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
Indirect Economic Impacts			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.16, 38, 76
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 203: Indirect Economic Impacts 2016	203-2: Significant indirect economic impacts	E	
Anti-corruption			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	p.14 www.tassalgroup.com.au/investors/governance/policies/
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 205: Anti-corruption 2016	205-1: Operations assessed for risks related to corruption	I	
GRI 300: Environmental			
Materials			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp. 26-28, 45, 48
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 301: Materials 2016	301-1: Materials used by weight or volume	I	p.28
Energy			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	p.52
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 302: Energy 2016	302-1: Energy consumption within the organisation	I	Standards, methodologies, assumptions, calculation tools and sources of conversion: Department of the Environment (2016) National Greenhouse Accounts Factors, Australian Government, Canberra

Biodiversity			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.45, 46, 48, 50, 51
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 304: Biodiversity 2016	304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	I	pp.46, 47
	304-2: Significant impacts of activities, products and services on biodiversity	I/E	p.48
	304-3: Habitats protected or restored	I/E	pp.48, 49, 51, 53
	304-4: IUCN Red List species and national conservation list species with habitats in areas affected by operations	I/E	pp.51, 53
Effluents and Waste			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	p.49, 52
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 306: Effluents and Waste 2016	306-1: Water discharge by quality and destination	I/E	p.59
	306-2: Waste by type and disposal method	I/E	p.59, 60
	306-5: Water bodies affected by water discharges and/or runoff	I/E	p.59
Environmental Compliance			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.54-57
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 307: Environmental Compliance 2016	307-1: Non-compliance with environmental laws and regulations	I/E	pp.48, 57
Supplier Environmental Assessment			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.24-28
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 308: Supplier Environmental Assessment 2016	308-1: New suppliers who were screened using environmental criteria	I/E	This information is not currently collected
GRI 400: Social			
Employment			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.70, 71
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 401: Employment 2016	401-1: New employee hires and employee turnover	I	p.73
	401-3: Parental leave	I	p.74

Labour and Management Relations			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.70, 71
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 402: Labour and Management Relations 2016	402-1: Minimum notice periods regarding operational changes	I	Tassal provides one month notice for large operational changes
Occupational Health and Safety			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.66-68
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 403: Occupational Health and Safety 2016	403-1: Workers representation in formal joint management-worker health and safety committees	I	p.68
	403-2: Types of injury and rates of injury, occupational diseases, lost days, and absenteeism and number of work related fatalities	I	p.69
	403-4: Health and safety topics covered in formal agreements with trade unions	I	pp.68, 71
Training and Education			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.71, 72
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 404: Training and Education 2016	404-1: Average hours of training per year per employee	I	p.75
	404-2: Programs for upgrading employee skills and transition assistance programs	I	In addition to Tassal's traditional training programs, in the case of redundancy, internal and/or external assistance is available to help employees search for alternative employment, dependent upon requirements
	404-3: Percentage of employees receiving regular performance and career development reviews	I	Performance reviews vary depending on the type of employee contract in place. Non-salaried employees receive skills based assessment; salaried employees receive an annual review. In FY2017, 120 performance reviews were completed for 292 salaried staff - approximately 41%
Diversity and Equal Opportunity			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	p.72
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 405: Diversity and Equal Opportunity 2016	405-1: Diversity of governance bodies and employees	I	p.73
	405-2: Ratio of basic salary and remuneration of women to men	I	Information is compiled through the payroll management system, Chris21

Local Communities			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.34, 38-41
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 413: Local Communities 2016	413-1: Operations with local community engagement, impact assessment, and development programs	I/E	pp.34, 38-41
	413-2: Operations with significant actual and potential negative impacts on local communities	I/E	pp.34, 38-41
Supplier Social Assessment			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.26, 28
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 414: Supplier Social Assessment 2016	414-1: New suppliers who were screened using social criteria	I/E	This information is not currently collected
Socio-economic Compliance			
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its Boundary	I	pp.34, 38-41
	103-2: The management approach and its components	I	
	103-3: Evaluation of the management approach	I	
GRI 419: Socioeconomic Compliance 2016	419-1: Non-compliance with laws and regulations in the social and economic area	I/E	p.44
Food Processing Sector Disclosures: GRI G4 only			
Healthy and Affordable Food	Disclosure on Management Approach	I	p.80
Procurement/Sourcing Practices	Disclosure on Management Approach	I	pp.24-28
	FP1: Percentage of purchased volume from suppliers compliant with the company's sourcing policy	I/E	This information is not currently collected
	FP2: Percentage of purchased volume which is verified as being in accordance with credible, internationally recognised responsible production standards, broken down by standard	I/E	This information is not currently collected
Labour and Management Relations	Disclosure on Management Approach	I	pp.70, 71
	FP3: Percentage of working time lost due to industrial disputes, strikes and/or lock-outs by country	I	There was no working time lost due to industrial disputes or any other activity
Animal Welfare	Disclosure on Management Approach	I	pp.61-64
	FP9: % and total of animals raised and/or processed by species and breed type	I/E	p.11
	FP10: Policies and practices related to physical alterations and the use of anaesthetic	I/E	p.62
	FP11: % and total of animals raised and/or processed, by species and breed type, per housing type	I/E	p.61
	FP12: Policies and practices on antibiotic, anti-inflammatory, hormone, and/or growth promotion treatments	I/E	pp.62, 63
	FP13: Total number of incidents of significant non-compliance with laws and regulations, and adherence with voluntary standards related to transportation, handling, and slaughter practices for live terrestrial and aquatic animals	I/E	There were no incidents of non-compliance

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